



Journal of
Case Research
and Inquiry

Cases, Notes and Articles

A publication of the Western
Casewriters Association

April 2025

Journal of Case Research and Inquiry

A publication of the Western Casewriters Association

Published online at www.jcri.org

ISSN 2377-7389

The cases, notes, and articles included herein, and their respective accompanying instructors' manuals, were anonymously peer reviewed and accepted by the *Journal of Case Research and Inquiry*, Vol. 10, 2025.

Individual cases, notes, and articles in this volume are copyrighted by their authors. The authors and the *Journal of Case Research and Inquiry* grant government and nonprofit institutions the right to access and reproduce manuscripts for educational purposes. For all other purposes, all rights are reserved to the authors.

For membership in the Western Casewriters Association, visit www.westerncasewriters.org

Editor

Stephen J.J. McGuire, California State University, Los Angeles

Associate Editor

Yang Zhang, University of Tennessee at Chattanooga

Journal of Case Research and Inquiry

California State University, Los Angeles

5151 State University Drive, STF 706

Los Angeles, CA 90032 U.S.A.

Please send all Inquiries and Submissions to:

editor@jcri.org

Qualified instructors can receive a peer-reviewed instructor's manual for each case. To request an instructor's manual, please complete the request form at www.jcri.org or write to the editor of the journal, editor@jcri.org



Western Casewriters Association

The Western Casewriters Association (WCA) is the Western regional association of business casewriters. WCA is associated with the North American Case Research Association (NACRA) and the Western Academy of Management (WAM). Its purpose is to train, develop and support business case writing for research and pedagogical purposes. WCA organizes an annual conference for experienced and new case-writers and academics using cases for teaching and publishes the *Journal of Case Research and Inquiry*. Visit the WCA website at www.westerncasewriters.org

JCRI Editorial Board Members

Arun Aryal, California State University, Los Angeles, aaryal@calstatela.edu

Kathryn Aten, Navy Postgraduate School, kjaten@nps.edu

Andre Avramchuk, California State University, Los Angeles, aavramc@calstatela.edu

Jyoti Bachani, Saint Mary's College of California, jb19@stmarys-ca.edu

Yvette M. Bendeck, University of Houston-Clear Lake, bendeck@uhcl.edu

Issam Ghazzawi, University of La Verne, ighazzawi@laverne.edu

Laura Guerrero, University of Houston – Clear Lake, GuerreroL@UHCL.edu

Duane Helleloid, University of North Dakota, duane.helleloid@und.edu

Monika Hudson, University of San Francisco, mhudson@usfca.edu

Julia Ivy, Northeastern University, j.ivy@northeastern.edu

Anne T. Lawrence, San José State University, anne.lawrence@sjsu.edu

Teresa Martinelli, University of La Verne, tmartinelli-lee@laverne.edu

Stephen J.J. McGuire, California State University, Los Angeles, steve@mcguire.net

Roger Mendoza, California State University, Los Angeles, mendoza@calstatela.edu

Nina O'Brien, California State University, Los Angeles, nobrien2@calstatela.edu

Marie Palladini, California State University, Dominguez Hills, mpalladini@csudh.edu

Melanie Reed, Thompson Rivers University, mreed@tru.ca

Franziska M. Renz, California State University, Sacramento, franziska.renz@csus.edu

JCRI Editorial Board Members, cont.

Keith Sakuda, University of Hawaii, ksakuda@hawaii.edu

Jeff Shay, Babson College, jshay1@babson.edu

James Spee, University of Redlands, james_spee@redlands.edu

Michael Valdez, Fort Lewis College, mevaldez@fortlewis.edu

Julian Vogel, San José State University, julian.vogel@sjsu.edu

Deborah Walker, Fort Lewis College, walker_d@fortlewis.edu

George L. Whaley, San José State University, george.whaley@sjsu.edu

Yang Zhang, University of Tennessee at Chattanooga, yang-zhang@utc.edu

Vijaya Zinnoury, University of Denver, Vijaya.Zinnoury@du.edu

JCRI Webmaster

Arun Aryal, California State University, Los Angeles, aaryal@calstatela.edu



JCRI Editorial Policy

Approved by the JCRI Editorial Board March 9, 2017; updated September 15, 2022, and April 6, 2024.

Aim and Goals

The *Journal of Case Research and Inquiry* (JCRI) is a publication of the Western Casewriters Association (www.westerncasewriters.org). JCRI publishes peer-reviewed case studies (cases) prepared from primary and secondary research, as well as pedagogical articles, notes and exercises. The journal publishes one issue per year, and if submissions so merit, may publish additional issues with editorial board approval. JCRI publications are available online, full text, and free of charge at www.jcri.org.

Scope and Content of the Journal

The journal publishes cases that address significant contemporary and perennial issues faced by organizations and managers in the areas of business and public administration, nonprofit management, social entrepreneurship, economics, education, and public policy. The journal publishes both Teaching Case Studies and Consulting Case Studies. Cases may be derived from primary field research, secondary research, or a combination of both. JCRI does not accept fictional cases, nor cases, notes, or articles previously published elsewhere.

Teaching Cases are primarily intended to support classroom instruction, including decision-making and the application of theory and best practices, and may or may not require a managerial decision. Teaching case studies have been used in higher instruction for more than 115 years. Teaching cases are necessarily accompanied by detailed Teaching Instructor Manuals (TIMs) that are not published but may be provided to instructors.

Consulting Cases ask the reader to develop solutions to issues faced by managers and organizations, with emphasis on practical solutions; these cases may be appropriate for final exams or other assignments. Consulting cases are accompanied by a detailed Consulting Instructor Manuals (CIMs).

All cases, IMs, notes, exercises, and articles are double blind peer-reviewed by at least two reviewers. IMs submitted should follow the guidelines provided at www.jcri.org. Case authors are required to obtain signed release forms, when necessary, from the organizations studied. The journal also publishes peer-reviewed articles, notes, and exercises. **Articles** are scholarly papers on case research, teaching with cases, and related pedagogical issues. **Notes** are industry or theoretical analyses or summaries of research or law to accompany cases. Finally, **Exercises** provide a “case like” learning experience in the classroom and may be associated with teaching cases or stand-alone; exercises are typically accompanied by a peer-reviewed instructor manual.

JCRI Open-Source Availability Policy

Cases, articles, notes, and exercises are available online at www.jcri.org at no cost. Instructors and students at state and nonprofit educational institutions are granted the right to reproduce JCRI published materials for educational purposes. The journal encourages instructors to include in their course syllabi links to the JCRI website so that students can easily access cases, articles, notes, and exercises. For reproductions by for-profit institutions, or for publication in textbooks or elsewhere, authors shall retain all rights.

Submission of Manuscripts

Authors should submit manuscripts electronically to editor@jcri.org. All submissions must follow the JCRI submission guidelines available in detail at www.jcri.org.

Review Policy

At the editor's discretion, a submission to the journal may be rejected without a full review, particularly if the manuscript does not align well with the aim and scope of the journal. Otherwise, all submissions shall be blind peer reviewed by at least two qualified reviewers. Authors shall receive reviewers' comments, together with a decision (reject, revise and re-submit, conditionally accept, or accept) by the Editor. Unless approved by the Editorial Board, no cases or papers shall be invited, and none published without undergoing the peer review process. The journal's Publication Ethics policy, including requirements for reviews, retractions, corrections, and appeals is available at www.jcri.org.

WCA Membership Requirement for Authors

There shall be no fees to publish in the journal, however the policy of the journal is that at least one author of each case, article, note, or exercise must be a WCA member for the year in which the case is published. To join WCA, please visit www.westerncasewriters.org. Attendees at the annual WCA conference are automatically members of the association for the year following the conference.

WCA Conference Cases

Authors of cases presented at the WCA conference will be invited and encouraged to submit their work to the journal. However, all submissions (whether presented at WCA, NACRA, or another conference) will undergo the peer review process. No paper - even a WCA award-winning case - shall be guaranteed publication in the journal.

Release forms

The journal shall require signed release forms from organizations, which must be collected by case authors for any case to be published that was carried out using primary research. A sample release form can be found at www.jcri.org.

Ownership and Distribution of Instructor Manuals

Instructor manuals (IMs) shall be archived by the journal for a period of at least three years after publication of a given case. IMs will only be provided to instructors who request them to editor@jcri.org when such instructors are formally affiliated with a nonprofit or governmental educational institution. No fees shall be charged to instructors who receive IMs, nor is membership in the WCA required to receive an IM. After the three-year period, inquiries for IMs should be made directly to the case author.

JCRI Policy on the use of Artificial Intelligence

Authors must be fully transparent regarding the use of generative AI in their submissions. If authors used AI or AI-assisted software to aid in writing any portion of their submission, this use must be declared in full in the instructor's manual of a case study and/or in a statement at the end (prior to references) of an article, note, or exercise. Authors must include what program was used, prompts, and details of outputs and any adaptations of outputs that appear in the submission. Authors should also include a footnote on the first page of the case, article, exercise, or note indicating that some of the content in the case was written by an AI or with the support of an AI tool. AI and AI-assisted software tools cannot be considered co-authors on submissions. (Adapted from North American Case Association (NACRA) submission details, March 22, 2024.)

JCRI Publication Ethics Policy

Approved by the JCRI Editorial Board March 9, 2017; updated September 15, 2022.

1. **Board Accountability.** The JCRI Editorial Board shall be responsible for establishing and updating, as needed, the Publication Ethics Policy of the *Journal of Case Research and Inquiry*.
2. **Editor Responsibilities.** The JCRI Editor shall be responsible for the content of the cases, notes, articles, exercises, and letters published in the journal. In consultation with the Editorial Board, the Editor shall endeavor to ensure that the content of the journal meets the standards of quality expected by the Western Casewriters Association (WCA) through the application of the blind peer-review process. The Editor shall also be responsible for ensuring that any non-peer reviewed content of the journal is clearly identifiable.
3. **Records.** The JCRI Editor shall keep accurate records of submissions to the journal, reviews, revisions, acceptances, and all other pertinent information to be able to inform the Editorial Board and WCA members of the status of the journal. The Editor shall also maintain a list of qualified reviewers for the journal that is updated based on reviewers' performance (availability, quality of review, and timeliness).
4. **Continuous Improvement.** The Editor shall strive for continuous improvement of the quality of the journal and the quality of the published cases, articles, notes, and exercises in each issue. The Editor shall seek the advice and input of Editorial Board and WCA members on ways to improve the quality, appeal, and usefulness of the journal.
5. **Retractions and Corrections.** The JCRI Editor shall be responsible for the publication of retractions, corrections, or clarification as needed, and shall keep the Editorial Board aware of any issues that might necessitate a retraction, correction, clarification, or apology.
6. **Volunteer Basis.** The JCRI Editor, Associate Editor(s), Special Issue Editor(s), Editorial Board members, Webmaster, and reviewers shall carry out their duties on a volunteer basis, and under no circumstances accept any payment for such duties. Under no circumstances shall potential authors be required to make any payments to the JCRI or its Editor, Associate Editor(s), Special Issue Editor(s), Editorial Board members, Webmaster, reviewers, or any other person associated with JCRI or WCA, nor shall any such payment be accepted.
7. **Quality of the Review Process.** The Editor, in consultation with Editorial Board, shall review and as needed update the journal's editorial policy and guidelines for reviewers in order to ensure thorough and timely reviews. The Editor shall also endeavor to ensure that the reviewers selected are qualified to review the submissions sent to them. The Editor shall apply the same review policies, procedures, and standards to submissions by WCA members, JCRI Editorial Board members, and non-WCA members. In addition, the JCRI Editor shall encourage reviewers to comment on the originality of submissions and be attentive to redundant publications or plagiarism. JCRI shall not accept fictional cases, nor cases, notes, articles, or exercises previously published elsewhere.

8. **Decisions and Appeals.** Decisions to accept or reject cases, articles, notes, and exercises shall be based on each paper's importance, originality, clarity, and pedagogical relevance as well as adherence to the submission requirements provided at www.jcri.org. Editorial decisions shall not be affected by the origins of the manuscript, including the institutional affiliation, nationality, ethnicity, political beliefs, race, gender, religion, or sexual orientation of authors. Authors whose submissions to **JCRI** have been rejected may appeal to the President of the Western Casewriters Association at www.westerncasewriters.org.
9. **Support of the Scholarly Process.** As appropriate, the Editor shall provide information to authors, reviewers, and institutions in order to support recognition of scholarly contributions.
10. **Support for Authors' Rights.** As per **JCRI** editorial policy, authors shall maintain full ownership and copyright for all papers published in the journal, with all the associated rights and obligations.
11. **Case Release Permissions.** Authors of cases shall be required to reveal the sources of information (primary, secondary or both) and to obtain signed release forms, when necessary, from the organizations studied, prior to publication of cases. Specifically, signed release forms shall be required when primary data have been used as source of information.



In Memoriam **ANDREW FERGUS**

April 13, 1964 - July 22, 2024

A past President of the Western Casewriters Association, Andrew published (with his co-author Tony Bell), the very first case in the first issue of JCRI: Mouat's Trading Company, a wonderful case that set the bar high for the many cases that followed. Andrew was a faculty member at Thompson Rivers University in Kamloops, British Columbia, Canada. He will be missed by family, friends, colleagues and the casewriters he reviewed, motivated and mentored.



Letter from the Editor

This is the 10th volume of the *Journal of Case Research and Inquiry*. With this volume, so far *JCRI* has published 71 **case studies** prepared from primary and secondary research by 186 casewriters, each one accompanied by a detailed peer-reviewed **instructor manual**. In addition, we continue to publish outstanding case-like pedagogical **exercises** for use in the classroom, alongside **notes** and **scholarly articles** related to case research and case teaching. Each case has been thoroughly reviewed and is ready for the class. Instructors who use *JCRI* cases or exercises may request from the journal the accompanying instructor's manual. The cases published in *JCRI* address diverse issues in business and society. They include studies of for-profit, nonprofit, and governmental organizations in several countries around the world. While most of the cases are based in the United States, *JCRI* publications have also included cases on truly global companies, as well as organizations operating in Argentina, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Egypt, El Salvador, Honduras, India, Ireland, Mexico, Mongolia, Nepal, Niger, The Philippines, The Solomon Islands, S. Korea, and Thailand. We welcome submissions about classic or contemporary issues anywhere in the world.

Instructors will find cases that focus on everything from entrepreneurship and small business management to decisions made in major multinational organizations. Cases, notes, exercises, and articles published in the journal are available online, full text, and free of charge at www.jcri.org. The editor is also available to write to authors' tenure and promotion committees.

In the volume, we publish six new case studies, two pedagogical exercises and one article on writing effective teaching notes. Topics in the present volume include international finance, leadership and business ethics, entrepreneurship, tax, sustainability, and nonprofit management. *JCRI* cases are ready for use in the classroom, and instructors may include in course syllabi links to cases at www.jcri.org.

JCRI is the publication of the Western Casewriters Association (WCA). On the WCA website, <http://www.westerncasewriters.org/>, authors will find a call for cases for the next WCA conference. The WCA annual conference is a unique opportunity to engage with other casewriters in a small group format to exchange feedback and polish-up a case, learn about teaching with cases, and enjoy presentations from leading case authors and case educators. The WCA is held in association with the annual meeting of the Western Academy of Management.

We are grateful to our authors for their submissions and especially grateful to our reviewers for their detailed, insightful comments on the case submissions for this volume. We look forward to receiving well-written cases, notes, exercises, and article submissions for *JCRI* in 2026.

Steve McGuire
Editor, *Journal of Case Research and Inquiry*

Yang Zhang
Associate Editor, *Journal of Case Research and Inquiry*



Table of Contents with Case Synopses

WESTERN CASEWRITERS ASSOCIATION, p. 2

JCRI EDITORIAL BOARD MEMBERS, p. 2

JCRI WEBMASTER, p. 3

JCRI EDITORIAL POLICY, p. 4

JCRI PUBLICATION ETHICS POLICY, p. 6

IN MEMORIAM, ANDREW FERGUS, p. 8

LETTER FROM THE EDITOR, p. 9

CASE RESEARCH, p. 15

ARTICLES, NOTES AND EXERCISES, p. 152

CASE RESEARCH, p. 15.

CATERPILLAR IN MONGOLIA:

STRATEGY FOR AN EMERGING MARKET, p. 16.

By Tserennyam Sukhbaatar

Caterpillar's remarkable story of business expansion in the emerging market of Mongolia began when Wagner Equipment was awarded the title of the first Caterpillar dealership, as the country transitioned from socialism to democracy and capitalism. Caterpillar (CAT) had identified a revenue stream opportunity in the emerging market and entrusted Wagner Equipment Co. to spearhead entry into the mining equipment sector in Mongolia. A Fortune-500 company, Caterpillar had 156 independently owned dealers in 192 countries. By identifying, analyzing, and implementing effective marketing, Cat became a significant player in Mongolia's construction and mining equipment sectors. The company also played a vital role in fostering the development and growth of Mongolia's economy. Being the first to enter, what measures would Caterpillar take to secure its position as Mongolia's leading mining equipment company? The chapter of Wagner Asia as a dealership for Caterpillar came to close in 2021. It was a moment marked by the decision of Bruce Wagner to pass the torch, entrusting the company's legacy to the capable hands of Barloworld Group, a South African conglomerate.

Key words: Caterpillar, Cat, Wagner Asia Equipment, Barloworld, Mongolia, Mining, CAT Equipment, CAT Dealer, USA, Business Strategy, Emerging Markets.

CHILD ADVOCATES OF SAN BERNARDINO COUNTY: FORGING A PATH FORWARD, p. 40.

By Craig R. Seal, Di Fan, Shammi Gandhi, Maria Garcia Guzman & Patrick T. Flaherty

Trisha Hendricksen had been with Child Advocates of San Bernardino County (C.A.S.A. of San Bernardino) for over 15 years. As the Interim Executive Director, she was uniquely positioned to recommend a path forward for the organization. Therefore, she would have to recommend that the Board: (1) hire another Executive Director; (2) consider building leadership capacity within the current organizational staff; (3) look to merge with (or be acquired by) another non-profit entity; or (4) hire an external Interim Executive Director. Any recommendation would require addressing key stakeholder concerns, including staff acceptance, and the approval of the Judge Advocate.

Key words: Nonprofit Management, Organizational Change, Children, Foster Care, Acquisitions, Mergers.

CAN A SMALL MOM & POP LIQUOR STORE COMPETE WITH LARGE CHAIN GROCERY STORES? p. 62.

By Deborah Walker, Michael Valdez, and Shikhar Acharya

Chris and Molly Hamilton were contemplating the changes in Colorado laws affecting their small liquor store in Durango, W.J. Doyle Wine and Spirits (W.J. Doyle). For the first time since Prohibition, Colorado consumers were able to buy full-strength beer at grocery stores and convenience stores. Prior to this change, only low alcohol “3.2 beer” was sold in most of the state’s grocery stores. Although the Hamilton’s beer sales had decreased following the law change and had not returned to the pre-law level, the store remained profitable. But it wasn’t long after full-strength beer sales were allowed in Colorado grocery and convenience stores that the voters decided they wanted wine available in those locations as well. The Hamiltons thought they could deal with this change as they had the previous one, but were not sure the same tactics that had worked with beer would work with wine. After all, were their beer customers the same as their wine customers? What new competitive strategies should the Hamiltons try to keep their wine sales strong? They weren’t sure, and the very existence of the business that had supported their family since 2010 might be at stake.

Key words: Marketing, Retail, Liquor, Competition, Consumer Behavior, Analysis, Regulatory Uncertainty

WAS THE ACQUISITION OF TWITTER INC. BY ELON MUSK A TAXABLE TRANSACTION? p. 87.

By Gretchen Lawrie and John Cooper

This case study reviews the facts of the acquisition of Twitter, Inc. by Elon Musk, which presents an opportunity to reinforce students' understanding of the complex U.S. corporate reorganization provisions (Merger). The case study leads to the question: What were the U.S. tax and non-tax consequences of the Merger for Twitter, Twitter shareholders, Parent, Elon Musk, and other investors in Parent?

Key words: Elon Musk, Twitter, Tax, Tax Law, Mergers, Corporate Reorganization.

SUMMAAGNI SUSTAINABILITY STRUGGLE: FREE QUALITY EDUCATION TO UNDERPRIVILEGED NEIGHBORHOODS, p. 116.

By: Ragni Lund, Summaya Phulpoto, Zahid Ali, Asad Ali Qazi and Sarwar M. Azhar

Mr. Amer Mahmood, Executive Director of Summaagni Education Trust (SET), convened his team to revise the mission and vision of the organization. SET was a non-profit organization operating schools in Punjab, Pakistan through the Punjab Rural Education Program (PREP). Mr. Mahmood faced the challenging decision of expanding SET schools into the Baluchistan and Khyber Pakhtunkhwa (KPK) regions. He felt the weight of his responsibilities on his shoulders, not just for expansion but also for sustaining SET's operations. If he failed to implement effective operations in these rural areas, his credibility - and the survival of SET - would be at risk.

Key words: Pakistan, Education, Nonprofit management, NGO, Mission, Vision.

EVENTFUL MANAGEMENT AT FALL LINE STATION, p. 132.

By August Jörding, Tiffanie Fraley, Marko Horn and William Carty

As part of a downtown revival in a Southeastern U.S. town, a young entrepreneur couple created a brewery and event business. The initial success in weekend bookings was fueled by a demand for wedding events pent up during the COVID pandemic. Anticipating a slowdown in demand because of the lack of dating opportunities during said pandemic, the business' sales manager tasks a consulting team to analyze the industry so that she can determine how the utilization of the event space can be increased.

Key words: Strategic Management, Management, Events, Event Planning, Event Management, Consulting, Entrepreneurship, Marketing, Project Management, Diversification.

ARTICLES, NOTES, AND EXERCISES, p. 152**THE ANATOMY OF EFFECTIVE TEACHING NOTES: PURPOSE, VALUE, PEDAGOGY, CONTENT, AND APPLICATION**, p. 153.

By Ellen A. Drost

This article examines the purpose, value, pedagogy, content and application of teaching notes in academic settings. Teaching notes serve as essential guides for instructors using case studies in their classrooms. Drawing from established research on pedagogical documentation and instructional design, this article provides educators with a framework for developing effective teaching notes that enhance both teaching delivery and student learning outcomes. To illustrate best practices, the article includes comprehensive examples from the "Los Angeles Apparel" case study, demonstrating how each element of a teaching note can be constructed for maximum pedagogical effectiveness. Through an extensive literature review and analysis of pedagogical approaches, the article concludes with recommendations for creating instructor manuals that provide guidance while maintaining instructional flexibility across various educational contexts.

Key words: Case Study, Teaching Note, Instructor Manual, Best Practice, Case Teaching, Case Pedagogy.

NATIONAL ANNUITY CORPORATION: INTERSTATE HIGHWAY PRIVATE EQUITY, p. 184.

By Seung Hee Choi and Thomas Patrick

This exercise focuses on the analysis of a potential public-private partnership (P3) investment opportunity aimed at constructing an interstate highway bypass in the Chicago area. The COVID-19 pandemic significantly altered the way business was conducted in America, with many firms having shifted to remote work and public transportation becoming less favored due to health concerns, leading to a notable increase in car usage. Consequently, city streets in Illinois saw an influx of traffic that existing roads were unable to handle. To address this issue, Illinois identified the need for a multilane highway to alleviate traffic congestion and expedite commuter travel. However, funding this large-scale project posed a significant challenge as the State already grappled with one of the highest public debts per resident in the country and only recently improved its credit rating from BBB. While additional debt could potentially jeopardize the upgrade, it is important to note that each debt issue was rated independently. Therefore, even if the new debt issue affected Illinois' overall credit rating, the cost of the issue itself might still remain competitive. Students are challenged to formulate a comprehensive list of due diligence questions, calculate the project's feasibility, and provide a recommendation to a managing director regarding the feasibility and attractiveness of pursuing this investment opportunity.

Key words: Finance, Public-private Partnership (P3), Infrastructure, Internal Rate of Return, Due Diligence.

A DATA ANALYTICS EXERCISE USING TABLEAU TO PERFORM TESLA'S COST-VOLUME-PROFIT ANALYSIS, p. 198.

By Haihong He and Xiangge Wang

In this exercise, students will analyze real-world data from Tesla to understand the cost-volume-profit (CVP) relationship and use data analysis to support their arguments about whether Tesla's growth is the result of its own success or driven by government support. Specifically, students will use the quarterly financial data, quarterly delivery and production data of Tesla to 1) use Tableau to visualize the operating income data to identify the break-even point; 2) use the regression function to estimate the average variable costs of manufacturing one vehicle and fixed costs in different periods; 3) use forecast function to predict future performance. After completing the exercise, students will have a foundational understanding of how to use Tableau for data analysis and visualization. This exercise is designed to encourage different opinions about Tesla's development and growth and to engage students in a range of learning, from managerial accounting concepts to developing skills in data analytics.

Key words: Data Analytics, Managerial Accounting, Cost Accounting, Cost- volume-profit Analysis, Data Visualization, Tableau, Tesla.

CASE RESEARCH



CATERPILLAR IN MONGOLIA: STRATEGY FOR AN EMERGING MARKET

TSERENNYAM SUKHBAATAR

Brigham Young University–Hawaii

On a beautiful morning in early 2020, Bruce Wagner, CEO of Wagner Equipment Co., a Caterpillar Inc. dealer, was gathering his thoughts in his office. Bruce had been working for Wagner Equipment Co. since January 1977 and had been promoted to president in 1994, replacing his father, Joe Wagner (Honoring the Legacy Campaign 2022). The Colorado-based Cat dealer represented the company in Colorado, New Mexico, and far west Texas. One of Bruce's most incredible experiences was when Wagner Equipment was awarded the first Caterpillar dealership in Mongolia in 1996 after a long search to expand Wagner's business overseas (UPI 1996).

Back in 1993, after the dissolution of the Soviet Union, Mongolia shifted from a communist to a democratic form of governance (Hays 2016). During Mongolia's transition to a new era, Caterpillar (CAT) saw expansion opportunities in collaboration with Wagner Equipment Co. Bruce Wagner, his father Joe Wagner, and Bob Barrows, the Vice President of Operation, visited Mongolia in 1996. Bruce and his team discovered abundant business opportunities, primarily due to the scarcity of Western companies and products in the country. The company decided to make the first move by becoming a Caterpillar dealer in Mongolia. He stated, *"Our goal was to improve the lives of Mongolians and contribute to economic growth by being pioneers in the market while expanding company profit as the economy grows."*

Wagner Equipment had challenges and success since then. During the COVID-19 pandemic, business in Mongolia slowed down. Also, Bruce was getting older, and he needed to decide whether to keep his family business in Mongolia or sell it and move on. He reflected on his journey to Mongolia and how much he and Cat had a fun time there. This emerging market country was risky and yet provided so many great business opportunities.

The Land of the Eternal Blue Sky

Mongolia was famously known as the birthplace of Chinggis Khaan, who ruled half the world in the 13th century (The History Channel 2023). However, this country was so much more. Mongolia typically experienced an average of 257 sunny days annually in a region characterized by high atmospheric pressure—no wonder it was known as the land of the eternal blue sky (Mel et al. 2022). The capital city Ulaanbaatar was the world's coldest capital (Nag 2021). The population of Mongolia was only 3.3 million, considered one of the least densely populated countries in the world (Kästle 2016). The region's total area was 1,564,116 square kilometers, which was more than twice the size of the state of Texas (see Exhibit 1).

Exhibit 1. Geography of Mongolia

Source: Image from Geology.com



Mongolia, located between Russia and China, was the second-largest landlocked country in the world (Sawe 2021). The land had abundant natural resources such as coal, fluorite, copper, and gold. Mongolia had over 10,000 deposits comprising more than 80 varieties of minerals, with around 10,000 exploration findings and several hundred thousand mineral points (IMARC 2023). Mongolia's natural resource reserves were estimated to be worth over \$2.75 trillion (Schuman 2012). Because of this, it was sometimes called *Minegolia* (Shmavonian 2012).

The country's primary exports, including copper ores, non-agglomerated bituminous coal, gold, unconsolidated iron ores, and premium animal hair, substantially contributed to world commerce. Mongolia's GDP was expected to exceed 21 Billion USD in 2025 (Trading Economics). The economy had grown to be 12 times larger than it was when Caterpillar entered the country in 1993. Anticipated average economic growth above 6% in 2025-2026 would further enhance the long-term picture, mostly due to the thriving mining sector (Kushkhov 2024).

In 1995, when Wagner Equipment Co. was offered the chance to establish itself as a Cat dealership in Mongolia, the business acknowledged the significant potential of the nation, which exceeded that of China and Russia (Eddie et al. 2024). Mongolia stood out as a rising economy that was more democratic than its neighbors. Bruce noted, *"Mongolians were more politically open than their neighbors. The country was more democratic and enthusiastic. We liked this country immediately."* Bruce had huge hopes for Mongolia and his business.

History of Caterpillar: The Yellow Iron

Beginning

The Caterpillar brand originated in 1890 when Benjamin Holt and C.L. Best developed the first steam tractor (Serena 2020) in the United States. It was more advantageous to have the farmer labor longer than the horses. In 1904, Holt replaced the wheels from a Holt steam tractor with tracks to help the farmer deal with the soft soil, and the machine crawled like a giant caterpillar (Chris 2019). After World War I, the Caterpillar Tractor Company and C.L. Best Tractor Co. merged to combine their strengths in developing innovative products and establishing strong dealer networks. The Great Depression prompted considerable innovation. In October 1931, the business introduced the Caterpillar Diesel Sixty Tractor and designed a unique Caterpillar yellow color to help the machine stand out (Caterpillar et al.). Within a few years, Cat became the world's largest producer of diesel engines. CAT made its name by developing innovative solutions.

In the 1950s, Caterpillar became a global corporation, selling its equipment and parts across every continent. (See Exhibits 2 and 3.) Renowned for its commitment to environmental and community sustainability, Caterpillar was one of the most innovative equipment companies. The growing demand for natural resources had heightened the need for Caterpillar machinery. Caterpillar had rapidly risen to a prominent position in the mining equipment industry within a short span of time.

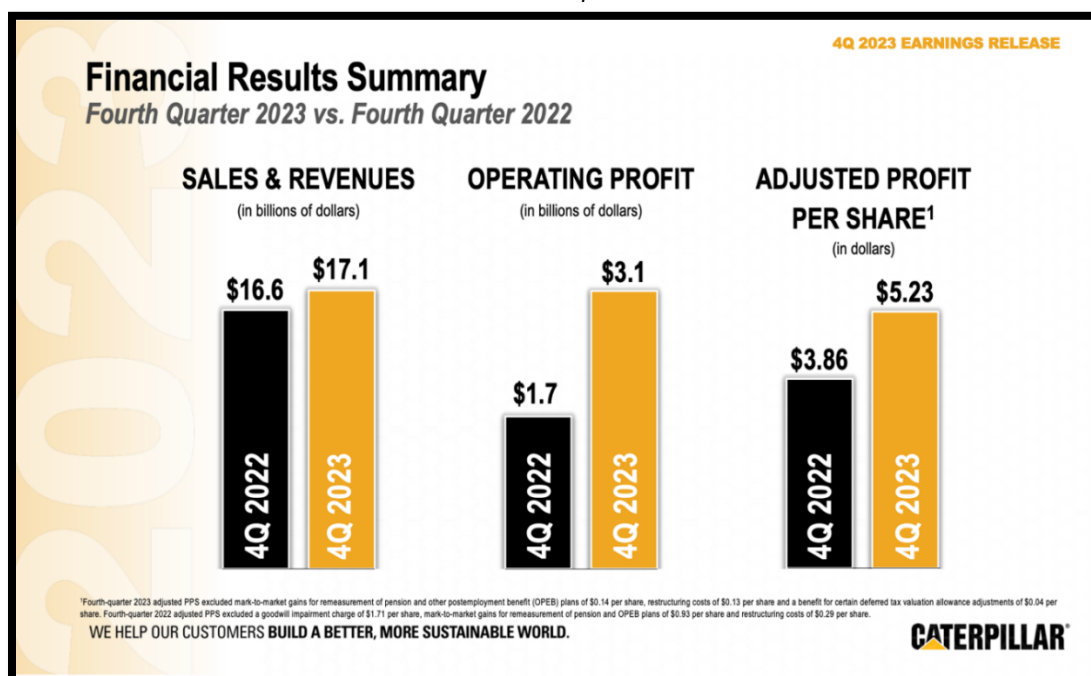
Exhibit 2. Geography of Caterpillar Dealership

Source: Image from Caterpillar.com



Exhibit 3. Summary of Caterpillar Financial Results

Source: Caterpillar.com



Today

By the end of 2022, the company achieved revenue of \$59.4 billion (WFAA 2022). Notably, 59% of this revenue was generated from international markets (Caterpillar et al. 2022). Additionally, Caterpillar was ranked 73rd on the prestigious Fortune 500 list the same year (WFAA 2022). As of January 2025, Caterpillar commanded a market capitalization of \$ 170.4 billion, posing a difficult challenge for competitors like Komatsu, Hitachi, Liebherr, and other mining equipment companies trying to keep pace.

Expansion in Asian Markets

Caterpillar in Asia emerged over several decades with several noteworthy enterprises. Nine Caterpillar machines were instrumental in the Kobe Bay Reclamation Project in 1961 (Caterpillar 2019). This project was the largest earthmoving project in Japan, where the machines were used to move a part of a mountain into the sea. At the same time, some 500 pieces of Caterpillar equipment were sent to Pakistan to start building the Mangla Dam (Stone 2018).

In addition, more than seventy pieces of Cat machinery and six Caterpillar engines were used in Jakarta, Indonesia, in 1982 to build an airfield (Caterpillar 2021). This pattern persisted in 1993 when over 300 Cat machines were brought in for the massive project of constructing China's Three Gorges Dam (Caterpillar 2021).

When the Golden Quadrilateral, a 3,625-mile-long four-to-six-lane road, was built in India in 2005, 220 Cat machines and power sets were deployed (Caterpillar 2021). Thirty-four Cat machines were used to successfully build the Saemangeum barrier in South Korea the following year (Caterpillar 2021). As the world's longest earthen barrier, it was an example of how versatile and adaptable Caterpillar machinery was for various Asian tasks. (See Exhibit 4.)

Exhibit 4. Geography of Caterpillar Dealerships in Asia

Source: Recreated from Caterpillar.com



Entering Mongolia – An Unknown Emerging Market

Before Anybody Else

Caterpillar positioned itself as a pioneer in a market many considered too risky to enter. Some perceived the company's decision as daring, even foolhardy, as it ventured into uncharted territory during Mongolia's significant transformation. Before the arrival of well-known names such as Coca-Cola, Pepsi, Toyota, KFC, Komatsu, Liebherr, Mercedes Benz, Ford, Apple, KPMG, Sony, Samsung, LG, and other brands, Caterpillar was a pioneer in Mongolia's unique developing market.

In the eyes of Rodney Camper, a Wagner Equipment employee who was the Wagner Asia general manager in Mongolia between 1996 and 1999, *"Mongolia held such a unique place; it was sort of the most progressive of the rest of the Soviet satellite states, the country was very interested in moving forward to the West."* This observation highlighted the country's commitment to progress and confidence.

The First Customer

Craig Jepson was the first Caterpillar employee to set foot in Mongolia. In 1993, Jepson assumed the role of Account Manager at Caterpillar Singapore, a regional office. He expressed his commitment to establishing the foundation for CAT's dealership to succeed. One of his first initiatives was the Erdenet Mining Corporation, a state-owned copper mining entity that was the largest company in the Mongolia at the time.

Jepson initiated a study of the local area, examined the layout, started training a couple of Mongolian employees to familiarize them with Caterpillar equipment, and established connections with the leader of the uranium mine situated near the border of Russia and Mongolia. Because of the tremendous effort CAT had put into paving the way for its dealer, two Cat 785 dump trucks were sold directly to the Erdenet Mining Corporation.

Business Plan

In March 1996, the first move was taken by Wagner Equipment Co. after Bruce Wagner, Joe Wagner, and Bob Borrows visited Mongolia. Returning from the trip, Wagner Equipment created a business plan and that would take up to two and a half months to accomplish. Caterpillar approved the plan to start a new dealership in Mongolia.

Wagner Asia Equipment LLC

The executor of the business plan was Rodney Camper, appointed to be the first general manager in Mongolia, who traveled to the country, learning the lay of the land from Craig Jepson. In late August 1996, Wagner Equipment Co. successfully created a new local company in Mongolia called Wagner Asia Equipment LLC (WA) to operate a CAT dealership.

One of the initial challenges was the licensing process. Due to the absence of Western business in Mongolia at that time, the Government was unfamiliar with this kind of setup; it turned out the Government suggested the company register the business license in a way that could avoid tax payments. Wagner Asia had a different perspective on taxes, expressing the desire to set up a firm that could contribute with taxes to fostering Mongolia's economic growth for the benefit of both the company and the nation. There followed a month-long process of discussion and form filling.

Rodney Camper was then invited to participate in a field trip organized by the Mongolian Government. The main reason was to gain insight into the operations of Western companies, particularly in the United States. Learning more about the culture and country's situation was an eye-opening moment, which helped Wagner Asia better understand its clients. It was an amazing opportunity for observation and market research for Wagner Asia and the beginning of building a relationship with its future customers.

Growth

The country's Russian past became apparent after a shift in the governmental structure. Most of the country's mining equipment came from Russia, and most of it needed upgrading. It was primarily the Russian Belaz brand, a rival of Caterpillar. A battle had just started.

The first major deal happened at the end of 1996. A competitive bidding event for mining equipment occurred during a mining expo in Ulaanbaatar, Mongolia. Various vendors participated in the Expo, including the Japanese corporations Itochu, Komatsu, Hitachi, Sanyo, and CAT. Under the leadership of Rodney Camper, CAT secured its initial deal with the mining company in Baganuur, a giant thermal coal mine. The deal included 20 dump trucks, eight bulldozers, and five excavators, totaling around 40 pieces of equipment with an estimated value of \$20 million (MMJ 2023). The victory was due to CAT's advantages in equipment

ownership cost. It was a significant win to kick off their entry into the market. It was a good beginning.

One of Wagner's challenges was Caterpillar's price premium. It was expensive for the mining companies involved. Wagner maintained a price premium because of the training program, assembly knowledge, equipment productivity, service, and application expertise. The firm was not only prepared to offer all required replacement parts and set up a repair facility, but it also launched a successful training program for the customers' technicians. These capabilities set CAT apart from competitors who lacked such comprehensive offerings.

The company acquired an old building for operations and training, which became the CAT dealer's office. Wagner Asia distinguished itself from its competitors by creating a customer support system and a machinery training program. This training program targeted new graduates from Mongolia's technical school and individuals aspiring to pursue a career in CAT mechanics. Wagner Asia adopted a fee structure that charged mining companies \$8,000 per mechanic annually for training services. Wagner Asia built a community proficient in CAT machinery through this marketing approach. This approach contributed to Wagner Asia's success and facilitated individuals becoming more skilled at working with CAT equipment.

Competition

Wagner Asia then positioned these CAT-certified technicians on mining sites nationwide. Those certified technicians were in high demand and became experts in the field. Upon their recommendation, mining companies began to choose CAT mining equipment. It was a brilliant strategic move for Wagner Asia. Growing the population by training a significant portion of Mongolians, the company effectively positioned Mongolia as a nation where expertise in CAT machines became commonplace, creating a natural advantage for both Wagner Asia and Caterpillar.

Competing with more affordable Chinese, Korean, and Russian equipment, such as Hyundai, Doosan, XCMG, Lui Gong, Sany, SDLG, and Belaz posed a challenge, especially as these competitors became increasingly aggressive after 2005. To counter the lower-priced competition, Wagner Asia introduced the SEM brand, Caterpillar's lower-end Chinese manufactured equipment (Caterpillar n.d.). This proved to be a successful move, as the SEM brand eventually emerged as the top-selling Chinese equipment brand in the country, surpassing all its competitors. In 2012, Wagner Asia achieved the distinction of being the top seller of SEM brands in the Eurasia region (Shandong Engineering Machinery Co. Ltd. n.d.).

Communication, Currency, and Corruption Challenges

Misunderstanding

Communication was difficult for a Western company in a country where English was not widely spoken. Driving in Mongolia also created risks and challenges due to underdeveloped roads, infrastructure and the lack of developed rules, regulations, and safe driving practices.

Early in the process, an incident involving an expat worker driving a bus to transport Mongolian employees resulted in injuries. Another challenge on the operational side took place with identifying a technology and training gap; the company recognized that while Mongolian individuals were highly educated, the existing technical education in the 1990s did not cover technologies such as diesel, hydraulics, and electronics.

Managing Corruption

Legal, judicial, and corruption challenges were another factor delaying business growth. The legal system was immature, leaning toward the customer rather than the company. Challenging government policies added to this complexity; the lack of apparent corruption law and the government's newness to democracy contributed to the insecurity and instability of companies

looking to invest in Mongolia. Corruption within the government made things even more complex. Bruce Wagner explained how the government-controlled mines occasionally asked for funds, and rejecting such requests led to lost dollars.

A challenging situation happened when WA could not repossess equipment held as collateral after missing payments from a customer. The tax authority demanded a \$250,000 payment within two weeks for WA to win the case. However, WA rejected the offer; *“though paying the bribe might have been acceptable in the country, it contradicted WA and Caterpillar’s ethical standards”*, Bruce emphasized. Additionally, offering a bribe would set a precedent, and other customers would insist on them. Instead, the company hired a lawyer who charged more than \$250,000 to help with the case; in the end, the company won the case and paved the way to success for many future cases.

Money Problems

Wagner's financial and economic issues were reflections of the complexities of global business development. Inadequate sources of financing for customer equipment acquisitions throughout the company's expansion period resulted in lost sales. To satisfy customer demand, the company identified individuals with gold licenses and introduced a rental system backed by gold deposits. In one gold mining firm, Wagner did not get any payment from the mining company, prompting the company to help the government establish a payment standard like the Uniform Commercial Code (UCC) and repossess mining assets (gold) for collateral. These incidents challenged the company's cash flow. Wagner eventually was able to sell the gold and recoup its losses.

Financial strain and cash flow issues, such as Mongolian banks lacking the funds required for customer purchases, led Wagner to adopt a monthly rental approach. In 2004, Wagner opened

the CAT Rental Store and started offering rental equipment services. In the long term, this decision proved to be highly beneficial, contributing significantly to the growth of the business.

Redefining Strategies for Sustainable Growth

Strategy, Strategy, Strategy

While selling Caterpillar mining equipment was the core of Wagner's business, the company realized it needed more than one revenue stream. WA aimed to maintain sustainable growth. WA expanded into additional dealerships, first with Ford trucks, then Michelin tires and Land Rovers. It also established strategies to support Caterpillar sales in multiple ways.

For instance, WA used a marketing strategy by delivering free or discounted Ford trucks to mining clients who purchased CAT equipment at the target price. Customers then started to request additional Ford spare parts and services because of the vehicles' endurance. This later led to the creation of another business: Wagner Automotive LLC, which later became Ford and Land Rover's sole dealer in the country.

John Karlsen succeeded Rodney Camper as General Director of Wagner Asia and initiated another successful marketing strategy in 1998. At that time, the company had limited sales representatives, and John launched a sales training program. After 2-3 years, the training program was off the ground, and the sales representatives were supported with all the tools they needed; the company began to gain more revenue through the efforts of the expanded sales force.

Generating Leads and Mining the Data

One of the sales-supporting systems was set up as the company started capturing their customers' machine data, which helped them gain a deeper understanding of customer needs through analysis. Initially, the company utilized Accpac, later known as Sage 300; this software served as an enterprise resource planning tool to connect core businesses such as accounting, distribution, warehousing, and manufacturing. It integrated sales, marketing, customer service, and business analytics into a unified information system.

As the first to use the program in Mongolia, Brian Roth, the IT manager, played an essential role by flying to the United States, bringing the program's floppy disks to Mongolia, and setting up the system. This innovative approach was the key to winning the trust of mining owners. The implementation of Sage 300 ensured efficient forecasting and supported the business operations side. It also started generating data-driven leads for its sales and marketing. As a result, the company established a strong relationship with its customers, like Mongolyn Alt LLC, one of Mongolia's largest gold mining groups. It later became one of the most loyal customers of Wagner Asia.

Relationship Marketing

However, little money was spent on advertising campaigns. Bruce Wagner focused on one of the most effective and long-term marketing strategies: relationship marketing. This marketing strategy increased employee and consumer trust and commitment to Caterpillar in Mongolia. Bruce Wagner once said, *"Relationship is the best marketing. We realized that building a relationship in the business was important."*

To build successful relationships with customers, Wagner Asia initiated various marketing events for its customers, including the unveiling of new products, the introduction of cutting-edge technology and services, and more. Since it worked in a B2B market, Wagner Asia did not

need to work with thousands of customers, only a few decision-makers. Bruce Wagner understood the importance of building relationships and building trust. Consistently maintaining year-round activities contributed to steady growth. These events were tailored to cater to various target customers, including C-level executives, technicians, and engineers. At these events, an average of 250 to 400 customers attend to learn more about the world of Wagner Asia and Caterpillar.

During the 2008 world economic crisis, Wagner Asia's business was booming, and Wagner Asia generated \$150 - \$175 million worth of orders for CAT equipment. However, dealing with these increasing sales posed challenges for the company. The firm navigated economic changes and faced financial difficulties, especially in 2019, when it experienced its most revenue difficulty.

Future of the Business in Mongolia

Bruce was reflecting on his past, and the amazing years he spent in Mongolia. It was a great journey. He also needed to consider his company's future, as it was his family business. He was planning his retirement. In his office in Denver, he was pondering his next move. He wanted to fly out to Mongolia and surprise his team with his new decision. However, Bruce Wagner has had difficulty deciding on the company's next step; he had three options to consider.

Option 1: Invest In Business and Run as A Cash Cow

The weight of the decision to own the company bore heavily on Bruce, considering the extensive journey of growth that had been charted since its inception in 1996. While grappling with slowing sales due to the COVID-19 pandemic, Bruce found himself at a crossroads. Despite the adversity, he had a steadfast belief in the company's capacity to regain ground after the pandemic. His optimism was fueled by a strategic outlook and foresight, especially with the revenue projected for 2020-2025. This positive outlook was supported by the mining industry's growing demand, which was expected to boost the business to new heights. Bruce remained

firm in his belief that overcoming the difficulties would open the door for unmatched growth and wealth in the company's future initiatives, even though the company's circumstances required grit and resilience. He also needed to prepare and train the next generation, which would be more crucial if he stayed.

Option 2: Sell The Entire Enterprise and Exit Mongolia

According to Caterpillar policy, he had to offer his company to one of CAT's dealers if were to sell it. Typically, Caterpillar did not want a new company with no experience to join as a new dealer. Therefore, he had to work with current dealers. He knew many of them. He even worked with some of them in different regions. They all had excellent experience with CAT equipment. There were many experienced Caterpillar dealers, such as Mantrac, Zeppelin, Barloworld, Al-Bahar, and Finning, who could easily manage the business in this market. However, he had to find a dealer who would be successful in the Mongolian market. Caterpillar could suggest some dealers, and Bruce had some names in mind too. Selling could earn him some cash quickly, but would this be enough to reward his 20+ years in Mongolia? He could focus his business on the United States or enjoy his retirement. At the same time, it would be sad for him to leave Mongolia if he sold his company.

Option 3: Stay In Mongolia for A While, Then Sell the Entire Company

Keeping his business in Mongolia was not an issue. He knew the market very well. Challenges were Caterpillar's high expectations, Chinese brands' fierce competition, and convincing his children and family members that it was worth it. Maybe he should stay and focus on the business for a while. Then, he could sell the company after a few years when it became more profitable. However, he did not know how long it would take - three, five, or more year? Was it better to leave today or in 5 years? Bruce remarked: *"I loved this country and its people so much. I just didn't want to leave soon."* He wanted to contribute to the country's economy, and

thought of his company as a child. Moreover, there were countless mining and construction projects were underway, which meant huge sales opportunities over the next years or decades.

While 2019 was ending and Bruce weighed the options of selling or maintaining ownership, there were alternative paths he might have pursued. A few weeks later, in early 2020, as part of his regular business trip to Mongolia, Bruce headed to the airport and departed for Ulaanbaatar to share his plan and decision with his team.

What alternatives did Bruce have for the Mongolian business? What would be his best course of action?



Appendix A. Timeline of the special events and activities*Sources: Author's Note and Company's Website*

Year	Event
1993	Caterpillar's account manager, Craig Jepson, visited Mongolia for the first time.
1996	Bruce Wagner and his team visited Mongolia for the first time.
1996	Wagner Asia Equipment LLC was established.
1997	The first major deal with Baganuur, a thermal coal company, was made.
1998	WA introduced the first CAT 769D dump trucks of 40 tons.
2004	WA supplied the complete technical park in the Gobi Desert for the Oyu Tolgoi project.
2004	WA received recognition as one of Mongolia's top 50 firms and a top taxpayer.
2004	WA opened the CAT Rental Store.
2008	WA introduced the SEM brand – a low-end Caterpillar brand to compete with Chinese competitors.
2009	WA introduced the CAT 785C mining dump truck with a capacity of 140 tons.
2010	WA successfully delivered 240-ton CAT 793D dump trucks for the first time to the Eurasia region - Ukhaa Khudag coking coal project in Tsogttsetsii, Umnogobi. This site contains one of the world's largest coking and thermal coal deposits, with an estimated resource of 6.4 billion tons or more than 100 years of production (MMJ 2012).
2010	WA opened the S.O.S Lab, a state-of-the-art chemical sampling laboratory, which was one of the ten laboratories worldwide meeting Caterpillar standards.
2011	WA opened the nation's largest Component Rebuilding Center and a residential camp in the Gobi Desert with a 300-resident capacity.
2012	WA became the top SEM seller in Eurasia.
2014	WA built the Gobi Distribution Center.
2018	WA unveiled the CAT Merchandise Store, a state-of-the-art machine shop, and other projects that amounted to millions.
2019	WA organized the first open-air expo for heavy equipment.
2019	WA became the 18th-best company in the nation.
2020	WA organized the first online auction during COVID-19.

Appendix B. Wagner Equipment Co. Introduction

Source: Wagnerequipment.com

Wagner Equipment Co., a Caterpillar dealer headquartered in Colorado, was established by Joe Wagner in 1976. Wagner's revenue source had been the sale and rental of CAT machines utilized in heavy construction, building construction, mining, waste handling, paving, and more. Wagner had more than 1,000 employees and over 235 field service technicians. In 2022, the company generated an approximate annual revenue of \$924.7 million, operating in the United States, including Colorado, New Mexico, and Far West Texas. In 1996, Wagner Equipment Co. extended its dealership to a new market, Mongolia, forming the Wagner Asia Equipment LLC company, and began to represent the Caterpillar brand. Over the past two decades, through its dedicated hard work and passion for contributing to the Mongolian economy, Wagner Asia Equipment LLC has successfully positioned Caterpillar as a leading brand in construction and mining equipment in the Mongolian market. By the end of 2020, Wagner Asia Equipment LLC had employed more than 700 employees in the country, and total revenue reached approximately \$180 million. Wagner Asia Equipment LLC was the largest American-invested company in the nation, among Mongolia's top taxpayers, and recognized as one of the best Caterpillar dealers in the Eurasia region.



Tserennyam Sukhbaatar is an Assistant Professor of Business at Brigham Young University–Hawaii, where he teaches Marketing and Management courses. He holds an MBA in Management from Woodbury School of Business at Utah Valley University and a B.S. in Business Management from BYU-Hawaii. With a career-spanning role from marketing specialist to Director of Marketing, he has worked with global brands like Apple, Dell, Sony, Toshiba, Electrolux, Acer, Panasonic, Samsung and Caterpillar. His research interests include digital marketing, consumer behavior, and international business. Tserennyam collaborates on interdisciplinary research to develop innovative solutions for complex societal challenges.

Acknowledgement:

The author acknowledges the invaluable contributions of his research assistants, **Parker Hyder** and **Chutamas Tavivongpaiboon**, whose dedication, diligence, and intellectual support were instrumental in shaping the outcomes of this study. Their commitment to excellence and attention to detail significantly enriched the research process.

Additionally, the author extends his appreciation to the executives of Caterpillar dealer Wagner Equipment Co.—Bruce Wagner, Bob Barrows, Brian Rothe, Rodney Camper, John Karlsen, Cody Eldridge, and Matt Connell—for their generous time, insightful discussions, and valuable industry knowledge. Their expertise and willingness to share critical information about Mongolia and Wagner Asia Equipment LLC's businesses significantly contributed to this case study's depth and relevance.



References

- Ankhtuya, B. (2023, December 1). *The World Bank revises its growth forecast for Mongolia*. *News.mn*. <https://news.mn/en/800165/>
- AMCHAM Thailand. (2023, December 7). *Caterpillar (Thailand) Ltd*. <https://connect.amchamthailand.com/list/member/caterpillar-thailand-ltd-1277>
- Baganuur Mine. (n.d.). *Baganuur Mine*. <https://baganuurmine.mn/>
- Barloworld Mongolia LLC. (n.d.). *About us*. <https://www.barloworld.mn/en>
- BELAZ (n.d.). *Home page*. <https://belaz.by/en/>
- Borusan Cat (n.d.). *Borusan Cat*. <https://www.borusancat.kz/en/corporate/about-us>
- Caterpillar (n.d.). *About SEM*. https://www.semmachinery.com/EU_EN/about-us/about-sem.html
- Caterpillar (n.d.). *Reclaiming Kobe Bay*. <https://www.caterpillar.com/en/news/caterpillarNews/customer-dealer-product/reclaiming-kobe-bay.html>
- Caterpillar (n.d.). *S.O.S. services: Scheduled oil sampling*. Caterpillar. https://www.cat.com/en_US/support/maintenance/sos-services.html
- Caterpillar (n.d.). *Meet the founders*. <https://www.caterpillar.com/en/company/history/history-timeline/meet-the-founders.html>
- Caterpillar (n.d.). *SEM: Affordable, available, and supported*. Caterpillar. <https://www.caterpillar.com/en/brands/sem.html>
- Caterpillar Annual Report (2022). Scene7. Caterpillar Inc 2022 Annual Report. <https://s7d2.scene7.com/is/content/Caterpillar/CM20230503-58d3d-2ac19>
- Caterpillar (2017, September 20). *Caterpillar celebrates 50 years in Singapore*. <https://www.caterpillar.com/en/news/caterpillarNews/global-footprint/caterpillarcelebrates50yearsinsingapore.html>
- Caterpillar Inc. (2021). *Our role in Asia's infrastructure*. <https://www.caterpillar.com/en/news/caterpillarNews/2021/asia-infrastructure.html>
- Caterpillar (n.d.). *SEM*. <https://www.caterpillar.com/en/brands/sem.html>
- Cat Mining (2021, February 17). *Relying on trucks and dealer support in the Gobi Desert* [Video]. YouTube. https://www.youtube.com/watch?v=YDW7iVzrv_s
- Chris (2019, September 25). *History of Cat. History of Branding*. <https://historyofbranding.com/cat/>
- Colorado Business Hall of Fame (n.d.). *Joe Wagner*. Colorado Business Hall of Fame. <https://www.coloradobusinesshalloffame.org/joe-wagner.html>
- Doosan Corporation (n.d.). *Doosan Corporation*. <https://www.doosan.com/en>
- Dyvik, E.H. (2024, August 9). *Longest land borders worldwide*. Statista. <https://www.statista.com/statistics/1103985/border-length-between-countries/>
- Eddie Clinton, E.T. & Clinton, E. (2024, January 18). *Wagner Asia: Servicing the best*. APAC Outlook Magazine. <https://www.apacoutlookmag.com/company-profiles/48-wagner-asia>
- Erdenet Mining Corporation (n.d.). *Home page*. <https://www.erdenetmc.mn/en/>
- Ford Motor Company (n.d.). *Ford*. <https://www.ford.com/>
- G., I. (2012, March 19). *Coal handling plant at Ukhaa Khudag heralds a new dawn*. www.mongolianminingjournal.com. <https://www.mongolianminingjournal.com/a/19172>
- Hailes, B. (2019, March 27). *Behind the wheel of Caterpillar's 797F haul truck*. <https://www.componentsonly.com/blog/article/2019-03-behind-the-wheel-of-caterpillars-797f-haul-truck/>
- Hays, J. (2016, April). *Mongolia breaks away from the Soviet Union. Facts and Details*. https://factsanddetails.com/central-asia/Mongolia/sub8_2b/entry-4567.html

- Heavy Equipment Guide Staff (2022, June 15). Fortune 500 companies in DFW: Caterpillar coming to North Texas | wfaa.com. Caterpillar, a \$51 billion construction equipment company, is relocating to North Texas. <https://www.wfaa.com/article/money/business/fortune-500-dfw-texas-companies-caterpillar-a-51-billion-construction-equipment-company-is-relocating-to-north-texas/287-f5181084-c7de-46e7-8e6c-e64845b8f679>
- History Caterpillar (n.d.). History - About Us. Tractors Malaysia Home. <https://www.tractors.com.my/our-business/about-us/our-history>
- History.com Editors (2023, May 30). Genghis Khan - descendants, Empire & Facts. History.com. <https://www.history.com/topics/asian-history/genghis-khan>
- Hitachi, Ltd (n.d.). *Hitachi*. <https://www.hitachi.com/>
- Honoring The Legacy Campaign (2022, April 20). <https://honoringthelegacycampaign.com/leadership/bruce-wagner/>
- HD Hyundai Construction Equipment (n.d.). *HD Hyundai Construction Equipment*. <https://www.hd-hyundaice.com/en>
- IMARC (2023, October 26). IMARC 2023 opportunities of Mongolia's mining sector: International Mining and Resources Conference (IMARC). International Mining and Resources Conference + EXPO (Portfolio). <https://imarcglobal.com/news/articles/imarc-2023-providing-an-in-depth-glance-into-the-opportunities-of-mongolias-mining-sector>
- ITOCHU Corporation (n.d.). *ITOCHU Corporation*. <https://www.itochu.co.jp/en/index.html>
- IVT International (n.d.). Caterpillar machines help build Mangla Dam [Video]. IVT International. <https://www.ivtinternational.com/videos/caterpillar-machines-help-build-mangla-dam.html>
- Junior Achievement-Rocky Mountain (2012, October 22). *Joe Wagner, 2002 Colorado Business Hall of Fame laureate* [Video]. YouTube. <https://youtu.be/p3E0ksWzH9w>
- Kästle, K. (2016). *Mongolia*. Mongolia - Country Profile - Mongol Uls. <https://www.nationsonline.org/oneworld/mongolia.htm>
- KH3215 (n.d.). Contact. <https://kh3215.contact.page/>
- Kushhov, B. (2024, April 10). Mongolia's economy in 2024-2026: Three years of prosperity? New Eastern Outlook. <https://journal-neo.su/2024/04/19/mongolias-economy-in-2024-2026-three-years-of-prosperity/>
- Land Rover (n.d.). Land Rover USA. <https://www.landroverusa.com/index.html>
- LECTURA GmbH (n.d.). *Caterpillar 769 D Specifications & Technical Data (1987-2023)*. <https://www.lectura-specs.com/en/model/construction-machinery/rigid-dump-trucks-caterpillar/769-d-17985>
- LiuGong (n.d.). *LiuGong North America*. <https://www.liugongna.com/>
- Mongolyn Alt (MAK) LLC (n.d.). *Homepage | Mongolyn Alt MAK LLC*. <https://www.mak.mn/en>
- Market screener (2019, October 24). *Caterpillar: Our history in Russia and Eurasia*. <https://www.marketscreener.com/quote/stock/CATERPILLAR-INC-4817/news/Caterpillar-24-Oct-2019-Our-History-in-Russia-and-Eurasia-29451977/>
- Caterpillar (n.d.). Meet the founders. <https://www.caterpillar.com/en/company/history/history-timeline/meet-the-founders.html>
- Mel, A. & Cherry, M. (2022, December 14). Mongolia, the land of the blue sky. Northtrotter. <https://northtrotter.com/2016/05/20/mongolia-the-land-of-the-blue-sky/>
- Metro Group (n.d.). Metro Group (Cambodia) Co., Ltd.. <https://kh3215.contact.page/profile>
- Michelin (n.d.). Michelin. <https://www.michelin.com/en/>
- Monark Equipment (n.d.). About us. [https://www.catrentalstore.com/monark-equipment/en PH/about.html](https://www.catrentalstore.com/monark-equipment/en_PH/about.html)
- Mongolia Map.(n.d.). *Mongolia Map and Satellite Image*. Geology. https://geology.com/world/mongolia-satellite-image.shtml#google_vignette

- Mongolia's top 100 enterprises (2020, May 21). Mongolia's top 100 enterprises of 2019. [www.mongolchamber.mn. https://www.mongolchamber.mn/a/389](https://www.mongolchamber.mn/a/389)
- Mongolian Mining Journal (2017, December 27). Caterpillar is expanding as a technology company. <https://www.mongolianminingjournal.com/a/65245>
- Mongolian Mining Journal (2023, January 24). *Wagner Asia's new achievements in Mongolia*. <https://www.mongolianminingjournal.com/a/43247>
- Nag, O.S. (2021, January 22). The coldest capital cities in the world. WorldAtlas. <https://www.worldatlas.com/articles/the-coldest-capital-cities-in-the-world.html>
- Omondi, S. (2019, August 1). Countries with the longest land borders. WorldAtlas. <https://www.worldatlas.com/articles/countries-with-the-longest-land-borders.html>
- Our History in Russia (2019, October 24). *Caterpillar: 24-oct-2019 - our history in Russia and Eurasia*. MarketScreener. <https://www.marketscreener.com/quote/stock/CATERPILLAR-INC-4817/news/Caterpillar-24-Oct-2019-Our-History-in-Russia-and-Eurasia-29451977/>
- Our Role in Asia's Infrastructure (2021, May 11). Our role in Asia's infrastructure. <https://www.caterpillar.com/en/news/caterpillarNews/2021/asia-infrastructure.html>
- Packowitz, I.M. (2023, August 1). *Update: Caterpillar's stock price soars to record high on stronger-than-expected 2Q earnings*. <https://www.25newsnow.com>. <https://www.25newsnow.com/2023/08/01/caterpillars-2nd-quarter-2023-results/>
- Redzic, O. (2022, January 4). Caterpillar: The next leap manufacturer providing a sustainable future with cutting-edge technologies. Analytics Insight. <https://www.analyticsinsight.net/interview/caterpillar-the-next-leap-manufacturer-providing-a-sustainable-future-with-cutting-edge-technologies>
- Rio Tinto (n.d.). *Oyu Tolgoi*. <https://www.riotinto.com/en/operations/mongolia/oyu-tolgoi>
- Rocket Reach. (n.d.). *Wagner Equipment profile*. https://rocketreach.co/wagner-equipment-profile_b5c7e8baf42e0dbb
- SANY (n.d.). SANY Global. <https://www.sanyglobal.com/>
- Sawe, B.E. (2021, March 10). Largest landlocked countries in the world. WorldAtlas. <https://www.worldatlas.com/articles/the-largest-landlocked-countries-in-the-world.html#:~:text=Mongolia%20is%20the%20second%20largest,of%20the%20country%20is%203%2C225%2C170>
- Schuman, M. (2012, July 24). Untapping Mongolia's mineral riches. *Forbes Asia*. <https://www.forbes.com/sites/forbesasia/2012/07/24/untapping-mongolias-mineral-riches/>
- SDLG (n.d.). SDLG. <https://www.sdlg.com/>
- Serena, N. (2020, December 12). The legacy of Caterpillar's founders lives on. https://www.cat.com/en_US/blog/the-legacy-of-caterpillars-founders-lives-on.html
- Shandong Engineering Machinery Co. Ltd (n.d.). *About SEM*. SEM Machinery. https://www.semmachinery.com/EU_EN/about-us/about-sem.html
- Sanyo Electric Co., Ltd. (n.d.). *Sanyo AV products*. <https://www.sanyo-av.com/us/>
- Shmavonian, K. (2012, July 25). Unearthing Mongolia's mineral riches. *Forbes*. <https://www.forbes.com/sites/forbesasia/2012/07/24/untapping-mongolias-mineral-riches/>
- Stone, T. (2018, June 20). Caterpillar Machines help build the Mangla dam. Industrial Vehicle Technology International. <https://www.ivtinternational.com/videos/caterpillar-machines-help-build-mangla-dam.html>
- Study Buddhism (n.d.). *Special features of Mongolian Buddhism*. Study Buddhism. <https://studybuddhism.com/en/advanced-studies/history-culture/buddhism-in-mongolia/special-features-of-mongolian-buddhism>
- TBH, T. (2024, February 24). *Marketing strategy and marketing mix of Caterpillar*. The Brand Hopper. <https://thebrandhopper.com/2024/02/24/marketing-strategy-and-marketing-mix-of-caterpillar/>

- The World Bank (2023, November). Mongolia Economic Update – November 2023. Mongolia Economic Update. <https://thedocs.worldbank.org/en/doc/aebdd3a2c3fb72b341d2d65d2e8c1845-0070012023/original/Mongolia-Economic-Update-Nov-2023.pdf>
- Tractors Malaysia (n.d.). Our history. <https://www.tractors.com.my/our-business/about-us/our-history>
- Trading Economics (n.d.) Mongolia GDP. <https://tradingeconomics.com/mongolia/gdp#:~:text=GDP%20in%20Mongolia%20is%20expected,acording%20to%20our%20econometric%20models>.
- UPI (1996, October 1). Caterpillar names New Mongolia Dealer - UPI Archives. UPI. <https://www.upi.com/Archives/1996/10/01/Caterpillar-names-new-Mongolia-dealer/9599844142400/>
- Wagner Asia Equipment LLC (2020, May 24). *What does Wagner Asia do?* [Video]. YouTube. <https://www.youtube.com/watch?v=81JJC7FUSB0>
- Wagner Equipment Co. (n.d.). *About us*. <https://wagnerequipment.com/about/>
- World Bank (2023, October 13). Overview. World Bank. <https://www.worldbank.org/en/country/mongolia/overview>
- WFAA Staff (2022, June 15). Fortune 500 companies in DFW: Caterpillar coming to North Texas | wfaa.com. Caterpillar, a \$51 billion construction equipment company, is relocating to North Texas. <https://www.wfaa.com/article/money/business/fortune-500-dfw-texas-companies-caterpillar-a-51-billion-construction-equipment-company-is-relocating-to-north-texas/>
- XCMG (n.d.). XCMG. <https://www.xcmg.com/en-ap>
- YouTube (n.d.). *Oyu Tolgoi launches underground mining operations* [Video]. YouTube. <https://www.youtube.com/watch?v=81JJC7FUSB0>
- Zippia (n.d.). *Wagner Equipment Co. revenue*. <https://www.zippia.com/wagner-equipment-co-careers-43945/revenue/>



CHILD ADVOCATES OF SAN BERNARDINO COUNTY: FORGING A PATH FORWARD

CRAIG R. SEAL

California State University, San Bernardino

DI FAN

University of Illinois, Urbana-Champaign

SHAMMI GANDHI

University of Northern Colorado

MARIA GARCIA GUZMAN & PATRICK T. FLAHERTY

California State University, San Bernardino

Trisha Hendricksen had been with Child Advocates of San Bernardino County (also called C.A.S.A. of San Bernardino) for over 15 years. Trisha had received both her bachelor's and master's degrees in criminal justice at California State University, San Bernardino. She had started as a Court Appointed Special Advocate (C.A.S.A.) volunteer in 2007. She was subsequently hired as an Advocate Supervisor in 2008 and promoted to Program Manager in 2012. In 2020, she was named the Program Director and in 2025 had been appointed as the acting Interim Executive Director role (in addition to her program director duties). When asked why she had chosen C.A.S.A. so many years ago, and why she had continued to work there, she said,

"I could honestly say I worked for an organization that made a difference. Every day, I got to witness how one person could have such a positive, life-changing effect on another, and that was truly rewarding. Who would not want to be a part of an organization like that?" (Hendricksen 2016).

While Trisha Hendricksen agreed to serve as the Interim Executive Director, her preference would have been to stay as the Program Director. For the second time in two years, she had been asked to assume a role she did not want but was willing to do so for the good of the organization. Trisha reflected:

"It was a rushed decision. It felt like we kept moving on. No problem. But I really should have thought about that more than I did when I said 'yes,' because it involved more than I thought. There was a lot of anxiety. When you wake up, something's bothering you. And it takes your brain a minute to register. And it was, oh, yes, that was what it was, and every day. What fire did I have to put out today? Just worked until I was done, until all the fires were out. And then, by that point, I was exhausted, there was no more left in me to be, how was your day?" (Hendricksen 2024).

Exhibit 1. Trisha Hendricksen of C.A.S.A. of San Bernardino County

Photo courtesy of Child Advocates of San Bernardino County



C.A.S.A. of San Bernardino

Child Advocates of San Bernardino County recruited, screened, and trained volunteers to serve as Court Appointed Special Advocates (C.A.S.A.) for youth living in the foster care system in the county. C.A.S.A. of SBC provided service to over 150 youths through the support of over 80 C.A.S.A. volunteers, with an operating budget of \$1.5 million. Oversight was provided by an eight-person volunteer Board of Directors to whom Trisha reported, and as a C.A.S.A. program, was jointly responsible to the SBC Judge Advocate (the presiding judge of the Juvenile Dependency Court).

In fall 2023, Trisha was preparing for a critical Board of Directors meetings, where the future leadership of C.A.S.A. of SBC was to be decided. Having gone through two Executive Directors in the last two years, the Board needed to decide whether to continue the search for a third Executive Director (in so many years) or consider an alternative path forward. The options for C.A.S.A. of SBC included: (1) Hire another Executive Director; (2) Build leadership capacity within the current organizational staff; (3) Look to merge with (or be acquired by) another non-profit entity; or (4) Bring on an external Interim Executive Director to buy more time to make a final decision.

The decision, what path to forge, would be heavily influenced by Trisha's recommendation, as not only was she the current Interim Executive Director, but she was also the voice of the 13-person full-time staff and the foster youth in the program. Moreover, Trisha had the respect of the Board and the Judge Advocate.

To complicate matters, there were several challenges for C.A.S.A. of SBC that made the decision more difficult. First, there was a potential budget shortfall (despite significant investments from several key stakeholders). Second, the numbers of retained volunteers and youth served had flatlined over the last couple of years. Third, the staff had to take on additional administrative responsibilities to support operations during the changes in leadership, which was not sustainable. And fourth, different key stakeholders preferred different leadership paths to pursue.

As the Interim Executive Director, Trisha wanted to help navigate the leadership challenge by providing a comprehensive recommendation to the Board that best served the foster youth of SBC, was financially sustainable, aligned with stakeholders' interests, and honored the contributions and commitment of the current staff.

Table 1. C.A.S.A. of SB Operating Budget*Source: Child Advocates of San Bernardino County*

	AMOUNT
Executive Staff	\$ 205,088.00
Executive Director and Program Director	
Administrative Staff	\$ 162,227.20
Office Administrator, Donor Relations Manager, Donor Relations Coordinator	
Outreach Staff	\$ 225,659.20
Community Outreach Manager, Training & Education Specialist, Outreach Assistant, Case Liaison	
Program Staff	\$ 326,372.80
Advocacy Manager, Advocate Supervisor II, Four (4) Advocate Supervisors I	
Salary Sub-Total	\$ 919,347.20
Benefits Sub-Total	\$ 168,267.02
Compensation Total	\$ 1,087,614.22
Consulting Expenses	\$ 95,766.00
Grants, Bookkeeping, and Development	
Operating Expenses	\$ 325,810.00
Offices, IT, Marketing, Volunteer, Youth Services	
TOTAL	\$ 1,509,190.22

Table 2. C.A.S.A. of SB Projected Revenue*Source: Child Advocates of San Bernardino County*

Funding Sources	Amount
Foundations	\$ 607,900.00
Government Contracts	\$ 615,548.00
Fundraising	\$ 180,000.00
TOTAL	\$ 1,403,448.00

Table 3. C.A.S.A. of SB Volunteer and Youth Pairs*Source: Child Advocates of San Bernardino County*

Year	Volunteer and Youth Pairs
2019	107
2020	104
2021	105
2022	92
2023	93
2024	97

Court Appointed Special Advocates

In reflecting on her upcoming recommendation, Trisha considered what C.A.S.A. meant (the history, mission, and vision of the organization), as well as the current staff and organizational climate.

C.A.S.A.

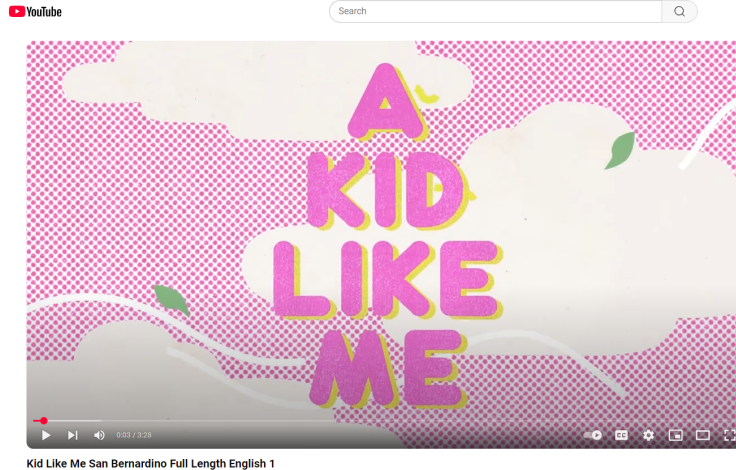
Court Appointed Special Advocates (C.A.S.A.), a national volunteer movement, began in 1976. Its founder, Seattle Superior Court Judge David Soukup, decided he could not endure any more sleepless nights worrying about the lifelong impact of his decisions on abused and neglected children. At that time, children in foster care did not receive the same representation in court as parents did. In an *LA Times* interview, Judge Soukup said,

“I was consumed by the fact that I didn’t have enough information about each child, and I just didn’t know if I had done the very best job I could.”

Judge Soukup set out to right this wrong. He thought well-trained volunteers could ensure children’s voices were heard and provide judges with the necessary insight to make the best possible decisions. In 1977, Judge Soukup formed the first C.A.S.A. program to recruit, train, and supervise everyday people who volunteered to build meaningful relationships and advocate for abused and neglected children in juvenile dependency court. The first 50 volunteers became Court Appointed Special Advocates. In 2025, there were more than 1,000 C.A.S.A. programs in all fifty states with more than 70,000 volunteers (National C.A.S.A. 2023).

Exhibit 2. A Kid Like Me Video

Source: <https://www.youtube.com/watch?v=A2asKWHpO6g>



C.A.S.A. Volunteers

A C.A.S.A. volunteer provided a judge with recommendations that helped the court make a sound decision about that child's future. Each case was as unique as the child involved. C.A.S.A. volunteers came from all walks of life with a variety of professional, educational, and ethnic backgrounds. Aside from their C.A.S.A. volunteer work, 85% were employed in regular full-time jobs. Two-thirds of the volunteers nationwide were women. A C.A.S.A. volunteer usually spent about 10-15 hours per month with her or his assigned foster youth.

Social workers were employed by state or county governments. Social workers sometimes worked on 40 to 50 cases at a time and were frequently unable to investigate each case comprehensively. The C.A.S.A. volunteer, however, had a small caseload: on average 1-2 youths. The volunteer did not replace the social worker on a case; he/she was a separate, independent appointee of the court. Although there were other child service organizations, C.A.S.A. was the only program where volunteers were officially appointed by the court to have the specific responsibility of looking after the child's best interests. In addition, C.A.S.A. was the only agency that required extensive pre-service training, continuing education, and an 18-month program commitment from volunteers.

To become an advocate, volunteers needed to complete 30 hours of training. The training included a mix of synchronous and asynchronous online instruction through C.A.S.A. University, often conducted on evenings and weekends. Volunteers also had to pass a comprehensive background check. Once training was successfully completed, volunteers were sworn in by the court and matched with 1 or 2 foster youths. Volunteers submitted monthly time logs to their staff Advocate Supervisor and completed 10 hours of continuing education each year. The relationship with the youth focused on advocacy, mentorship, and guidance for school, life, and work. Volunteers also collaborated closely with their Advocate Supervisor, especially when court cases or significant issues were pending, for example, placement instability, mental health, or substance abuse. (C.A.S.A. of San Bernardino 2023).

Exhibit 3. California C.A.S.A.'s Mission and Vision

Source: California CASA (<https://www.californiacasa.org/mission-vision>)

The mission of California C.A.S.A. *“is to ensure that children and youth in the child welfare and juvenile justice systems have both a voice and the services they need to thrive. We achieve this by strengthening and empowering California’s network of local C.A.S.A. programs and advocating for effective child welfare policies and practices.”*

Vision. *“Every child in the California child welfare and juvenile justice systems who needs advocacy will have the transformative support of a C.A.S.A. volunteer.”*

In California, there were 46 programs. Local C.A.S.A. directors who ran county-wide programs recognized the need for a state office that could grow and strengthen the C.A.S.A. network. Together, they formed the California C.A.S.A. Association in 1987. At its founding, only 17% of California Superior Courts had access to C.A.S.A. volunteers. Through persistence, partnership, and passion, the network of C.A.S.A. programs had grown to serve children and courts in 51 counties in California, where 99% of foster youth lived (California C.A.S.A. Association 2023). By 2025, close to 1,000 C.A.S.A. programs served children in 49 states.

Exhibit 4. C.A.S.A. of San Bernardino's Mission and Vision

Source: CASA of San Bernardino County (<https://www.casaofsb.org/who-we-are/>)

Mission. *"C.A.S.A. of San Bernardino County improves the quality of life for youth in foster care, juvenile justice care, and foster care alumni with stable and consistent mentoring, advocacy, and supportive services."*

Vision. *"To advocate on behalf of all abused and neglected children and youth throughout San Bernardino County."*

In 1984, the benefits of the program reached Judge Patrick Morris with the San Bernardino County Juvenile Dependency Court, who established Child Advocates of San Bernardino County as an official C.A.S.A. program to serve the growing numbers of children entering the County's child welfare system. Since then, advocacy services had expanded to include advocacy for both healthcare and education systems.

San Bernardino County (SBC) had over 5,000 children and youths living in foster care (Kidsdata.org, 2023 Population Reference Bureau, <https://www.kidsdata.org/>). They were victims of abuse and neglect and, as a result, had been removed from their homes and families and placed into foster care. These children desperately needed guidance on how to survive and navigate the complicated and overburdened child welfare system.

C.A.S.A. of SBC improved the quality of life for youth in foster care, juvenile justice care, and foster care alumni with stable and consistent mentoring, advocacy, and supportive services to advocate on behalf of abused and neglected children and youth throughout SBC. Every day, C.A.S.A. volunteers mentored and advocated for the best interests of abused and neglected children in the courtroom, classroom, and health care system. Volunteer advocates—empowered directly by the courts—offered judges the critical information they needed to ensure that each child's rights and needs were met while in foster care. SBC had a waitlist of over 250 young people who needed help.

C.A.S.A. of SBC volunteers had positively affected the lives of thousands of at-risk youths since its founding – assuring that children’s voices were heard in the courtroom, that decisions made about them included their input, that their physical and mental health were top priorities, and that their educational rights were at the heart of their school experience.

Exhibit 5. Role and Impact of a C.A.S.A. Volunteer

Source: Katz et al. 2020; Waxman et al. 2009; Brocious, Trawver & Griffin 2021; Katz & Geiger 2023.

Role of a C.A.S.A. Volunteer:

- Establishes a strong and stable relationship with a child.
- Gathers information, writes reports, and makes recommendations in the best interest of the child.
- Advocates to ensure the child receives the appropriate resources that he or she deserves.

Impact of a C.A.S.A. Volunteer:

- Children who are appointed C.A.S.A./GAL volunteers or staff have higher rates of case monitoring and service referrals compared to those who are not appointed C.A.S.A./GAL volunteers or staff.
- Compared to children without a C.A.S.A./GAL volunteer or staff, those who have one tend to achieve better outcomes, as reflected in their academic and behavioral performance in school. Specifically, they are more likely to pass all their courses, avoid expulsion, and have better conduct performance.
- Transition-age youth refer to their C.A.S.A./GAL volunteers or staff as “fierce advocates” who are relentless in sharing information, helping youth acquire benefits, and building relationships with other professionals (such as attorneys, social workers, and mentors).
- C.A.S.A./GAL volunteers or staff play a crucial role in the lives of the children they serve by providing assistance that other professionals involved in the case may be unable to provide.

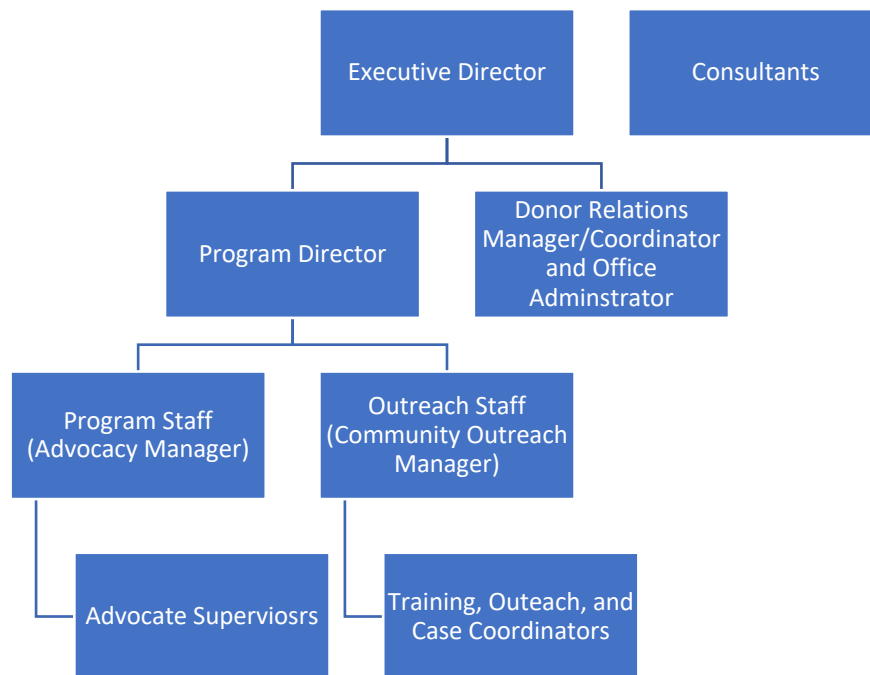
Child Advocates of San Bernardino County had a staff of 13 full-time employees and a \$1.5 million operating budget. Staff were organized into three distinct units: **(1) Community Outreach and Training**, which focused on sourcing and training volunteers and placing them with youth; **(2) Advocacy**, which supported the volunteers in their placement with foster youth;

and **(3) Administration**, which included the Executive Director, Donor Relations, Office Administrator, and Consultants.

For Community Outreach and Training, there was a Community Outreach Coordinator who supervised the Training & Education Specialist, Case Liaison, and Outreach Assistant. For Advocacy, there were an Advocacy Program Manager, an Advocate Supervisor II, and four Advocate Supervisors I. For Administration, there was a Donor Relations Coordinator and an Operations Administrator. In addition, C.A.S.A. had three Consultants, independent contractors, who collaborated with the Executive Director and Board providing support for budget, development, and grants.

Exhibit 6. C.A.S.A. of SBC Organization Chart

Source: Child Advocates of San Bernardino County



Community Outreach focused on recruiting, screening, and training community volunteers to serve as Court Appointed Special Advocates.

- The **Community Outreach & Training Manager** was part of the leadership team and oversaw the Community Outreach and Training Department.
- The **Case Liaison** was responsible for processing all new referrals, monitoring, supervising, and managing C.A.S.A.'s eligibility/waitlist, providing eligible youth with pre-advocacy and services to meet their immediate needs as they waited for their C.A.S.A. appointment.
- The **Training and Education Specialist** ensured that all C.A.S.A. volunteers, staff, and Board of Directors received the highest quality training, served as trainer/facilitator for all in-person, virtual, and hybrid trainings, participated in training new employees and board members, and assisted in the organization and management of advocate training, including continuing education so that the needs of the organization and volunteers were met.
- The **Outreach Assistant** was responsible for ensuring that C.A.S.A. had a continuous pool of qualified community volunteers participating in and completing the recruitment, screening, and training process to become Court Appointed Special Advocates for youth in foster care, and maintaining current volunteer files.

Advocate Supervisors matched, supervised, and supported trained volunteers to provide mentorship and advocacy for the youth they were assigned to, and functioned as an intermediary between social workers, attorneys, and the courts.

- The **Advocacy Program Manager** served as the advocacy program leader and administrator for staff and C.A.S.A. volunteers. In addition, the Advocacy Program Manager represented C.A.S.A. at committee meetings and events as requested by the Program Director,
- The **Advocate Supervisor** provided expert supervision and case management of volunteers (referred to as Advocates) for open dependency and delinquency court

cases to ensure that children received comprehensive advocacy and mentoring for their safety, well-being, and permanency. This was a full-time 40-hour a week position.

Administrative included alumni relations, development, and administrative support for C.A.S.A.

- The **Donor Relations Coordinator** was primarily responsible for leading C.A.S.A.'s individual giving efforts, setting a strategy, and executing fundraising plans for sustainability and growing the number of annual donors through annual campaigns, increasing the size of individual donations, and converting annual donors to major donors.
- The **Marketing and Communications Coordinator** was responsible for helping to build the C.A.S.A. brand and increase awareness and visibility of C.A.S.A. among target audiences.

A survey of staff indicated high levels of organizational commitment and intention to remain, however, there was a decline in job satisfaction, engagement, and perceived management support (see Table 4).

Table 4. Results of C.A.S.A. of SB Staff Survey

Based on 5-point Likert scale (5 = very high, 1= very low)

Source: Child Advocates of San Bernardino County

Survey Questions	Average Score	Average Ranking
Motivation (Intrinsic)	3.8	Moderate-High
Satisfaction (Extrinsic)	3.6	Moderate-High
Organization Commitment	4.8	Very High
Employee Engagement (Trust/Knowledge Sharing)	3.6	Moderate-High
Work-life Balance	4.5	High
Persistence (reduced intention to quit)	4.3	High
Supervision (Management Support)	3.6	Moderate-High
Flexible Work Arrangements	4.7	Very High

The major themes of the survey included needing increased opportunities for career growth, greater communication across departments and levels, balancing compensation with workload, and building relationships with leadership.

Additional Stakeholders

In addition to considering the mission of C.A.S.A. and the current staff and climate, there were stakeholders for Trisha to consider, including programs that were aligned with C.A.S.A. of SBC, and the presiding Judge Advocate.

Voices for Children

“To ensure that children had every opportunity to achieve stability, we matched them with caring volunteers—called C.A.S.A.s—who advocated for their best interests” (Voices for Children 2024).

Founded in San Diego in 1980, Voices for Children (VFC) was a private, nonprofit organization that recruited, trained, and supported Court Appointed Special Advocate volunteers who spoke for the needs and well-being of children in foster care. In 2015, VFC expanded to serve children in Riverside County foster care. As the only agency designated by the courts to provide C.A.S.A. volunteers in San Diego and Riverside Counties, VFC’s C.A.S.A.s played a crucial role in helping judges make the most informed decisions for children’s future. (Voices for Children 2023).

Of note, the current Chief Executive Officer (CEO) of California C.A.S.A., was the former Executive Director of VFC.

Children’s Fund. Children’s Fund was a San Bernardino nonprofit that served communities’ most vulnerable children by funding and equipping agencies and nonprofits that served children who were experiencing poverty, abuse, and neglect (Children’s Fund 2022-2023 Impact Report 2024).

The idea of the Children's Fund (CF) was recommended in 1985 as a better way to deliver services to at-risk children who fell under the responsibility of the respective county departments. Patrick Morris formed a Policy Council, the then presiding Judge of the Juvenile Court, who also founded C.A.S.A. of SBC. After reviewing scenarios, the endorsement was made to add a nonprofit 501(c) (3) component to the Children's Network.

In 1986, Children's Fund (CF) was founded. Jack H. Brown, then the Chairperson and CEO of Stater Bros. Markets, was the Founding Chairperson of the Board of Directors. Realizing that children *"in the system"* were not always getting their needs met, CF was created as a non-profit organization to serve the children in the county who most needed support.

Since its inception in 1986, Children's Fund had assisted more than 1.8 million children, serving the communities' most vulnerable children by funding and equipping agencies and nonprofits that served children who were experiencing poverty, abuse, and neglect. Children's Fund was positioned to leverage donations to help provide essential services to the region's most vulnerable children. CF could meet the immediate needs of children and families who were under case management through partner agencies, preventing families from experiencing an emergency. CF worked collaboratively with over 50 agencies, nonprofits, and school districts across San Bernardino County to ensure that brighter futures were built upon a support system that put children first (Children's Fund 2023).

Of note, the current Chief Executive Officer (CEO) of CF was a former Executive Director of C.A.S.A. of SB and was well-regarded by C.A.S.A. SBC's staff and Board.

Presiding Judge. In addition to the C.A.S.A. of SBC Board of Directors and staff, there was the Presiding Juvenile Court Judge, who was the ultimate overseer of program from the court. As such, the Presiding Judge needed to approve any changes in services to youth, including changes in leadership and/or structure of the organization. The Judge's concern would be how to increase the impact of the program on youth served in SBC. Therefore, any decision to merge with another C.A.S.A. Program (such as VFC) or come under the umbrella of another organization (such as CF) would need to be approved by C.A.S.A. National, Cal C.A.S.A., and the presiding Judge Advocate.

Key Factors

There had been four key factors that Trisha needed to consider in her recommendation for a path forward: (1) the impact on youth served; (2) increasing the number of C.A.S.A. volunteers; (3) being mindful of any budget constraints; and (4) diversifying the board of directors.

First, C.A.S.A. of SBC had served over 150 foster youths each year, but with over 5,000 foster youths in SBC, which was just a 2% service rate. The service rates of other C.A.S.A. programs averaged 16%. The current indicator of 2% of youth served (with over 200 foster youth on the waitlist) was an issue that all stakeholders were concerned about. Whatever decision was made, the most important factor was increasing the number and percentage of foster youths served (California C.A.S.A. Association 2013).

Second, in order to increase the number of youths served, the number of volunteers recruited and retained by the program had to increase. Over the last three years, the program had averaged just under 100 volunteers per year, which was not sufficient to grow the number of youths served.

Third, while C.A.S.A. of SBC had a significant reserve and could easily weather the next year or two, beyond that, unless something significantly changed (in terms of cost or revenue), the organization was in danger of exhausting its reserves and moving into a deficit situation.

Fourth, while C.A.S.A. of SBC had a dedicated Board, its resources and networks were limited and often overlapped. This might imply getting a broader set of Board members with access to large donors, greater skill and experience diversity, and connections to prospective volunteers.

The Decision

As the Interim Executive Director, Trisha was uniquely positioned to recommend a path forward for the organization. Therefore, she would have to recommend that the Board: (1) hire another Executive Director; (2) consider building leadership capacity within the current organizational staff; (3) look to merge with (or be acquired by) another non-profit entity; or (4) hire an external Interim Executive Director.

Any recommendation would require addressing key stakeholder concerns, including staff acceptance and the approval of the Judge Advocate, Cal C.A.S.A., and C.A.S.A. National to be successfully implemented. In addition, based on her own experience, Trisha had her own bias regarding which option might be the most feasible, especially for the current staff who had been sacrificing to help keep the organization moving forward during the transition.

The first option was to hire a new Executive Director. The search for an Executive Director could take 3-6 months, plus an additional 3-6 months for onboarding and evaluation. In addition, given the potential budget shortfall and the limited number of youth served, this would put added pressure to raise more revenue and/or cut costs. As with all new hires, there was no guarantee of success, and the onboarding time for a new Executive Director was a

significant investment in staff and Board time and resources. However, this option allowed the organization to maintain its independence. The option was aligned with past precedence, was favored by the parent organization (Cal C.A.S.A.), and could forge a successful path forward with the right director in place (as has been seen with other county C.A.S.A. programs, such as VFC).

“I could not imagine us doing that all over again. But because I felt like the job duties fell on me, anyway. And I did not think I could keep doing this for another 6 months for this person to get hired and brought on” (Hendricksen 2024).

A second option was to consider existing staff capabilities. Fortunately, the Program Director was willing to fill the interim role in the short term (but was not willing to take the job permanently) and staff members had indicated a willingness to take on more responsibility. However, it was unclear if this was a sustainable model. While it could help to address the budget shortfall and build staff competence, it could also detract from the core mission of serving the youth in the foster care system, might require significant Board and outside consultant support, and vacated positions might need to be backfilled, further reducing the budget benefits and the sustainability of the option.

“I did not feel there was any staff at the time that would be able to take it. I meant, I did not even feel confident that I could take it.” (Hendricksen 2024).

A third option was to consider being acquired by another non-profit, with the C.A.S.A. program coming under an ‘umbrella’ organization. Currently, two organizations were considered. Joining Voices for Children (VFC) or becoming part of the San Diego and Riverside C.A.S.A. organizations. An acquisition would allow C.A.S.A. of SBC to leverage its resources and expertise and provide greater symmetry and impact for SBC and Riverside counties. The downside was that the Board would lose control of the organization (and might not have a role in the new entity). There was no guarantee that staff would be retained; there were potential concerns regarding the cultural fit with the larger organization; and concerns that the county program would not be a priority for the larger parent organization. Of note, while Cal C.A.S.A.

preferred that C.A.S.A. of SB remained independent, it would be Cal C.A.S.A.'s second preference that C.A.S.A. were acquired.

"I never liked that option. Because I felt the thing that really made us unique, and work was that we were very connected to our community. And I felt San Diego coming in it just did not seem like it was going to be a good fit; maybe over time it would have been, and who knew, but it would have been the last option for me. When Riverside had to go under San Diego, they ended up letting go of all their staff. So, that was just a no-go for us" (Hendricksen 2024).

Moving under the Children's Fund (CF) umbrella would provide staff continuity, solve the budget issue, allow the team to focus on growth, provide an opportunity for the Board to stay engaged, and provide access to a larger (well-resourced, connected, and diverse) Board moving forward. The downside was losing potential control (as the C.A.S.A. of SBC Board would be a minority in the new organization), merging the culture of the two organizations, and while there was support in the CF's current CEO, if there was ever a change in the CF's leadership, then C.A.S.A. of SBC could be vulnerable. In addition, this was not a preference of Cal C.A.S.A., given its experience with umbrella organizations that were not C.A.S.A.s. Cal C.A.S.A. might reconsider its financial support (which was a significant part of the current operating budget).

"It was appealing, because he (the former C.A.S.A. of SBC Director who was now the CFO of CF) never really left, he was still helping us; it felt like a natural fit. It made sense for him to continue to be the leader for us to merge with; all the staff collaborated well with him. They trusted him; they wanted to work for him. So, there was some comfort in that. And we did really great things when we were together. The only thing at that time that I felt like we were lacking was financial resources. It was like our dream to have these departments and not just one person doing all these things. It felt like a natural fit to be able to merge into them and be able to do this work at a bigger, larger scale and serve more kids" (Hendricksen 2024).

Of note, there was a lengthy process to merge or be acquired, requiring multiple levels of approval, including from the local county Judicial Council, Cal C.A.S.A., and National C.A.S.A. as the organization had to transition from one 503(c) organization to another, with all the requisite contracts, grants, foundations, and approval processes.

Finally, another option was to hire a temporary, external Interim Executive Director, ideally someone who had supported another C.A.S.A. program and/or who had turned around a non-profit program that was struggling. This would provide a longer runway to make a final decision, and appease Cal C.A.S.A. (as their preferred option) and other funding organizations. It would not require a lengthy reorganization process and would allow current staff to focus on their core responsibilities. However, there were concerns regarding how quickly the person could get up to speed, what support he or she might need, how the staff would respond, what decisions the person could implement, and whether C.A.S.A. was just delaying the inevitable and costing more time and money.

Whatever the recommendation, the organization was in a critical stage with its budget, staff, and program, and the importance of making the 'right choice' had never been more apparent.

"We were being forced to decide. And it was not a decision that we wanted to make" (Hendricksen 2024).

Conclusion

In conclusion, Child Advocates of San Bernardino County stood at a crossroads, facing a leadership transition amidst challenges in funding, volunteer recruitment and retention, and service impact. The Interim Executive Director's recommendation, whether to hire a new Executive Director, build internal leadership capacity, merge with another nonprofits, or appoint an interim director, would significantly affect the organization's ability to fulfill its core mission. To navigate this critical juncture successfully, C.A.S.A. of SBC had to prioritize the best

interests of the young people served, ensuring their voices were heard and their needs were met. The chosen path forward should be grounded in comprehensive management theories, fostered collaboration among stakeholders, and accompanied by a clear and actionable plan addressing recruitment, financial sustainability, and program effectiveness. By making a strategic, well-informed recommendation, C.A.S.A. of SBC could continue making a meaningful difference in the lives of vulnerable children, ensuring they had the support and advocacy they needed for a brighter future.





Craig R. Seal received his PhD in Organizational Behavior from The George Washington University and is a professor of Management at California State University, San Bernardino. His research focuses on teaching cases, employee-centric performance management, personal interpersonal capacity, and hybrid flexible teaching and learning. He teaches organizational behavior, human resource management, and business ethics. Before pursuing a career in academia, he was a manager and executive with experience in non-profit, real estate, and staffing.



Di Fan has her MBA in Management and is currently enrolled in the EdD program with dual concentration of Human Resource Development and Diversity & Equity in Education at the University of Illinois, Urbana-Champaign. Di also serves as a Capricious Grading Committee Member of EPOL (Education Policy, Organization & Leadership) at UIUC. Di has experience working in higher education as TA, GA, and RA, striving to create a fairer and more diverse environment for students and faculties. Her research interests include leadership, human resource development/management, diversity, equity & inclusion, organizational behavior/change, and cultural competency/communication.
gaby31402938@gmail.com



Shammi Gandhi received her Ph.D. in Management and MBA from New Mexico State University. She is currently an Assistant Professor of Management at the University of Northern Colorado. Her research explores identity change in migrants and workplace stress impacts on employee well-being. She teaches Human Resource Management and Organizational Behavior at the undergraduate level and Talent Management and Compensation at the MBA level. Shammi has presented her research at major conferences, including the Western Academy of Management and the Academy of Management. shammi.gandhi@unco.edu



Maria Soledad Garcia Guzman was a graduate student in the Jack H. Brown College of Business and Public Administration at California State University, San Bernardino. She graduated with honors with a BA in Human Resource Management in Fall 2021, and a double MBA in Winter 2023 in Supply Chain Management and Management, integrating people and processes for organizational success and managing people and organizations. She was a Graduate Assistant, focusing on case-based research and non-profit consulting. She has two conference presentations, a published article, is an active member of SHRM, and was inducted into the Beta Gamma Sigma Honor Society. mg120699@gmail.com



Patrick T. Flaherty is a full time Lecturer at California State University, San Bernardino in the Jack H Brown College of Business and Public Administration. He teaches classes in varied business topics but primarily in human resources. He received his BA in Management and his MBA from California State College, San Bernardino. Mr. Flaherty has over 45 years of experience in the private sector where he has held such positions as General Manager of an Industrial Processing Facility, General Manager of a regional Trash / Refuse company and various sales management positions. He spent the last 20+ years in the outsourced Human Resource industry, opening his own HR consulting firm in 2015. Patrick holds the Senior Professional in Human Resources (SPHR) Certification from the Human Resource Certification Institute (HRCI) as well as the Senior Certified Professional (SHRM - SCP) from the Society of Human Resources (SHRM). PFlaherty@csusb.edu

References

- Brocious, H., Trawver, K.R. & Griffin, R. (2021). Supporting and expanding statewide C.A.S.A. programs. *Juvenile & Family Court Journal*, 72(2), 41-58.
- C.A.S.A. of San Bernardino (2023). <https://www.casaofsb.org/>. Accessed October 13, 2023.
- California C.A.S.A. Association (2013). <https://www.californiacasa.org/local-programs>. Accessed October 13, 2023.
- California C.A.S.A. Association (2023). <https://www.californiacasa.org/our-mission>. Accessed October 13, 2023.
- Children's Fund (2023). <https://www.childrensfund.org/about>. Accessed October 13, 2023.
- Children's Fund 2022-2023 Impact Report (2024). https://issuu.com/shari-childrensfund/docs/2023_cf_impact_report_020724_update. Accessed March 8, 2024.
- Hendricksen, T. (2016). <https://www.casaofsb.org/who-we-are/staff.html>. Accessed March 9, 2024.
- Hendricksen, T. (2024, March 22). Interview by case writers.
- Katz, C. & Geiger, J. (2023). The role of Court Appointed Special Advocates (C.A.S.A.s) in the lives of transition-age youth with foster care experience. *Child and Adolescent Social Work Journal*, 40: 17-27.
- Katz, C., Moles, K., Grauwiler, P. & Post, S. (2020). The context-specific service provision of C.A.S.A. *Child Welfare*, 98, 2: 63-84.
- National C.A.S.A./GAL Association for Children (2023). <https://nationalcasagal.org/about-us/history/>. Accessed October 13, 2023.
- Voices for Children (2023). <https://www.speakupnow.org/about-us/>. Accessed October 13, 2023.
- Voices for Children (2024). <https://www.speakupnow.org/>. Accessed March 8, 2024.
- Waxman, H., Houston, R., Profilet, S. & Sanchez, B. (2009). The long-term effects of the Houston Child Advocates, Inc., program on children and family outcomes. *Child Welfare*, 88, 6: 23-46.



CAN A SMALL MOM & POP LIQUOR STORE COMPETE WITH LARGE CHAIN GROCERY STORES?

DEBORAH WALKER, MICHAEL VALDEZ

Fort Lewis College

& SHIKHAR ACHARYA

University of North Texas at Dallas

In the spring of 2023, Chris and Molly Hamilton were contemplating the changes in Colorado laws affecting their small liquor store in Durango, W.J. Doyle Wine and Spirits (W.J. Doyle). On January 1, 2019, for the first time since Prohibition, Colorado consumers were able to buy full-strength beer at grocery stores and convenience stores. Prior to this change, only low alcohol “3.2 beer” was sold in most of the state’s grocery stores. Although the Hamilton’s beer sales had decreased in 2019 following the law change and had not returned to the pre-law level, the store remained profitable. But the Hamiltons were now facing a new law change that allowed wine to be sold in large grocery stores and convenience stores as well (see Appendix A for details).

The Hamiltons were not sure the same tactics that had worked with beer would work with wine. After all, were their beer customers the same as their wine customers? They weren’t sure, although they thought the demographics of their beer customers were somewhat different from their typical wine customer. They realized they needed to specify those differences and then determine how they should add to their merchandising and marketing plans to compete with the large grocery stores. The video in Exhibit 1 discusses how small liquor stores in Colorado were coping after the wine law change. Exhibits 2 and 7 show photographs of the store.

The authors developed the case for class discussion rather than to illustrate either effective or ineffective handling of the situation. The case and its accompanying instructor's manual were anonymously peer reviewed and accepted by the *Journal of Case Research and Inquiry*, Vol. 10, 2025, a publication of the Western Casewriters Association. Qualified educators may request the instructor’s manual at editor@jcri.org. The authors and the *Journal of Case Research and Inquiry* grant state and nonprofit institutions the right to access and reproduce this manuscript for educational purposes. For all other purposes, all rights are reserved to the authors. Copyright © 2025 by Deborah Walker, Michael Valdez & Shikhar Acharya. Contact Deborah Walker, 1000 Rim Drive, Durango, CO 81301, walker_d@fortlewis.edu.

**Exhibit 1. “Our sales are down at least 50%,”
Local liquor stores see wine sales dip following new law**

Source: New Tonight – KOAA News 5 (2025)

<http://www.youtube.com/watch?v=RvstbQueg94&t=13s>



The Hamilton couple thought about several changes that might help keep their new competition from eating into their profits, but it was now time to start making specific decisions about wine sales. The very existence of the business that had supported their family since 2010 might be at stake.

Exhibit 2. W.J. Doyle Wine and Spirits Liquor Store

Source: Authors' Photo



The Hamiltons

Chris and Molly started W.J. Doyle Liquor Store “from scratch” in 2010. Chris was born and raised in Durango and his family included serious chefs and wine drinkers. They also had a long history in the legal profession. Chris received his law degree at the University of Colorado and was a practicing attorney before starting W.J. Doyle. This experience helped him understand the sometimes complicated and changing legal and regulatory environment that liquor store owners dealt with in Colorado. Chris grew up traveling with his family to places (such as France) where they could spend time learning about and enjoying wines. Chris was “*a wine connoisseur*” with extensive wine knowledge, and this knowledge had been valuable in the operation of the store. W.J. Doyle customers enjoyed the education Chris provided regarding the different varieties of grapes that went into making wines, and which wines would go with which foods. Chris was successful in “*hand selling*” wines to customers. He was also able to find local selections from small vineyards and/or distributors that he thought his customers would enjoy. Therefore, the Hamiltons were able to find better and more specialized wines at a better price than the highly advertised national brands. That was one reason W.J. Doyle’s slogan was, “*Helping you drink better for less.*”

Molly Hamilton was born and raised in Savannah, Georgia but went to college in Gunnison, Colorado. She worked as a bartender for Chris’s uncle while in Gunnison, which is how Molly and Chris met. In 2000 Molly moved to Durango and within six months she was engaged to Chris. Molly had worked in retail for 23 years before starting the liquor store and was therefore familiar with retail sales marketing and merchandising as both a buyer and assistant manager. Although she had no prior experience in running a liquor store, her retail experience was useful when they decided to start W.J. Doyle. Their family, including their dogs, were often part of the store’s atmosphere (see Exhibit 3).

Exhibit 3. Inside W.J. Doyle Wine and Spirits – Doyle Dog

Source: <https://www.wjdoyledurango.com/>

**Durango Beer, Wine, and Spirit Industry**

Durango was a city in La Plata County, Colorado. Durango had a 2024 population of 19,955 and was growing at a rate of 1.07% annually. Its population had increased by 4.4% since the most recent census in 2020. The average household income in Durango was \$99,984 with a poverty rate of 14.23%. The median age was 36.6 years; 36.5 years for males and 36.7 years for females (World Population Review). Though Durango was a small resort city of almost 20,000 residents, its population understated its regional importance. As the county seat and home to a small liberal arts college, it had become the governmental, retail, and cultural “hub city” of southwestern Colorado. People flocked to Durango for a variety of reasons. Through careful preservation of its historic western architecture, the city had a vibrant downtown filled with the arts, shopping, and nightlife. The area offered abundant opportunities for cycling, skiing, hiking, white water rafting, kayaking, hunting, and fishing. In addition, the city was home to the historic Durango & Silverton Narrow Gauge Railroad and was situated within easy driving distance of Mesa Verde National Park.

There were six craft breweries in Durango, Colorado in 2024 (see Exhibit 4). Durango was also home to 16 small liquor stores that sold beer, wine, and spirits at the end of 2024 (see Appendix B). There were 16 before the beer sales regulation changed in 2019. Then one more small liquor store opened in January 2021. There were 17 local stores from January 2021 until July 2024 when one went out of business, bringing the total back to 16.

Exhibit 4. Local Craft Breweries

Source: Authors' Note

Carver Brewing Co.
Steamworks Brewing Co.
Anarchy Brewing Co.
Animas Brewing Co.
Ska Brewing Co.
Durango Beer & Ice Co & High Trestle Brewing Co. (in DB&I Co.)

After the law changed in 2019, the number of establishments that sold full strength beer increased. Four large grocery stores and 10 convenience stores/gas stations added full strength beer to their shelves (see Exhibit 5).

Exhibit 5. Local Grocery and Convenience Store Competition

Source: Authors' Notes, observations and interviews with Durango area store managers and/or owners, August and September 2024.

Large Grocery Stores	Sales
City Market	Beer and Wine
City Market	Beer and Wine
Wal Mart	Beer and Wine
Albertson's	Beer and Wine
Convenience Stores	Sales
Everyday Gas Station	Beer and Wine
Speedway Gas Station (1)	Beer and Wine
Speedway Gas Station (2)	Beer and Wine
Speedway Gas Station (3)	Beer and Wine
Maverik Gas Station	Beer and Wine
Speedway Gas Station (4)	Beer and Wine
Grandview Store	Beer and Wine
Needles Country Store	Beer and Wine
Circle K Gas Station	Beer
Sonoco (Grandview)	Beer

Customer Preferences and Marketing Strategy

Customer Preferences

The Hamiltons were aware of the well-known statistic that men were more likely to drink beer than women, while women were more likely to drink wine than men. In fact, they knew their best customers for “buttery” chardonnay were women over the age of 45 or 50. Women also bought Tequila when they bought spirits, for preparing margaritas, not for sipping. Women hardly ever bought the higher end spirits, such as bourbons, for themselves. Those customers tended to be male, restaurant people, or professionals. But tradesmen, such as electricians and plumbers, also tended to drink hard liquor, as well as beer (personal Interview with Chris Hamilton Oct. 2024).

Generally, they thought their beer customers were, on average, younger than their wine and spirits customers and probably had a lower average income as well. They knew college students drank cheap beer but also sometimes expensive beer and whiskey but hardly ever drank wine. For a while the college students drank a lot of Pabst Blue Ribbon (PBR) beer (they were buying 90 PBR 30 packs per week) until prices increased and they could no longer afford it; by fall of 2024, they were buying only about 30 or 40 PBR 30 packs per week. When college students bought more expensive liquor they bought it in small quantities. The Hamiltons thought the students were considering the alcohol content and were able to obtain a similar “buzz” with a small amount of liquor that they received from drinking a lot more beer (personal interview with Chris Hamilton, Oct. 2024). Exhibit 6 summarizes the Hamilton’s thoughts on their customer preferences.

Exhibit 6. W.J. Doyle's Customer Preferences*Source: Authors' Notes, Interview with Chris Hamilton, Oct. 2024*

Product	Demographic	Customer Preferences
Beer	College Students	Preferred cheap beer; occasionally opted for less amounts of high ABV (alcohol by volume) (8-9%) expensive beer or spirits but generally did not buy wine.
	Male	More likely to purchase beer than wine overall.
	Tradesmen (e.g., Electricians, Plumbers)	Primarily drank hard liquor and beer.
Wine	Female, 45+	Strong preference for buttery Chardonnay; purchased more frequently than men.
	Older Adults (Typically 45+)	More likely to drink wine than younger consumers.
Whiskey	More Professionals, Restaurant Staff	High-end whiskeys were popular among professionals but rarely purchases by women for self-consumption.
Tequila	Female	Often bought tequila for margaritas, not typically for sipping.
High-End Spirits	Male Professionals	Primarily purchased by men, especially in higher-end categories.

W. J. Doyle Beer Marketing Strategies

To compete with the new competitors in the beer market, the Hamiltons changed their marketing strategy and focused more on specific market segments as well as on customer service and personal assistance to customers.

They thought grocery store consumers tended to be low involvement beer buyers, more likely to stick with known brands with broad consumer recognition. They added a “*Sam’s Club membership type strategy where a customer could join for \$9.95 a month and that got the customer cost plus 15% on anything they bought*” (personal interview with Chris Hamilton August 2024).

To improve their margins, they instituted a frequent customer punch card program early on and changed it from 5 punches to 10 in 2016. This program seemed to bring beer customers back to the store even after the law change in 2019.

Although they sold the traditional six packs, within about six months of the law change, they realized they could carry a larger variety of beer if they sold single cans. Each shelf in their store could take four 6-packs or 24 singles. They also realized by selling most of their beer as singles they could buy the larger packaging and break it into singles. By buying 30-packs they sold some singles with a higher margin than was customary in the industry. An example was Pabst Blue Ribbon. They could add in the costs of the materials and labor to make their own 6-packs while still getting a larger markup. By buying 30-packs they could sell six singles for 80 cents each or \$4.80 a 6-pack with a 33% markup compared to a 25-28% markup on singles when they bought 6-packs to stock their single cans. They thought at the time that by going to singles they would sell more beer because this allowed the customer to get exactly what they wanted. And this gave them a competitive edge because not many of the other liquor stores in the area sold singles (personal interview with Molly Hamilton, August 5, 2024). As one local college student explained, *"It is fun to be able to mix and match different brands of beer in one 6-pack. That's why I often shop at W.J. Doyle"* (personal interview with Will Bingaman November 2024).

Exhibit 7. Inside W.J. Doyle Wine and Spirits

Source: <https://www.wjdoyledurango.com/>



After grocery stores were allowed to sell wine, the Hamiltons increased the prices of six pack singles to increase their margin. *“A few cents here and there add up”* (personal Interview with Molly Hamilton August 2024).

Other Liquor Stores’ Beer Marketing Strategies

Other local liquor stores also thought they should change their strategies when the new beer sales law went into effect. For example, Spirits of the West lowered its prices to *“keep up with the big grocery stores.”* Wagon Wheel Liquor focused on marketing and having better customer service, such as personal assistance that grocery stores did not have. Wagon Wheel also turned away from selling larger brand names that were carried by the grocery stores, hoping to improve the bottom line. Brightside Spirits went with a more unique selection of beer than the grocery stores carried. Liquor World said it had made no real strategy changes ; the store had good name recognition, having opened in 1983, and wanted to stay consistent for regular customers. Star Liquor explained how it had shifted to digital marketing and buying unique brands, including the brands of local craft breweries that were not carried in the grocery stores (personal Interviews with local liquor store managers/owners, August and September 2024).

W. J. Doyle Financials

The Hamiltons had always used their own data that included revenue, cost of goods sold (COGS), and profit numbers for each of their four product categories (beer, wine, spirits, and other products they sold), as well as state and national beer sales data to make buying and marketing decisions (see Appendix D for product category data).

The Hamiltons noticed that the new strategies they implemented to remain competitive in the local beer market were not successful right away. As shown in Exhibits 8 and 9, total revenue and profit decreased from 2018 to 2019 by \$182,316.84 and \$37,730.28, respectively. This

happened even with a decrease in the cost of goods sold (COGS). However, in 2020 things turned around and total profit rose above the 2017 level and continued to increase through 2023.

Exhibit 8. W. J. Doyle's Total Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

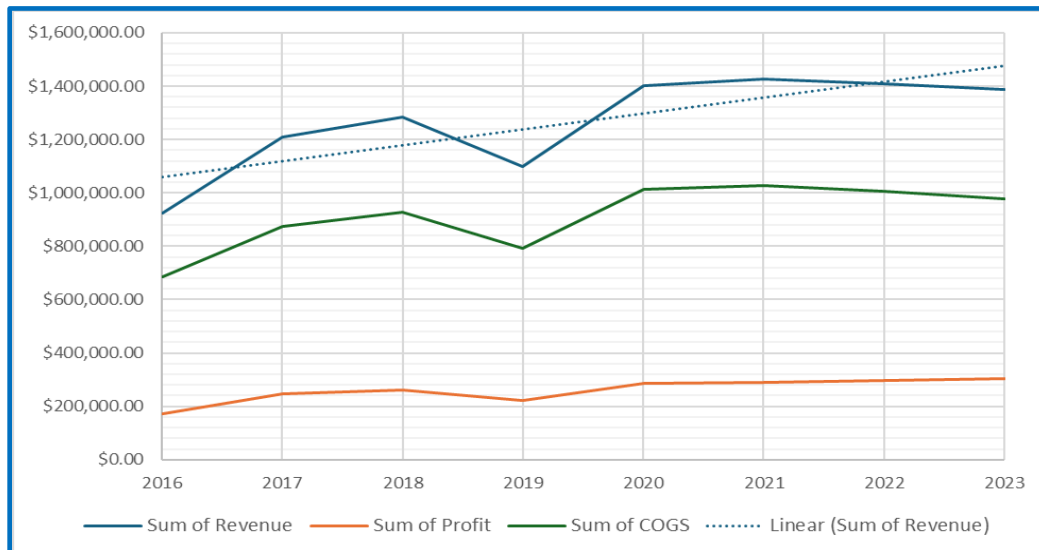
Source: Chris and Molly Hamilton

Year	Sum (Revenue)	Sum (COGS)	Sum (Profit)
2016	\$923,669.17	\$685,073.82	\$170,476.98
2017	\$1,209,318.69	\$872,602.43	\$248,705.61
2018	\$1,282,809.62	\$927,629.18	\$261,278.31
2019	\$1,100,492.78	\$793,961.31	\$223,548.03
2020	\$1,403,634.16	\$1,011,756.94	\$285,093.91
2021	\$1,427,024.34	\$1,027,020.46	\$291,494.21
2022	\$1,410,651.45	\$1,007,508.80	\$296,081.02
2023	\$1,387,421.42	\$979,307.25	\$302,862.55
Year = All	\$10,145,021.63	\$7,304,860.19	\$2,079,540.62

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Exhibit 9. W. J. Doyle's Total Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton



Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

They looked deeper into their numbers and uncovered some interesting patterns. Revenue and profit from beer sales decreased from 2018 to 2019 (with a decrease in COGS too, reflecting their strategy of lowering costs by buying in bulk). In fact, the numbers showed a statistically significant decrease in revenue and profit from beer sales after the law changed on January 1, 2019 (see data statistic details in Appendix C).

Although beer sales revenue and profit increased again in 2020, neither increased back to (or above) their 2018 levels (prior to the change in the Colorado law) as their total revenue and profits had done (see Exhibits 10 and 11). Therefore, something else was driving their return to higher total revenue and higher profits in 2020.

Exhibit 10. W. J. Doyle's Beer Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

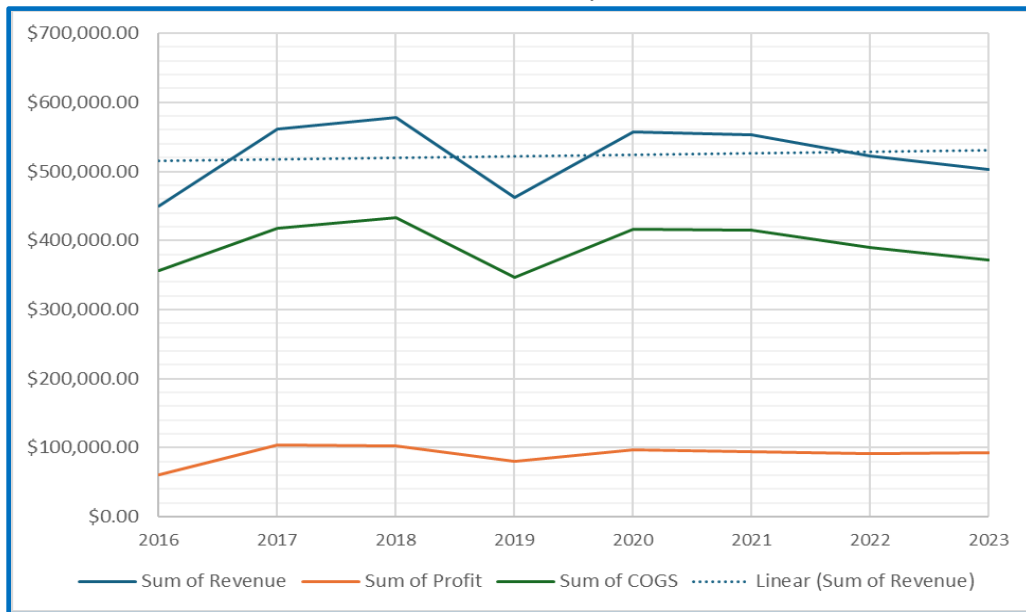
Source: Chris and Molly Hamilton

Beer			
Year	Sum (Revenue)	Sum (COGS)	Sum (Profit)
2016	\$450,138.73	\$355,975.36	\$61,227.61
2017	\$561,840.21	\$417,037.10	\$103,686.27
2018	\$578,337.53	\$433,643.28	\$102,356.41
2019	\$461,803.16	\$346,246.29	\$80,738.65
2020	\$557,403.79	\$416,984.93	\$97,218.62
2021	\$552,962.78	\$415,583.26	\$94,522.17
2022	\$521,900.03	\$389,804.11	\$91,629.10
2023	\$503,110.35	\$371,419.44	\$92,693.07
Year = All	\$4,187,496.58	\$3,146,693.77	\$724,071.90

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Exhibit 11. W. J. Doyle's Beer Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton



Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

They discovered their revenue and profits from spirit sales had decreased from 2018 to 2019, after steadily increasing. But revenue and profit from spirit sales increased substantially from \$364,438.36 in 2019 to \$484,081.80 in 2020 and from \$92,592.84 in 2019 to \$122,527.86 in 2020 respectively (see Exhibits 12 and 13). This was a statistically significant increase (see Appendix C). Spirit sales continued to be outlawed in grocery stores and convenience stores in Colorado. Therefore, was the Hamiltons' decrease in beer sales and increase in spirit sales due to their customers picking up beer while grocery or gas shopping but continuing to shop at W. J. Doyles for spirits? Were their customers buying "more" spirits at their favorite local liquor store? Was there an overall increase in spirit sales in Colorado or in the United States in 2020? What was driving the increase in spirit sales for W. J. Doyle in 2020?

Exhibit 12. W. J. Doyle's Spirits Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

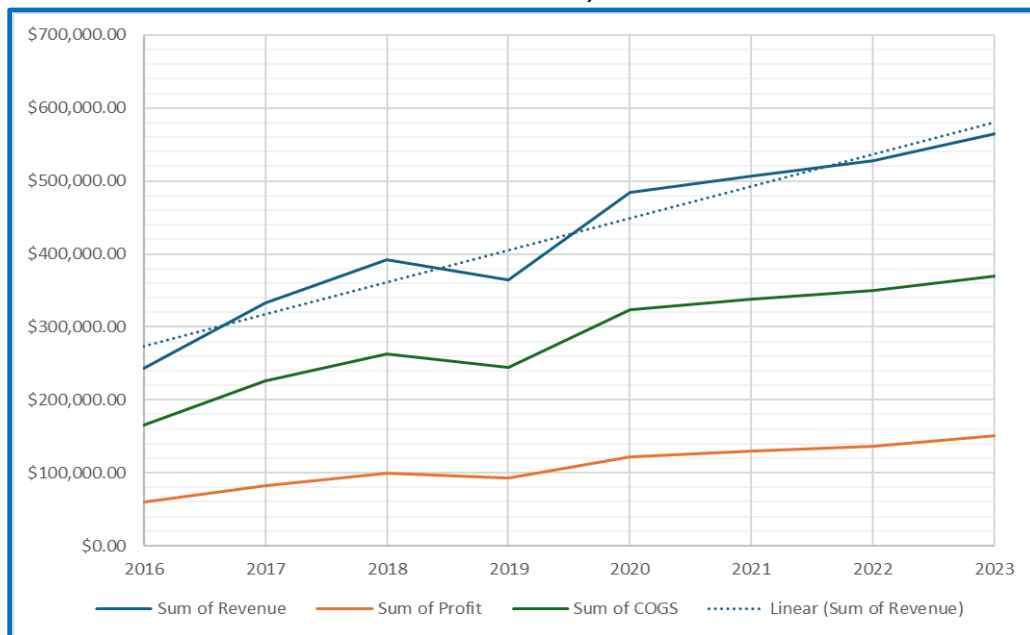
Source: Chris and Molly Hamilton

Spirits			
Year	Sum (Revenue)	Sum (COGS)	Sum (Profit)
2016	\$243,618.68	\$166,012.68	\$59,770.11
2017	\$332,783.05	\$225,580.57	\$82,831.12
2018	\$391,852.90	\$263,561.18	\$99,575.41
2019	\$364,438.36	\$244,327.38	\$92,592.84
2020	\$484,081.80	\$324,018.55	\$122,527.86
2021	\$506,603.74	\$337,662.98	\$129,680.46
2022	\$528,398.80	\$350,366.85	\$137,086.92
2023	\$564,314.04	\$370,132.88	\$150,411.20
Year = All	\$3,416,091.37	\$2,281,663.07	\$874,475.92

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Exhibit 13. W. J. Doyle's Spirits Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton



Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Also interesting, revenue and profit from wine sales did not change in a statistically significant amount during the period after the 2019 law change (see Exhibits 14 and 15, and Appendix C). Although wine sales revenue did decrease in 2019, from 2018, by \$19,354.04. This was not a significant decrease. However, like spirit sales, wine sales revenue increased again in 2020 above that of 2018.

Exhibit 14. W. J. Doyle's Wine Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

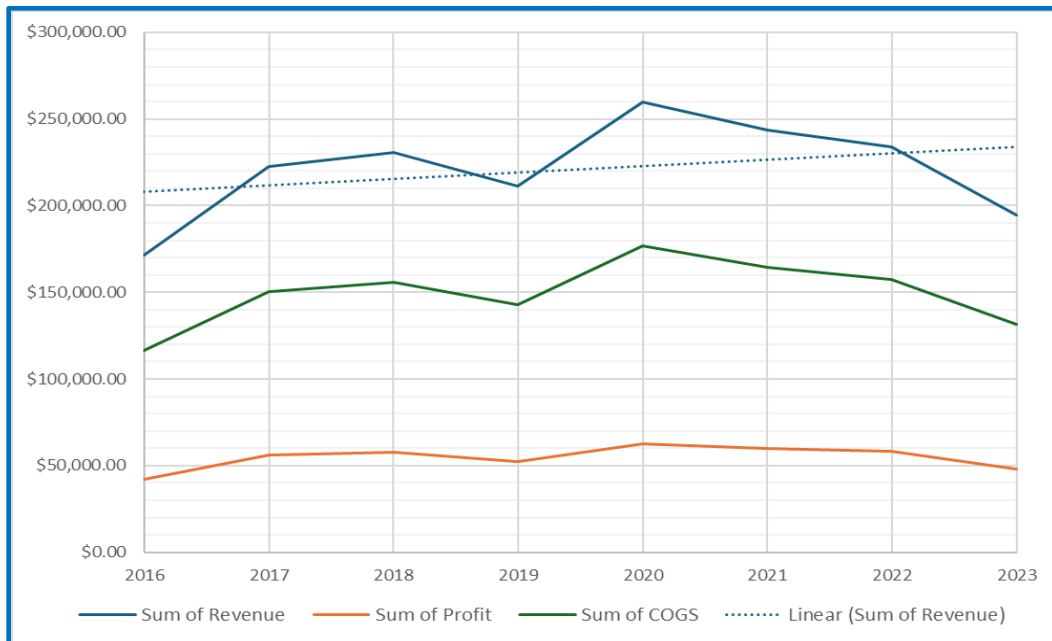
Source: Chris and Molly Hamilton

Wine			
Year	Sum (Revenue)	Sum (COGS)	Sum (Profit)
2016	\$171,403.81	\$116,693.75	\$42,155.79
2017	\$222,404.20	\$150,189.94	\$55,924.30
2018	\$230,645.10	\$156,061.71	\$57,723.68
2019	\$211,291.06	\$142,924.96	\$52,416.53
2020	\$259,885.64	\$176,982.04	\$62,837.04
2021	\$243,476.49	\$164,510.82	\$60,109.67
2022	\$233,881.62	\$157,402.80	\$58,335.27
2023	\$194,571.13	\$131,633.34	\$47,956.81
Year = All	\$1,767,559.05	\$1,196,399.36	\$437,459.09

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Exhibit 15. W. J. Doyle's Wine Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton



Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

The Hamiltons collected data on four product categories: beer, wine, spirits, and other products they offered for sale. This last category included cigarettes, non-alcoholic beverages, accessories, food items, tips, store account payments, discounted items, schnapps, and delivery fees. They found there was a decrease in revenue in 2018 (from 2017) for the “other” products they sold and in fact decreased even more significantly in 2019 (as compared to 2018). This created a loss of \$2,199.99 in 2019 from the sales of the “other” products the Hamilton’s sold. This followed from the fact that beer, spirits, and wine revenues and profits were all down in 2019 (from the year before). This indicated less foot traffic in W. J. DoYLES after the Colorado beer law change on January 1, 2019. Some of the “other” products that were sold were considered complements¹ to beer, spirits, and/or wine. For example, non-alcoholic beverages were complementary to spirits when making mixed drinks. Non-alcoholic beverages, food

¹ A complement in economics and consumer theory refers to a product that consumers associate closely with another item and is sometimes necessary for the other item's consumption; a complement is a good that is bought when another item is bought as decided by the consumer (Investopedia, 2024).

items, and cigarettes could also be considered impulse goods, which were items that consumers purchase without prior planning or intent. When consumers entered the liquor store, they ended up buying more than just the beer, spirits, or wine because they saw other items and decided to purchase them as well. With less foot traffic, impulse item sales were down for W. J. Doyle in 2019. Fortunately, profit for “other” products rebounded in 2020 and continued to increase through 2023 (see Exhibits 16 and 17).

**Exhibit 16. W. J. Doyle’s “Others” Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023**

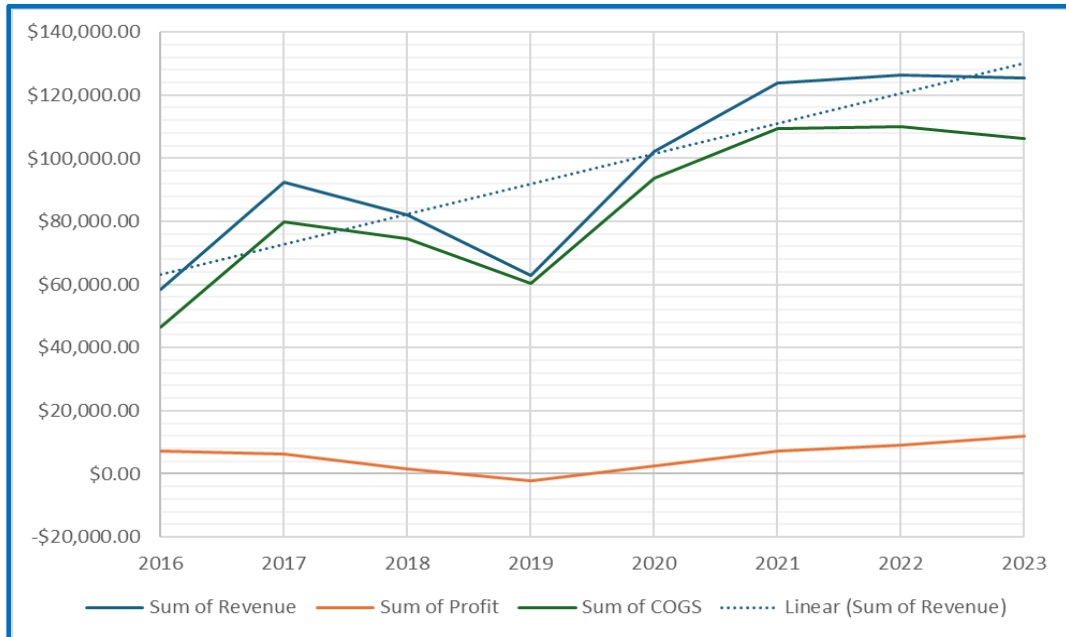
Source: Chris and Molly Hamilton

“Others”			
Year	Sum (Revenue)	Sum (COGS)	Sum (Profit)
2016	\$58,507.95	\$46,392.03	\$7,323.47
2017	\$92,291.23	\$79,794.82	\$6,263.92
2018	\$81,974.09	\$74,363.01	\$1,622.81
2019	\$62,960.20	\$60,462.68	-\$2,199.99
2020	\$102,262.93	\$93,771.42	\$2,510.39
2021	\$123,981.33	\$109,263.40	\$7,181.91
2022	\$126,471.00	\$109,935.04	\$9,029.73
2023	\$125,425.90	\$106,121.59	\$11,801.47
Year = All	\$773,874.63	\$680,103.99	\$43,533.71

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Exhibit 17. W. J. Doyle's Other Products Revenue, COGS, and Profit
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton



Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS.

Conclusion

On March 1, 2023, Chris and Molly knew they now had more competitors selling wine. Could they offset a potential profit decrease with similar pricing, merchandising, or marketing techniques they had been using for beer? Or, due to differences in customer demographics or merchandising disparities, should they use some new methods to keep their loyal wine customers coming back (or to acquire new wine buyers)?

Appendix A.
History and Background of Colorado's Alcoholic Beverage Laws

“During the 2016 legislative session, the Colorado General Assembly passed Senate Bill 16-197. On June 10, 2016, Gov. Hickenlooper signed Senate Bill 16-197 into law, concerning the retail sale of alcohol beverages. The signed bill restricted the issuance of new liquor-licensed drugstore and retail liquor store licenses except under specified circumstances; allowed liquor-licensed drugstore and retail liquor store licensees to obtain more licenses under limited circumstances; and repealed the limit on the alcohol content of fermented malt beverages on January 1, 2019.

“Effective January 1, 2019, the limitation on the maximum alcohol content of fermented malt beverages, also referred to as ‘3.2% beer’, was eliminated, “thereby allowing grocery stores, convenience stores, and any other person currently licensed or licensed in the future to sell fermented malt beverages for consumption on or off the licensed premises to sell fermented malt beverages containing more than 3.2% alcohol by weight or 4% alcohol by volume” (Colorado Wyoming Petroleum Marketers Association & Convenience Store Association, LED Fact Sheet for Colorado Retailers on Fulls [sic] Strength Beer, 2024).

In 2023, Colorado voters approved Proposition 125, which allowed grocery stores and convenience stores to sell wine. The law went into effect on March 1, 2023. It allowed grocery stores and convenience stores that already had a beer license to sell wine, cider, and sake. It restricted fermented malt beverage and wine retailers from being within 500 feet of an existing retail liquor store.

Appendix B. Local Competition

Local Liquor Stores in the Durango Area
6th Street Liquor
Discount Liquors
Durango Liquor & Wine Co
Liquor World
Mac's Liquor Store
River Liquor
Skyridge Gas Station & Liquor
Spirits of the West
Star Liquors
Bear's General, formerly The Mercado Corner Market
Upper East Side Liquors
W. J. Doyle Wine and Spirits
Wagon Wheel Liquors
Wildcat Canyon Liquors
Hermosa Liquor
Animas Wine & Spirits
Helens Country Liquor Store – Went out of business July 2024.
Brightside Spirits
Wine Only
Four Leaves Winery
EsoTerra Ciderworks
Durango Wine Experience
Suncliffe Vineyards Tasting Room
Spirits Only
Durango Craft Spirits
Honey House Distillery
Beer Only
Carver Brewing Co.
Steamworks Brewing Co.
Anarchy Brewing Co.
Animas Brewing Co.
Ska Brewing Co.
Durango Beer & Ice Co & High Trestle Brewing Co. (in DB&I Co.). Opened August 2020.
Durango Beer Co. – Went out of business August 2018.
Brew Pub and Kitchen – Went out of business March 2019.

Appendix C. Analysis W.J. Doyle Data after the Change in Beer Sales Law on January 1, 2019

Conclusions: W. J. Doyle Revenue

- Statistically significant decrease in revenue from beer sales after the law changed in 2019.
- Statistically significant increase in revenue from spirit sales after the law changed in 2019.
- No statistically significant change in revenue from wine sales after the law changed in 2019.

Revenue Change: T test – Test for difference in daily mean revenue for beer, wine, and spirits before and after full-strength beer sales were allowed in grocery and convenience stores on January 1, 2019.

Beer T Test: Yes-No Assuming unequal variances

Difference	398.609 t Ratio	15.81587
Std Err Dif	25.203 DF	390.1009
Upper CL Dif	448.160 Prob > t	<.0001*
Lower CL Dif	349.058 Prob > t	<.0001*
Confidence	0.95 Prob < t	1.0000

Conclusion: Statistically significant decrease in beer sales revenue after the law changed in January 2019.

Spirits T Test: Yes-No Assuming unequal variances

Difference	369.893 t Ratio	23.43111
Std Err Dif	15.786 DF	2224.061
Upper CL Dif	400.850 Prob > t	<.0001*
Lower CL Dif	338.935 Prob > t	<.0001*
Confidence	0.95 Prob < t	1.0000

Conclusion: Statistically significant increase in spirit sales revenue after the law changed in January 2019.

Wine T Test: Yes-No Assuming unequal variances

Difference	-1.297 t Ratio	-0.11984
Std Err Dif	10.824 DF	2123.039
Upper CL Dif	19.930 Prob > t	0.9046
Lower CL Dif	-22.524 Prob > t	0.5477
Confidence	0.95 Prob < t	0.4523

Conclusion: There was no significantly significant change in wine sales revenue after the law changed in 2019.

Conclusions: W. J. Doyle Profit

- Statistically significant decrease in profit from beer sales after the law changed in 2019.
- Statistically significant increase in profit from spirit sales after the law changed in 2019.
- There was no statistically significant change in profit from wine sales after the law changed in 2019.

Profit Change: T test – Test for difference in daily mean profit for beer, wine, and spirits before and after full-strength beer sales were allowed in grocery and convenience stores on January 1, 2019.

Beer T Test: Yes-No Assuming unequal variances

Difference	-18.427 t Ratio	2.19278
Std Err Dif	8.404 DF	1079.278
Upper CL Dif	1.938 Prob > t	0.0285*
Lower CL Dif	-34.916 Prob > t	0.9857
Confidence	0.95 Prob < t	0.0143*

Conclusion: Statistically significant decrease in beer sales profit after the law changed in January 2019.

Spirits T Test: Yes-No Assuming unequal variances

Difference	103.560 t Ratio	24.75293
Std Err Dif	4.184 DF	2112.664
Upper CL Dif	111.764 Prob > t	<.0001*
Lower CL Dif	95.355 Prob > t	<.0001*
Confidence	0.95 Prob < t	1.0000

Conclusion: No statistically significant change in wine sales profit after the law changed in January 2019.

Wine T Test: Yes-No Assuming unequal variances

Difference	-2.2810 t Ratio	0.9452
Std Err Dif	2.4132 DF	1904.071
Upper CL Dif	2.4518 Prob > t	0.3477
Lower CL Dif	-7.0138 Prob	0.8277
Confidence	0.95 Prob < t	0.1723

Conclusion: No statistically significant change in wine sales profit after the law changed in January 2019.

Appendix D. W. J. Doyle's Yearly Revenue, Profit, and COGS by Product Type
April 13, 2016 – December 31, 2023

Source: Chris and Molly Hamilton

Categories by Year	Sum of Revenue	Sum of Profit	Sum of COGS
2016			
Beer	\$450,138.73	\$61,227.61	\$355,975.36
Others	\$58,507.95	\$7,323.47	\$46,392.03
Spirits	\$243,618.68	\$59,770.11	\$166,012.68
Wine	\$171,403.81	\$42,155.79	\$116,693.75
2016 Total	\$923,669.17	\$170,476.98	\$685,073.82
2017			
Beer	\$561,840.21	\$103,686.27	\$417,037.10
Others	\$92,291.23	\$6,263.92	\$79,794.82
Spirits	\$332,783.05	\$82,831.12	\$225,580.57
Wine	\$222,404.20	\$55,924.30	\$150,189.94
2017 Total	\$1,209,318.69	\$248,705.61	\$872,602.43
2018			
Beer	\$578,337.53	\$102,356.41	\$433,643.28
Others	\$81,974.09	\$1,622.81	\$74,363.01
Spirits	\$391,852.90	\$99,575.41	\$263,561.18
Wine	\$230,645.10	\$57,723.68	\$156,061.71
2018 Total	\$1,282,809.62	\$261,278.31	\$927,629.18
2019			
Beer	\$461,803.16	\$80,738.65	\$346,246.29
Others	\$62,960.20	-\$2,199.99	\$60,462.68
Spirits	\$364,438.36	\$92,592.84	\$244,327.38
Wine	\$211,291.06	\$52,416.53	\$142,924.96
2019 Total	\$1,100,492.78	\$223,548.03	\$793,961.31
2020			
Beer	\$557,403.79	\$97,218.62	\$416,984.93
Others	\$102,262.93	\$2,510.39	\$93,771.42
Spirits	\$484,081.80	\$122,527.86	\$324,018.55
Wine	\$259,885.64	\$62,837.04	\$176,982.04
2020 Total	\$1,403,634.16	\$285,093.91	\$1,011,756.94
2021			
Beer	\$552,962.78	\$94,522.17	\$415,583.26
Others	\$123,981.33	\$7,181.91	\$109,263.40
Spirits	\$506,603.74	\$129,680.46	\$337,662.98
Wine	\$243,476.49	\$60,109.67	\$164,510.82
2021 Total	\$1,427,024.34	\$291,494.21	\$1,027,020.46

Categories by Year	Sum of Revenue	Sum of Profit	Sum of COGS
2022			
Beer	\$521,900.03	\$91,629.10	\$389,804.11
Others	\$126,471.00	\$9,029.73	\$109,935.04
Spirits	\$528,398.80	\$137,086.92	\$350,366.85
Wine	\$233,881.62	\$58,335.27	\$157,402.80
2022 Total	\$1,410,651.45	\$296,081.02	\$1,007,508.80
2023			
Beer	\$503,110.35	\$92,693.07	\$371,419.44
Others	\$125,425.90	\$11,801.47	\$106,121.59
Spirits	\$564,314.04	\$150,411.20	\$370,132.88
Wine	\$194,571.13	\$47,956.81	\$131,633.34
2023 Total	\$1,387,421.42	\$302,862.55	\$979,307.25

Notes: 2016 Data is from April-December. Expenses such as labor, marketing, overhead, etc. are not included in COGS. "Others" include cigarettes, non-alcoholic beverages, accessories, food, tips, store account payments, discounted items, schnapps, and delivery fees.



Deborah Walker is a professor of economics in the Katz School of Business Administration at Fort Lewis College. Her teaching and research interests include public policy, Austrian economics, public choice, evolution of economic thought, economics of women's issues and entrepreneurship. Professor Walker is currently the Chair of the Economics, Accounting, and Marketing areas in the Katz School of Business.



Michael E. Valdez is the Bradley Family Professor at Fort Lewis College's Katz School of Business where he teaches courses in entrepreneurship, international management, and strategy. Dr. Valdez's research interests center on international management, cross-cultural management, entrepreneurial success factors (micro and macro), and organizational reputation. His research has appeared in *Entrepreneurship Theory and Practice*, *Academy of Management Review*, *Journal of Asia Business Studies*, and *Transportation Journal*. He has presented his research at various conferences in the United States and abroad and is a member of the Academy of Management and the Academy of International Business.



Shikhar Acharya is an Assistant Professor of Business Statistics at the University of North Texas at Dallas. He earned his Ph.D. in Systems Engineering from the Missouri University of Science and Technology, where his research primarily focused on the detection of malicious devices. His work also involves exploring the use of statistical methods and machine learning algorithms to improve decision-making processes.

References

Colorado Senate Bill 18-243, <https://leg.colorado.gov/bills/sb18-243>. Retrieved May 26, 2024.

Colorado Senate Bill 16-197, <https://sbg.colorado.gov/senate-bill-16-197>. Retrieved May 26, 2024.

Colorado Wyoming Petroleum Marketers Association & Convenience Store Association, LED Fact Sheet for Colorado Retailers on Fulls [sic] Strength Beer, 2024.

Personal Interviews with Chris and/or Molly Hamilton. Various Dates in 2023 and 2024.

Personal Interviews with Local Durango Liquor store managers/owners. August and September 2024.

Personal Interview with Fort Lewis Student, Will Bingaman, November 2024.

World Population Review, <http://worldpopulationreview.com/us-cities/durango-co-population>. Retrieved May 26, 2024.



WAS THE ACQUISITION OF TWITTER INC. BY ELON MUSK A TAXABLE TRANSACTION?

GRETCHEN R. LAWRIE

JOHN R. COOPER

California State University, Los Angeles

Introduction

The social media and social networking service Twitter, Inc. (“Twitter”) was *“a global platform for public self-expression and conversation in real time”* (Twitter, Inc. 2021, Feb. 17). Twitter as a place where users could create tweets and users could follow other users. Through topics, interests, and trends, Twitter helped *“...people discover what’s happening through text, images, on demand and live video, and audio from people, content partners, media organizations, advertisers and others”* (Twitter, Inc. 2022, Feb. 16).

Starting in January 2022, entrepreneur, founder, and leader of several companies, including Telsa, Inc., Elon Musk began to acquire stock in Twitter. On April 13, 2022, Mr. Musk delivered to Twitter a non-binding proposal to acquire 100 percent of Twitter. On October 27, 2022, Twitter merged with and into X Holdings II, Inc. (Acquisition Sub), a wholly owned subsidiary of X Holdings I, Inc. (Parent), with Twitter surviving as a wholly owned subsidiary of Parent, which was majority owned and controlled by Mr. Musk.

The contentious transaction played out in the public eye, catching the attention of the world. At the same time, it offered a unique opportunity to examine the tax issues that were involved. What were the U.S. tax and non-tax consequences of the Merger for Twitter, Twitter shareholders, Parent, Elon Musk, and other investors in Parent?

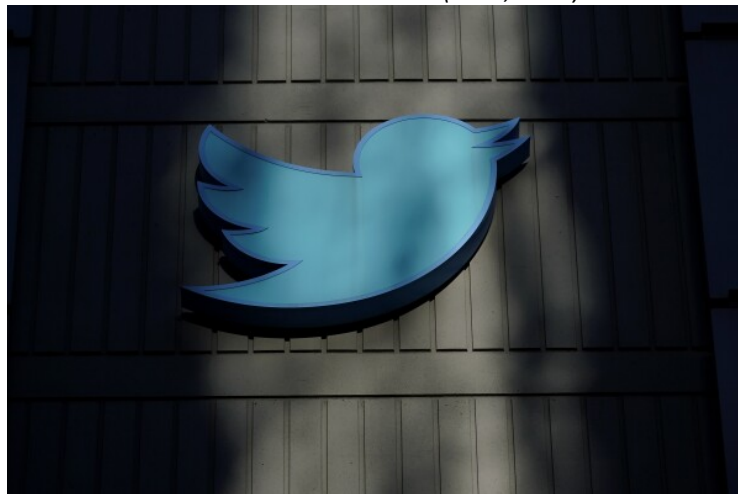
Parties Involved in the Merger

Twitter, Inc.

In 2006, two of the co-founders of Twitter, Jack Dorsey and Biz Stone, had an assignment at the podcasting platform Odeo to build something new over a two-week period. Mr. Dorsey drew a sketch of a text-entry box with the word “*Status*” above it and the domain name, my.stat.us. Messrs. Dorsey and Stone built the technology that became the basis for twttr, which was later renamed Twitter. On March 21, 2006, Mr. Dorsey sent the first post on twttr, later called a “tweet,” writing “*just setting up my twttr*” (Landi 2021).

Exhibit 1. Twitter Logo

Source: Associated Press (2023, Jul. 1)



Twitter was incorporated in April 2007 and experienced remarkable growth in users. By April 2009, Twitter had an estimated 32.1 million users. By 2021, Twitter’s average monetizable daily active usage (“mDAU”), defined as the number of Twitter users who were authenticated and accessed Twitter on any given day, was 217 million (Statista 2022).

In 2009, Twitter launched a verification system for important or significant accounts, which involved a process to verify and grant a blue check mark for the account. The intent of the blue

check mark was that Twitter users could review a post and be confident that the post was from a specific person's or organization's actual account, rather than an impersonator (Stein 2023).

In November 2013, Twitter launched its initial public offering (IPO) and began trading on the New York Stock Exchange (NYSE) under the symbol "TWTR" (Schaefer 2013). On the first day of trading, Twitter raised approximately \$2.1 billion with a market capitalization of \$24.4 billion (Pepitone 2013). In 2021, Twitter's total revenue was \$5.0 billion with \$4.51 billion in advertising revenue and \$571.8 million in data licensing and other revenue (Statista 2023).

Elon Musk

Elon Musk was an entrepreneur, founder, and leader of several businesses including the electric vehicle manufacturer, Tesla, Inc. (Tesla), and designer, manufacturer, and provider of launch services of rockets and spacecrafts through Space Exploration Technologies Corp. (SpaceX). Since April 2004, Mr. Musk served as a member of Tesla's Board of directors and, since 2008, as chief executive officer. Beginning in May 2002, he served as chairman of the SpaceX Board and later, in April 2004, he served as its chief technology officer.

Mr. Musk opened his Twitter account in 2009. By July 2022, he had over 100 million followers on Twitter and had tweeted more than 18,000 times. Beginning in January 2022, Mr. Musk began to buy Twitter stock. Mr. Musk became Twitter's largest shareholder by midyear, owning over nine percent of Twitter's common stock (Isidore 2022).

Exhibit 2. Elon Musk*Source: Associated Press (2023, Jul. 1)***Entering Into Merger Agreement**

The Twitter Board of Directors (the Board) regularly reviewed Twitter’s strategic direction and ongoing business plans with a view toward strengthening Twitter’s business, furthering Twitter’s mission to serve the public conversation, and enhancing stockholder value. The Board considered a variety of strategic alternatives including Twitter: 1) remaining an independent entity; 2) combining with other entities; 3) acquiring other entities; or 4) being sold to other entities.

In March of 2022, Mr. Musk contacted Jack Dorsey, Twitter’s founder, former CEO, and one of Twitter’s directors, to discuss the future direction of social media and the benefits of open social protocols. Mr. Musk also expressed his interest in joining the Board (Twitter, Inc. 2022, Apr. 25) and taking Twitter private (Feiner 2022, May 17). After considering several things, including Mr. Musk being a substantial shareholder, his active use of Twitter, his technical expertise in areas critical to Twitter’s products and technology, and the perspectives he could bring to the Board, the NomGov Committee agreed to recommend that the Board should

consider inviting Mr. Musk to join the Board (Twitter, Inc. 2022, Apr. 25). Although agreement was ultimately reached for Mr. Musk to join the Board, he declined and instead said he would be making an offer to take Twitter private (Twitter, Inc. 2022, Apr. 25).

In mid-April 2022, Mr. Musk delivered to Mr. Taylor a non-binding proposal to acquire 100 percent of Twitter for \$54.20 cash per share (Proposal). He stated that it was his best and final offer and if it were not accepted, he would need to reconsider his position as a Twitter shareholder. Mr. Musk publicly announced his Proposal to acquire Twitter for approximately \$43 billion (Twitter, Inc. 2022, Apr. 25; Siddiqui and Gregg 2022).

Over the next eight days, Mr. Musk tweeted comments that could have been interpreted to refer to his Proposal, which led the Twitter Board to believe Mr. Musk might commence an unsolicited tender offer for Twitter's common stock (Twitter, Inc. 2022, Apr. 25). In response to his comments, the Board announced that it had adopted a *poison pill plan* (the "Plan"). The Plan provided distribution rights to Twitter shareholders that would become exercisable if the Plan were triggered by an entity, person, or group acquiring 15 percent or more of Twitter's outstanding stock in a transaction not approved by the Board. Under the Plan, each shareholder, except for the acquiring person, entity, or group that triggered the Plan, could purchase additional Twitter stock (Twitter, Inc. 2022, Apr. 25).

Mr. Musk formed Parent and Acquisition Sub to carry out the transactions connected to a potential acquisition of Twitter. X Holdings I, Inc. (Parent) was formed solely for purposes of the Merger and was majority owned and controlled by Mr. Musk (Twitter, Inc. 2022, Apr. 25). X Holdings II, Inc. (Acquisition Sub) was formed solely for purposes of the Merger and was a wholly owned subsidiary of Parent (Twitter, Inc. 2022, Apr. 25). Shortly after, Mr. Musk publicly announced that to finance a potential acquisition of Twitter he had obtained commitment letters of \$46.5 billion in equity and debt financing (Twitter, Inc. 2022, Apr. 25).

Exhibit 3. Elon Musk & Twitter Logo*Source: Feiner (2022, May 17)*

In late April 2022, Twitter, Mr. Musk, and Parent negotiated the terms of the \$44 billion Merger Agreement. Ultimately, the Board met and unanimously agreed for Twitter to be acquired by Mr. Musk, approved the Merger Agreement, and recommended that Twitter's shareholders vote to approve the Merger. Also, on the same day and following the Board meeting, Twitter, Parent, Acquisition Sub, and Mr. Musk signed and executed the Merger Agreement (Twitter, Inc. 2022, Apr. 25).

Reasons for the Merger

The Board recommended that Twitter shareholders vote for the Merger for several reasons including:

- The potential benefits to shareholders;
- The Merger was less risky than other possible alternatives, such as remaining an independent company or pursuing transactions with other entities;

- A negotiated agreement with Mr. Musk, rather than an unsolicited takeover by him, could possibly result in additional stockholder value and less disruption to Twitter's business; and
- The per share price reflected a fair and favorable price for the shares of Twitter's common stock and was the best value Twitter could reasonably obtain from Mr. Musk (Twitter, Inc. 2022, Apr. 25).

Events After Merger Agreement Signed

During this time Twitter announced that it had overstated its mDAUs from 2019 to 2021 because of an error in how it accounted for people linked to multiple accounts, and therefore it was issuing revised financial statements restating its mDAUs for those three years (Twitter 2022, Apr. 28). Following Twitter's announcement, Mr. Musk became concerned that Twitter used *"lax methodologies...to assess the actual prevalence of fake or spam accounts on its platform"* to calculate the number of false or spam accounts included in Twitter's mDAU (Twitter, Inc. 2022). Mr. Musk began to request access to Twitter data and other information so that he could *"make an independent assessment of the prevalence of fake or spam [Twitter] accounts"* (Twitter, Inc. 2022a, Jul. 8). Also, during this time, Mr. Musk requested Twitter to *"apply more rigorous computer-aided and third-party testing to determine the prevalence of fake or spam accounts on its platform with greater certainty"* (Twitter, Inc. 2022, Apr. 25). According to Mr. Musk, Twitter refused his requests.

Responding to Mr. Musk, Twitter denied that it used lax methodologies for counting false or spam accounts and that it would continue to work with Mr. Musk to help him *"gain a deeper understanding of [Twitter's] methodology for calculating mDAU."* Twitter also stated that it had addressed *"the vast amount of Mr. Musk's information requests"* which were becoming increasingly burdensome and its obligation to provide Mr. Musk information was limited to the specific purpose of facilitating the closing of the Merger (Twitter, Inc. 2022b, Jul. 8).

After little progress was made on this issue, Twitter and Mr. Musk appeared to be at a standstill on the proposed acquisition. Mr. Musk notified Twitter that he was terminating the Merger because Twitter had breached the terms of the Merger Agreement by not providing the data and information that he had requested, and that Twitter appeared to have made false and misleading representations upon which Mr. Musk had relied when entering into the Merger Agreement. In response to the termination notice, Twitter stated that it had not breached the Merger Agreement and Mr. Musk's termination was invalid and wrongful.

Twitter filed a lawsuit against Mr. Musk, Parent, and Acquisition Sub in the Delaware Court of Chancery (Chancery Court) in July asking the Court to order him to perform the Merger Agreement obligations and to complete the Merger (Twitter, Inc. 2022, Jul. 12). In its lawsuit, Twitter stated that three months after the Merger Agreement was signed., Mr. Musk refused to honor his obligations because the Merger no longer served *"his personal interests"* and that he believed he was *"free to change his mind, trash the company, disrupt its operations, destroy stockholder value, and walk away"* (Twitter, Inc. 2022, Jul. 12).

Chancellor McCormick of the Delaware Court of Chancery granted Twitter's motion to expedite the court proceedings and scheduled a trial to begin in October 2022 (Tillman 2022). Mr. Musk quickly countersued Twitter asserting that Twitter breached the Merger Agreement asking the Chancery Court to rescind the Merger Agreement. Mr. Musk stated that he had expected that Twitter would hide nothing from him. Instead, Twitter *"played a months-long game of hide-and-seek to attempt to run out the clock"* before he *"could discern the truth"* about Twitter's representations. Further, the more Twitter evaded simple inquiries, the more Mr. Musk *"grew to suspect that Twitter had misled"* him (Musk 2022, Aug. 4).

During all this contentious activity, Twitter shareholders voted to approve the Merger on September 13, 2022 (Twitter, Inc. 2022, Sep. 13). At the same time as the legal proceedings, Twitter and Mr. Musk attempted to re-negotiate the terms of the Merger Agreement. Mr. Musk

proposed buying Twitter at a discount of up to 30 percent of the originally agreed purchase price. An attorney representing Mr. Musk, Alex Spiro, stated that Twitter had offered to Mr. Musk “*billions off the transaction price*,” but he refused because Twitter had attempted to impose self-serving conditions on any potential deal (Hirsch & Conger 2022).

After negotiations failed, Mr. Musk contacted Twitter stating that he was willing to close the Merger under the original terms of the Merger Agreement of \$54.20 per share if the legal proceedings were stopped and the debt financing proceeds had been received. Twitter rejected Mr. Musk’s offer on October 4 (Musk 2022, Oct. 6). A few days later, Chancellor McCormick granted Mr. Musk’s request to postpone the trial that was to begin on October 12, 2022, to October 28, 2022, because he had agreed to close the Merger and obtain financing on or by that date. Chancellor McCormick stated that if the Merger was not completed by October 28, 2022, the trial would proceed. Twitter opposed granting Mr. Musk’s request to delay the trial because the Merger would not be able to close “*fast enough*” (Twitter, Inc. 2022, Oct. 6).

Merger Transaction

On October 27, 2022, the \$44 billion Merger closed, and Acquisition Sub merged with and into Twitter with Twitter surviving as a wholly owned subsidiary of Parent and retaining substantially all of its assets. Twitter shareholders exchanged their Twitter common stock for \$54.20 cash per share and their shares were cancelled (Twitter, Inc. 2022a, Oct. 27). See Appendix C.

As part of the Merger, Mr. Musk and some equity investors contributed their pre-Merger Twitter stock to Parent and received stock in Parent. For example, equity investor, Prince Alwaleed Bin Talal Bin Abulaziz Al Saud, rolled over more than 34 million shares of his pre-Merger Twitter stock to Parent in exchange for Parent common stock (Seligson 2022).

Some equity investors received \$54.20 cash per share for their pre-Merger Twitter stock and contributed cash to Parent in exchange for Parent stock. For example, equity investor, the Qatar Investment Authority, received \$54.20 cash for each share of its pre-Merger Twitter stock and those shares were cancelled. It also contributed \$375 million to Parent in exchange for Parent common stock (Twitter, Inc. 2022b, Oct. 27; Seligson 2022).

Other equity investors who did not own stock in Twitter prior to the Merger contributed cash for Parent stock. For example, the founder of the software company Oracle, Larry Ellison, contributed \$1 billion cash for Parent stock (Al Jazeera 2022; Kastrenakes & Lawler 2022).

Besides rolling over his pre-Merger Twitter stock, Mr. Musk also contributed cash for Parent stock.

On the day of the closing, Mr. Musk tweeted that *“the bird is freed”* (Musk 2022, Oct. 28). He also tweeted that the reason he acquired Twitter was *“because it is important to the future of civilization to have a common digital town square, where a wide range of beliefs can be debated in a healthy manner without resorting to violence.”* Further, he stated that he did not acquire Twitter *“to make more money,”* rather he did it *“to try to help humanity”* (Musk 2022 Oct. 27). In a 2023 interview, Mr. Musk stated that he only went through with the Merger because a judge was about to force him to make the purchase (Clayton 2023).

Merger Financing

To finance the Merger, Mr. Musk committed to obtain \$46.5 billion, \$33.5 in equity financing and \$13 billion debt financing, which covered the \$44 billion purchase price and the \$2.6 billion closing costs. Of the equity financing, Mr. Musk personally provided \$26.4 billion, of which he funded a portion of by selling approximately \$15.5 billion worth of his Tesla stock during the spring and summer of 2022. Individuals, investment firms, and other equity investors contributed the remaining \$7.1 billion of the \$33.5 billion equity financing. Of the debt

financing, several banks, such as Bank of America, provided \$13 billion in loans and other forms of debt financing, with an annual interest payment on the debt financing of approximately \$1.5 billion (Al Jazeera 2022; Maurer 2023).

Post-Merger

On October 27, 2022, Twitter's common stock was delisted and stopped being traded on the NYSE. Mr. Musk became the sole director and CEO of Twitter (Twitter, Inc. 2022a, Oct. 27). Also, in October, Mr. Musk fired several Twitter executives including CEO Agrawal, chief financial officer (CFO) Ned Segal, and legal and policy executive Vijaya Gadde (Francis 2022; Thomas and Corse 2022). By spring 2023, Twitter's workforce of approximately 8,000 employees had been reduced through involuntary and voluntary terminations to approximately 1,500 employees (Clayton 2023).

In a March 2023 email to Twitter employees, Mr. Musk wrote that Twitter was worth \$20 billion, less than 50 percent of its \$44 billion purchase price. He also stated that someday Twitter could be worth \$250 billion, but the path to get there would be difficult (Cao 2023; Conger & Ryan 2023). Further, Twitter remained in a precarious financial position and had been four months away from running out of money. Also, he said that "*radical changes*" needed to be made at Twitter, including mass layoffs and cost cutting, to avoid bankruptcy and streamline operations. Additionally, Mr. Musk stated that "*Twitter is being reshaped rapidly*" and could be thought of as "*an inverse start-up*" (Conger & Ryan 2023).

During the spring of 2023, Twitter's name was changed to X Corp. In July 2023, Twitter's blue bird logo was replaced with an "X". Prior to the logo change, Mr. Musk had posted on Twitter that: "*Soon we shall bid adieu to the Twitter brand and, gradually, all the birds*" (Corse 2023, Apr. 12). Then in August 2023, the subscription service, Twitter Blue, was renamed X Premium (Economic Times 2023).

Conclusion

Starting in January 2022, Elon Musk began to acquire stock in Twitter and in April 2022, he proposed to acquire 100 percent of Twitter. In October 2022, the Merger was completed, and Twitter became a subsidiary of Parent, which was majority owned and controlled by Mr. Musk. What were the U.S. tax and non-tax consequences of the Merger for Twitter, Twitter shareholders, Parent, Elon Musk, and other investors in Parent?



Appendix A. Overview of Taxable Acquisitions and Tax-Free Acquisitive Reorganizations

For U.S. federal tax purposes, the acquisition of a corporation's (Target) stock and/or assets by another corporation (Acquirer) may be treated as a taxable acquisition or a tax-deferred acquisition, commonly referred to as a tax-free acquisitive reorganization (I.R.C. § 368(a)). The term taxable acquisition means that Target is taxable upon the gain realized on sale of its assets to Acquirer and that Target's shareholders are taxable upon the gain realized on the sale of their stock to Acquirer. Whereas in a tax-free acquisitive reorganization, taxes due on gains realized by Target, Target shareholders, and/or Acquirer are deferred until a subsequent event, such as Target shareholders selling their Acquirer stock for cash after a reorganization.

Taxable Stock and Asset Acquisitions

Types of Taxable Stock and Asset Acquisitions

There are several different types of taxable acquisitions including: 1) direct stock sales; 2) direct asset sales; 3) cash mergers; 4) forward subsidiary cash mergers; 5) reverse subsidiary cash mergers; 6) direct stock sales with an election under I.R.C. § 338; and 7) direct stock sales with an election under I.R.C. § 338(h)(10).

In a direct taxable stock acquisition, Acquirer pays cash and/or notes for Target shareholders' stock with Target becoming a subsidiary of Acquirer or being liquidated. In a direct taxable asset sale, Target sells substantially all of its assets to Acquirer for cash, notes, property, and/or the assumption of Target's indebtedness. After the transaction, Target may continue to exist or liquidate and distribute the sale proceeds and any assets it retained to its shareholders.

In a taxable cash merger, Target merges directly into Acquirer in a transaction carried out pursuant to state law with Target's shareholders receiving cash and/or notes for their stock. Instead of merging directly into Acquirer, in a taxable forward subsidiary cash merger, Target merges, pursuant to state law, with and into Acquirer's wholly owned subsidiary, with Subsidiary, not Target surviving the merger. In a taxable reverse subsidiary cash merger, Target and Acquirer's Subsidiary merge, but Target, not Subsidiary, survives the merger.

In a stock sale with a Section 338 election, Acquirer purchases 80 percent or more of Target's stock within a 12 month period and then elects to have the transaction treated for federal tax purposes as if Target had sold its assets in a taxable transaction to a hypothetical new corporation for their fair market value (FMV). In a stock sale with a Section 338(h)(10) election, Acquirer purchases 80 percent or more of Target's stock from Target's parent corporation or from shareholders of a Target that is an S corporation and then elects to have the transaction treated for federal tax purposes as a sale of Target's assets, rather than as a sale of Target's stock.

Tax Consequences of Taxable Stock and Asset Acquisitions

In direct stock sales, reverse subsidiary cash mergers, direct asset sales without liquidation of Target, and direct stock sales with an IRC § 338(h)(10) election, Target shareholders are taxed on the gain from the sale of their Target stock (Cash received for Target stock – Target

shareholders' basis in Target stock = Target shareholders' taxable gain or loss). In cash mergers, forward subsidiary cash mergers, and direct asset sales followed by liquidation of Target, Target shareholders are taxed on the liquidation or deemed liquidation of Target and Target is taxed on the sale or deemed sale of its assets (Cash received for Target's assets – Target's basis in assets = Target's taxable gain or loss). In direct stock sales with a Section 338 election, shareholders are taxed on the sale of their Target stock and Target is taxed on the deemed sale of its assets.

In direct stock sales and reverse subsidiary cash mergers, Acquirer takes a FMV basis in Target stock acquired from Target's shareholders and takes a carryover basis in Target's assets. Whereas, in direct asset sales, cash mergers, forward subsidiary cash mergers, direct stock sales with a Section 338 or Section 338(h)(10) elections, the basis of Target's assets are adjusted to FMV.

Tax-Free Acquisitive Reorganizations

Statutory Requirements for Tax-Free Acquisitive Reorganizations

I.R.C. § 368 provides for several different corporate tax-free acquisitive reorganizations, in which Acquirer uses its stock with either none or a limited amount of cash and other property (together referred to as boot) to acquire Target's stock and/or assets. In a I.R.C. § 368(a)(1)(A) or Type A merger, Target's assets and liabilities are transferred to Acquirer with Target shareholders receiving Acquirer stock or a combination of stock and a limited amount of boot and Target dissolves by operation of state law.

In a I.R.C. § 368(a)(1)(B) or Type B stock-for-stock reorganization, Acquirer acquires a controlling interest in Target's stock from Target shareholders solely in exchange for all or part of Acquirer's voting stock. A controlling interest means that immediately after the reorganization, Acquirer (or its subsidiary) owns at least 80 percent of the total combined voting power of all of Target's voting stock and at least 80 percent of the total number of shares of each other class of Target's stock.

In a I.R.C. § 368(a)(1)(C) or Type C stock-for-assets reorganization, Acquirer acquires substantially all of Target's assets in return for consideration consisting solely of Acquirer's voting stock or a combination of Acquirer's voting stock and up to 20 percent of boot. Then, Target liquidates by exchanging Acquirer's stock for Target shareholders' stock and distributing boot and any other remaining Target assets to Target shareholders.

In a I.R.C. § 368(a)(2)(D) forward triangular merger, Target merges with and into Acquirer's wholly owned Subsidiary, with Subsidiary, not Target, surviving the merger. In a I.R.C. § 368(a)(2)(E) reverse triangular merger, Target merges with and into Acquirer's wholly owned subsidiary, with Target, not Subsidiary, surviving the merger.

Non-Statutory Requirements for Tax-Free Acquisitive Reorganizations

Besides meeting the specific requirements of I.R.C. § 368, A tax-free reorganization must also meet the following non-statutory requirements: 1) plan of reorganization; 2) business purpose;

3) continuity of business enterprise (COBE); and 4) continuity of interest (COI). A tax-free reorganization must be carried out pursuant to a plan of reorganization adopted by each party to the reorganization, but it does not have to be in a particular form or in writing. Other than avoiding federal income taxes, a reorganization must have a valid business purpose, such as expanding product lines, reducing administrative and other costs, or avoiding state and local taxes (Treas. Reg. §§ 1.368-1(c), 1.368-2(g), and 1.368-3(a)). To meet the COBE requirement, Acquirer must either continue at least one significant line of Target's historical business or use a significant portion of Target's historic business assets in a business (Treas. Reg. § 1.368-1(d)).

For purposes of the COI requirement, Target shareholders must have a substantial proprietary interest in Acquirer after the reorganization, meaning that a substantial part of the value of the Target's stock must be exchanged for Acquirer's stock (Treas. Reg. § 1.368-1(e)). The COI requirement is not met if the consideration does not include any of Acquirer's stock (Treas. Reg. § 1.368-1(e)). For COI purposes, Acquirer's stock can be either common or preferred and voting or non-voting stock (*John A. Nelson Co. v. Helvering*, 296 U.S. 374 (1935)).

Under Treas. Reg. § 1.368-1(e)(2)(v) Ex 1, the COI requirement is met if Target shareholders receive and hold Acquirer stock that equals at least 40 percent of the value Target's stock. But some courts have accepted a lesser amount. For example, in *John A. Nelson Co. v. Helvering*, the US Supreme Court held that the COI requirement had been met because Target shareholders had received and held Acquirer's nonvoting preferred stock that equaled 38 percent of the value Target's stock (296 U.S. 374 (1935)). In *A.L. Miller v. Commissioner*, the COI requirement was met because the Target shareholders held Acquirer stock equal to 25 percent of the value of Target's stock (84 F.2d 415 (6th Cir. 1936)).

Tax Consequences in Tax-Free Acquisitive Reorganizations

Target Shareholders' Tax Consequences

In a tax-free reorganization, Target shareholders may have a realized gain if the FMV of Acquirer's stock plus the amount of boot (cash and FMV of property) they received in the reorganization exceeds their Target stock basis (FMV of Acquirer's stock + cash + FMV of other property - Target stock basis = Target shareholders' realized gain or loss). However, they will only recognize (or pay tax) on a portion of their realized gain, which is referred to as a recognized gain. The amount of their recognized gain is equal to the lesser of the boot they received or their realized gain (I.R.C. §§ 354 and 356). For example, if Target shareholders' realized gain is \$500 and they received \$100 of boot, their recognized gain is \$100, because the \$100 of boot is less than the \$500 of realized gain.

Target shareholders' basis in their Acquirer stock equals their Target stock basis plus any recognized gain minus the amount of boot received and minus the amount of liabilities assumed by Acquirer as part of the reorganization (Target stock basis + recognized gain - boot - assumed liabilities = Target shareholders' basis in Acquirer stock). If Target shareholders held their Target stock as a capital asset, their holding period in their Target stock is tacked on to their holding period in their Acquirer stock (I.R.C. § 1223(1)). Their basis in boot received from

Acquirer is its FMV on the date of the exchange and the holding period for the boot begins on the date of the exchange (I.R.C. §§ 358 and 1223(1)).

Target's Tax Consequences

In an acquisitive reorganization, Target will not recognize gain or loss on exchanging property for Acquirer's stock, nor on distributing Acquirer's stock to its shareholders. Target will also not recognize gain or loss on boot received as part of the reorganization if it distributes the boot to its shareholders. But Target will recognize gain, not loss, if it distributes to its shareholders assets that were not transferred to Acquirer (i.e., retained assets), calculated as if Target had sold the distributed property for its FMV (I.R.C. §§ 361 and 1032).

Acquirer's Tax Consequences

If Acquirer exchanges solely its stock for Target's stock and assets, Acquirer will not recognize gain or loss. However, if Acquirer also transfers other property (non-cash boot) as part of the reorganization, it will recognize gain or loss equal to the FMV of the property minus its basis (I.R.C. §§ 361, 1001 and 1032; Rev. Rul. 72-327).

Acquirer's basis in Target's transferred assets equals Target's basis in those assets plus any gain recognized by Target (Target assets' basis + Target's recognized gain = Acquirer's basis in Target assets). Target's holding period in its transferred assets is tacked on to Acquirer's holding period. Acquirer's basis in Target stock it receives from Target shareholders equals their basis in their Target stock plus any gain recognized by them (Target shareholders' basis in Target stock + Target shareholders' recognized gain = Acquirer's basis in Target shareholders' Target stock). Target shareholders' holding period in their transferred Target stock is tacked on to Acquirer's holding period in those shares (I.R.C. §§ 362, 1223(1) and 1223(2)).

Tax Consequences for Acquirer's Shareholders

If Acquirer's shareholders do not participate in a tax-free reorganization involving the Acquirer, generally there is no reorganization-related tax consequences for Acquirer's shareholders. Generally, Acquirer shareholders would not realize and/or recognize gain or loss and their basis and holding period in their pre-reorganization Acquirer stock would be the same after the reorganization.

I.R.C. § 351 Exchanges

Requirements for I.R.C. § 351 Exchanges

I.R.C. § 351 provides that the contribution of property by investors (transferors) to a corporation (transferee) they control after the contribution transaction may be treated as a tax-free (tax deferred) I.R.C. § 351 exchange. Specifically, I.R.C. § 351(a) states that: no gain or loss will be recognized if property is transferred to a corporation by one or more persons solely in exchange for stock if immediately after the exchange such person or persons are in control of the corporation. The tax treatment of Section 351 is mandatory If the exchange of property for stock meets the requirements of Section 351.

For purposes of Section 351, the phrase one or more persons includes individuals, corporations, partnerships, and other entities (Treas. Reg. § 1.351-1(a)).

In a Section 351 exchange, property includes both tangible and intangible property. Specifically, under I.R.C. § 351, property is defined to include stock and securities, therefore transferors can exchange stock they own in a corporation for transferee corporation's stock (Rev. Rul. 74-502). Also, property includes cash and its basis equals its face value (Rev. Rul. 69-357; *Holstein v. Commissioner*, 23 T.C. 923 (1955)). However, services, such as accounting and legal services, are not considered property and therefore if a transferor provides services to the transferee in exchange for the transferee's stock, the transaction is not a Section 351 exchange (Treas. Reg. § 1.351-1(a)(1)(i)).

Even though I.R.C. § 351 states that persons must receive solely stock, they can receive a certain amount of other property and cash, referred to as boot (I.R.C. § 351(b)).

To be in control of the transferee corporation in a Section 351 exchange, the transferors must own immediately after the transfer, stock possessing at least 80 percent of the total combined voting power of all classes of voting stock and at least 80 percent of the total number of shares of all other classes of stock of the transferee, such as non-voting preferred stock. (I.R.C. § 368(c); Treas. Reg. § 1.351-1(a)(1)). In other words, to determine if the control requirement has been met and there is more than one transferor, all the transferors' shares are added together. If as a group, they own less than 80 percent of all shares of voting stock and own less than 80 percent of all other classes of stock, the control requirement has not been met and the transaction is not a Section 351 exchange. However, if a transferor provides services in exchange for the transferee's stock, its shares cannot be included with the other transferors' shares to determine control unless the transferor also transfers property to the transferee along with providing services.

The phrase immediately after the exchange does not require simultaneous exchanges by two or more persons. But the separate transfers must be made pursuant to a prearranged plan and done with "an expedition consistent with orderly procedure" (Treas. Reg. § 1.351-1(a)(1)).

Transferors' Tax Consequences

Transferors in a I.R.C. § 351 exchange generally do not recognize gain or loss if they transfer property to a corporation in exchange for the corporation's stock and that they control the corporation after the exchange. However, the transferors will recognize gain, but not loss, to the extent of the value other property and cash (boot) they receive along with the corporation's stock. The amount of recognized gain may not exceed the amount of boot (I.R.C. §§ 351(a) and (b); Treas. Reg. §§ 1.351-1(b)(1) and 1.351-2(a)).

To calculate the transferors' basis in the transferee's stock, both the transferors' realized and recognized gains must be first calculated. The transferors' realized gain equals the FMV of the transferee's stock plus the FMV of property and cash (boot) received from transferee less the basis of the transferors' property (transferee stock FMV + FMV of property received from

transferee + cash received from transferee – basis of transferors' property = transferors' realized gain) (I.R.C. § 358; Treas. Reg. § 1.351-2(a)).

The transferors' recognized gain equals the lesser of the boot received or the realized gain. By first calculating the transferors' realized and recognized gains, the basis in the transferee's stock can then be calculated. The transferors' basis in the transferee corporation stock equals the basis of the property exchanged for transferee's stock, decreased by the amount of property and cash (boot) received, increased the amount of gain recognized, and decreased by the amount of assumed liabilities (transferors' basis in the property – value of property – amount of cash + recognized gain - assumed liabilities = transferors' basis in transferee corporation stock).

The transferors' holding period in the transferee corporation stock equals the holding period of the property transferred to transferee. If only cash was exchanged for the transferee stock, the holding period starts upon receiving the stock.

Transferee's Tax Consequences

The transferee corporation will not recognize gain or loss on exchanging its stock for the transferors' property. Its basis in the property received from the transferors equals the transferors' basis in their transferred property, increased by the amount of gain the transferees recognized in the Section 351 exchange. (transferors' property basis + transferors' recognized gain = transferee's basis in the transferors' property). The transferee's holding period in the transferors' transferred property equals the number of years the transferors' held the property (I.R.C. § 362; Treas. Reg. § 1.351-2(c)).

Taxable (Busted) I.R.C. § 351 Exchange

If any of the specific statutory and non-statutory requirements of I.R.C. § 351 exchange are not met, a transaction may be treated as taxable (busted) I.R.C. § 351 exchange.

Transferors' Tax Consequences

In a busted I.R.C. § 351 exchange, the transferors recognize gain or loss based on the difference in the value of the stock received and the adjusted of the relinquished property. The basis in the transferee's stock is the stock's FMV and the holding period in the stock begins upon receipt of it.

Transferee's Tax Consequences

In a busted I.R.C. § 351 exchange, the transferee's basis in the transferors' property would equal the property's FMV and its holding period in the property would start upon receipt of it.

Appendix B. Acquisition Timeline

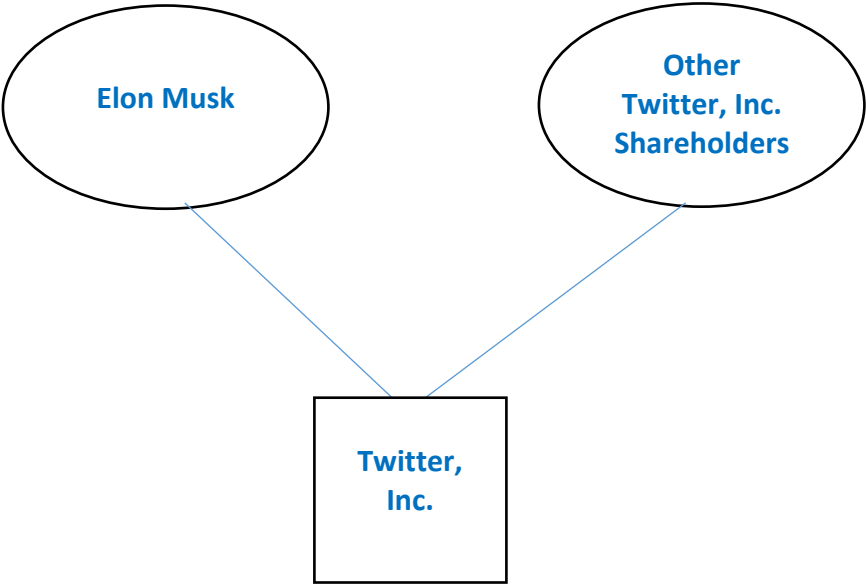
Source: Authors

DATE	EVENT
1/22	Elon Musk began to buy Twitter, Inc.'s stock
3/22	Mr. Musk tweeted comments regarding Twitter's business, platform and functionality, and content moderation policies
3/26/22	Mr. Musk and Jack Dorsey, Twitter's founder, former chief financial officer (CFO) and one of Twitter's Board-of-directors, discussed the future direction of social media and the benefits of open social protocols
3/26 & 3/27/22	Mr. Musk and Egon Durban, one of Twitter's Board of directors discussed Mr. Musk joining Twitter's Board of directors (Board) and that he had acquired more than five percent of Twitter's common stock
3/27/22	Mr. Musk, Bret Taylor, Twitter's Board chairman, and Parag Agrawal, Twitter's chief executive officer (CEO) and a Board director, discussed Mr. Musk's interest in joining the Board and possibly taking Twitter private or starting a Twitter competitor
3/31/22	During a meeting of Messrs. Musk, Agrawal, and Taylor, Mr. Musk reiterated his interest in joining the Board, helping to improve Twitter's business and the possibility of taking Twitter private or starting a Twitter competitor
2/2/22	Twitter's Nominating and Corporate Governance Committee (NomGov Committee) met and agreed to recommend that the Board should consider inviting Mr. Musk to join it
4/3/22	The Board agreed with the NomGov Committee and decided to invite Mr. Musk to join it, if he entered into a cooperation agreement (Cooperation Agreement) that would limit his public statements about Twitter
4/4/22	<ul style="list-style-type: none"> Mr. Musk publicly announced that he owned approximately 9.2 percent of Twitter's common stock, becoming Twitter's largest shareholder Mr. Musk told Mr. Taylor that he would not agree to limit his public statements about Twitter but would be open to limiting his ownership of Twitter to approximately 15 percent with any increase subject to Board approval The Board decided to ask Mr. Musk if he would enter into a revised Cooperation Agreement that would only limit the amount of Twitter stock he could purchase, but not limit his public statements about Twitter (Letter Agreement)
4/5/22	Twitter and Mr. Musk publicly announced that Mr. Musk had agreed to the Letter Agreement
4/9/22	Mr. Musk notified Messrs. Taylor and Agrawal that he would not be joining the Board and would be making an offer to take Twitter private
4/10/22	Twitter publicly announced that Mr. Musk had decided not to join the Board

DATE	EVENT
4/12/22	The Board discussed Mr. Musk's offer, reviewed potential alternatives to his offer, and discussed adopting a shareholder rights plan (poison pill plan)
4/13/22	Mr. Musk delivered to Mr. Taylor a non-binding proposal to acquire 100 percent of Twitter for \$54.20 cash per share (Acquisition Proposal)
4/14/22	Mr. Musk publicly announced his proposal to acquire Twitter for approximately \$43 billion
4/15/22	The Board announced that it had adopted a poison pill plan
4/19/22	Parent and Acquisition Sub formed
4/21/22	Mr. Musk publicly announced that he had obtained commitment letters of approximately \$46.5 billion in equity and debt financing
4/23/22	Mr. Taylor and Mr. Musk met and Mr. Musk reiterated that his Acquisition Proposal was his best and final offer and that he was willing to take it directly to Twitter's shareholders.
4/24/22	<ul style="list-style-type: none"> Mr. Musk informed the Board that he was committed to his Acquisition Proposal and that the Board should recommend his offer to Twitter's shareholders Mr. Musk gave the Board a merger agreement (Merger Agreement)
4/24 & 4/25/22	Twitter, Mr. Musk, Parent, and Acquisition Sub negotiated the Merger Agreement terms
4/25/22	<ul style="list-style-type: none"> The Board met and unanimously agreed for Twitter to be acquired by Mr. Musk, approved the Merger Agreement, and recommended that Twitter's shareholders vote to approve the Merger Twitter, Parent, Acquisition Sub, and Mr. Musk signed and executed the Merger Agreement
4/28/22	Twitter announced that it had overstated its average monetizable daily active usage (mDAU) from 2019 to 2021 because of an error in how it accounted for people linked to multiple accounts, and therefore it was issuing revised financial statements restating its mDAUs for those three years
5/6/22	During a meeting with Twitter representatives, Mr. Musk asked questions about Twitter's mDAU figures, its representations that less than five percent of its mDAU figures comprised false or spam accounts, and Twitter's process to calculate its mDAU
5/9/22	<ul style="list-style-type: none"> Mr. Musk began to request from Twitter data and other information so that he could make an independent assessment of the prevalence of fake or spam Twitter accounts and requested Twitter to apply more rigorous testing to determine the prevalence of fake or spam accounts with greater certainty Mr. Musk stated that Twitter had not responded to his requests Twitter denied using lax methodologies and stated it had addressed Mr. Musk's requests
6/2/22	The waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 expired

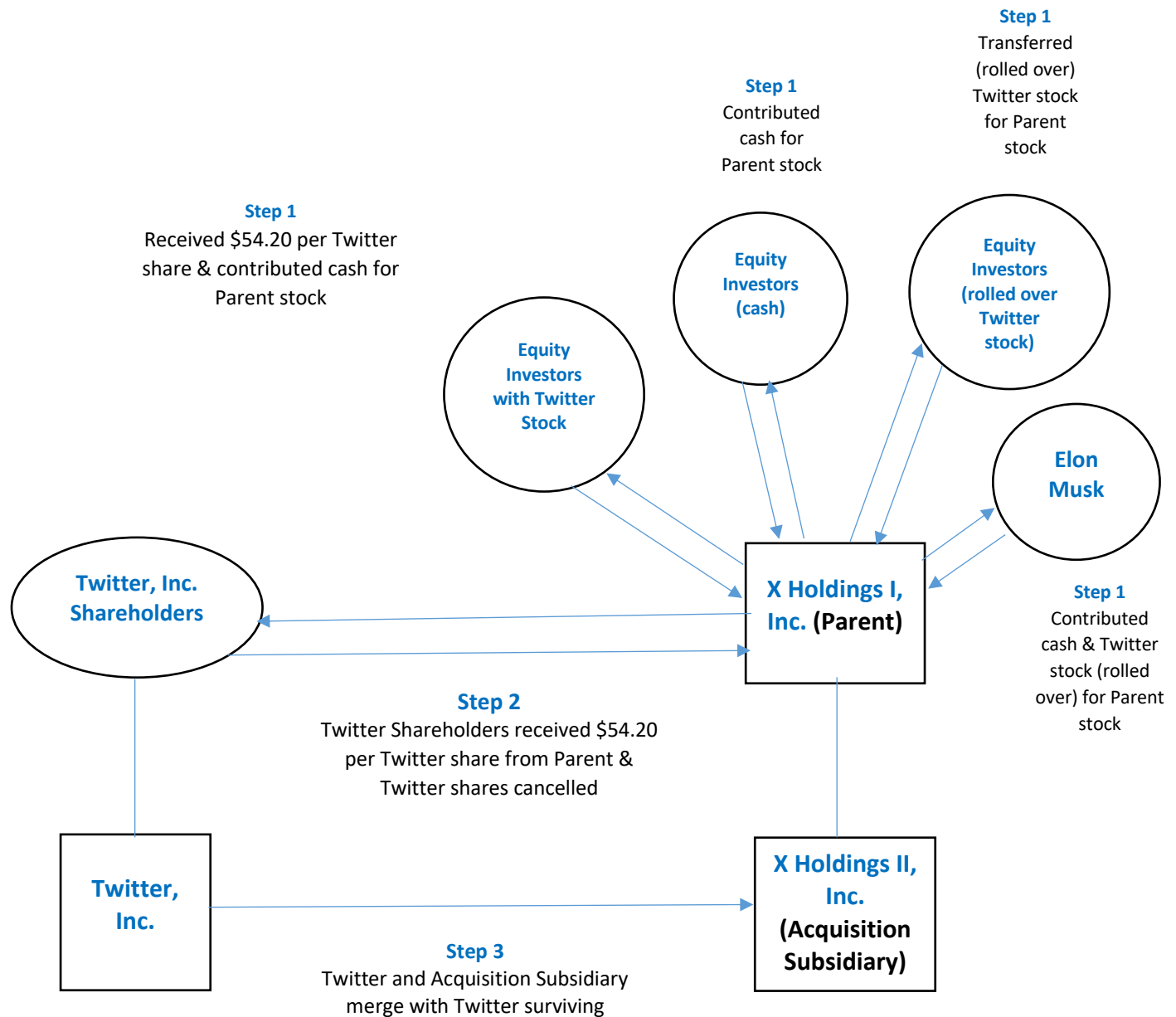
DATE	EVENT
7/8/22	<ul style="list-style-type: none"> Mr. Musk notified Twitter that he was terminating the Merger Agreement and the acquisition of Twitter because Twitter had breached the Merger Agreement Twitter stated that it had not breached the Merger Agreement and that Mr. Musk's termination was invalid and wrongful
7/12/22	Twitter sued Mr. Musk, Parent, and Acquisition Sub in the Delaware Court of Chancery (Chancery Court) asking the court to require them to perform their Merger Agreement obligations and to complete the Merger
7/19/22	Delaware Court of Chancery Chancellor Kathaleen Saint Jude McCormick granted Twitter's motion to expedite the court proceedings and scheduled a trial to begin in October 2022
8/4/22	Mr. Musk countersued Twitter asserting that Twitter breached the Merger Agreement and asking the Chancery Court to rescind the Merger Agreement.
9/13/22	Twitter shareholders voted to approve the Merger
9/22	Mr. Musk proposed buying Twitter at a discount of up to 30 percent of the original Merger terms
10/3/22	After negotiations failed, Mr. Musk contacted Twitter stating that he was willing to close the Merger under the original terms of the Merger Agreement provided that the legal proceedings were stopped and the debt financing proceeds had been received
10/4/22	Twitter rejected Mr. Musk's revised offer.
10/6/22	<ul style="list-style-type: none"> Chancellor McCormick granted Mr. Musk's request to delay the trial until October 28, 2022, but if the Merger was not completed by or on that date, the trial would proceed in November 2022. Twitter opposed granting Mr. Musk's request to delay the trial
10/27/22	<ul style="list-style-type: none"> The Merger closed with Acquisition Sub merging with and into Twitter with Twitter surviving as a wholly-owned subsidiary of Parent Twitter shareholders exchanged their Twitter stock for \$54.20 per share and their shares were cancelled Mr. Musk and some equity investors transferred cash & received Parent stock Mr. Musk and some equity investors rolled over their Twitter stock and received Parent stock for their Twitter stock Twitter's common stock delisted and stopped being traded on the NYSE Mr. Musk became the sole director and CEO of Twitter Mr. Musk fired several Twitter executives including CEO Agrawal
Spring 2023	<ul style="list-style-type: none"> The pre-Merger workforce of approximately 8,000 employees reduced to approximately 1,500 employees through involuntary and voluntary terminations Twitter's name changed to X Corp
July 2023	Twitter's blue bird logo replaced with an "X"

Appendix C. Pre-Merger Structure
Source: Authors



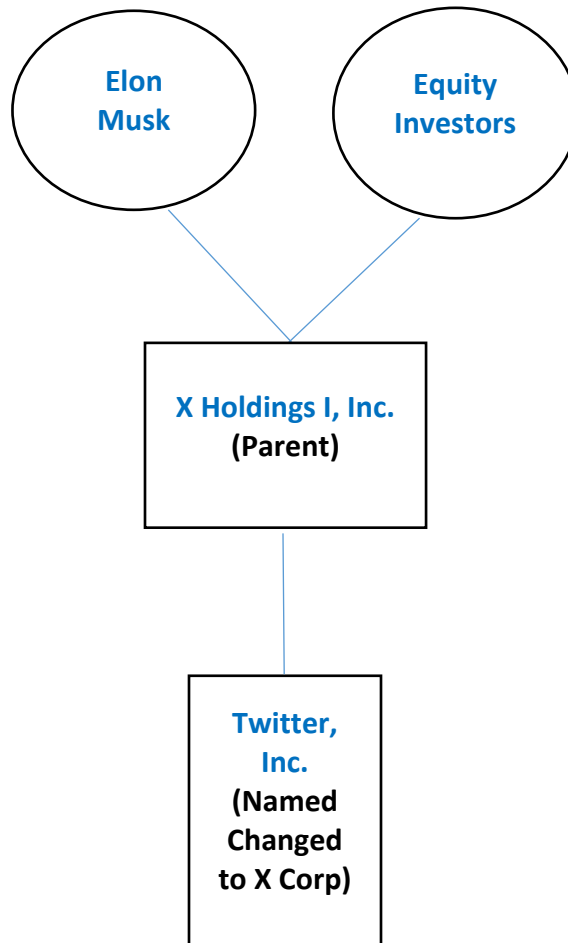
Appendix C. (cont.) Merger Transaction

Source: Authors



Appendix C. (cont.) Post-Merger Structure

Source: Authors





Gretchen R. Lawrie is an Associate Professor of Accounting at California State University, Los Angeles, College of Business and Economics. She graduated in 1989 from Wheaton College in Illinois with a degree in political science and from Wayne State University Law School in 1992 with a J.D., and then in 1997 with an L.L.M. in taxation. Prior to teaching, Gretchen was a senior associate, and then a manager in the federal mergers and acquisition tax group at KPMG LLP. Her research interests include corporate, partnership, and individual federal taxation.



John R. Cooper is an Assistant Professor of Accounting at California State University, Los Angeles where he teaches accounting, taxation, and MBA courses. Dr. Cooper began his career at Ernst & Young in the emerging business group where he provided consulting services in the areas of audit and taxation. After leaving Ernst & Young, he started an eight-person consulting firm where he provided business consulting, business valuation, and litigation support. He has published numerous research articles.



References

- Al Jazeera (2022). How Elon Musk financed his \$44bn Twitter takeover. Retrieved from <https://www.aljazeera.com/economy/2022/10/28/how-elon-musk-financed-his-twitter-takeover>.
- Associated Press (2023) Elon Musk imposes daily limits on reading posts on Twitter. Retrieved from <https://apnews.com/article/twitter-outage-musk-complaints-restrictions-b59ef586491891fdd3d6c8220ba2ec0d>.
- Cao, S. (2023, Mar. 27). Elon Musk says twitter has lost half its value since he paid \$44 Billion for it. Observer. Retrieved from <https://observer.com/2023/03/elon-musk-twitter-valuation/>.
- Capoot, A. (2022, December 12). Twitter Blue relaunches, now costs \$11 per month if you subscribe from an iPhone. CNBC. Retrieved from <https://www.cnbc.com/2022/12/12/twitter-blue-relaunches-with-steeper-price-for-apple-users-.html>.
- Clayton, J. (2023). Elon Musk BBC interview: Twitter boss on layoffs, misinfo and sleeping in the office. BBC News. Retrieved from <https://www.bbc.com/news/business-65248196>.
- Conger, K. & Hirsch, L. (2022, October 27). Elon Musk Completes \$44 Billion Deal to Own Twitter. New York Times. Retrieved from <https://www.nytimes.com/2022/10/27/technology/elon-musk-twitter-deal-complete.html>.
- Conger, K. & Ryan, M. (2023, Mar. 26). Elon Musk values Twitter at \$20 billion. New York Times. Retrieved from <https://www.nytimes.com/2023/03/26/technology/elon-musk-twitter-value.html>.
- Conger, K. (2023, Apr. 20). Twitter begins removing check marks from accounts. New York Times. Retrieved from <https://www.nytimes.com/2023/04/20/technology/twitter-blue-check-marks.html>.
- Corse, A. (2023, Apr. 12). Twitter Inc. changes its name to X Corp. and moves to Nevada. Wall Street Journal. Retrieved from <https://www.wsj.com/articles/twitter-inc-changes-its-name-to-x-corp-and-moves-to-nevada-703ac892>.
- Corse, A. (2023, Jul. 24). Elon Musk replaces Twitter's blue bird with an 'X'. Wall Street Journal. Retrieved from <https://www.wsj.com/articles/elon-musk-says-twitter-will-change-its-logo-to-x-5f73c349>.
- Dempsey, J. (2023, Jul. 17). Twitter loses nearly half advertising revenue since Elon Musk takeover. BBC. Retrieved from <https://www.bbc.com/news/business-66217641>.
- Duffy, C. (2022). The mass unbanning of suspended Twitter users is underway. Retrieved from <https://www.cnn.com/2022/12/08/tech/twitter-unbanned-users-returning/index.html>.
- Duffy, C. & Fung, B. (2022, Oct. 10). Elon Musk commissioned this bot analysis in his fight with Twitter. Now it shows what he could face if he takes over the platform. CNN Business. Retrieved from <https://www.cnn.com/2022/10/10/tech/elon-musk-twitter-bot-analysis-cyabra/index.html>.
- Economic Times (2023, Aug. 7). After renaming Twitter to X, Elon Musk announces new name for Blue subscription. Retrieved from <https://economictimes.indiatimes.com/magazines/panache/after-renaming-twitter-to-x-elon-musk-announces-new-name-for-blue-subscription/articleshow/102501854.cms?from=mdr>.
- Economic Times (2022, Apr. 26). Twitter's Board of directors and its top shareholders. Retrieved from <https://economictimes.indiatimes.com/tech/technology/twitters-board-of-directors-and-its-top-shareholders/articleshow/91108235.cms?from=mdr>.
- Elon Musk kills Twitter's bird: a timeline of the social media app, from twtr to 'X'. (2023, July 25). *Wall Street Journal*. Retrieved from <https://www.wsj.com/story/elon-musk-kills-twitters-bird-a-timeline-of-the-social-media-app-from-twtr-to-x-5fcad87f>.
- Feiner, L. (2022, May 17). New filing reveals the full story behind Musk's bid to buy Twitter. CNBC Tech. <https://www.cnbc.com/2022/05/17/musks-bid-to-buy-twitter-private-story-detailed-in-new-filing.html#:~:text=The%20following%20day%2C%20Musk%20spoke,private%20or%20starting%20a>

- %20competitor.&text=Twitter%20gives%20up%20all%20gains,the%20takeover%20deal%20in%20da
nger%3F.
- Fowlkes, T. & Mark, J. (2023). Elon Musk sets new daily Twitter limits for users. Washington Post. Retrieved from <https://www.washingtonpost.com/technology/2023/07/01/elon-musk-new-twitter-user-limits/>.
- Francis, T. (2022, Oct. 28). Twitter executives in line for \$100 million payout after Elon Musk fired them. Wall Street Journal. Retrieved from <https://www.wsj.com/articles/twitter-executives-in-line-for-100-million-payout-after-elon-musk-firing-11666971500>.
- Haddad, M. (2022, Apr. 26). Infographic: What has Elon Musk said on Twitter? Aljazeera. Retrieved from <https://www.aljazeera.com/news/2022/4/26/infographic-what-has-elon-musk-said-on-twitter#:~:text=Musk%2C%20who%20is%20worth%20some,including%20%E2%80%9Cauthenticating%20all%20humans%E2%80%9D>.
- Hindu Business Line.(2022, April 29). Twitter erroneously overstated its daily active users over the past three years. The Hindu Business Line. Retrieved from <https://www.thehindubusinessline.com/info-tech/twitter-erroneously-overstated-its-daily-active-users-over-the-past-three-years/article65366160.ece>.
- Hirsch, L. & Conger, K. (2022). Judge grants Musk appeal to slow trial with Twitter. New York Times. Retrieved from <https://www.nytimes.com/2022/10/06/technology/elon-musk-twitter-trial>.
- Hirsch, L. (2022, October 26). Elon Musk seems to answer to no one. Except for a judge in Delaware. New York Times. Retrieved from <https://www.nytimes.com/2022/10/26/technology/musk-twitter-delaware-judge-mccormick.html>.
- Isidore, C. (2022). Elon Musk buys 9.2% stake in twitter making him the largest shareholder. CNN Business. <https://www.cnn.com/2022/04/04/investing/elon-musk-twitter-shares-stake/index.html>.
- Kastrenakes, J. & Lawler, R. (2022). Elon Musk got \$1 billion from Larry Ellison for his Twitter takeover. The Verge. Retrieved from <https://www.theverge.com/2022/5/5/23058295/elon-musk-twitter-funding-qatar-larry-ellison>.
- Landi, M. (2021). Just setting up my twttr. Independent. <https://www.independent.co.uk/news/uk/jack-dorsey-twitter-st-louis-donald-trump-b1966372.html>.
- Lawler, R. (2022, Oct. 6). The Elon Musk vs. Twitter trial is on hold until October 28th. The Verge. Retrieved from <https://www.theverge.com/2022/10/6/23391749/elon-musk-twitter-trial-stay-close-deal-judge-date>.
- Maurer, M. (2023, Mar. 8). Where Musk's Twitter gambit stands, nearly five months In. Wall Street Journal. Retrieved from <https://www.wsj.com/articles/where-musks-twitter-gambit-stands-nearly-five-months-in-c50d04b6>.
- Musk, E. (2022, April 13). Amendment No. 2 to Schedule 13D/A. Retrieved from <http://www.sec.gov/edgar>.
- Musk, E. (2022, Aug. 4). Counterclaims, Court of Chancery of the State of Delaware Case Number C.A. No. 2022-0613-KSJM. Retrieved from <https://s3.documentcloud.org/documents/22127591/musk-public-version-of-counterclaims-answer-w-cos.pdf>.
- Musk, E. (2022, Oct. 6). Counterclaims, Defendants Motion to Stay Pending Closing of the Transaction Court of Chancery of the State of Delaware Case Number C.A. No. 2022-0613-KSJM. Retrieved from <https://s3.documentcloud.org/documents/22127638/musks-answer-affirmative-defenses-and-counterclaims.pdf>.
- Musk, E. (2022, Oct. 27). Elon Musk Tweet. Retrieved from <https://twitter.com/elonmusk/status/1585619322239561728/photo/1>.
- Musk, E. (2022, Oct. 28). Elon Must Tweet. Retrieved from <https://twitter.com/elonmusk/status/1585841080431321088?lang=en>.

- Musk, E. (2022, Nov. 25). Musk says granting 'amnesty' to suspended Twitter accounts. Associated Press. Retrieved from <https://apnews.com/article/elon-musk-technology-donald-trump-business-misinformation-c60bc41229339eac5008188fa6d057c>.
- Pepitone, J. (2013). #Wow! Twitter soars 73% in IPO. CNN Business. <https://money.cnn.com/2013/11/07/technology/social/twitter-ipo-stock/>
- Reuters (2022, Oct. 10). Retrieved from <https://www.reuters.com/markets/us/who-is-financing-elon-musks-44-billion-deal-buy-twitter-2022-10-07/>.
- Schaefer, S. (2013). Twitter stock pops in NYSE debut, finishes first day with 73% gain. Forbes. <https://www.forbes.com/sites/steveschaefer/2013/11/07/twitter-opens-at-45-10-stock-pops-73-in-nyse-debut/?sh=4831db2122d8>.
- Seligson, P. (2022). Elon Musk's Twitter deal is different than most LBOs, here's how. Washington Post.
- Siddiqui, F. & Gregg, A. (2022, April 14). Elon Musk attempts hostile takeover of Twitter. Washington Post. Retrieved from <https://www.washingtonpost.com/technology/2022/04/14/elon-musk-twitter-takeover-bid/>.
- Statista (2022). Number of monetizable daily active X (formerly Twitter) users (mDAU) worldwide from 1st quarter 2017 to 2nd quarter 2022 (in millions) [Graph]. <https://www.statista.com/statistics/970920/monetizable-daily-active-twitter-users-worldwide/>.
- Statista (2023). X/Twitter: annual revenue 2010-2021 by segment. <https://www.statista.com/statistics/274566/twitters-annual-revenue-by-channel/#:~:text=In%202021%2C%20Twitter%20generated%20more,million%20U.S.%20dollars%20in%202020>.
- Stein, J. (2023). The life and death of the blue check mark. Slate. Retrieved from <https://slate.com/technology/2023/04/blue-check-funeral.html>.
- Thomas, L. & Corse, A. (2022, October 28). Elon Musk closes Twitter deal, immediately fires top executives. Wall Street Journal. Retrieved from <https://www.wsj.com/articles/elon-musk-completes-twitter-takeover-11666918031>.
- Twitter, Inc. (2013). Form S-1. Retrieved from <http://www.sec.gov/edgar>.
- Twitter, Inc. (2021, Feb. 17). Form 10-K report 2020. Retrieved from <https://www.sec.gov/edgar>.
- Twitter, Inc. (2022, Apr. 25). Elon Musk to acquire Twitter. [Press Release]. Retrieved from <https://www.prnewswire.com/news-releases/elon-musk-to-acquire-twitter-301532245.html>.
- Twitter, Inc. (2022, Feb. 16). Form 10-K. Retrieved from <http://www.sec.gov/edgar>.
- Twitter, Inc. (2022, Apr. 28). Twitter announces first quarter 2022 results. [Press Release]. Retrieved from <https://www.prnewswire.com/news-releases/twitter-announces-first-quarter-2022-results-301535206.html>.
- Twitter, Inc., (2022, Jun. 3). Twitter announces expiration of Hart-Scott-Rodino waiting period for transaction with Elon Musk. [Press Release]. Retrieved from <https://www.prnewswire.com/news-releases/twitter-announces-expiration-of-hart-scott-rodino-waiting-period-for-transaction-with-elon-musk-301560891.html>.
- Twitter, Inc. (2022, Jun. 6). Musk letter to Twitter. Retrieved from https://www.sec.gov/Archives/edgar/data/1418091/000110465922068347/tm2217761d1_ex99-o.htm.
- Twitter, Inc. (2022a, Jul. 8). Twitter board confident in merger agreement and intends to close transaction at \$54.20 per share price. Retrieved from https://www.sec.gov/Archives/edgar/data/1418091/000110465922078413/tm2220599d1_ex99-p.htm.
- Twitter, Inc. (2022b, Jul. 8). Musk letter to Twitter Board. Retrieved from https://www.sec.gov/Archives/edgar/data/1418091/000110465922078413/tm2220599d1_ex99-p.htm.

- Twitter, Inc. (2022, Jul. 12). Complaint Case Number 2022-0613-KSJM Court of Chancery of the State of Delaware. Retrieved from <https://s3.documentcloud.org/documents/22084462/twitter-v-elon-musk-complaint.pdf>.
- Twitter Inc. (2022, Apr. 25). SEC Schedule 14A. Retrieved from <https://www.sec.gov/Archives/edgar/data/1418091/00011931252202163/d283119ddefm14a.htm>
- Twitter, Inc. (2022, Sep. 13). Twitter stockholders approve acquisition by Elon Musk. [Press Release]. Retrieved from <https://www.prnewswire.com/news-releases/twitter-stockholders-approve-acquisition-by-elon-musk-301623677.html>.
- Twitter, Inc. (2022, Oct. 4). Response to Counterclaims, Court of Chancery of the State Delaware Case Number C.A. No. 2022-0613-KSJM. Retrieved from <https://s3.documentcloud.org/documents/22128216/twitters-reply-to-musks-counterclaims.pdf>.
- Twitter, Inc. (2022, Oct. 4). Twitter, Inc. Investor Relations Tweet. Retrieved from <https://twitter.com/TwitterIR/status/1577380758192197632>.
- Twitter, Inc. (2022, Oct. 6). Letter to Delaware Court of Chancery Chancellor McCormick. Retrieved from <https://s3.documentcloud.org/documents/23126746/proposed-final-krs-10-6-22-ltr.pdf>.
- Twitter, Inc. (2022, Oct. 7). Amendment Number 1 to Schedule 13D. Retrieved from <http://www.sec.gov/edgar>.
- Twitter, Inc. (2022a, Oct. 27). Form 8-K. Retrieved from <http://www.sec.gov/edgar>.
- Twitter, Inc. (2022b, Oct. 27). Amendment Number 13 to Schedule 13D. Retrieved from <http://www.sec.gov/edgar>.
- Twitter, Inc. (2022c, Oct. 27). Schedule 13D. Retrieved from <http://www.sec.gov/edgar>.



SUMMAAGNI SUSTAINABILITY STRUGGLE: FREE QUALITY EDUCATION TO UNDERPRIVILEGED NEIGHBORHOODS

RAGNI LUND, SUMMAYA PHULPOTO

Sukkur IBA University

ZAHID ALI

Institute of Business Management Karachi

ASAD ALI QAZI

Sukkur IBA University

SARWAR M. AZHAR

Pak American Institute of Management Science

On Saturday, November 14, 2022, at 10:00 a.m., Mr. Amer Mahmood convened his team to revise the mission and vision of the Summaagni Education Trust (SET). In January 2020, Mr. Mahmood had joined SET as an executive director. SET was a non-profit organization operating schools in Punjab from the Punjab Rural Education Program (PREP). Mr. Mahmood faced the challenging decision of expanding SET schools into Baluchistan and Khyber Pakhtunkhwa (KPK), Pakistan.

He felt the weight of his responsibilities on his shoulders, not just for expansion but also for sustaining SET's operations. If he failed to implement effective operations in these rural areas, his credibility - and the survival of SET - would be at risk.

Summaagni Education Trust

Summaagni Education Trust (SET) was a not-for-profit, non-governmental private organization and social enterprise established in 2014 with a one-room office as a teacher training institution. Syed Waqas Jafri joined as President and Amir Cheema as General Secretary of SET in June 2016, and SET became an officially registered trust with a Board of Trustees. By that time, SET had introduced the *one-class-one-teacher model* of school education. It launched the Punjab Rural Education Program (PREP) project in 2016 with a vision *“to achieve 100% literacy in Pakistan.”*

Earlier, the Read Foundation, using the one-class-one-teacher model, was already working successfully in Pakistan's AJK (Azad & Jammu Kashmir) area. The connection of the SET founders with the Read Foundation and the passion to contribute to society's development underlay SET's launch.

At its launch in 2014, SET started as a teacher training institution and adopted *“100% literacy in Pakistan”* as its vision. At that time in Pakistan, the government allocated a meager budget for education, and Pakistan's primary school enrollment rate was a mere 46%, the lowest in South Asia. On the other hand, the drop-out ratio from government-owned primary schools was an alarming 54%. Pakistan ranked 144th among 175 countries in literacy, with literacy rates of 57% for adult males and 28% for adult females. Literacy in rural areas was a mere 34%. Thus, the vision to achieve 100% literacy was challenging, if not impossible, especially for an NGO.

The Secretary General of the SET, Mushtaq Mangat, admitted,

“While the organization's vision was to achieve 100% literacy for Pakistan, it did not work 9 [...]. It was perhaps too bold, ambitious, and unachievable a target that we set forth for ourselves without considering our capacity and capability.”

“Leadership for the 21st century” was also adopted as a vision statement for a short period. However, the vision and mission were revisited in the year 2020 in a Strategic Review Workshop attended by members of the Board, executive committee, and the regional and district managers, held at the Changa Manga Forest Rest House on January 12-13, 2020, when Syed Amer Mahmood joined as Executive Director. The workshop deliberations resulted in a new vision, mission, and set of values for the organization, which was later formally approved by the Board and adopted by SET (Exhibit 1).

“Better society through value-based education” was carved as the vision, and *“to explore and strengthen the potential of students through Modern education in terms of technology and training with the active participation of the community”* was adopted as the mission for the organization. The top team also enlisted and committed to *“transparency at all levels, commitment to the cause, mutual respect, and excellence”* as the set of core values that SET would uphold. The title of the PREP project was renamed the *“Pakistan Rural Education Program.”* It reflected the increasing scope of the project as now the PREP schools were also working in the Federal Capital Islamabad, Mansehra, Bagram, and Attock (see Exhibit 2).

Dr. Ishtiaq Ahmad Gondal, founder Secretary and former President of SET, said:

“We are flexible and continuously learning and this commitment to ongoing learning and improving accordingly is our greatest strength.” Dr. Ishtiaq Ahmad Gondal, who had been very effective in mobilizing funds from overseas for the project and was planning to tour the USA, Europe, and the Gulf to mobilize even more funds, added: “We must remain committed to our ideology, to the cause of education and the sponsors and stakeholders of SET to sustain success.”

Summaagni Education Trust faced a few challenges, especially in its flagship project, Punjab Rural Education Program (PREP), which was meant to educate underprivileged children primarily in rural Punjab. Since the inception of the PREP project and the opening of the first Summaagni School in 2016, total reliance was placed on funding from international donors as well as local Pakistanis, *i.e.*, from external means. This raised concerns about capacity, quality, technology,

and control while rendering the organization vulnerable to sustainability threats. The Board of SET, in its last meeting, had also asked the Executive Director and the Executive Committee to work out plans around three areas of focus on two provinces located in Pakistan, Baluchistan and KPK (Exhibit 3).

The Executive Director of PREP, Syed Amer Mahmood, and his team had been working hard on the assignment to put up concrete plans regarding expanding operations into Baluchistan and KPK while considering the sustainability of the PREP project. This plan had to be presented to the Board in the next meeting scheduled in June 2022. In its deliberations on the modalities of the assignment, the Executive Committee had several arguments, which reflected the issues that needed to be sorted out.

Mr. Ahmed Sher had raised an issue concerning expanding PREP activities to Baluchistan and KPK:

“A marketing anomaly that PREP, which earlier was an acronym for ‘Punjab Rural Education Program’ although now replaced with ‘Pakistan Rural Education Program,’ certainly with its roots and 99.5% existence and operations in Punjab, is to be introduced in Baluchistan and KPK? Has somebody thought about whether we should retain PREP or introduce a new project like BREP (Baluchistan Rural Education Program)/ KPK rural education program, and if so, what would be the working framework?”

Mr. Jamshed also touched upon the issue when he commented, *“Shouldn’t we consider the sensitivities of the people of Baluchistan/KPK while naming the project and suggesting the control mechanism?”* Agreement on the name change was accepted, making it crucial to consider the sentiments of the stakeholders in Baluchistan and Khyber Pakhtunkhwa (KPK) when developing governance.

While framing the issues, Amer thought that the Board had entrusted him with a huge responsibility and that he was being tested to his limit. To arrive at a resolution, he decided to

consult his team, which has been with him through all thick and thin. Amer immediately called a meeting of the core team at the head office of SET for Saturday, November 14, 2022, at 10:00 a.m.

Pakistan Rural Education Program (PREP) – The Beginning

The Pakistan Rural Education Program (PREP) project of the Summaagni Education Trust started in 2016, with 22 schools in the rural areas of three districts in Punjab, namely Faisalabad, Sargodha, and Gujrat. All the 22 schools were launched with the support of like-minded friends with whom the founders had personal contacts. As such, only personal connections were explored, and no media campaign was launched to attract sponsors or to muster a response from society. In 2017, the number of schools increased to 52; it rose to 115 in 2018 and 176 in 2019 (see Exhibit 4). The number kept on increasing each year. The organization's records showed 240 schools in 2020 and 262 schools in 2021. The growth of the Summaagni schools continued, and the number of schools reached 271 in 2022 and 278 in 2023.

Since its launch in 2016, PREP has had to close down 35 schools for several reasons, and the year 2020 – 2021 alone witnessed the closure of 25 Summaagni schools. As schools closed, SET faced the problem of resource degradation.

According to SET's Executive Director, Syed Amer Mahmood, 2016 was the period of PREP launch characterized by a team of motivated volunteers committed to the cause and dedicated to the vision. The period from 2018 – 2021 was a period of real growth for the project, which brought promises and challenges. The phenomenal growth led to issues of *"quality, communication, control, capacity, sustainability, incorporate and expand technology usage."*

Mushtaq Mangat was made Secretary General, and Syed Amer Mahmood joined as Executive Director of SET in 2021 to take up the challenge of consolidation and management of the challenges that had result from rapid growth. Despite meager resources, the phenomenal growth of the PREP project owed to the sincerity of purpose and the untiring efforts of a selfless team committed to the cause.

The Executive Director, Syed Amer Mahmood said,

“Earlier, there was much overlapping as no proper division of work was defined, and everybody was performing a support role. Titles of the team did not truly reflect the specific responsibilities. While hiring, commitment to the cause was the primary consideration, instead of relevant experience or expertise.”

In 2023, 278 Summaagni schools were part of the PREP program, with a student body of 34,469 (see Exhibit 5). PREP provided value-based education in 25 districts of Punjab, as well as in Islamabad, Mansehra, Batgram, and Attock.

The Challenges Ahead

Expansion of The Project

Although 2018 – 2021 has been a period of consolidation, some of the Board members were concerned about the slower growth of schools from 2021 – 22. The Board considered further expansion of the Summaagni network to KPK and Baluchistan to be made a priority. Given the instability in the KPK and Baluchistan, some Board members were concerned that the establishment of the Summaagni schools network in the two provinces was an uphill task. Before committing resources to the two provinces, political and economic conditions needed to be taken into account.

Buildings and Financial Status

Rent and salaries were the two major operational expenses at the 278 schools of SET. Only 19 schools operated in buildings wholly owned by the Summaagni Education Trust, while five schools used permanently rent-free school buildings offered by sponsors. Moreover, 30 schools were currently in buildings for which the landlords did not charge rent. Nobody was sure how long this facility would operate in buildings without rent. SET, however, paid rent for buildings for 223 Summaagni schools. The report on the financial situation presented to the Board in its meeting held on January 25, 2020, revealed that out of the total 278 schools, 155 schools were generating some savings for the Trust, 10 schools were break-even, and 112 schools were showing a loss (see Exhibit 6).

Fee Structure

As a charity-based not-for-profit organization, Summaagni Education Trust offered quality education at a moderate fee structure. Fees started at PKR 100 per month in 2017, and till the year 2020, the Board only allowed an increase of PKR 10 in the fee (to make it PKR 110 per month). Later, in the year 2021, the price was increased again to PKR 220 per month, which included a Trust Fund, *i.e.*, PKR 10 per month per student. The fee structure was competitive compared to government schools, but the initiative by the Punjab government to offer free education, bags, and books, as well as a scholarship to the students and support provided by the Punjab Education Foundation, did not augur well for the Trust schools (see Exhibit 7).

Employee Retention

While the competitive environment and government initiatives posed challenges to SET, employee retention also surfaced as a problem. Realizing this challenge, management employees' salaries were increased by almost 16%. However, any increase in teachers' wages would significantly impact the budget, given the large number of teachers, 1,519.

Sources of Funding and Sponsors

During July-December 2020, SET could mobilize resources to Rs 4.9 billion (\$USD 1 = Rs 167.9), almost 11.45% of the total revenue generated. The remaining revenue came from the fees collected from students, sponsorships and donations (see Exhibit 8). This meant that almost 88% of the revenue received during July-December 2020 came from student fees. Each student at Summaagni paid PKR 30 per month. During July – December 2022, PKR 34.3 million (\$USD1 = PKR 275) was received as school fees, which amounted to 79.4% of the total income generated in the same period. Whereas PKR 3.9 million was collected as Trust Funds from 34,469 students (9.9% of the total revenue received in the same period). PREP Manager Mr. Shaheed ul Haq said, *“Our student body is our greatest strength, and this will help us to lessen our reliance on the donors and sponsors”* (Exhibit 9).

Summaagni Education Trust and its PREP project relied heavily on funding from external means and was supported by sponsors, both individuals and organizations. However, the regular support for the organization came from Volunteer Services Overseas (VSO), Plan International, Prem Rawat (USA), Foundation of Faithful (UK), Helping Hand (USA), Rotary Club Pakistan, Summaagni Education Forum (Norway), Education Foundation (UK), and the Sheikh Zaid-ul-Nihan Foundation. The government of Punjab was not providing any funding for the project.

The scope and plans of the Summaagni Education Trust called for an increase in the sources of funding, and at the last meeting of the Board held on December 25, 2020, the Chairman asked for a comprehensive plan to meet this end. Currently, 30% of funding came from institutional resources, while 70% of funding was an outcome of personal relations of the directors.

As such, Summaagni observed a hybrid funding model, *i.e.*, charity plus fees-for-service. The Resource Mobilization Department was instrumental in securing funding for SET. Almost 70% of funding came from overseas sources, whereas 30% was locally generated. In the latter half of 2022, SET spent over PKR 43 million to maintain its current level of services, while the revenue

generated during this period exceeded expenses by almost PKR 0.9 million. After nearly nine years in operation, resource mobilization had become a primary and urgent focus (see Exhibit 10).

Shutdowns of Schools

While the phenomenal growth of the Summaagni school network had been unparalleled, the closure of certain Summaagni schools had been a matter of concern for the Board. Since its launch in 2016, SET had to close 35 schools for several reasons. 2018-20 alone witnessed the closure of 25 Summaagni schools. In 2021-2022, out of the 25 schools that had opened, only 17 schools survived. The reasons attributed to the closure of these schools varied, including operational problems, financial constraints, lack of alternate buildings, community issues, migration of the student body to competing schools or schools in nearby districts, etc. The updating program of the Punjab Education Foundation for private schools, through which certain private schools offered free education and books, also resulted in the closure of some schools. Earlier, the efforts and initiatives of the Punjab government to increase primary enrollments in the province, such as no fees, scholarships, and making it mandatory for parents to enroll their children in schools, had also caused an impact on the Summaagni network.

Competition

When enquired about the Summaagni schools' competition, the Secretary General of SET, Mushtaq Mangat, claimed, *"there is no competition. We are working for a noble cause, and, whosoever individual or organization is in this field, we offer them our support and seek cooperation with them."*

When the same question was put to Executive Director Syed Amer Mahmood, he replied:

“Since the launching of PREP in 2016, through to the present, times have changed and we are facing intense competition. When we launched PREP in rural Punjab, only government schools existed, and then, only one school per village, but now there are almost ten schools per village. Given this competition, awareness created by the vibrant media, gradual acquisition of urban character by the rural areas, and soaring rates of civil work and infrastructure development have increased our operations and fixed costs. The stakeholders are demanding better infrastructure and academic quality. The retention of teachers who now have better opportunities has also become our major concern.”

Technology

SET did not incorporate technology in the expansion of Summaagni schools. Funds for SET were utilized only to manage and sustain operations, SET had not considered technological needs such as projectors, online teaching, internet connections, and computer classes, which required proper electricity. Thus, including technology was a new value, and a new challenge, for SET, especially in underprivileged areas.

Exhibit 1. Vision, Mission, and Organizational Values of SET (2017)

Vision: *“Better society through value-based education”*

Mission: *“To explore and strengthen the potential of students through Modern education in terms of technology and training with the active participation of the community across Pakistan.”*

Values:

*Transparency at All Levels
Commitment to the Cause
Mutual Respect, and
Excellence*

Exhibit 2. Pakistan Map



Exhibit 2, cont.*Source: Pakistan Bureau of Statistics*

Year	County	Population
2017-2020	Baluchistan	12.335 million
2017-2020	KPK	35.502 million
2020	Overall Pakistan	227.2 million
Youth Development Index		
2020	0.517	Pakistan
2019	0.520	Pakistan
2018	0.510	Pakistan
2017	0.503	Pakistan
2016	0.492	Pakistan
Literacy Rate of Pakistan Province		
2020	Baluchistan	43.6%
2019	Baluchistan	44.2%
2018	Baluchistan	44.7%
2017	Baluchistan	45.3%
2016	Baluchistan	45.9%
Literacy Rate of Pakistan Province		
2020	KPK	53.0%
2019	KPK	54.0%
2018	KPK	54.9%
2017	KPK	55.9%
2016	KPK	57.0%

Exhibit 3. Summaagni Schools 2020 - Network Information

Narowal	8	Faisalabad (South)	15	Multan	3	Sargodha (South)	9
Gujranwala	8	Faisalabad (North)	15	Khanewal	11	Chakwal	7
Sheikhupur	1	Jhang	21	Muzaffargarh	5	Khushab	12
Lahore	3	Toba Tek Singh	9	Bahawalpur	6	Attock	3
Sialkot	10	Rahim Yar Khan	13	Gujrat (South)	8	Jehlum	2
Mansehra	12	Dera Ghazi Khan	12	Gujrat (North)	9	Islamabad	4
Bagram	1	Vehari	12	Mandi Baha ud Din	13	Rawalpindi	9
Mianwali	8	Bhakkar	8	Sargodha (North)	9	Bahawalnagar	1

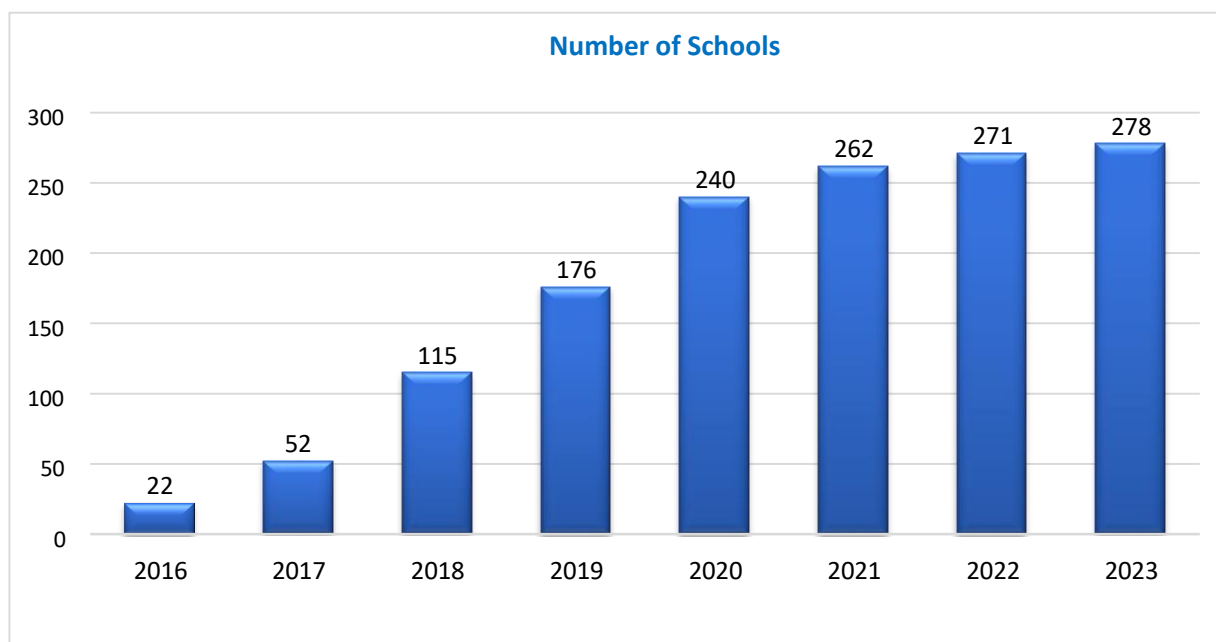
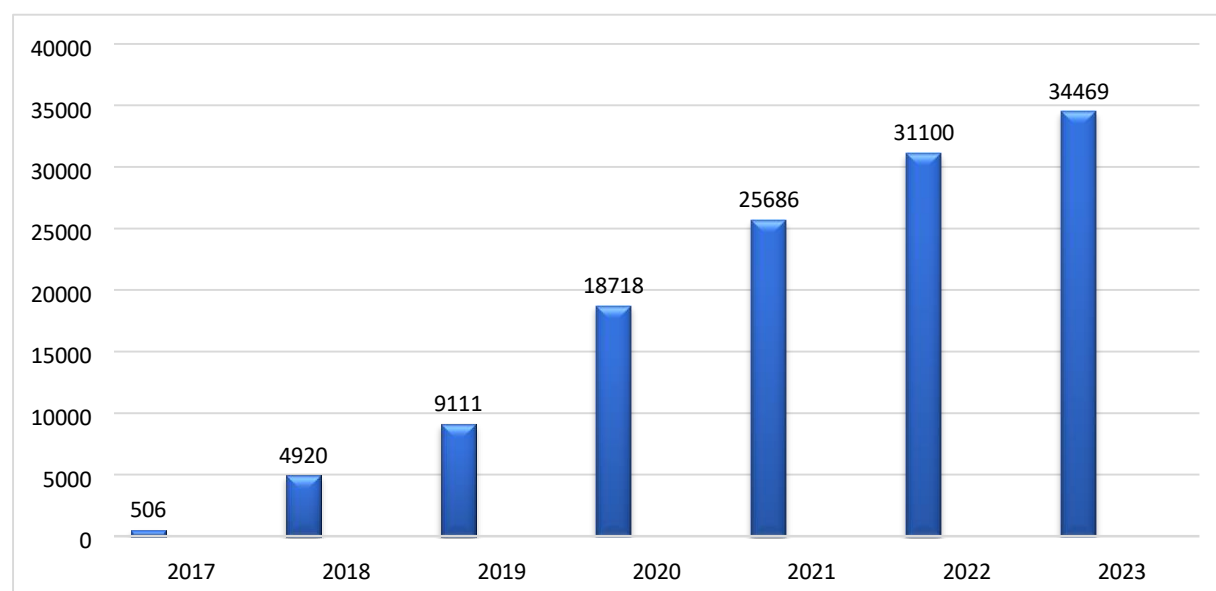
Exhibit 4. Growth of PREP Schools 2016-2023**Exhibit 5. Growth in Student Enrollment at PREP Schools 2017-2023**

Exhibit 6. PREP Buildings and Financial Status 2020

	Owned	Permanent Free	Free	Rented
Building Status	19	5	30	223
Financial Status	Saving	Break Even	Loss	
	155	10	112	
Avg. Student/ Class	Avg. Student/ Teacher		Avg. Students/School	
19	23		24	

Exhibit 7. Deserving Students at PREP and Monthly Scholarships

	Previous	Admitted	Dropped	Present
Registered Orphans	1,281	1,056	120	2,217
Total Deserving	15,976	2,578	1,532	17,022
Total Scholarship /Month	Previous	Avg. / Stud	Present	Avg. /Stud
	1,123,634	35	1,388,366	40

Exhibit 8. Financial Highlights: Income - July 2020 to December 2021 (PKR '000)

	Amount	Percentage
Donations	4,949,172	11.4 %
Trust Fund	3,927,853	9.09 %
School average fee	34,325,483	79.4 %
Miscellaneous	19,224	0.05 %
Total	43,221,732	100 %

Exhibit 9. Adoption Status - PREP Schools 2020

Students Adopted by the Donors	1,345
Schools Adopted by the Donors	88
Life Time Members	99

Exhibit 10. Financial Highlights: Expense - July 2020 to December 2021 (PKR '000)

	Amount	Percentage
Schools	33,200,018	77.2 %
Head office	8,767,006	20.4 %
Girls Colleges	467,189	1.1 %
Capital Cost	551,526	1.3 %
Total	42,985,739	100 %



Ragni Lund is an MS Scholar in Finance at Sukkur IBA University, where she also earned her BBA with a specialization in Finance. Along with studying, Ragni is also employed in the Finance & Accounts Department at Sukkur IBA University. During her undergraduate studies, she developed a passion for writing and successfully published nearly 25 short articles in prominent newspapers such as The Nation, Tribune, Pakistan Observer, and Pakistan Today. In an MS program, she published an article titled "FinTech Landscape in Saudi Arabia and the Role of Islamic Finance" in a well-known magazine and a research paper titled "Macroeconomic Dynamics and Panel VAR-Analysis in Developing Countries" in a reputable journal. Her strong research background fuels her ongoing contributions to academic publications. This expertise allows her to excel in her professional and scholarly roles.



Summaya Phulpoto is an MSc candidate in Marketing at Sukkur IBA University and holds a bachelor's degree in business administration (BBA) with a specialization in Human Resource Management from Shah Abdul Latif University. With a robust background in research and data analysis, she has contributed to various significant projects, including analyzing the scope and psychological correlates of homelessness in Sindh, exploring food security and drought mitigation in Tharparkar, and examining financial inclusion in Sindh. As a freelancer since 2019, Summaya has provided research consultancy, data analysis, and creative writing services, consistently delivering insightful and impactful findings. Her expertise spans qualitative and quantitative analysis, report writing, and content creation. Summaya has also presented papers at national conferences and published articles in newspapers.



Zahid Ali, an MS finance scholar at the Institute of Business Management (IoBM) Karachi, has previously earned a Bachelor of Business Administration from Sukkur IBA University. Zahid Ali is actively engaged in research as well as in the banking industry. He has more than one and a half years of experience in Banking, specifically in Remittances, compliance, and Finance departments. Zahid Ali has achieved milestones in the banking industry by completing a Junior Associateship of the Institute of Bankers Pakistan (JAIBP) Stage 1 and 2 with distinction. Apart from this, He has published Blogs and articles in The Nation, Dawn, and other newspapers. He is currently engaged in scholarly writing in different international journals, by linking his professional industry experience with academia to solve real-world problems.



Asad Ali Qazi is an Assistant Professor in Supply Chain Management at Sukkur IBA University Pakistan, serving since 2017. He earned his PhD from the University of Rome Tor Vergata, Italy, focusing on circular procurement.



Sarwar M. Azhar, a recognized scholar in the fields of management and marketing with more than three decades of experience and a distinguished career as a business manager, established the Pak American Institute of Management Sciences in 1983. By founding Pamir Knot College, which provided primary and secondary education, he significantly broadened his influence in the field of education. Dr. Azhar, who enrolled in the Ph.D. program at Nottingham University Business School in 1998, has authored over forty-five research papers and edited "Globalization," an influential volume that has received 600+ citations. His extensive and diverse impact extends over several decades, establishing a significant and lasting presence within the scholarly world.

EVENTFUL MANAGEMENT AT FALL LINE STATION

AUGUST JÖRDING

Lund University

TIFFANIE FRALEY

University of Tennessee at Chattanooga

MARKO HORN & WILLIAM CARTY

Mercer University

As part of a downtown revival in a Southeastern U.S. town, a young entrepreneur couple created a brewery and event business. The initial success in weekend bookings was fueled by a demand for wedding events that had been pent up during the COVID pandemic. Anticipating a slowdown in demand created by the lack of dating opportunities during the pandemic, the business' sales manager tasked a consulting team to analyze the industry so that she could determine how the utilization of the event space could be increased.

Introduction

Jamie, a marketing graduate from a prestigious university nearby, was hired at Fall Line in Macon, Georgia, to manage an event space adjacent to the successful brewery. She had been very happy to find employment in an economy still reeling from the COVID pandemic crisis. On one of her first days on the job, she found herself standing in a recently revived, old industrial building in downtown Macon. Her eyes scanned the iron beams and brick wall. The floor was covered with kegs and packaging tape. Through a gap, she saw a dark room that was empty and cold. Despite its emptiness, it was beautiful. *"I am so glad you are here, Jamie,"* a voice echoed through the empty room. The voice belonged to Kaitlynn, one of the owners of the Fall Line Brewery. *"Managing the brewery and the event space at the same time was way too much work. Let me show you around and give you a little background to this place,"* Kaitlynn said.

The authors developed the case for class discussion rather than to illustrate either effective or ineffective handling of the situation. The case and its accompanying instructor's manual were anonymously peer reviewed and accepted by the *Journal of Case Research and Inquiry*, Vol. 10, 2025, a publication of the Western Casewriters Association. Qualified instructors may request the Instructor Manual at www.jcri.org. The authors and the *Journal of Case Research and Inquiry* grant state and nonprofit institutions the right to access and reproduce this manuscript for educational purposes. For all other purposes, all rights are reserved to the authors. Copyright © 2025 by August Jörðing, Tiffanie Fraley, Marko Horn & William Carty. Contact William Carty, 1501 Mercer University Drive, Macon, GA 31207 carty_w@mercer.edu

Fall Line History

Kaitlynn explained to Jamie what she had found when she first moved the business back to her hometown. She described how she had stepped into a dim, dark building that hosted a family of pigeons and mice, and how there was little hope for the building. As water dripped through a hole in the ceiling, ideas had begun to stir in her for the potential of everything this dusty, dirty place could become. Her vision, as she had just purchased the space, was to transform it into a brewery and a magical event space. She and her husband wanted to hold on to as much history as possible of the previous horse and mule shop, turned automobile shop. With the iron beams, original brickwork, and wooden supports, they opened Fall Line Brewery and Fall Line Station in October of 2020. With the pandemic still fresh on everyone's minds, they feared that it would be difficult to find enough people wanting to rent the event space. Kaitlynn explained how she pondered questions like:

- *"What makes us so special?"*
- *"Why would people want to hold their event with us?"*
- *"The community already had a few breweries. What made us any different?"*
- *"What would make someone choose our beer over Macon Brewing Company, which was right down the street from us too?"*

Kaitlynn decided that the company's true differentiator was quality. She explained to Jamie that she and husband truly cared. Cared about the history of the building and where it came from. Cared about the quality of their beer. Cared that every customer felt welcome and appreciated. Their goal had been to keep caring; caring enough to see success.

Fall Line Station

Even though the two product lines (brewery and event space) were housed in the same building, the couple separated the brewery business (Fall Line Brewery) from the event space (Fall Line Station), so that potential customers would not envision having their wedding in a brewery. The brick building, with its beautiful glass windows, was a prominent place in historic downtown Macon, a city that had fallen on hard times and went through an inner-city revival process during the previous two decades. The building and its adjacent structures created a beautiful view of history preserved, and hope renewed. for everything that the venue could become. Dr. W.G. Lee of Wilkinson County, Georgia, had built the stunning architecture that gave the space its distinctive look in 1918, one hundred years before Kaitlynn found it. In the space, one could see the bones of what had was once been a two-story horse and mule shop, before it had been transformed into an auto dealership and repair facility. During the renovations in 2018, as much as possible of the original architecture was maintained. With an industrial look, the building's exposed brick, railroad trusses, wooden beams, and ironwork intact, Fall Line Station had become a true one-of-a-kind space in Macon.

Even though the owners had no previous experience in event venue management, they had a well-articulated vision of what they had wanted the customer experience to be. *“We want every bride, groom, and guest to be able to celebrate their day with all of their dreams for it coming true,”* Kaitlynn explained.

“Part of making each day unique and special for the customer is creating custom table arrangements for each event. To have our guests rest assured, either me or my venue partner Matt stayed at the venue during the event for any questions the guests might have, and we set up the events and tear them down afterwards.”

The two revenue streams for Fall Line were the facility rental fee and the beverage sales during the wedding. The venue had a capacity for 400 guests that could be accommodated in the ceremony and reception areas and provided access to the bridal and groom suites for time with bridal parties, groomsmen, and families. In addition, the wedding party could access a roped off

area in Fall Line's Beer Garden space for guests to enjoy fresh air. Kaitlynn had further explained:

"We give our guests a list of caterers that we partner with, for them to use for the food on their special day. We are not able to provide any food for the weddings because we do not have a commercial kitchen in the building. The small kitchen we have allows us only to serve sandwiches in the brewery. One thing that we provide in-house is what we know best: alcohol. We provide alcohol and bar services (including staffing) from Fall Line Brewing Co for our events at Fall Line Station."

Fall Line's business (the brewery and event space) had grown quickly during their first 3 years of operation and the facility has outstanding reviews (The Knot(a) n.d.). The event space was used by local artists, families celebrating life and love, competitive corn hole teams for tournaments, and friends celebrating the holidays. Following the pandemic, Fall Line Station observed a spike in wedding bookings as all the young, engaged couples from the lockdown were now able to host their big day with groups of people. Fall Line Station was consistently booked every weekend for the following year. However, for the calendar for 2024, less than two-thirds of weekends had been booked.

Kaitlynn discussed this issue with Jamie:

"We were lucky that we were at the right place and time to take advantage of the pent-up demand for wedding events that the COVID pandemic created. Unfortunately, the COVID years also meant it was difficult for people to date, so now there is a bit a lull in the demand for weddings. Wedding bookings for the next year are down, we must do something to utilize our event space."

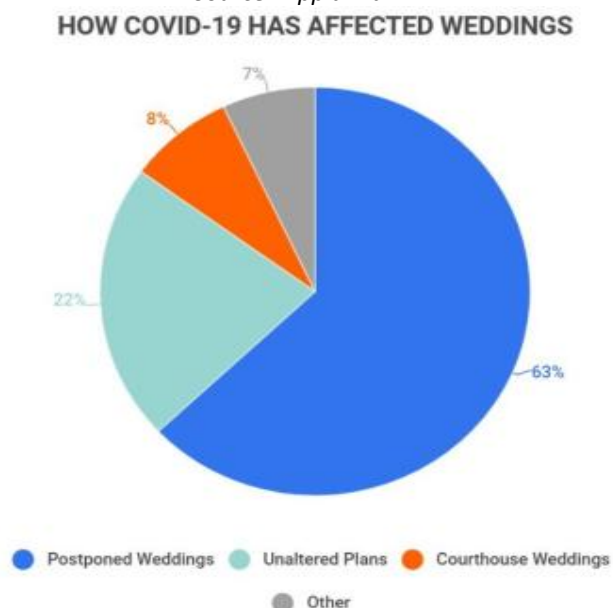
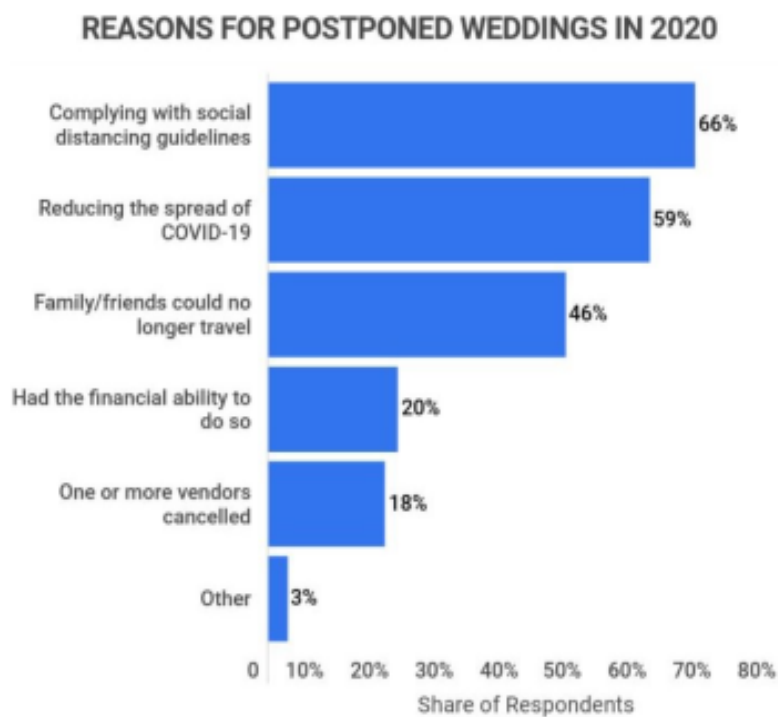
Figure 1. COVID Effect*Source: Zippia n.d.***Figure 2. Wedding postponement 2020***Source: Zippia n.d.*

Figure 3. Average Wedding Costs*Source: Zippia n.d.*

Fall Line's Hometown

Macon was a historic city located in central Georgia. It was known for its cultural heritage, vibrant music scene, and significant role in the history of the American South. It was situated at the fall line of the Ocmulgee River (name's sake of Fall Line Brewery and Fall Line Station), which historically made it a prime location for trade and transportation and had continuous human population for 12,000 years (National Park Service n.d.). Macon was founded in 1823, and the city became a major hub for the cotton trade, since it is located along important river routes and proximity to railroads.

Macon was often associated with music, particularly as the birthplace of several famous musicians such as Otis Redding, an influential soul singer, and the Allman Brothers Band, a classic southern rock band. The city celebrated its musical heritage with museums, festivals, and landmarks dedicated to these musical icons such as the Big House Museum, home of the original Allman Brother's band members (Big House n.d.).

In 2024, Macon-Bibb County, with the city of Macon at its center, had a population of approximately 160,000, a median household income of \$50,700, and a 24% poverty rate (Census n.d.). It was a diverse city that blended its historical roots with a forward-looking community focused on growing tourism. Visitors could explore numerous historic homes and places including the Hay House, a National Historic Landmark, and the Ocmulgee National Monument, which preserved ancient Native American earthworks and had been proposed to become Georgia's first National Park (Environment America n.d.). The downtown area, once struggling, had been revitalized, offered a mix of shops, restaurants, and cultural attractions. The city's economy had become diverse, with industries in manufacturing, education, and healthcare, and with its modern-day revitalization of the downtown area, had become an attractive choice for evening entertainment (Anderson n.d.).

Just to the South of Macon-Bibb County was the city of Warner Robbins and growing Houston County with a population of 172,000, an annual household income of \$80,700, and a 10.7% poverty rate (Census n.d.). Together they formed a metropolitan area of almost 350,000 people.

External Help

Not long after the conversation between Kaitlynn and Jamie, a consulting team from a local university reached out to Jamie. Over the years, Kaitlynn had built a good relationship with an Entrepreneurship Professor at the local university, who was always looking for hands-on projects for his students. This was the perfect opportunity to get an outside perspective on the event space. Jamie invited the student team to tour the venue, to give them a better idea of the space.

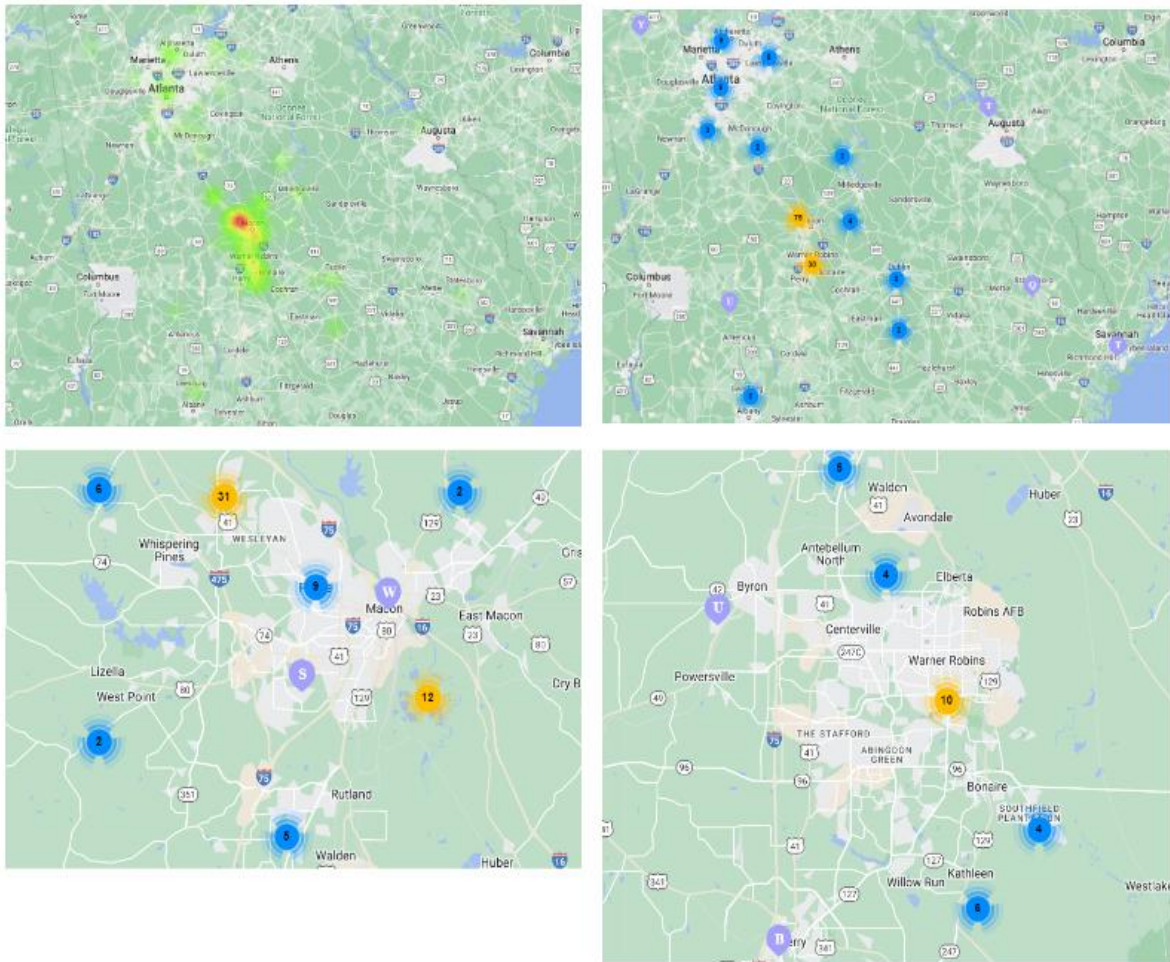
It was on that tour that she realized this was going to be a success. Why? Because the students also genuinely cared.

Jamie explained the difficulty to the team: the never-ending challenge of standing out in a crowded market and the deep desire to boost event space utilization. The consulting team understood that the key was going to be communicating the unique value proposition of the historic venue to the vibrant community. The team got back to Jamie after analyzing industry trends, talking to local Maconnites, and analyzing the customer records that Jamie had provided. The consultants prepared a local industry analysis, provided a table of the data found, and constructed heat maps of the historical data.

The maps in Figure 4, developed from actual customer data, demonstrated the “heat” for most demand by geographic region from north to Atlanta, through Macon and then to Warner Robins to the south. Additional maps looked at each of these urban markets, enumerating total customers by urban area zip code.

In addition to the data and research the student had provided, the student team asked Jamie a pointed question about the bookings and utilization of the venue at certain times of the year since their research showed that couples prefer some months over others (The Knot(b) n.d). Jamie responded:

“That is a great observation. Seasonality is of course an issue for us as well, but we are not impacted a great deal. Outdoor weddings, or event venues without central heat and air are impacted a whole lot more. In our climate-controlled building, we have wedding couples comfortable all year. In addition, people’s travel is generally not impacted a whole lot here in the South. Since we have only 52 weekends a year available, we see our booking requests relatively stable throughout the year. Of course, there are certain times and dates where we could rent the venue 50 times over.”

Figure 4. Analysis of Historical Sales Data for Fall Line Station*Source: Heat maps by authors from owner data***Target Market:****ZIP CODES INFO ON CUSTOMERS PAST TWO YEARS**

Top three Zip Codes:

1. 31210 (31 Zip Codes) North Macon
2. 31201 (12 Zip Codes) Macon Downtown
3. 31088 (10 Zip Codes) Warner Robins

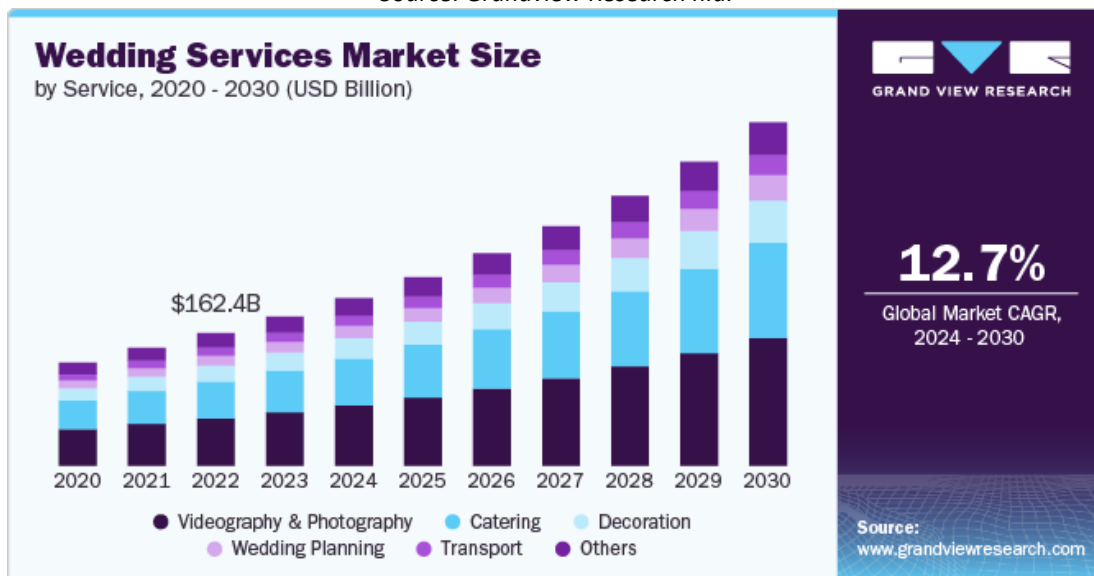
Industry Competition

The team outlined to Jamie that,

“The global wedding services market size was estimated at USD 182.5 billion in 2023 and is expected to grow at a CAGR of 12.7% from 2024 to 2030. The global demand for wedding services is experiencing robust growth due to a combination of increasing disposable incomes, evolving consumer preferences, and cultural shifts toward more personalized and elaborate celebrations” (2024 Grandview Research).

Figure 5. Wedding Industry Market Projections

Source: Grandview Research n.d.



Even though the wedding industry continued to experience an increase in destination weddings, with a market size of \$30 million in 2023 (Statista), most of the total market opportunity for 2024 remained couples who chose unique and beautiful locations with very personalized customer service (Brides.com). In 2023, 58% of couples got married where they currently lived, and 24% of couples got married in one of the partner’s hometowns (The Knot(c) 2024).

After the team realized that most of the wedding event space market was still local, they focused their analysis on the few local competitors in the event industry space. Many of them had different sizes and/or themes (see Table 1).

The consulting team's summary placed the various venues in different strategic groups based on formality and size of the event space. The first group consisted of LoftE Studio and Society Garden's Indoor space. Those were the smallest and most casual venues, ranging from 40-70 people capacity. The next group consisted of Yollah, Society Garden's Outdoor Space, Emerson Courtyard, and The Crazy Bull; those venues were more of a bar scene and could hold more people than the previous group; 100-500 guests. The third group consisted of Suite 616 and Rosewood Ballroom. At those venues, weddings were held but they tended to be smaller than and not as formal as something that may have been held at Fall Line Station. Those events ranged from 125-200 people. The last group consisted of Fall Line Station, Emerson Ballroom, and The Blacksmith Shop. Those events were the most formal and could hold 225-400 guests. They explained that the last group were the most comparable competitors for Fall Line Station due to the similar guest capacity and formality of events. However, due to the lack of information accessible for The Blacksmith Shop, they used Emerson Ballroom as the main competitor (see Table 2).

The consulting team went through the differences and similarities of the venues and Fall Line Station as well as pricing. After reviewing the list of other venues and comparing pricing to Emerson Ballroom, the team concluded that Fall Line Station was priced very competitively for weddings. Undoubtedly the historic, classic, upscale venue at Fall Line Station differentiated itself from all other venues in quality, which lead to a competitive advantage.

Table 1. Industry Analysis*Source: Provided from Fall Line Owner from Market Research*

Venue	Type	Price (Friday night)	Services	Guests Cap.
Fall Line	Venue space and Brewery	\$3000	-Chairs and table included -600 sq ft of garden space included -Drinks provided by venue	400
Yollah	Outdoor venue space and Restaurant	\$2000	Space rented and food provided	-24 for dining room -More for outdoor space (100-200?)
Society Garden Outdoor Space	Outdoor Venue space, Stage, and Bar	-\$800 for main beer garden -\$500 for outdoor pavilion space	-Outdoor space -Offers alcohol in main beer garden	-500 for main beer garden -75 for outdoor pavilion space
Society Garden Indoor Space	Venue Space	\$250 for up to 4 hours	-Can add mimosas or barge cooler -Karaoke included	30-40
The Crazy Bull basement	Venue space, Bar	\$250	-Bar in the basement -Bathrooms in the basement	Not provided
Emerson Ballroom	Venue space	\$4500	-Venue and food -Includes access to bathroom and courtyard -\$400 to rent the parking lot -Built in bar -Chairs and tables	225 seated - 300 for standing
Emerson Courtyard	Venue space	\$1300	-\$400 to rent the parking lot -Includes access to bathrooms	225 seated - 300 for standing
Rosewood Ballroom	Venue space	Rental rates not readily available	-Custom tables -Covered patio -Dance Floor -Stage -Warming kitchen	125
LoftE Studio	Venue space	~\$1000	Chairs and Tables	70
Blacksmith Shop	Venue Space	Not available	-Tables -Chairs -Bar Service	Not listed
Suite 616	Venue Space	Events start at \$1950 Weddings start at \$3,800	-Chairs and Tables -PA System -Prep Kitchen	200

Table 2: Competitor Analysis*Source: Fall Line Owner from Market Research*

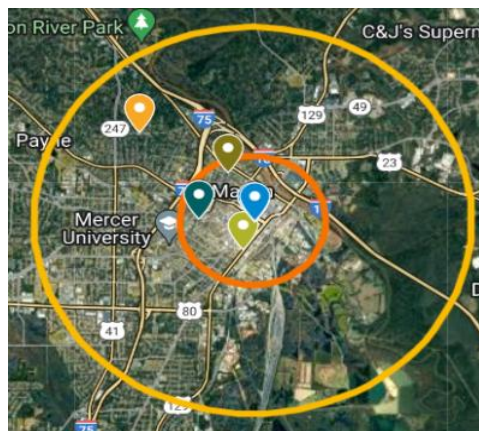
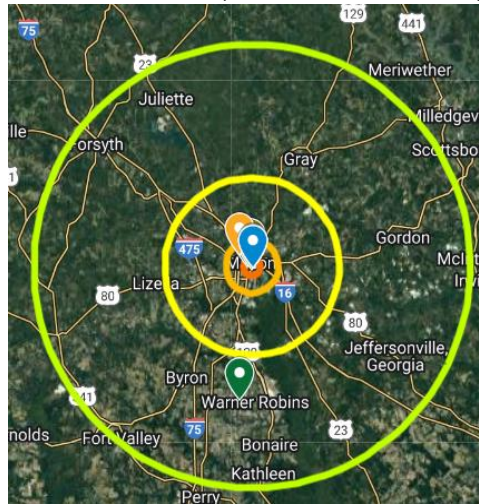
Little River Farms	Venue Space	\$4000-6100	- 50% deposit - Set up and breakdown - Tables and chairs	N/A
Meadows at Mossy Creek	Venue Space	\$5000-18900	- Set up and Breakdown - Rental: 9am-11pm	N/A
Foxhall Resort	Venue Space	\$1500-4500	N/A	N/A
Daisy Hill	Venue Space	\$3800-7400	- Bar (\$30-40) - Satellite Bar (\$350) - Full Bar (\$500)	50-150
The Corner Distinct at Ball Ground	Venue Space	\$4000-5000	- Tables and chairs - 4 hour access	150
Rocking T Meadows	Venue Space	\$6,450	- Bar service: \$1700 (bartender, security officer) - Chairs and linens	N/A
Venue at Murphy Lane	Venue Space	\$8,850	- All inclusive - Limits to one wedding per weekend - Chairs, tables, and decor included	N/A

Existing Customer Base

After the consulting team presented the industry analysis to Jamie, the team explained what they found about the customers who had previously booked the event venue. Given that most couples booked a location close to home, or one of the parents' homes, the team had a closer look at the existing customer base. Jamie was excited to learn about the previous customers because she was new to the job and hadn't been involved in weddings in the past. The team analyzed the customer database (kept by Fall Line Station in an Excel file) and created graphic displays of customer frequency organized by zip code in heat maps. Jamie learned that the top three zip codes of previous Fall Line Station customers were North Macon, Macon Downtown, and Warner Robbins. Jamie had more clarity about the industry and existing customer base now, but her main question remained. How could the utilization of Fall Line Station as an event space be increased in the future?

Figure 6. Location of Competition*Source: Developed by the Authors*

Orange: 1 Mile, Dark Yellow: 3 Miles, Neon Yellow: 10 Miles, Green : 25 Miles

**Table 3. Events***Source: Provided from Fall Line Owner Records*

Fall Line Station Events	Booked Events- Conducted by Outside Event Managers who rented the venue
Charity Concert-pair with non-profit to increase ticket sales to concert	Mercer FSP Events
Movie Streaming Series-Sell tickets for movie streaming for families	Conventions/Corporate Events Family Events- baby showers, birthday parties, family reunions Outsourced Concerts- booked by event promoters Bridal Events- Weddings, Bridal Showers, Engagement Parties

Table 4. Pricing and Advertising Model*Source: Provided from Fall Line Owner Records*

	Target Market	Advertising Method	Pricing
Charity Concert/Festival Concert	Local Macon Families	Flyers and Social Media (Facebook and Instagram)	\$10-20/ticket Based on an attendance of around 200
Movie Streaming	Local Macon Families	Social Media (Facebook and Instagram)	\$10-20/ticket Based on an attendance of around 200
Mercer/FSP Events	Mercer Student Organizations	Digital Brochure sent to Meredith Keating White (Executive Director of Campus Events) Email: keatingwhite_me@mercer.edu -Can reach out for closer dates that are available for bookings and offer discounted rate (no one is booking a wedding 1 month in advance)	Sunday-Friday: \$3000 Saturday: \$4500 Possibly discounted for last minute bookings to fill calendar
Conventions/Corporate Events	-Large corporate companies -Leaders in charge of planning conventions -event planners	Corporate/Convention Event Planners: Emily Jordan Events: Submit via website https://www.emilyjordanevents.com/ Macon Experiences: info@maconexperiences.com	Sunday-Friday: \$3000 Saturday: \$4500
Family Events	-Parents -Local Families	Emily Jordan Events: Submit via website https://www.emilyjordanevents.com/ Macon Experiences: info@maconexperiences.com	Sunday-Friday: \$3000 Saturday: \$4500
Outsourced Concerts	-Concert/music promoters -Performers	Send pricing and information of the venue (including square footage, pricing, available dates) to concert promoters)	Sunday-Friday: \$3000 Saturday: \$4500
Bridal Events	-Newly engaged couples -Wedding planners -Parents of newly engaged couples	Send pricing and information brochures to bridal planners. Planners in Macon area: Mulberry Weddings and Events: (478)-743-5563 Chancey Charm Weddings: info@chanceycharmweddings.com Borrowed and Blue: kaley@borrowedandbluega.com Emily Jordan Events: Submit via website https://www.emilyjordanevents.com/ Brienne McMullan Events LLC: hello@briennemcmullanevents.com	Sunday-Friday: \$3000 Saturday: \$4500

Figure 7. “Lizzy and Matt Wedding”

Source: Fall Line Station Gallery



Figure 8. “Chopephotography - 385”

Source: Fall Line Station Gallery



Figure 9. Drawing of Dr. W. G. Lee’s Horses and Mules

Source: Artist Unknown. Fall Line Brewing Company Facebook

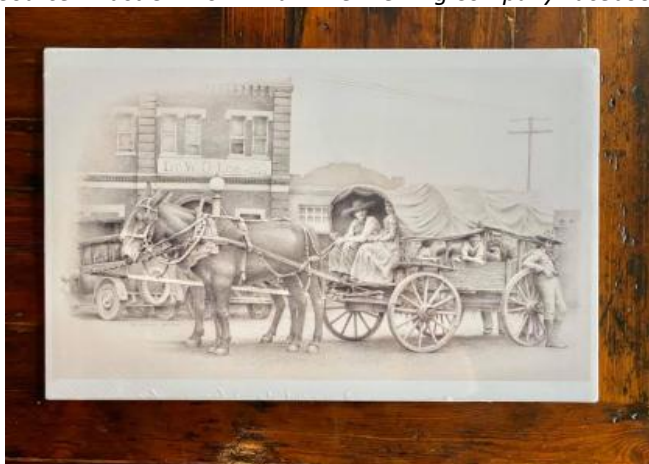


Figure 10. Photo from Tripadvisor

Source: Tripadvisor page for Fall Line Brewing

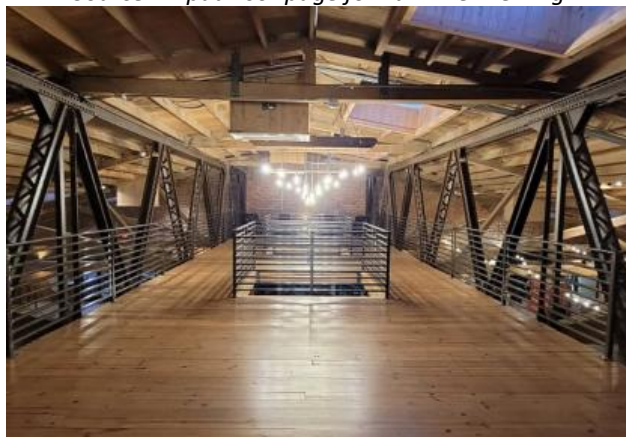


Figure 11. “Fall Line Station Ceremony” Event Page

Source: Fall Line Station Event Spaces Webpage

<https://falllinestation.com/event-spaces/>



Figure 12. “AC1-0556” Fall Line Brewing Co. Event Page

Source: *Fall Line Station Event Spaces Webpage*

<https://falllinestation.com/event-spaces/>





August Jörding is an M.Sc. Finance candidate at Lund University. He holds a B.B.A. in Finance with a minor in Entrepreneurship from Mercer University, where he was also a member of the men's golf team. He served as an executive officer of Mercer's Student Managed Investment Fund and is a winner of the 2024 LUSEM Case Competition as well as a semifinalist in the 43rd edition of the John Molson MBA International Case Competition.



Tiffanie Fraley is a Master of Public Health student with a concentration in Nutrition and Dietetics at The University of Tennessee at Chattanooga. She attended Mercer University, where she earned her B.S. in Biology with minors in Chemistry and Entrepreneurship. At Mercer, she conducted field study research in the Galapagos Islands, focusing on biological studies. Tiffanie is an active member of her community, volunteering in both clinical and public health settings. Upon completing her master's program, Tiffanie aims to become a Registered Dietitian Nutritionist.



Marko Horn is an Associate Professor of Entrepreneurship and Management at Mercer University in Macon, GA. He earned his Ph.D. in Strategic Management from Florida State University after obtaining an M.B.A. and B.B.A in Management and Entrepreneurship from Kennesaw State University. He is a business consultant for the health care industry. He is past President and Fellow of the Southeastern Case Research Association. Before migrating to the U.S., he served 10 years in the German Air Force. He published numerous articles in Management and Case Research Journals.



Bill Carty is an Assistant professor of Strategic Management at Mercer University in Macon, GA where he teaches Strategic Management and Leadership. Dr. Carty earned a Doctor of Business Administration from the University of Florida and a Master of Arts in National Security and Strategic Studies from the US Naval War College. In addition to teaching, Dr. Carty engages in business consulting. Prior to coming to academia, Dr. Carty served 26 years in the US Army, retiring as a colonel.



References

- Anderson, N. (2023, January 17). Macon, *New Georgia Encyclopedia*. Retrieved December 14th, 2024.
<https://www.georgiaencyclopedia.org/articles/counties-cities-neighborhoods/macon/>
- Big House Museum (2024). Retrieved December 14th, 2024, <https://thebighousemuseum.com/>
- Brides.com (2024). What to expect from weddings in 2024. Accessed April 14th, 2024,
<https://www.brides.com/wedding-trends-2024-8414858>
- Census (2023). Retrieved December 14th, 2024,
<https://www.census.gov/quickfacts/fact/table/maconbibbcountygeorgia/PST045223> and
<https://www.census.gov/quickfacts/fact/table/houstoncountygeorgia,maconbibbcountygeorgia/PST045223>
- DWP-Insider (2023). These are the biggest 23 trends for 2023 weddings, Retrieved October 23rd 2023,
<https://dwpinsider.com/these-are-the-biggest-23-trends-for-2023-weddings-according-to-the-experts/#:~:text=The%20after%20effects%20of%20the%20pandemic%20have%20directly,to%20witness%20some%20breathtaking%20and%20never%20seen%20before%20locations.>
- Environment America (2024), Retrieved December 14th, 2024,
<https://environmentamerica.org/georgia/updates/is-georgia-about-to-get-its-first-national-park/>
- Fall Line Brewing Company (2023). Good Beer for Good People! Fall Line Brewing Co.,
falllinebrewingco.com/. Accessed 18 Oct. 2023.
- Fall Line Station (2023). Gallery. Fall Line Station, falllinestation.com/gallery/ Accessed 18 Oct. 2023.
- Grand View Research (2023). Accessed December 11th, 2024,
<https://www.grandviewresearch.com/industry-analysis/wedding-services-market-report#:~:text=The%20global%20wedding%20services%20market,more%20personalized%20and%20elaborate%20celebrations>
- National Park Service (2024). Retrieved December 14th, 2024,
<https://www.nps.gov/ocmu/index.htm#:~:text=More%20Than%2012%2C000%20Years%20of%20Continuous%20Human%20Habitation&text=Around%20900%20CE%2C%20the%20Mississippian,elite%2C%20which%20remain%20here%20today.&text=We%20are%20gearing%20up%20for%20the%202024%20Ocmulgee%20Indigenous%20Celebration!>
- Safarova, K. (2020). *Succeeding as a Management Consultant: Learn the Skills Used by the Leading Management Consulting Firms, Such as McKinsey, BCG, et al.* Firmsconsulting LLC.
- Statista (2024). Size of destination wedding market. Accessed December 12th, 2024.
<https://www.statista.com/statistics/1333948/market-size-destination-wedding-worldwide/>
- The Knot (a) (2024). Macon Wedding Venues: Retrieved December 14th, 2024,
<https://www.theknot.com/marketplace/fall-line-station-macon-ga-2045317#:~:text=Fall%20Line%20Station%20is%20highly,outstanding%20service%20and%20picturesque%20setting>
- The Knot (b) (2024). When is wedding season? Retrieved December 14th, 2024,
<https://www.theknot.com/content/is-there-an-off-season-for-weddings>
- The Knot (c) (2024). Where should I get married? Retrieved December 11th, 2024,
<https://www.theknot.com/content/wedding-location>
- The Knot (d) (2023). 2023 Real Weddings Study: Retrieved February, 21st, 2024,
<https://www.theknot.com/content/wedding-data-insights/real-weddings-study>
- Zippia (2023). 20+ Trending U.S. Wedding Industry Statistics [2023]: How Big Is the Wedding Industry. Accessed 12 September 2023, www.zippia.com/advice/wedding-industry-statistics/#:~:text=There%20are%20an%20average%20of,the%20industry%20is%20so%20competitive

ARTICLES, NOTES and EXERCISES



THE ANATOMY OF EFFECTIVE TEACHING NOTES: PURPOSE, VALUE, PEDAGOGY, CONTENT, AND APPLICATION

ELLEN A. DROST

California State University, Los Angeles

Abstract

This article examines the purpose, value, pedagogy, content and application of teaching notes in academic settings. Teaching notes serve as essential guides for instructors using case studies in their classrooms. Drawing from established research on pedagogical documentation and instructional design, this article provides educators with a framework for developing effective teaching notes that enhance both teaching delivery and student learning outcomes. To illustrate best practices, the article includes comprehensive examples from the "*Los Angeles Apparel*" case study, demonstrating how each element of a teaching note can be constructed for maximum pedagogical effectiveness. Through an extensive literature review and analysis of pedagogical approaches, the article concludes with recommendations for creating instructor manuals that provide guidance while maintaining instructional flexibility across various educational contexts.

Introduction

Teaching notes, also referred to as Instructors' Manuals (IM), are critical instructional tools that bridge the gap between teaching materials and their effective classroom implementation. As Swiercz (2015) notes, a well-crafted teaching note transforms a case study from simply being a narrative account to becoming a powerful learning instrument. Despite their importance, the development of teaching notes often receives less attention than the creation of the primary teaching materials themselves. This article aims to address this gap by providing a comprehensive examination of teaching notes for case studies—their purpose, structure, content elements, and best practices for their development. By drawing on established research in case method teaching and pedagogical approaches, this article offers educators a framework for creating teaching notes that effectively support case-based instruction across disciplines and educational levels.

To illustrate best practices, the article includes examples from Pugh & Drost's (2020) case study, *Los Angeles Apparel: Make Locally in a Global Market*, demonstrating how each element of a teaching note can be constructed for maximum pedagogical effectiveness.

Purpose and Value

Teaching notes serve multiple essential functions in case-based teaching that extend beyond simple instructional guides. According to Austin (1993) of Harvard Business School, teaching notes represent the "*distilled wisdom of teaching experience*" and serve as crucial vehicles for transmitting pedagogical knowledge across the teaching community. Austin (2000) elaborates that teaching notes serve as repositories of teaching wisdom in three critical dimensions:

- **Conceptual Wisdom:** Teaching notes articulate the theoretical frameworks, analytical models, and key concepts embedded in the case.
- **Pedagogical Wisdom:** They capture teaching strategies, questioning sequences, and facilitation techniques that have proven effective through classroom experience.

- **Experiential Wisdom:** They document practical lessons learned from actual teaching experiences—common student misconceptions, discussion pitfalls, and breakthrough moments—that would otherwise remain tacit knowledge.

Austin's (1993, 2000) work emphasizes teaching notes' role in preserving and transferring "*teaching craft knowledge*"—the practical wisdom developed through teaching experience that often remains undocumented. Thus, positioning teaching notes as crucial elements in creating a community of practice among case instructors and allowing pedagogical innovations and insights to be shared rather than remaining isolated in individual classrooms.

Barnes, Christensen and Hansen (1994) argue that teaching notes serve as repositories of institutional knowledge, allowing successful teaching strategies to be shared across faculty members and preserved over time. This function is particularly valuable in academic environments with high faculty turnover or extensive use of adjunct instructors.

Shirley, Brooks, & Jones (2019) stress that effective teaching notes clearly articulate the case's purpose through carefully crafted learning objectives with compelling decision points that engage students. These notes equip instructors with essential contextual information, targeted learning goals, case-specific discussion questions, comprehensive teaching strategies, and assessment approaches for successful case implementation. Teaching notes function as roadmaps that guide instructors through the case teaching process while highlighting potential challenges and offering solutions.

Research on Teaching Note Effectiveness

The concept of teaching notes has evolved significantly over the past century, beginning with Copeland's (1954) introduction of structured instructor guides at Harvard Business School. These early notes primarily focused on (factual) information rather than comprehensive pedagogical guidance. As educational psychology advanced in the mid-20th century, McNair (1971) documented how teaching notes evolved into more detailed documents incorporating learning objectives and teaching strategies, reflecting the instructor's role as a facilitator rather than merely a knowledge transmitter. Wasserman (1994) noted how teaching notes became more sophisticated through the 1980s and 1990s, incorporating more elements of instructional design.

More recently, several studies have demonstrated the impact of teaching notes on instructional quality and student outcomes. Lundeberg and Yadav (2006) found that instructors with access to detailed teaching notes demonstrated greater confidence, asked more effective questions, and better managed classroom dynamics. Student outcomes were also significantly higher in these classes. Keefer (2007) tracked novice instructors over three years, showing that those who consistently used teaching notes developed pedagogical content knowledge more rapidly. Wright, Owens and McCarthy (2016) found that collaboratively developed teaching notes led to greater instructional coherence and improved student learning outcomes compared to individually developed notes. Nilson and Zimmerman's (2018) meta-analysis identified five factors that significantly influence teaching note effectiveness: clarity of learning objectives, alignment with assessment methods, inclusion of multiple teaching strategies, provision of theoretical frameworks, and adaptability to different teaching contexts.

Pedagogy

Inquiry-Based Learning Approaches

Inquiry-based learning emphasizes student-driven exploration of questions, problems, and scenarios. Teaching notes designed to support inquiry-based approaches provide instructors with frameworks for guiding student investigation while avoiding prescriptive solutions. Key elements for teaching notes supporting inquiry-based learning include question formulation techniques, scaffolding progressions, and intervention points for redirecting student inquiry when necessary (Savery, 2015). Hmelo-Silver, Duncan and Chinn (2007) emphasized the importance of teaching notes that provide instructors with "*just-in-time*" guidance for supporting student inquiry.

Problem-Based Learning Approaches

Problem-based learning (PBL) approaches emphasize authentic problems as the starting point for learning. Barrows (1996) outlined essential elements for teaching notes supporting PBL, including problem specifications, facilitation protocols, and assessment rubrics. Hung, Jonassen, and Liu (2008) emphasized the importance of teaching notes that help instructors calibrate problem difficulty and complexity, while Savery (2006) distinguished between problem-based and project-based approaches in teaching notes, highlighting different timeframes, resource requirements, and facilitation strategies.

Discussion-Based Teaching Approaches

Discussion-based teaching approaches emphasize dialogue and collective meaning-making. Brookfield and Preskill (2016) identified key elements for teaching notes supporting democratic discussion, including opening questions, response strategies for common discussion challenges, and reflection prompts. Parker and Hess (2001) distinguished between "*teaching with discussion*" and "*teaching for discussion*," advocating for teaching notes that not only guide

instructors in using discussion as a teaching tool but also help them develop students' discussion skills. Finkel (2000) emphasized the importance of teaching notes that support *"teaching with your mouth shut"*—minimizing instructor talk to maximize student voice.

Experiential Learning Approaches

Experiential learning approaches emphasize direct experience and reflection. Kolb and Kolb (2005) applied experiential learning theory to teaching note design, emphasizing the importance of guidance for all phases of the experiential learning cycle. Moon (2004) focused on the role of reflection in experiential learning, providing frameworks for teaching notes that guide instructors in facilitating different levels of reflective practice. Beard and Wilson (2018) emphasized the importance of teaching notes that help instructors manage the emotional dimensions of experiential learning.

Culturally Responsive Teaching Approaches

Culturally responsive teaching approaches emphasize the importance of connecting learning to students' cultural frames of reference. Gay (2018) identified key elements for teaching notes supporting culturally responsive teaching, including cultural knowledge resources, communication style variations, and content adaptation guidelines.

Ladson-Billings (2014) distinguished between culturally responsive and culturally sustaining pedagogies, suggesting that effective teaching notes include not only strategies for making content relevant to diverse students but also approaches for affirming and sustaining cultural identities through instructional practices. Hammond (2015) focused on the neuroscience of culturally responsive teaching, providing frameworks for teaching notes that help instructors understand how culture influences information processing and learning.

Content

Key Elements of Effective Teaching Notes

Based on a synthesis of research by case method scholars (Wasserman 1994; Austin 2000; Shirley, Brooks & Jones 2019; Mauffette-Leenders, Erskine & Leenders 2007; McGuire & Whaley 2017; Wright & McCarthy 2018; Shirley & Brooks 2022), best practices emerge as essential elements of effective case teaching notes. To illustrate these best practices, comprehensive examples from the “*Los Angeles Apparel*” (Pugh & Drost 2020) case study will demonstrate how each element of a teaching note can be constructed for maximum pedagogical effectiveness.

Case Synopsis

Effective case synopses in teaching notes are typically 300-500 words and use parallel structure to highlight key elements. Their analysis of over 200 teaching notes identified that the most useful synopses include both factual summary and thematic framing. A summary of the case provides instructors with a refresher of the content, highlighting key themes, events, and characters without being exhaustive (Ellet 2007); an example of a comprehensive synopsis of the Los Angeles Apparel case is given below.

Case Synopsis - Los Angeles Apparel: Locally Made in a Global Market

This case examines Los Angeles Apparel, a vertically integrated clothing manufacturer founded in 2016 by Dov Charney, a former CEO of American Apparel. After being forced out from American Apparel in 2014, Charney launched Los Angeles Apparel with a mission to revitalize domestic garment manufacturing while ensuring ethical labor practices in an industry known for offshore production and exploitative working conditions.

The case traces Los Angeles Apparel's development from a startup in South LA to a growing manufacturer with both wholesale and direct-to-consumer distribution channels. By 2018, the company was generating over \$20 million in annual revenue but had not yet achieved profitability. The company's business model centers on vertical integration—controlling production from fabric sourcing through garment manufacturing—and paying above-market wages to a predominantly immigrant workforce.

Financial data reveal Los Angeles Apparel's challenging path to profitability as it balances higher production costs against the marketing advantage of its "*Made in USA*" ethical positioning. The case presents the company at a strategic crossroads: With financing options wearing thin, should Los Angeles Apparel (1) follow American Apparel's retail expansion model, (2) focus on growing its wholesale business, or (3) develop a different strategy to achieve profitability in an industry dominated by low-cost overseas production?

The case also explores the industry context, including the decline of domestic apparel manufacturing following trade liberalization, the rise of fast fashion, the growing importance of e-commerce, and changing consumer attitudes about ethical production and sustainability. Adding complexity to Charney's challenge is the competition he faces from his former company, American Apparel, which was acquired by Gildan Activewear and remains a formidable competitor in both wholesale and retail markets.

Learning Objectives

According to Shirley and Britt (2022), learning objectives (LOs) are critical elements that reveal a case study's educational purposes, establish expected student proficiencies, provide a framework for learning, and offer assessment structure. They emphasize that effective LOs use action-oriented verbs tied to observable behaviors that extend beyond basic knowledge. The authors maintain that well-defined objectives allow instructors to understand the case's intended value and expected student outcomes, helping faculty determine how to effectively implement the material in their specific educational contexts. Clear, specific learning objectives articulate what students should know or be able to do after engaging with the case.

According to Anderson and Krathwohl (2001), effective learning objectives should be measurable and aligned with broader curricular objectives. Anderson and Krathwohl revised Bloom's Taxonomy to create a comprehensive framework for classifying educational objectives, moving from nouns to verbs and emphasizing different types of knowledge (factual, conceptual, procedural, and metacognitive) intersecting with cognitive processes (remembering, understanding, applying, analyzing, evaluating, and creating). This revised taxonomy provides a powerful tool for articulating learning objectives that span different types of knowledge and

levels of cognitive engagement. The following learning objectives for the Los Angeles Apparel case incorporate this framework:

Learning Objectives - Los Angeles Apparel

After analyzing and discussing this case, students will be able to:

- **Remember** key facts about the global and domestic apparel manufacturing industry, including labor practices, cost structures, and regulatory environments.
- **Understand** how trade liberalization and globalization have transformed the apparel industry's supply chain structures and competitive dynamics.
- **Apply** stakeholder theory to analyze how Los Angeles Apparel balances the interests of employees, consumers, investors, and community members in its business model.
- **Analyze** the strategic advantages and disadvantages of vertical integration and domestic manufacturing in the globalized apparel industry using comparative advantage theory and supply chain management concepts.
- **Evaluate** the sustainability of Los Angeles Apparel's ethical manufacturing business model in terms of financial viability, scalability, and competitive positioning.
- **Create** and assess strategic growth options for companies facing the tension between ethical commitments and financial sustainability in competitive, cost-driven industries.

Teaching Objective

Clear identification of teaching objectives and the target audience help instructors align their approach with learners' needs and curricular goals. The teaching objectives articulate the primary conceptual takeaways the instructor should emphasize, while the target audience information helps tailor the approach appropriately based on educational level, prior knowledge requirements, and disciplinary context (Garvin 2003). The *“Los Angeles Apparel”* case is designed to facilitate discussion and learning around several key themes:

Teaching Objectives - Los Angeles Apparel

- The impact of globalization on domestic manufacturing and the challenges of competing against low-cost overseas production;
- The strategic positioning of ethical manufacturing as a differentiator in a price-sensitive industry;
- The tension between social mission and financial sustainability in business models;
- The role of founder identity and reputation in entrepreneurial ventures;
- Decision-making in resource-constrained environments.

Target Audience - Los Angeles Apparel

This case is designed primarily for undergraduate and graduate courses in Business Strategy, Entrepreneurship, Business Ethics, Social Entrepreneurship, or International Business. It is particularly effective in courses examining business model innovation, ethical leadership, or global supply chain management.

Prior Knowledge Requirements - Los Angeles Apparel

- Basic understanding of apparel industry supply chain models;
- Familiarity with competitive strategy concepts and business model frameworks;
- Exposure to globalization and trade policy concepts is helpful but not required.

Appropriate Course Placement- Los Angeles Apparel

Most effective when used in the middle of a course after students have established foundational concepts but before final integrative cases or projects. Works well as a bridge between theoretical models and practical implementation challenges.

Contextual Considerations- Los Angeles Apparel

The case is particularly relevant for students interested in social entrepreneurship, domestic manufacturing, labor issues, or sustainable business practices. It provides opportunities to discuss the practical implementation challenges of mission-driven business models and the strategic trade-offs between social impact and financial performance.

Explicit audience specification in teaching notes facilitates implementation challenges. For instructors using teaching materials outside of their primary discipline, detailed audience information is a helpful element for successful adaptation.

Theoretical and Conceptual Frameworks

A concise overview of relevant theoretical or conceptual frameworks provides instructors with the conceptual foundation necessary for guiding student learning. Hmelo-Silver and Barrows (2006) found that teaching notes with explicit theoretical frameworks led to more coherent facilitation and stronger theory-practice connections in classroom implementation. Their observational research compared instructor approaches with varying levels of theoretical guidance in teaching notes. Ambrosini, Bowman and Collier (2010) emphasize that this section of the teaching notes should connect theory to practice by explaining how abstract concepts

manifest in the specific case. The following theoretical and conceptual frameworks can be embedded and integrated in the Los Angeles Apparel case discussion questions and learning objectives:

1. Industry Analysis: Porter's Five Forces Model (Porter 2008)

Porter's Five Forces framework provides a structured approach for analyzing the competitive intensity and attractiveness of the apparel industry. The case offers rich material for examining how industry forces—supplier power, buyer power, threat of new entrants, threat of substitutes, and competitive rivalry—shape Los Angeles Apparel's strategic options and constraints. Students can identify how the company's domestic manufacturing approach potentially mitigates certain industry forces while making it more vulnerable to others.

2. Strategic Positioning (Porter 1996)

Porter's framework for competitive strategy helps analyze Los Angeles Apparel's strategic positioning. The case allows students to evaluate whether the company is pursuing a differentiation strategy through ethical manufacturing, a focus strategy targeting specific market segments, or attempting to achieve cost leadership through operational efficiencies—and the challenges of each approach. This framework helps students assess the coherence and sustainability of the company's competitive positioning.

3. Resource-Based View of the Firm (Barney 1991)

The Resource-Based View (RBV) provides tools for analyzing Los Angeles Apparel's internal resources and capabilities as potential sources of competitive advantage. Students can apply the VRIO framework (Value, Rarity, Imitability, Organization) to assess whether the company's production capabilities, ethical practices, or brand reputation constitute sustainable competitive advantages. The case illustrates tensions between resources that create social value and those that create economic returns.

4. Stakeholder Theory (Freeman 1984)

The case provides an opportunity to apply stakeholder theory in examining how Los Angeles Apparel balances the interests of multiple stakeholders, including employees, consumers, suppliers, and community members. Freeman's stakeholder approach helps analyze how the company's commitment to fair wages and working conditions affects its relationships with these various groups and influences strategic decision-making.

5. Triple Bottom Line (Elkington 1997)

Elkington's framework for evaluating business performance across economic, social, and environmental dimensions provides a valuable lens for assessing Los Angeles Apparel's business. The case allows students to explore tensions and potential synergies between profit objectives and social goals in a competitive industry with thin margins.

6. Creating Shared Value (Porter & Kramer 2011)

Porter and Kramer's concept of creating shared value helps analyze how Los Angeles Apparel attempts to integrate social mission with business strategy. The case provides an opportunity to evaluate whether the company's ethical manufacturing approach creates sustainable competitive advantage or merely increases operating costs without corresponding market benefits.

7. Social Entrepreneurship Theory (Mair & Martí 2006)

Mair and Martí's framework for analyzing social entrepreneurship provides tools for understanding how Los Angeles Apparel balances social mission with commercial objectives. The case illustrates the challenges of achieving dual objectives and maintaining mission integrity while seeking financial sustainability.

8. Business Model Innovation (Teece 2010)

Teece's framework for analyzing business model innovation and value capture provides tools for evaluating Los Angeles Apparel's vertically integrated approach in an industry dominated by fragmented global supply chains. The case illustrates how a contrarian business model can potentially create differentiation in a mature industry.

Hmelo-Silver and Barrows (2006) found that teaching notes with explicit theoretical frameworks led to more coherent facilitation and stronger theory-practice connections in classroom implementation. Their observational research compared instructor approaches with varying levels of theoretical guidance in teaching notes.

Discussion and Assignment Questions

Effective Teaching notes include a list of questions designed to promote discussion of the key issues within the case and incorporate theoretical and conceptual frameworks recommended for case analysis and discussion. If the case contains quantitative data for analysis, it is helpful to include results of essential "number crunching" in the teaching note. The following 15 discussion questions for the "Los Angeles Apparel" case explore five different types of key issues:

Industry Context and Supply Chain Questions:

- How has globalization transformed the apparel manufacturing industry since the 1990s? What specific trade agreements and policies have contributed to these changes?
- Compare the vertically integrated manufacturing model of Los Angeles Apparel with the typical fast fashion supply chain model. What are the strategic advantages and disadvantages of each approach?
- Using Porter's Five Forces model, analyze the competitive dynamics of the domestic apparel manufacturing industry. Which forces pose the greatest threats to Los Angeles Apparel?

Business Model and Competitive Strategy Questions:

- What are the key components of Los Angeles Apparel's business model? How does this model differ from mainstream apparel industry approaches?
- Applying Porter's frameworks for competitive strategy, how would you characterize Los Angeles Apparel's strategic positioning? Is it pursuing cost leadership, differentiation, or focus? Is this positioning sustainable?
- Using the Resource-Based View of the firm, analyze Los Angeles Apparel's resources and capabilities. Do any of these resources meet the VRIO criteria for sustainable competitive advantage?

Ethical Manufacturing as Strategy Questions:

- Using stakeholder theory, evaluate how Los Angeles Apparel's business model affects different stakeholder groups (employees, consumers, investors, community). How does the company balance competing stakeholder interests?
- To what extent can ethical manufacturing serve as a viable differentiation strategy in the apparel industry? What evidence from the case supports your assessment?
- Apply the Triple Bottom Line framework to evaluate Los Angeles Apparel's performance. How does the company balance economic, social, and environmental considerations?

Founder and Leadership Questions:

- How does Dov Charney's personal history and reputation influence Los Angeles Apparel's strategic opportunities and constraints? Is his controversial reputation an asset or liability for the new venture?
- What leadership lessons can be drawn from comparing Charney's experiences at American Apparel and Los Angeles Apparel?

Strategic Options and Recommendations Questions:

- What are the most promising strategic options for Los Angeles Apparel to achieve profitability while maintaining its commitment to domestic, ethical manufacturing?
- Should Los Angeles Apparel follow American Apparel's retail expansion model? Why or why not? What evidence supports your recommendation?

- How might Los Angeles Apparel apply the concept of Creating Shared Value to develop a more sustainable business model?
- What metrics should Los Angeles Apparel use to evaluate success beyond financial performance? How might these metrics be incorporated into strategic decision-making?

Application

Teaching Strategy and Plan

A detailed teaching plan outlines the recommended instructional approach, including timing, discussion questions, exercises, and presentation guidelines. Schulman (1992) suggests that this section of the teaching notes should balance providing structure with allowing for instructional flexibility.

Sample Teaching Plan and Strategy for Los Angeles Apparel Case (80-minute session)

Pre-class Preparation:

- Assign students to research the current state of domestic manufacturing in the US apparel industry
- Request that students review Porter and Kramer's "Creating Shared Value" article

Opening (10 minutes):

- Begin with a quick poll: "Is ethical manufacturing a viable competitive strategy in the apparel industry?" (Use raised hands, digital polling, or brief written responses)
- Use poll results to highlight the central tension of the case
- Briefly outline the learning objectives and session structure

Industry Context Analysis and Guiding Questions (15 minutes):

- Lead discussion on the global transformation of apparel manufacturing since the 1990s
- Guiding questions:
 - How have trade agreements affected domestic apparel manufacturing?
 - What are the key competitive dynamics in the apparel industry?
 - What factors drive companies to manufacture overseas versus domestically?
- Use whiteboard to map key industry forces and trends

Business Model Analysis and Guiding Questions (20 minutes):

- Lead discussion on Los Angeles Apparel's vertically integrated business model
- Guiding questions:
 - What are the key components of Los Angeles Apparel's business model?
 - How does this model differ from mainstream apparel industry approaches?

- What are the economic advantages and disadvantages of vertical integration in this context?
- Use whiteboard to map business model components and their interconnections

Ethical Manufacturing as Strategy and Its Assessment (15 minutes):

- Transition to analysis of ethical manufacturing as strategic positioning
- Divide class into four groups, each focusing on one stakeholder perspective:
 - Group 1: Employees and labor advocates
 - Group 2: Consumers and retail partners
 - Group 3: Investors and financial stakeholders
 - Group 4: Local community and government
- Allow 5 minutes for small group discussion
- Have each group report on how ethical manufacturing creates value or challenges for their stakeholder group
- Integrate insights into a holistic assessment of the strategic viability of ethical manufacturing

Strategic Options and Recommendations and Guiding Questions (15 minutes):

- Present the three strategic options outlined in the case:
 - Option A: Follow American Apparel's retail expansion model
 - Option B: Focus on growing the wholesale business
 - Option C: Develop a hybrid approach
- Use a decision matrix approach to evaluate each option
- Guiding discussion questions:
 - How does each option affect Los Angeles Apparel's mission fulfillment?
 - What are the financial implications of each approach?
 - How might different stakeholders respond to each strategy?
 - What capabilities would Los Angeles Apparel need to develop for successful implementation?

Closing and Integration (5 minutes):

- Conduct a final poll on the sustainability of Los Angeles Apparel's model
- Highlight key learning points from the discussion
- Connect case insights to broader themes of ethical business, entrepreneurship, and strategic positioning
- Preview follow-up assignment (if applicable)

Teaching Approach Notes:

The case involves complex trade-offs between social mission and business realities. The instructor should avoid simplistic characterizations of "good" versus "bad" business practices and instead encourage nuanced analysis of how business models can incorporate ethical practices while remaining financially viable.

Analysis of Key Issues

An in-depth analysis of the central issues presented in the case helps instructors anticipate student responses and guide discussion effectively. Golich, Boyer, Franko and Lamy (2000) note that this section of the teaching notes should include multiple perspectives to encourage critical thinking. Barnes and Christensen (1994) emphasized the importance of issue sequencing in teaching notes, suggesting that the analysis should present issues in an order that facilitates progressive concept development. Their longitudinal study of case method teaching demonstrated that strategic issue sequencing significantly improved conceptual understanding.

Key Issue 1: Viability of Ethical Manufacturing in the Apparel Industry

Industry Context: The global apparel industry is characterized by highly fragmented supply chains, intensive cost pressure, and production primarily located in low-wage countries. Los Angeles Apparel's commitment to domestic manufacturing with fair wages represents a significant deviation from industry norms.

Analysis: Economic analysis of Los Angeles Apparel's manufacturing approach reveals both advantages and challenges. On the cost side, the company faces significantly higher labor expenses compared to overseas manufacturers, with domestic production costs estimated at 15-20% higher than comparable offshore production. However, this approach creates potential value through shorter lead times, greater quality control, reduced shipping costs, enhanced supply chain transparency, and marketing differentiation.

The case presents a fundamental question about whether ethical manufacturing can generate sufficient price premiums or operational advantages to offset higher production costs in an industry where consumers are highly price sensitive.

Alternative Perspectives: Some analysts argue that the ethical manufacturing approach creates sustainable competitive advantage through brand differentiation and customer loyalty among value-aligned consumers. Others contend that the approach is economically unsustainable, representing a founder's ideological commitment rather than a viable business model in a globalized industry.

Supporting Evidence: The case provides data points including:

- Los Angeles Apparel's wage structure compared to industry averages;
- Production cycle time comparisons between domestic and offshore manufacturing;
- Consumer willingness-to-pay data for ethically produced garments;
- Competitor pricing and positioning analysis.

Key Issue 2: The Role of Founder Identity in Entrepreneurial Ventures

Industry Context: Founder identity and reputation can significantly impact startup ventures, particularly in consumer-facing industries where personal brand and company brand may be closely linked.

Analysis: The case presents a complex situation where Charney's experience, industry knowledge, and connections provide valuable assets to Los Angeles Apparel, but his controversial reputation also creates potential liabilities. Having been ousted from American Apparel amid controversy, Charney faces the challenge of leveraging his expertise while managing the narrative around his past.

The case raises questions about whether Charney's notoriety helps or hurts the new venture, and how his leadership approach at Los Angeles Apparel compares to his earlier experience at American Apparel.

Alternative Perspectives: Some might argue that Charney's industry experience and relationships provide irreplaceable competitive advantages that outweigh reputation concerns. Others might contend that his controversial past creates substantial risks for the company, particularly in an era of increased consciousness about workplace conduct and corporate ethics.

Supporting Evidence: Relevant case data includes:

- Charney's track record of industry innovation and business growth at American Apparel;
- The circumstances of his departure from American Apparel;
- Evidence of customer and supplier relationships that transferred to the new venture;
- The company's similar branding and aesthetic to American Apparel.

Key Issue 3: Strategic Growth Options for Social Enterprises

Industry Context: Social enterprises like Los Angeles Apparel often face greater challenges when scaling operations than conventional businesses. The apparel industry's thin margins and intense competition amplify these scaling difficulties.

Analysis: The case presents the classic social enterprise dilemma of maintaining mission integrity while achieving financial sustainability and growth. Los Angeles Apparel's current scale creates certain inefficiencies in production and distribution that affect financial performance. However, scaling operations could potentially dilute the company's mission or compromise its ethical manufacturing practices if not managed carefully.

The case presents three distinct strategic paths, each with different implications for mission fulfillment and financial performance:

- Follow American Apparel's retail expansion model;
- Focus on growing the wholesale business;
- Develop a hybrid approach with selective expansion.

Each option involves trade-offs between mission fulfillment, financial sustainability, and growth potential that illustrate the complex strategic choices facing social enterprises.

Alternative Perspectives: Some social entrepreneurship scholars argue that selective compromise on operational details is acceptable if it enables greater overall mission impact through scale and sustainability. Others contend that maintaining full mission integrity is essential to long-term competitive advantage and that compromises undermine the very foundation of the business model.

Supporting Evidence: Relevant case data include:

- Cost structure analysis at different production volumes;
- Market segmentation data showing size of potential customer segments;
- Competitor case studies of successful and unsuccessful ethical manufacturing models;
- Survey data on consumer perception of partially vs. fully US-manufactured products.

Expected Challenges and Solutions

Identifying potential challenges—conceptual difficulties, common misconceptions, or sensitive topics—helps instructors prepare for classroom management issues. Accompanying solutions provide instructors with strategies for addressing these challenges (Nilson 2016).

Challenge 1: Oversimplified Ethical Analysis

Challenge Description: Students sometimes adopt binary ethical positions rather than engaging with the complex trade-offs inherent in ethical business practices, particularly regarding labor and manufacturing decisions in a global context.

Solution Approaches:

- Present multiple ethical frameworks to demonstrate that ethical analysis involves weighing competing values
- Encourage students to consider global context: "How might workers in different countries evaluate these practices?"
- Introduce data on actual outcomes rather than intentions: "What evidence do we have about worker well-being under different models?"
- Use role-playing: "If you were responsible for making this decision, what information would you need?"
- Emphasize that ethical business often involves optimizing across constraints rather than finding perfect solutions

Challenge 2: Insufficient Industry Knowledge

Challenge Description: Many students lack detailed understanding of apparel industry economics, manufacturing processes, and supply chain structures, leading to unrealistic strategic recommendations.

Solution Approaches:

- Provide a pre-class primer on apparel industry structure and economics;
- Prepare visual aids showing key industry metrics (typical margins, cost structures, lead times);
- When unrealistic suggestions arise, ask: *"How would this approach affect production costs and lead times?"*
- Invite students with relevant industry experience to share insights;
- Prepare mini lectures (2-3 minutes) on critical industry concepts that can be inserted if knowledge gaps become apparent.

Challenge 3: Complexity of Founder's Personal History

Challenge Description: Discussions about Dov Charney's controversial leadership history may become overly focused on personal judgments rather than analytical insights about leadership and organizational culture.

Solution Approaches:

- Frame discussion around specific business implications of leadership choices;
- Use structured analytical frameworks to examine founder influence on company strategy and culture;
- Redirect personal judgments to evidence-based analysis: *"What evidence do we have about how these aspects of leadership affected business outcomes?"*
- Prepare transition statements to refocus discussion: *"While personal judgments are natural, let's focus on what this situation teaches us about leadership in entrepreneurial ventures;"*
- Use comparative cases to establish patterns and principles beyond the specific individual.

Challenge 4: Difficulty Quantifying Social Impact

Challenge Description: Students struggle to integrate social impact considerations into business analysis because social benefits are often harder to quantify than financial metrics.

Solution Approaches:

- Introduce frameworks that incorporate social impact measurement;
- Provide examples of how companies have quantified social impact in comparable situations;
- When social impact arguments emerge, ask: *"How might we measure this effect?"*
- Encourage students to develop proxy metrics for social outcomes;
- Discuss how investors increasingly incorporate ESG metrics in valuation models.

Challenge 5: Unrealistic Growth Expectations

Challenge Description: Students often underestimate the challenges of scaling an operation with high labor costs and thin margins, leading to overly optimistic growth projections.

Solution Approaches:

- Provide industry benchmarks for growth rates in comparable companies;
- Use structured analysis tools that require explicit assumptions about key growth drivers;
- When optimistic projections emerge, ask: *"What would need to be true for this outcome to occur?"*
- Introduce capital constraints into the discussion: *"How would this growth be financed?"*
- Share case examples of social enterprises that failed due to scaling too quickly.

Empirical research by Wright and McCarthy (2018) found that anticipatory guidance in teaching notes significantly reduced instructional anxiety, particularly among novice instructors. Their comparative study of instructors using teaching notes with and without detailed challenge-solution sections showed measurable differences in classroom climate and instructor confidence.

Approaches to Assessment

Suggested assessment approaches help instructors evaluate student learning. According to Barkley and Major (2016), this section should include both formative and summative assessment options aligned with the stated learning objectives, as shown in Table 1 below. Wiggins and McTighe (2005) advocate for assessment strategies in teaching notes that emphasize authentic performance tasks. Their research indicates that teaching notes with performance-based assessment guidance leads to deeper learning outcomes than those focused solely on knowledge recall.

Table 1. Assessment Approaches and Related Learning Objectives

Assessment Type	Assessment Approach	Description	Implementation	Related Learning Objectives
Formative	Real-time Digital Polling	Electronic polls used at key moments during case discussion to gauge understanding	<ul style="list-style-type: none"> • Characterize Los Angeles Apparel's competitive strategy on a scale of 1-5. • Which stakeholder group benefits most from LA Apparel's business practices? • Rate the sustainability of the ethical manufacturing approach. 	1, 3, 4
Formative	Small Group Deliverables	Quick analysis deliverables that demonstrate application of frameworks	<ul style="list-style-type: none"> • Stakeholder impact analysis for LA Apparel's manufacturing approach. • SWOT analysis of vertically integrated manufacturing in the U.S. • Value chain mapping comparing LA Apparel to traditional apparel manufacturers. 	1, 2, 4
Summative	Individual Case Analysis Paper	4-page analysis paper requiring application of theory and strategic thinking	<ul style="list-style-type: none"> • Apply stakeholder theory to analyze LA Apparel's approach. • Evaluate the economic sustainability of the business model. • Develop and defend strategic recommendations. Consider implementation challenges 	1, 2, 3, 4, 5
Summative	Team Debate: Business Model Viability	Student teams debate opposing positions on model sustainability	<ul style="list-style-type: none"> • Teams prepare 10-minute presentations of assigned position with 5-minute rebuttals. • Questions from class and instructor, evaluated on evidence quality, logical argumentation, and addressing counterarguments. 	1, 2, 3
Summative	Reflection Essay: Balancing Mission and Market	Individual 2-page essay addressing social enterprise tensions	<ul style="list-style-type: none"> • Analysis of how LA Apparel balances social mission with market realities. Reflection on compromises. 	

Supporting Materials

References to additional resources—readings, videos, worksheets—provide instructors with supplementary materials for extending or reinforcing learning. Fink (2013) emphasizes that these resources should be carefully curated to avoid overwhelming instructors. Essential pre-class readings for the *‘Los Angeles Apparel’* case are indicated in Table 2; Instructor resources are summarized in Table 3. Table 4 indicates student resources for both in the class and for post-class reference. Research by Herreid and Schiller (2013) on the use of multimedia resources in case teaching found that teaching notes with annotated resource guides led to more effective resource integration than simple resource lists. Their recommendations include providing explicit rationales for each resource and suggestions for integration points.

Table 2. Essential Pre-class Readings

Reading	Author(s) & Year	Focus	Relevance to Case
Creating Shared Value	Porter & Kramer (2011)	Business strategy	Theoretical framework for analyzing how companies can create economic value through addressing social needs.
Advancing Research on Hybrid Organizing	Battilana & Lee (2014)	Organizational theory	Examines the challenges of organizations pursuing both social and commercial objectives.
Global Commodity Chains and Fast Fashion	Taplin (2014)	Industry analysis	Analyzes the structure and dynamics of global apparel supply chains.
Slow Fashion Movement	Pookulangara & Shephard (2013)	Consumer behavior	Examines consumer attitudes toward ethical and sustainable fashion.

Table 3. Instructor Resources

	Resource	Format	Purpose	Application
Analysis Tools	Apparel Industry Value Chain Map Template	PowerPoint	Analysis tool	Visualizing industry structure and positioning LA Apparel within it
	Social Enterprise Scaling Decision Matrix	Excel	Analysis tool	Evaluating trade-offs between mission fidelity and growth in scaling decisions
	Triple Bottom Line Assessment Framework	Excel	Analysis tool	Structured evaluation of economic, social, and environmental impacts
Visualization Resources	Apparel Industry Cost Structure Comparison Charts	PowerPoint	Visualization	Illustrating cost differentials between various production models
	LA Apparel Supply Chain Visualization	PowerPoint	Visualization	Depicting company's vertical integration approach compared to industry norms
	Ethical Consumer Segment Size and Growth Data	Excel	Visualization	Market data on potential customer segments for ethical apparel
Teaching Aids	Board plan with suggested column structure	PDF	Teaching aid	Organizing whiteboard/discussion space for effective case facilitation
	Discussion leadership cue cards	PDF	Teaching aid	Key questions and transition points to guide classroom discussion
	Apparel Manufacturing Process Flowchart	PDF	Teaching aid	Visual reference for understanding production processes discussed in case

Table 4. Student Materials

Category	Resource	Purpose
For In-class Use	Stakeholder Impact Analysis Worksheet	Helps students analyze effects on different stakeholders
	Strategic Options Evaluation Matrix	Facilitates comparison of strategic alternatives
	Social Enterprise Scaling Challenges Framework	Structures analysis of growth challenges
For Post-class Reference	Ethical Manufacturing Models in Apparel: Case Examples	Provides comparative examples from the industry
	US Apparel Manufacturing: Key Economic Data	Offers context on domestic manufacturing economics
	Comparing Business Models: Fast Fashion vs. Ethical Manufacturing	Contrasts different business approaches

AI Tools for Teaching Note Development

Recent advancements in artificial intelligence (AI) and natural language processing (NLP) technologies offer promising opportunities for casewriters and instructors developing teaching notes. Large language models (LLMs) such as GPT-4 (Brown et al., 2020) and other advanced AI systems can assist in multiple aspects of teaching note development, potentially enhancing both efficiency and quality.

Lund *et al.* (2024) examined ChatGPT's potential impact on academia, discussing how large language models could automate scholarly writing while raising significant ethical concerns in the context of research and publishing. Pereira *et al.* (2024) conducted a qualitative study on generative AI in academic writing, finding it should serve as a complementary tool rather than a replacement. Key concerns include academic dishonesty, new forms of plagiarism, authorship questions, and potential loss of critical thinking skills. Artificial intelligence offers promising capabilities for enhancing the development of teaching notes while reducing the time investment required. However, the most effective approach combines AI's analytical and generative capabilities with human instructors' pedagogical wisdom, contextual understanding, and ethical judgment. Table 5 suggests some applications and benefits to consider when collaborating with AI.

Table 5. AI Applications, Benefits, and Considerations in Teaching Note Development

Application Area	Potential Benefits	Key Considerations
Initial Content Generation	Reduces time spent drafting case synopses, learning objectives, and discussion questions	Human refinement remains essential for accuracy and contextual appropriateness
Theoretical Framework Integration	Suggests relevant frameworks and conceptual applications	Requires disciplinary expertise to evaluate appropriateness of suggestions
Quality Assurance through Critical Review Process	Improves the quality of final teaching materials.	Specifically evaluates factual accuracy, contextual appropriateness, and alignment with learning objectives.
Anticipating Teaching Challenges	Helps predict student misconceptions and discussion roadblocks	Most effective when integrated with instructor's classroom experience
Resource Curation	Suggests relevant readings, activities, and supporting materials	Human evaluation needed for quality, relevance, and accessibility

Best Practices for Effective Teaching Notes

Creating effective case teaching notes requires careful consideration of both content and presentation. Based on research for the article and by case method experts (Shirley, Brooks & Jones 2019; Brooks & Shirley 2022; McGuire & Whaley 2017; Wright, Owens & McCarthy (2016); Erskine, Leenders & Mauffette-Leenders 2011; Mauffette-Leenders, Erskine & Leenders 2007; Barnes, Christensen & Hansen 1994), the following best practices emerged for developing high-quality case teaching notes:

1. Maintain Clarity and Accessibility

Teaching notes should use clear, concise language and avoid unnecessary jargon. Heath (2006) emphasizes that organizational elements such as headers, bullet points, and tables enhance readability and help instructors quickly locate specific information. Readability research by Nilson (2016) found that teaching notes with readability scores at the 10th-12th grade level were rated most useful by instructors across disciplines, and those using consistent typographical conventions for different content types received higher usability ratings.

2. Balance Comprehensiveness with Usability

While teaching notes should be thorough, they must remain practical tools that busy instructors can easily implement. Survey research by Davis and Wilcock (2003) found that instructors preferred teaching notes of 8-12 pages for typical classroom sessions, with strategic use of appendices as an effective approach for balancing comprehensiveness with core usability.

3. Incorporate Multiple Perspectives

Effective teaching notes acknowledge diverse viewpoints and encourage instructors to explore various interpretations with students. Research by Schultz and Quinn (2014) demonstrated that

teaching notes presenting multiple theoretical lenses led to more sophisticated classroom discussions than those presenting a single interpretive framework.

4. Provide Flexibility

While offering structured guidance, teaching notes should allow for instructional creativity and adaptation to different teaching contexts. Hammond (2015) found that teaching notes featuring modular designs with clearly identified core and supplementary elements better supported instructor adaptation while maintaining instructional integrity.

5. Include Empirical Support

When possible, teaching notes should reference research-based evidence supporting the recommended teaching approaches. Mazur (2009) found that teaching notes with embedded research citations led to greater instructor adoption of evidence-based teaching methods.

6. Incorporate Feedback Mechanisms

Creating mechanisms for instructors to provide feedback on teaching notes enables continuous improvement. Action research by Wright, Owens and McCarthy (2016) demonstrated that teaching notes developed through iterative feedback cycles showed measurable improvements in usability and effectiveness.

Effective teaching notes serve as critical bridges between case studies and their successful classroom implementation. By providing instructors with clear guidance while maintaining space for instructional flexibility, well-crafted teaching notes enhance teaching quality and support student learning.

Based on the research reviewed in this article, educators developing teaching notes should consider the eight essential points summarized in Table 6 below for developing effective teaching notes:

Table 6. Essential Points for Developing Effective Teaching Notes

Key Recommendation	Explanation
Structure around clear learning objectives	Define objectives that address multiple dimensions of learning (cognitive, application, integration, human dimension, etc.).
Balance comprehensiveness with usability	Use strategic organization and modular design to create thorough but accessible teaching notes.
Incorporate multiple theoretical perspectives	Include diverse pedagogical approaches to support varied teaching contexts and learning goals.
Ground in evidence-based practices	Provide explicit rationales and research support for recommended teaching approaches.
Leverage appropriate technology	Consider technological affordances that enhance rather than complicate usability.
Establish feedback mechanisms	Create opportunities for continuous improvement through instructor collaboration and input.
Maintain flexibility with structure	Adapt content and structure for specific pedagogical approaches while preserving core elements.
Include guidance for inclusive teaching	Provide strategies for culturally responsive implementation across diverse educational settings.

As educational environments continue to evolve, teaching notes will remain essential tools for preserving and sharing pedagogical expertise. By investing in the development of high-quality teaching notes, educators can enhance instructional clarity while supporting innovation in teaching practice.



Ellen A. Drost is Professor of Management in the College of Business and Economics at California State University, Los Angeles. She teaches MBA and undergraduate courses in Strategic Management, International Business. She has authored over 100 refereed journal articles, conference papers, cases, and book chapters on international human resource management, cross-cultural leadership, entrepreneurship, organizational culture, and research methodology. Her work has appeared, among others, in the *Academy of Management Journal*, *Human Resource Management*, *Asia-Pacific Journal of Human Resource Management*, *Cross-Cultural Management*, *International Entrepreneurship Review*, *International Journal of Entrepreneurial Behavior and Research*, *Thunderbird International Business Review*, *The CASE Journal*, and numerous edited volumes in international business and management. She also serves on editorial boards of various academic journals. Her current research focuses on entrepreneurship, organizational culture, and research methodology. Ellen received her doctorate degree in Management and International Business from Florida International University. She received her management experience in Amsterdam and Brussels as controller for an international marketing organization. She was born in the Netherlands and speaks, reads and writes Dutch, English and French, fluently.



References

- Ambrosini, V., Bowman, C. & Collier, N. (2010). Using teaching case studies for management research. *Strategic Organization*, 8(3), 206-229. <https://doi.org/10.1177/1476127010374254>
- Anderson, L.W. & Krathwohl, D.R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman. https://doi.org/10.1207/s15430421tip4104_2
- Austin, J.E. (1993). *Teaching notes: Communicating the teacher's wisdom*. Harvard Business School Publishing Division, No. 5-793-105.
- Austin, J.E. (2000). *The craft of case teaching and the teaching note*. Harvard Business School Publishing Division, No. N9-300-010.
- Barkley, E.F. & Major, C.H. (2016). *Learning assessment techniques: A handbook for college faculty*. Jossey-Bass.
- Barnes, L.B., Christensen, C.R. & Hansen, A.J. (1994). *Teaching and the case method: Text, cases, and readings*. Harvard Business School Press.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Battilana, J. & Lee, M. (2014). Advancing research on hybrid organizing: Insights from the study of social enterprises. *Academy of Management Annals*, 8(1), 397-441. <https://doi.org/10.5465/19416520.2014.893615>
- Beard, C. & Wilson, J.P. (2018). *Experiential learning: A practical guide for training, coaching and education (4th ed.)*. Kogan Page.
- Brookfield, S.D. & Preskill, S. (2016). *The discussion book: 50 great ways to get people talking*. Jossey-Bass.
- Brown, T.B., Mann, B., Ryder, N., Subbiah, M., Kaplan, J., Dhariwal, P., Neelakantan, A., Shyam, P., Sastry, G., Askell, A., Agarwal, S., Herbert-Voss, A., Krueger, G., Henighan, T., Child, R., Ramesh, A., Ziegler, D. M., Wu, J., Winter, C., ... Amodei, D. (2020). Language models are few-shot learners. *Advances in Neural Information Processing Systems*, 33, 1877-1901. <https://doi.org/10.48550/arXiv.2005.14165>
- Davis, C. & Wilcock, E. (2003). *Teaching materials using case studies*. UK Centre for Materials Education.
- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone. <https://doi.org/10.1002/tqem.3310080106>
- Ellet, W. (2007). *The case study handbook: How to read, discuss, and write persuasively about cases*. Harvard Business School Press.
- Erskine, J.A., Leenders, M.R. & Mauffette-Leenders, L.A. (2011). *Teaching with cases (3rd ed.)*. Richard Ivey School of Business.
- Fink, L.D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. Jossey-Bass.
- Finkel, D.L. (2000). *Teaching with your mouth shut*. Boynton/Cook Publishers.
- Freeman, R.E. (1984). *Strategic management: A stakeholder approach*. Pitman. <https://doi.org/10.1017/cbo9781139192675.003>
- Garvin, D.A. (2003). Making the case: Professional education for the world of practice. *Harvard Magazine*, 106 (1), 56-65.
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice (3rd ed.)*. Teachers College Press.
- Golich, V.L., Boyer, M., Franko, P. & Lamy, S. (2000). *The ABCs of case teaching*. Georgetown University Institute for the Study of Diplomacy.
- Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin.

- Heath, J. (2006). *Teaching and writing case studies: A practical guide*. The Case Centre.
<https://cir.nii.ac.jp/crid/1130282272346129664>
- Herreid, C.F., & Schiller, N.A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching*, 42(5), 62-66. https://www.tandfonline.com/doi/pdf/10.2505/4/jcst13_042_05_62
- Hmelo-Silver, C.E., & Barrows, H.S. (2006). Goals and strategies of a problem-based learning facilitator. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), 21-39. <https://doi.org/10.7771/1541-5015.1004>
- Hmelo-Silver, C.E., Duncan, R.G. & Chinn, C.A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*, 42(2), 99-107. <https://doi.org/10.1080/00461520701263368>
- Hung, W., Jonassen, D.H. & Liu, R. (2008). Problem-based learning. In J.M. Spector, M.D. Merrill, J. van Merriënboer, & M.P. Driscoll (Eds.), *Handbook of research on educational communications and technology* (3rd ed., pp. 485-506). Lawrence Erlbaum Associates.
- Keefer, M.W. (2007). Teaching case pedagogy: Building faculty learning communities around teaching cases. In P. Martens & C. Gordon (Eds.), *Multiple perspectives on the self in SLA* (pp. 231-254). Multilingual Matters.
- Kolb, A.Y. & Kolb, D.A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212.
<https://doi.org/10.5465/amle.2005.17268566>
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review*, 84(1), 74-84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Lund, B.D., Want, T., Mannuru, N.R., Nie, B., Shimray, S. & Wang, Z. (2023). ChatGPT and a new academic reality: Artificial Intelligence-written research papers and the ethic of the large language models in scholarly publishing. *Journal of the Association for Information Science and Technology*, 74 (5), 491-598. <https://asistdl.onlinelibrary.wiley.com/doi/10.1002/asi.24750>
- Mair, J. & Martí, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41(1), 36-44. <https://doi.org/10.1016/j.jwb.2005.09.002>
- Mauffette-Leenders, L.A., Erskine, J.A. & Leenders, M.R. (2007). *Learning with cases* (4th ed.). Richard Ivey School of Business.
- McGuire, S.J.J. & Whaley, G.L. (2017). Guidelines for Writing a Management Teaching Case, *Journal of Case Research and Inquiry*, 3, 236-271.
<https://www.jcri.org/articles/2017/Guidelines%20Management%20Teaching%20Case%20JCRI.pdf>
- McNair, M.P. (1971). *McNair on cases*. Harvard Business School.
- Moon, J.A. (2004). *A handbook of reflective and experiential learning: Theory and practice*. Routledge Falmer.
- Pugh, E. & Drost, E.A. (2020). Los Angeles Apparel: Locally Made in a Global Market. *Entrepreneurship Education and Pedagogy*, 4 (4), 778-796. <https://doi.org/10.1177/2515127420982511>
- Nilson, L.B. (2016). *Teaching at its best: A research-based resource for college instructors* (4th ed.). Jossey-Bass.
- Nilson, L.B. & Zimmerman, B. (2018). *Creating self-regulated learners: Strategies to strengthen students' self-awareness and learning skills*. Stylus Publishing.
- Parker, W.C. & Hess, D. (2001). Teaching with and for discussion. *Teaching and Teacher Education*, 17(3), 273-289. [https://doi.org/10.1016/S0742-051X\(00\)00057-3](https://doi.org/10.1016/S0742-051X(00)00057-3)
- Pereira, R., Reis, I.W., Ulbricht, V. & Santos, N.D. (2024), Generative artificial intelligence and academic writing: an analysis of the perceptions of researchers in training, *Management Research*, 22(4), 429-450. <https://doi.org/10.1108/MRJIAM-01-2024-1501>

- Pookulangara, S. & Shephard, A. (2013). Slow fashion movement: Understanding consumer perceptions—An exploratory study. *Journal of Retailing and Consumer Services*, 20(2), 200-206. <https://doi.org/10.1016/j.jretconser.2012.12.002>
- Porter, M.E. (1996). What is strategy? *Harvard Business Review*, 74(6), 61-78.
- Porter, M.E. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, 86(1), 78-93.
- Porter, M.E. & Kramer, M.R. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), 62-77.
- Savery, J.R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), 9-20. <https://doi.org/10.7771/1541-5015.1002>
- Savery, J.R. (2015). *Essential readings in problem-based learning*. Purdue University Press.
- Shirley, B., Brooks, B. & Jones, E. (2019). Why your case study needs an effective teaching note. *Journal of Case Studies*, 37 (3), 9-14.
- Shirley, B. & Brooks, B. (2022). Writing the teaching note learning outcomes: Excellence in Case Studies: Part 4. *Journal of Case Studies*, 40 (3), 9-15.
- Schulman, L.S. (1992). Toward a pedagogy of cases. In J.H. Shulman (Ed.), *Case methods in teacher education* (pp. 1-30). Teachers College Press.
- Siplor, J.C., Granger, M. & Farhoomand, A. (2021). Writing a Teaching Case and Teaching Note: A Reference Guide. *Communications of the Association for information Systems*, 49 (35), 658-667. <https://doi.org/10.17705/1CAIS.04935>
- Swiercz, P.M. (2015). *SWIF learning: A guide to student-written, instructor-facilitated case writing*. Ginn Press.
- Taplin, I.M. (2014). Global commodity chains and fast fashion: How the apparel industry continues to reinvent itself. *Competition & Change*, 18(3), 246-264. <https://doi.org/10.1179/1024529414Z.00000000059>
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2-3), 172-194. <https://doi.org/10.1016/j.lrp.2009.07.003>
- Wasserman, S. (1994). *Introduction to case method teaching: A guide to the galaxy*. Teachers College Press.
- Wright, A. & McCarthy, S. (2018). Developing case teaching notes: An analysis of critical success factors. *Journal of Management Education*, 42(6), 759-781. <https://doi.org/10.1177/105256291786053>
- Wright, A., Owens, A. & McCarthy, S. (2016). Collaborative development of teaching cases: Methods, benefits and challenges. In P. Blessinger & J.M. Carfora (Eds.), *Innovations in higher education teaching and learning*, Vol. 6, pp. 59-74. Emerald Publishing.



NATIONAL ANNUITY CORPORATION: INTERSTATE HIGHWAY PRIVATE EQUITY

SEUNG HEE CHOI & THOMAS PATRICK

The College of New Jersey

This exercise case involves the analysis of a potential public-private partnership (P3) investment opportunity focused on constructing an interstate highway bypass in the Chicago area. Students are tasked with formulating a comprehensive list of due diligence questions, calculating the project's Internal Rate of Return (IRR), and providing a recommendation to a managing director regarding the feasibility and desirability of further exploring this investment opportunity.

Public-Private Partnerships (P3s)

A P3 is a collaborative arrangement between a public-sector entity (such as a government agency) and a private consortium (such as a private entity). The goal is to jointly develop, finance, operate, and maintain infrastructure projects including transportation, energy, water, and other infrastructure. The public sector provides regulatory oversight, land, and often some funding, whereas the private sector contributes capital, expertise, and operational efficiency. P3s distribute risks and responsibilities between the public and private partners, allowing each party to leverage its strengths (Hakim, Clark & Blackstone 2022; Reinhardt 2011).

Background and Development

The COVID-19 pandemic significantly changed business conduct in America, leading to increased remote work and declining public transportation use due to health concerns. Consequently, car usage rose, resulting in traffic congestion on Illinois city streets. To address this, Illinois identified the need for a multilane highway to reduce congestion and expedite commuter travel (Pandey, Alamri, Khoury & Bakre 2022). However, funding the project posed a challenge due to the state's high public debt and recently improved credit rating from BBB. While additional debt could potentially jeopardize the credit rating upgrade, it is important to note that each debt issue is rated independently. Therefore, even if the new debt issue affects Illinois' overall credit rating, the cost of the issue itself might remain competitive.

Illinois recognized that privately built projects were often completed on time and within budget. Researching successful privately owned express toll lanes in Washington, DC, and on Interstate 77 outside Charlotte, NC, Illinois considered finding a private company to finance and oversee the project. Florida had recently accomplished a similar project by contracting with a large investment company to build an interstate highway that did not charge tolls, with the state paying an annual fee for several years before the highway reverted to state ownership. One potential company with a proven track record in such projects is the National Annuity Corporation (NAC).

Exhibit 1. Washington, D.C.'s Capital Beltway/Interstate highway connectors

Sources: Maryland DOT, Virginia DOT, and The Washington Post



For the exercise, students are tasked with formulating due diligence questions, calculating the project's feasibility through IRR, understanding the significance of IRR, and providing a recommendation to a managing director on whether to pursue this investment opportunity. The exercise allows students to apply theoretical knowledge to real-world scenarios, develop financial analysis, strategic decision-making, and demonstrate understanding of the dynamics of public-private partnerships.

National Annuity Corporation (NAC)

National Annuity Corporation (NAC) is one of the premier 401k pension fund managers in the United States. It receives funds daily that were withheld from employee paychecks by client corporations in each of the fifty states. It also receives matching contributions from employers. Upon retirement, employees have the option of receiving a lump sum payout, an annuity, or some combination of the two. Given the tax implications of a lump sum payout, almost all of the employees opt for a monthly payout.

NAC has groups that invest in publicly traded stocks, publicly traded bonds, real estate, high risk securities, natural resources, private equity, and private placements. In the past, the group investing in natural resources (agriculture, lumber, mining, and fisheries) has been the high performing division. Investments in infrastructure have been a popular way to achieve diversification benefits since the 1950s. In fact, at the time of the American Revolution, most infrastructure was privately owned, providing returns to investors while under state regulations. Infrastructure investments have consistently provided steady, reliable returns across various economic conditions (Andonov, Kraeussl & Rauh 2021).

Prior to retirement, an employee can direct how his or her funds are to be invested. When the stock market, such as the S&P 500, is rising, more funds are typically invested in publicly held equities. When the market is in decline, bonds and private placements gain favor. Upon retirement, many employees opt for an annuity, leaving NAC free to invest these funds where the firm believes they can earn the highest return. For several years, the portfolios of the natural resources and infrastructure groups - such as the Vanguard Real Estate ETF (VNQ), which invests primarily in real estate and infrastructure assets within the United States - has outperformed the S&P Global Infrastructure Index and the S&P 500 Index (Carlo, Kok & Wijnands 2023; Vanguard 2024).

NAC has over one trillion dollars under management. Each year approximately \$50 billion must be reinvested. In addition to this amount, about \$5 billion of new money is transferred to NAC. There is tremendous pressure to get money out the door for new investments. The heads of each investment group campaign for their “share” of the new investment pool of funds. NAC guarantees its clients a minimum of a 3% return. It also has an internally imposed expense ratio of .75%. Thus, the breakeven investment must earn 3.75%. This rate is frequently higher than the Federal Funds rate.

Need for Highway Construction Investment

Illinois found that a shift in employment opportunities to the outskirts of Chicago as a result of COVID-19 in conjunction with a surge of residential construction altered rush hour traffic patterns. An increased volume of traffic placed a burden on roads that were originally designed for local traffic. The proposed new road could reduce commute time by at least twenty minutes in the morning and evening while easing local traffic congestion. The proposed bypass would cut through a blighted area that has long been an eyesore. Rather than facing community resistance, the proposed construction project was warmly received by nearby residents.

The Illinois Department of Transportation announced a request for proposals (RFP) for the construction of an Interstate highway to be built as part of a bypass around Chicago. This would be an eleven-mile road with an approximate price tag of \$1.1 billion. It would be a toll-free road. Illinois already had condemned all property in the path of the road. In return for constructing and maintaining the road, Illinois was willing to pay the equity investor \$89 million (inflation adjusted) a year for thirty years. Twelve construction companies submitted proposals for the project and Illinois narrowed down the list of potential developers to five. Some potential construction companies were eliminated because they had never worked on a project of this size. Others were not considered financially stable enough to carry the project to completion.

Why doesn't Illinois build the road itself? The obvious answer is that it did not have the money and could not budget such an expense. Illinois' financial situation was such that its current credit rating would justify a high interest rate. It is also a known fact that private construction moves at a faster rate than projects constructed by governments.

Since the stream of repayment funds is considered relatively risk-free, projects of this type are normally ninety percent leveraged. A project of this magnitude will cost more than one billion dollars, the construction company with the winning bid needs a financial investment partner.

This potential investment has been brought to the private equity infrastructure group (PEIG) of NAC. Private Equity Infrastructure Groups (PEIGs) are firms that specialize in investments across various infrastructure sectors. These sectors include energy, transportation, infrastructure, and water and waste management. By focusing on these areas, PEIGs aim to provide capital and expertise to support and grow essential infrastructure projects. Examples of the type of projects this group funds include private fiber optic networks, express toll lanes on interstate highways, gas transmission plants, and wind farms. Such groups fund large projects and in the process, become the major (if not the only) stockholder in the venture. If PEIG is the investment partner on this project, it must find other potential lenders. PEIG has a private placement group, but it is viewed as a conflict of interest to be both an equity holder as well as a lender to the same undertaking. If PEIG is interested in obtaining an equity position in a project, it must pair with one of the five construction companies that remain in the running. As luck would have it, PEIG had previously partnered with one of the five construction companies on four previous projects. On top of this, it must secure commitments from other private placement companies for approximately one billion dollars.

These details include items such as cost (\$1.1 billion), timeline for construction (4 years), timeline for operation of the project (30 years commencing from the date the contract is awarded), and the exit strategy for PEIG. In this case the highway will be turned over to Illinois after thirty years.

The construction company expects a 5% equity ownership but is not expected to invest any of its own capital (funds) in the project. The reason for not considering this investment opportunity would be the perceived credit rating of the entity that will eventually purchase the equity created by the investor. Other reasons for not considering an investment project include

political risk, cost, estimated internal rate of return (IRR), availability of investible funds, and a lack of firm knowledge of the type of proposed undertaking.

The project under consideration involves the construction of an interstate highway around Chicago. Illinois has already condemned all property in the path of this road. In return for constructing and maintaining the road, Illinois is willing to pay the investor \$89 million a year for thirty years. The investor would be responsible for routine maintenance of the roadway for the thirty-year duration. Maintenance includes such items as general upkeep of the road, snow plowing, removal of cars in case of an accident, insurance, functioning streetlights, etc.

Exhibit 2. Project Details

Project Cost	\$1.1 billion
Annual Payment to Investor	\$89 million (inflation adjusted)
Project Duration	30 years
Construction Timeline	4 years
Potential Reduction in Commute Time	20 minutes (morning and evening)
Equity Ownership of Construction Company	5%
Leverage Ratio	90% leverage

Feasibility Study

Illinois has agreed to pay \$89 million a year for thirty years, provided that equity holders maintain the highway to Illinois stated specifications beginning upon completion of the highway. The \$89 million amount is not tied to the amount of traffic that uses the highway. The annual payment would be adjusted each year in accordance with the rate of inflation. PEIG has found a highway maintenance company that will maintain the roadway for \$8 million a year, a fee that will also be adjusted for inflation.

Maintenance will be contracted for twenty-six years and will commence when the highway construction has been completed. Administration of this undertaking is expected to cost \$1 million a year. For cash-flow purposes, assume these payments are made at the end of the year. Insurance on the highway is also expected to be \$1 million a year. For cash-flow purposes assume these payments are made at the beginning of the year. Both figures will be adjusted annually as the cost-of-living changes.

Private placement lenders expect an interest rate of 200 basis points (2%) over the average return on twenty- and thirty-year US government bonds. That average rate is currently 3.75%. Given the structure of this project, the private placement firms will receive four annual interests only payments while the road is under construction. After construction is completed, a constant annual payment of interest and principal will be paid at the end of each year for twenty-six years. There will be no balloon payment at the end of the thirty years. The private placement firms, as a group, are expected to invest \$247.5 million at the beginning of the first, second, third, and fourth years, for a total of \$990 million investment. By having the private placement firms make four installments, this will reduce interest costs and provide time to raise the funds to invest in this project. PEIG, if it is the successful equity investor, will fund \$110 million at the start of the construction. This will show the private placement investors that it has some “skin” in the game should problems arise early on.

The construction company expects to receive 5% equity in this project and thus 5% of the potential returns. The returns to the construction company commence once the road is completed and Illinois has made its first inflation-adjusted \$89 million payment at the end of the first year. At the end of the thirtieth year, the successful private equity firm and construction company will turn the highway over to the state of Illinois, and all payments will cease.

Exhibit 3. Overview of Financial and Operational Inputs

Annual Payment to Investor	\$89 million (Inflation-adjusted)
Payment Duration	30 years
Payment Start	Upon highway completion
Inflation Adjustment	Annual payments adjusted for inflation
Maintenance Cost	\$8 million per year
Maintenance Duration	26 years
Administration Cost	\$1 million per year
Administration Payment Timing	End of each year
Insurance Cost	\$1 million per year
Insurance Payment Timing	Beginning of each year
Interest Rate for Private Placement	2% over 3.75% (US govt. bonds average rate)
Construction Payments to Private Placement	\$247.5 million at the beginning of years 1, 2, 3, and 4 Total: \$990 million
PEIG Investment at Start	\$110 million
Construction Equity	5% equity ownership
Returns Commencement	Upon first \$89 million payment from Illinois
Total Investment	\$1.1 billion

Your Assignment

Ava Gardner is a managing director in PEIG. She has asked you, a senior analyst, to help her make a recommendation to her boss (the Chief Investment Officer) as to whether PEIG should further explore this investment opportunity or move on to other potential investment opportunities.

If it agrees to go forward, PEGI would invest ten percent of the total cost of this project. As a first step, Ava wants you to compile a list of due diligence questions. Additionally, she wants you to determine the most likely internal rate of return if PEIG should undertake this highway project as well as your recommendation assuming no cost-of-living increases. In determining the IRR, assume \$247.5 million will be invested at the beginning of each of the first four years to cover construction costs. Insurance and administration expenses will be paid at the beginning of each year.

It is Monday morning and Ava wants your analysis completed before you leave for the weekend. She has a meeting with the CIO scheduled for 10:00 next Monday. She wants to look over your recommendations over the weekend. Both your and Ava's annual bonuses are a substantial portion of your compensation. If Ava's meeting with the CIO leaves her saying, "Gee, I never thought of that," both of you will suffer come bonus time.

Exhibit 4. Excel Template

Consider setting up an Excel Spreadsheet that looks like the following (Dollars in millions)

	T = 0	T=1	T=2	until T =30
Construction cost				
Interest and principal payments				
Insurance payments				
Administrative cost				
Maintenance expense				
Payments from Illinois				
Payment to construction company				
(5% of \$89 million)				
Est. Inflation Rate				
Cash flow				

The internal rate of return (IRR)

IRR, which stands for internal rate of return, serves as a crucial financial metric for evaluating the potential profitability of investments. It represents the annual growth rate that an investment is expected to generate. Investors utilize IRR to evaluate the potential return on different assets. The fundamental principle underlying the internal rate of return (IRR) is to

equate the net present value (NPV) of all cash flows to zero within a discounted cash flow analysis. In essence, this concept involves determining the discount rate at which the present value of annual nominal cash inflows equals the initial net cash outlay for the investment.

Calculating the internal rate of return (IRR) entails determining the discount rate that results in a net present value (NPV) of zero. Given its iterative nature, the IRR function in Excel is often utilized to carry out precise calculations.

The formula for IRR is as follows:

$$0 = NPV \sum_{t=1}^T \frac{C_t}{(1 + IRR)^t} - C_0$$

Where,

C_t =Net cash inflow during period t

C_0 =Total initial investment cost

IRR = Internal Rate of Return

t = Number of time periods

The internal rate of return takes into consideration the time value of money, making it a valuable tool for evaluating capital budgeting projects. It offers a single measure for comparing various investment opportunities. Specifically, when comparing similar investments, a higher IRR generally indicates a more attractive project. However, students must understand that the IRR assumes the reinvestment of cash flows at the same rate, which may not always be realistic.

Additionally, complex cash flow patterns can lead to multiple solutions, known as multiple IRRs. It's also crucial to note that IRR doesn't factor in the scale of investment or project size. Moreover, while it is often correct that a higher IRR indicates a more attractive project, this statement does not hold true in all cases. For instance, if the cash flow pattern is inverse (*i.e.*, a cash inflow is followed by a series of cash outflows), the comparison becomes inaccurate.

Therefore, it is important to consider the specific cash flow patterns when using IRR for investment evaluations.

While IRR serves as a valuable metric for assessing the potential profitability of an investment, it's imperative to complement its use with an evaluation of other pertinent factors during the decision-making process. Factors such as the associated risks, opportunity costs, and specific economic and industry trends should be considered alongside IRR to make well-informed investment decisions. By taking a comprehensive approach that considers a wide array of variables, investors can gain a more holistic understanding of the potential outcomes and risks associated with any investment opportunity, thereby making informed and effective decisions for their portfolios.

Evaluating Infrastructure: IRR, Risks, and Strategic Funding

- How does the Internal Rate of Return (IRR) account for the impact of inflation on future cash flows when calculating the project's IRR?
- How can we assess the potential risks, financial impacts of delays, community reactions, and the state's financial stability when evaluating large infrastructure projects?
- What general questions should be asked to assess the feasibility, reliability of involved parties, and overall management capability when evaluating an investment project?
- How can PEIG attract long-term investment partners, make the project appealing to a broad range of investors, and address the challenges and implications of committing to a long-term, illiquid investment?



Seung Hee Choi is a Professor of Finance at The College of New Jersey, renowned for her extensive research and teaching across a broad spectrum of topics. Her expertise encompasses Corporate Finance, ESG, Real Estate Finance, and Investment, demonstrating a diverse and impactful research and teaching portfolio. She can be reached at choi@tcnj.edu.



Thomas Patrick is a Professor of Finance at The College of New Jersey where he created the finance department. His expertise is business valuation. He has served as a consultant to over one hundred corporations, several trade associations, and several government agencies. He was a pioneer in on-line education. He can be reached at tpatrick@tcnj.edu.



References

- Andono A., Kraeussl, R. & Rauh, J. (2021) Institutional Investors and Infrastructure Investing, *The Review of Financial Studies*, 34, 8: 3880–3934.
- Carlo, A., Eichholtz, P., Kok, N. & Wijnands, R. (2023). Pension fund investments in infrastructure, *Journal of Asset Management*, 24: 329-345.
- Hakim, S., Clark, R.M. & Blackstone, E.A. (2022a) *Handbook on Public Private Partnerships in Transportation, Vol II: Roads, Bridges, and Parking*. Springer Publishing
- Hancock, P. (2023) Moody's gives Illinois another credit upgrade, *Capitol News Illinois*. Retrieved from <https://www.nprillinois.org/illinois/2023-03-14/moodys-gives-illinois-another-credit-upgrade> and <https://chronicleillinois.com/government/moodys-gives-illinois-another-credit-upgrade-to-put-it-at-grade-a-category/>
- Public-Private Partnerships (P3s), Retrieved from [https://www.transportation.gov/buildamerica/p3#:~:text=Public%20private%20partnerships%20\(P3s\)%20are,in%20the%20delivery%20of%20projects](https://www.transportation.gov/buildamerica/p3#:~:text=Public%20private%20partnerships%20(P3s)%20are,in%20the%20delivery%20of%20projects)
- Pandey, A. Khoury & Bakre (2022). Equitable Dynamic Pricing of Express Lanes - Final Report, US Department of Transportation Grant, Center for Advanced Transportation Mobility, North Carolina Agricultural and Technical State University.
- Reinhardt, W. (2011). The role of private investment in meeting U.S. transportation infrastructure needs. *Public Works Financing*, 260: 1-31.
- The study of I-77 Express Lanes in Charlotte, Retrieved from https://www.i77express.com/new_article/heres-how-i-77-express-is-doing-in-charlotte-three-years-in/?form=MG0AV3
- Vanguard (2024). Vanguard Real Estate ETF (VNQ) Proxy Statement, Retrieved from <https://investor.vanguard.com/>
- Washington, D.C.'s Capital Beltway/Interstate-270 highway connector, Retrieved from <https://www.washingtonpost.com/transportation/2023/02/11/virginia-maryland-beltway-express-lanes/>



A DATA ANALYTICS EXERCISE USING TABLEAU TO PERFORM TESLA'S COST-VOLUME-PROFIT ANALYSIS

XIANGGE WANG & HAIHONG HE
California State University, Los Angeles

Introduction

To align with the evolving demands of the accounting profession, college accounting programs need to implement a fully integrated curriculum that combines core accounting principles with advanced data analytics and critical thinking skills (Dow, Jacknis & Watson 2021). According to the recently updated AACSB Accounting Standards A5 (AACSB 2025), accounting degree programs should integrate: *“Data analytics including, for example, statistical techniques, clustering, data management, modeling, analysis, text analysis, predictive analytics, learning systems, or visualization.”*

Our exercise responds to calls from AACSB and the accounting profession. In this exercise, students are guided to use one of the most widely adopted and powerful visual analytics platforms, Tableau (Hoelscher & Mortimer 2018), to clean data, conduct regression and predictive analyses, and create data visualization to help them perform cost-volume-profit (CVP) analysis and make decisions. Students can work in teams and present their findings to the class. After completing this exercise, students can strengthen their understanding of CVP analysis, improve their critical thinking and communication skills, and develop a data analytics mindset, which are crucial skills for future accounting professionals. This exercise is designed to be used in a Principles of Managerial Accounting or Cost Accounting course to expose accounting and business major students to data analytics tools and how data analyses can be used for decision-making.

The authors developed the exercise for class discussion rather than to illustrate either effective or ineffective handling of the situation. The exercise and its accompanying instructor's manual were anonymously peer reviewed by the *Journal of Case Research and Inquiry*, a publication of the Western Casewriters Association. Qualified educators may request the instructor's manual at editor@jcri.org. The authors and the *Journal of Case Research and Inquiry* grant state and nonprofit institutions the right to access and reproduce this manuscript for educational purposes. For all other purposes, all rights are reserved to the authors. Copyright © 2025 by Xiangge Wang and Haihong He. Contact Xiangge Wang, 5151 State University Drive, Los Angeles, CA 90032, USA, xwang65@calstatela.edu

In the following sections, we outline the learning objectives, summarize implementation guidelines, and discuss the effectiveness of the exercise, followed by concluding remarks. Two appendices are included at the end: Appendix A contains the student exercise handout, and Appendix B provides the grading rubric. A detailed instructor's manual, along with the two Excel data files, is available upon request.

Exercise Learning Objectives

This exercise aligns with higher-order learning goals based on Bloom's Taxonomy (Bloom 1956; Anderson *et al.* 2001). Bloom's Taxonomy is a widely used educational framework that outlines six levels of progressive learning: remember, understand, apply, analyze, evaluate, and create. These levels represent a hierarchy of learnings that moves from basic memorization to developing more complex critical-thinking skills.

The purpose of this exercise is to expose students to data analytics by using critical-thinking skills to apply visualization techniques to real-world data of Tesla and analyze the CVP relationship. Specifically, students are required to use Tesla's quarterly financial data, quarterly delivery, and production data to accomplish the following learning objectives, aligned with Bloom's Taxonomy framework, as shown in Exhibit 1.

Exhibit 1. Exercise Learning Objectives Aligned with Bloom's Taxonomy Framework

Source: Authors' Note

Bloom's Taxonomy	Exercise Learning Objectives
Bloom level 3 Apply	1. Identify the appropriate variables for cost, volume, and profit in CVP analysis. 2. Use Tableau to perform data analysis and create visualizations to determine the break-even point. 3. Use Tableau to conduct linear regression analysis.
Bloom level 4 Analyze	4. Analyze the impact of cost and volume on profit using Tableau.
Bloom level 5 Evaluate	5. Assess Tableau outputs to determine logical interpretations and arguments.

Cost behavior and cost estimation are among the most important concepts that students must grasp in managerial/cost accounting (Stout 2015). These concepts are the foundation for learning CVP analysis, cost prediction, budgeting, variance analysis, etc. After completing the exercise, students learn to identify the appropriate variables for the different components of CVP analysis. By observing the trendline of the Cost of Goods Sold, Operating Income Before Depreciation, and Selling and Administrative Expenses, students are able to determine the cost behavior (whether they are variable costs, fixed costs, or mixed costs) of each variable and the break-even point. Exhibit 2 demonstrates the cost behavior of variable and fixed costs and how to identify the break-even point. Exhibit 3 is a YouTube video that uses Airbnb as an example to explain the details of the CVP analysis.

Exhibit 2. CVP Graph

Source: Weygandt, Kimmel & Mitchell (2021)

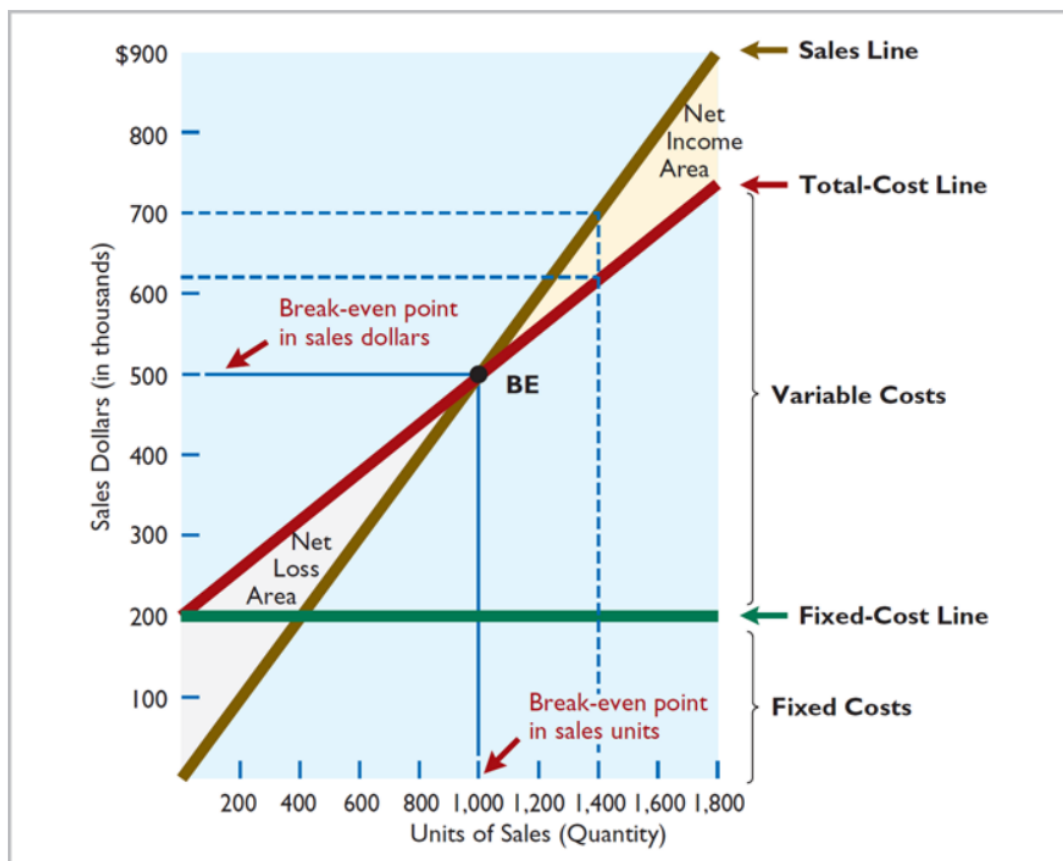
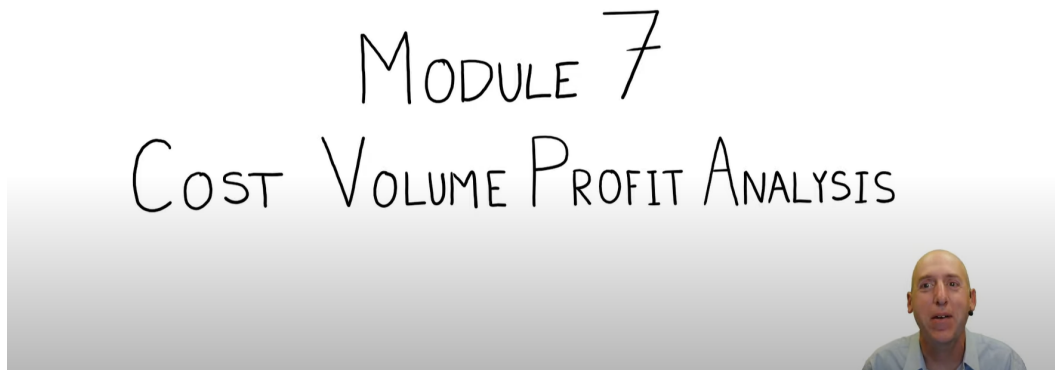


Exhibit 3. Breakeven Point and CVP Analysis*Source: Bell (2022)*<https://www.youtube.com/watch?v=tuKLU6aQnJg>

Students in managerial/cost accounting courses usually learn the relatively simplistic methods of estimating cost functions, e.g., scatter plots and the high-low method. However, the coverage of regression analysis in the textbooks tends to be incomplete and superficial (Stout 2015). It is important to develop data analytics skills to use large datasets to conduct regression analysis.

Exhibit 4 compares the cost equation lines from the regression analysis and high-low method. The regression analysis tries to find a line that best fits the dataset by minimizing the total distance between the line and all data points. While the high-low method only uses two data points, which may be easily affected by outliers. Therefore, regression analysis can better explain the relationship between variable and fixed cost components and the total costs. It can also predict the total costs based on the value of the predictors. More information about regression analysis can be found on the website <https://www.graphpad.com/guides/the-ultimate-guide-to-linear-regression>.

Exhibit 4. Comparison of Cost Equation Lines from Regression Analysis versus High-low Method

Source: Weygandt, Kimmel & Mitchell (2021)

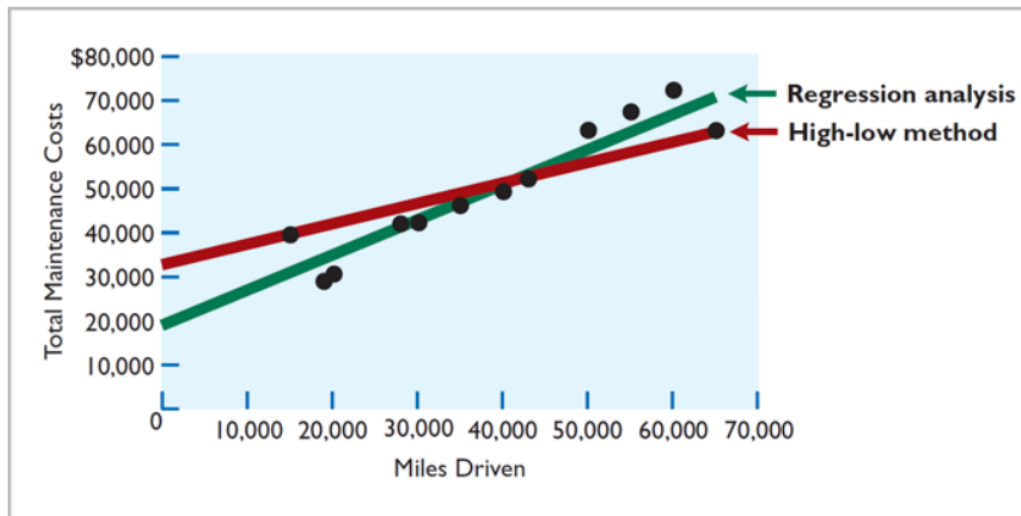


Exhibit 5 provides a good explanation of the output report from the regression analysis generated in Excel. Through this exercise, our goal for students is to use Tableau to conduct regression analyses to estimate the variable costs and fixed costs components for two time periods and create a table with the quarterly cost data to observe the change in costs and profit over the decade. Lastly, students learn to interpret financial data and data visualizations to explain Tesla's business model and success.

Exhibit 5. Cost Behaviors: Using Regression Analysis

Source: ProfAlldredge (2018)

<https://www.youtube.com/watch?v=dAD6fGKrcQo>



Exercise Implementation Guidance

We expect instructors with no experience using Tableau to be able to teach this exercise with minimal training. Before the semester starts, the instructor can request the free instructor and student licenses at the following website: <https://www.tableau.com/academic/teaching>. At the beginning of the CVP analysis chapter, the instructor can provide students with the exercise scenario, instructions, and videos showing how to visualize and analyze data in Tableau. Students are told to install Tableau on their computers using the student licenses and watch free Tableau training videos on page <https://www.tableau.com/learn/training/20212>, in the Creator section.

- Watch the following three videos in Getting Started (9 videos):
 - Getting Started (1 min)
 - Connecting to Data (2 min)
 - The Workspace Area (2 min)
- Watch “Connecting to Data” Video (17 min)

The exercise package for students to download from the course website includes the exercise document, an Excel file containing quarterly product and delivery data, and another Excel file with quarterly performance information. The quarterly product and delivery data are manually collected and the quarterly performance data are obtained from the Compustat database. Students are given Tesla's company information and instructed to use Tableau software to analyze cost behavior and perform a CVP analysis for Tesla. Two key questions addressed are: when did Tesla break even, and how have its costs and profits evolved over the past decade?

To guide students to find answers to these questions, we created two assignments for this exercise. Assignment 1 is worth 30% and requires students to use the provided data to identify the cost, volume, and profit variables for the CVP analysis. Assignment 2 is worth 70% and requires students to use Tableau to create data visualizations, conduct regression analyses, and assess Tesla's profitability.

For Assignment 1, we suggest the following discussion questions:

- Explain how you will use the data to conduct the CVP analysis. Specifically, identify the variables that will represent cost, volume, and profit, and define the profit equation using these variables.
- The dataset uses Operating Income before Depreciation. Explain why using Operating Income before Depreciation, rather than Operating Income after Depreciation, is more appropriate for Tesla's CVP analysis.
- Discuss how conducting a CVP analysis with historical data can provide insights into future performance.

For Assignment 2, we suggest the following discussion questions:

- Use Tableau to visualize the operating income trend and identify the break-even point where Tesla began the positive profit trend.
- What contributes to the success of Tesla? Please use Tableau to support your argument.
 - Is it because of the lower manufacturing cost?
 - Is it because of increased production capacity and delivery?
 - Will Tesla continue its growth in the next year?

The instructor can ask students to work in groups so that students can learn this new data analytics tool together and share what they find with group members. The instructor can ask each group to present one part of the assignment to the class in the last three weeks of the semester, which helps students practice their presentation and communication skills.

In each class session, two groups can present their findings, their learning progress, and how they use Tableau to create the graphs or visualizations. In this way, students have the chance to share the challenges they face and how they overcome them, and the whole class can join the discussion.

Student Feedback on the Exercise

Students enrolled in an undergraduate cost accounting course at a large state university completed the exercise during the Spring 2024 semester. This exercise was assigned as a group project. The instructor asked students to form groups of three to four students and provided six weeks between the initial exercise introduction and the due date. This group project represented 10 percent of students' overall grade.

The instructor asked students to complete a pre-exercise survey before introducing the exercise in class and complete a post-exercise survey after students turned in their work. Student participation was voluntary and anonymous.

For the pre-exercise survey, the instructor asked students *“How much do you know (accounting) data analytics?”* 52% of the students had zero to minimum knowledge and 41% took at least one relevant course. Only 7% of the students had some working experience in data analysis. The results highlight the need for the integration of more data analytics exercises into the accounting curriculum. Another question asked students *“Have you used Tableau before?”* 93% of students did not have any experience of using Tableau before. Our exercise provides a great opportunity to learn this new data analytics tool.

The same seven questions on both surveys are on a seven-point Likert scale where 1 is *“not strong at all”* and 7 is *“very strong.”* Exhibit 6 presents the results from the two surveys.

Exhibit 6. Pre-Exercise and Post-Exercise Survey Results

Source: Survey Data Collected by the Authors

Question	Pre-Exercise	Post-Exercise
My current working knowledge of Tableau is:	1.54	4.67
My current working knowledge of how to classify costs into variable costs, fixed costs, and mixed costs is:	3.84	5.00
My current working knowledge of how to perform a Cost-Volume-Profit (CVP) analysis and identify the break-even point is:	4.05	4.86
My current working knowledge of how to calculate the unit cost to manufacture a product is:	4.27	4.67
My current working knowledge of how to use regression analysis to estimate a firm's variable costs and fixed costs is:	3.11	4.64
My current working knowledge of how to use Tableau to run regression analysis is:	2.11	5.00
My current working knowledge of how to use Tableau to create data visualizations, e.g., graphs, pie charts, tables, etc. is:	2.50	5.71

The survey results showed that students' working knowledge of Tableau, using Tableau to run a regression analysis and create visualization increased significantly. The exercise also deepened

students' understanding of identifying variable, fixed, and mixed costs, and how to conduct CVP analysis. These results indicate the exercise was effective at achieving the learning objectives.

In the post-exercise survey, we asked some qualitative questions to students to gather their feedback and perceptions on the exercise. Students were asked *"This exercise will help me in my career. If so, how? If not, why not?"* Below are some of their responses.

"This project provided a beginner experience on a new tool that will allow me to analyze data on a large scale and help me make decisions based on the data provided."

"It will allow me to say I have proficient experience in Tableau in job interviews, which can be a deciding factor in whether I get hired or not."

"Yes, it helps to get some working knowledge of this program and will be a good jumping off point to working more deeply with it."

"I believe it will, knowing how to turn data into a presentable form for other departments to understand I believe is vital and very useful for accountants"

"I believe it will help my career because it has given me options to make complicated data easier to read."

Overall, students believed that this exercise helped them with data analytics skills and their future job applications. Then students were asked *"What I liked about this project was that ..."* Below are some responses:

"It allowed me to use this program in a well-detailed and guided manner which was low stakes for a first run."

"It was a fun exercise to understand the use of tableau and how a company like Tesla came to have great success by dialing their costs down"

"Learning a new program and being able to try something practical and being given a project like as if I was in a meeting. It was fun doing something outside of our usual class work"

Students also mentioned that they hoped this exercise was introduced earlier in the semester. When introducing this exercise, an instructor can give eight or even ten weeks for students to learn Tableau and complete this exercise.

Peer Instructor Feedback on the Exercise

Two accounting professors specializing in managerial accounting instruction were invited to review this exercise and provided positive comments. One notable comment is that this exercise can bolster accounting students' academic understanding of the fundamental cost-volume-profit analysis, particularly the break-even analysis. Students can gain a deepened understanding of the interrelationship between revenue, costs, production capacity, and profitability, helping them make better CVP analyses and managerial accounting decisions. Additionally, the regression analysis in this exercise helps students develop skills in utilizing linear regression models in future accounting research and case analysis courses.

Another notable comment is that this exercise strengthens students' critical thinking and problem-solving skills in professional accounting settings. Applying real-world Tesla scenarios, this practice offers students valuable strategic analysis training with hands-on data analysis and visualization experience. Students utilize Tableau functions to transfer raw data into credible analysis and forecast reports to identify Tesla's business success factors in its electric vehicle manufacturing processes. This hones students' technological and managerial accounting proficiencies, which will be crucial for their future accounting careers, which are changing rapidly with the development of high technologies (AICPA 2024).

Conclusion

This comprehensive exercise combines CVP analysis with data analytics skills using Tableau. It equips future accounting and business professionals with the required technical skills and highlights their ability to apply these skills in strategic decision-making, reporting, and performance. Through data visualization and dashboards, accountants and managers can gain insights into cost structures, break-even points, and profitability, enhancing control over the financial aspects of the business.

This exercise uses publicly available data from a real-world business – Tesla, to spark students' interest in using data analytics to apply cost, profit, and volume relationships acquired in managerial and cost accounting. It encourages students to delve deeper, fostering critical thinking skills as they uncover underlying factors. Moreover, it provides an opportunity for students to enhance their proficiency in utilizing the widely adopted visualization tool, Tableau.

This exercise addresses the pressing need in accounting curricula to provide instruction on regression analysis and predictive analytics. As the accounting profession undergoes a technological shift, predictive analytics skills are frequently identified as areas where educational programs fall short or where professionals need to catch up (Dawkins 2023).

Finally, this exercise can be further developed to ask students to explore the role of government support in Tesla's success, prompting them to consider ESG reporting and how regulators can incentivize firms to achieve these goals.



Appendix A. Student Materials and Instructions

Purpose

In this assignment, you will have the opportunity to analyze Tesla's production and financial data using Tableau to conduct a Cost-Volume-Profit (CVP) analysis. This assignment enhances your understanding of a key managerial accounting concept by applying it to a real-world business scenario – Tesla Inc. Additionally, it addresses the critical need for students to develop and acquire data analytics skills.

Learning Outcomes

You can expect to:

1. show the appropriate variables for cost, volume, and profit in CVP analysis.
2. use Tableau to perform data analysis and create visualizations to determine the break-even point.
3. use Tableau to conduct linear regression analysis.
4. analyze the impact of cost and volume on profit using Tableau.
5. assess Tableau outputs to determine logical interpretations and arguments.

Background of Tesla

Tesla, Inc., headquartered in Austin, Texas, is a multinational automotive and clean energy company. Founded in July 2003 by Martin Eberhard and Marc Tarpenning as Tesla Motors, the company gained significant momentum when Elon Musk joined as its largest shareholder in February 2004 and later became CEO in 2008. Tesla has played a pivotal role in the automotive industry's shift from traditional motor vehicles to electric vehicles (EVs).

Tesla went public through an initial public offering (IPO) on NASDAQ on June 29, 2010. In the same year, Tesla began the production of the Model S sedan. In 2015, Tesla began the production of the Model X SUV. Both models are expensive luxury cars. The company then shifted its strategy to produce more affordable, high-volume vehicles, such as the Model 3 sedan in 2017 and the Model Y crossover in 2020. In June 2021, the Model 3 became the first electric car to surpass 1 million units sold globally (Shahan 2021). In 2023, the Model Y became the best-selling vehicle of any kind worldwide (Munoz 2024). Recently, Tesla launched the Tesla Semi truck in 2022 and the Cybertruck pickup in 2023.

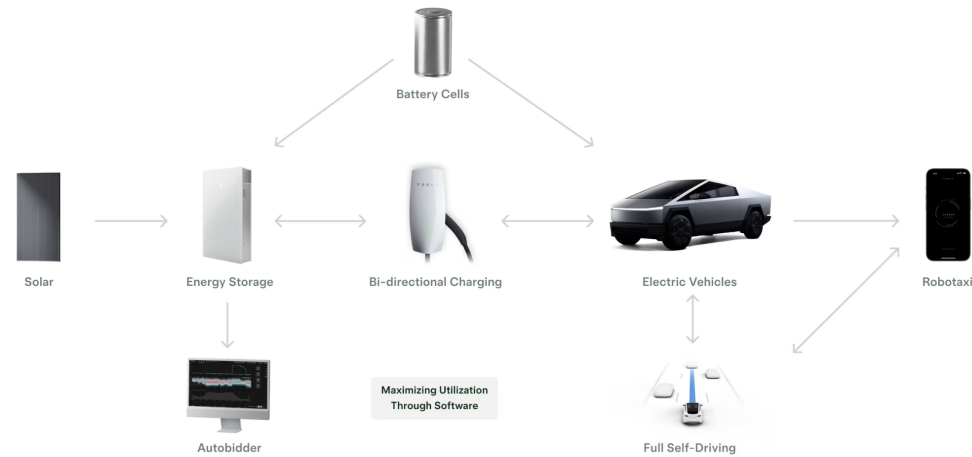
In addition to electric vehicles, Tesla's subsidiary, Tesla Energy, has developed, built, sold, and installed solar energy generation systems and battery energy storage products for residential, commercial, and industrial customers. The company's mission is to *"design and manufacture a fully integrated ecosystem for energy and transportation, with all our products working together to maximize their impact."* ([About | Tesla](#)) Exhibit 1 presents Tesla's main products and the integrated ecosystem.

Exhibit 1. Tesla's Main Products and the Integrated Ecosystem

Source: <https://www.tesla.com/impact>

Providing an Ecosystem

We design and manufacture a fully integrated ecosystem for energy and transportation. Our products work together to maximize their impact.



Tesla also invested heavily in expanding its production capacity, constructing five Gigafactories worldwide. In March 2023, Tesla announced plans to open Gigafactory Mexico in 2025. Exhibit 2 presents the location, number of employees, and the products produced of Tesla's primary facilities.

Exhibit 2. Tesla's Primary Facilities

Source: https://en.wikipedia.org/wiki/Tesla,_Inc.#Energy_products

Primary facilities operated by Tesla

Opened ↕	Name ↕	City ↕	Country ↕	Employees ↕	Products ↕
2010	Tesla Fremont Factory	Fremont, California	United States	22,000	Model S, Model X, Model 3, Model Y
2016	Gigafactory Nevada	Storey County, Nevada	United States	7,000	Batteries, Powerwall, Semi
2017	Gigafactory New York	Buffalo, New York	United States	1,500	Solar Roof, Supercharger
2019	Gigafactory Shanghai	Shanghai	China	20,000	Model 3, Model Y, Supercharger
2022	Gigafactory Berlin-Brandenburg	Grünheide	Germany	10,000	Model Y
2022	Gigafactory Texas	Austin, Texas	United States	12,000	Model Y, Cybertruck

Tesla has had a transformative impact on the automotive industry and contributed to the worldwide effort for a greener environment. The road reliability of Tesla EVs, the revolution of enhancing EV performance by software updates, and the direct-to-consumer sales model have not only made Tesla a significant competitor but have also redefined the automotive industry.

As of 2023, it stands as the world's most valuable automaker—an impressive feat for a company that's still relatively young. In 2022, Tesla achieved a significant milestone by dominating the battery electric vehicle market, securing an impressive 18% market share. The company's exceptional performance has translated into substantial growth in production and sales. In 2023, Tesla reported delivering approximately 1.8 million vehicles, representing a staggering 38% increase over the previous year. Cumulatively, by April 2023, Tesla had sold a remarkable 4 million electric cars, solidifying its position as an industry leader.

Tesla's Financial Success and Controversy

Tesla has received tremendous business success over the past decade. Exhibit 3 provides a quick summary of Tesla's performance in the ten-year period from 2013 to 2022. In 2013, Tesla delivered 22,442 vehicles, generated \$2,013 million in revenue, and earned \$45 million in operating income. Fast forward ten years to 2022, Tesla delivered 1,313,851 vehicles, generated \$81,462 million in revenue, and achieved an operating income of \$17,579 million. Tesla's deliveries increased 60 times, revenue increased 40 times, and operating income increased 390 times. When dividing the operating income by the number of delivered vehicles, Tesla's operating income per delivery was \$2,023 in 2023 and jumped to \$13,379 in 2022.

Exhibit 3. Comparison of Tesla's Key Performance Indicators in 2013 and 2022

Source: Created from the Financial Statements of Tesla

	2013	2022
Total Delivery	22,442	1,313,851
Revenue	\$2,013 million	\$81,462 million
Operating income	\$45 million	\$17,579 million
Operating income per delivery	\$2,023	\$13,379

On the other hand, Tesla has faced lawsuits, government scrutiny, and journalistic criticism. Elon Musk, in particular, has been criticized for repeatedly delaying both the production and release dates of Tesla products. Additionally, Tesla has received significant government subsidies over time. Exhibit 4 summarizes Tesla's government subsidies since its inception. These federal, state, and local government subsidies and incentives, primarily in the form of tax credits and loans, have positively impacted Tesla, particularly during its early stages. Critics argue that these subsidies have played a major role in Tesla's growth and expansion.

Exhibit 4. Summary of Tesla's Subsidies Since 2000Source: <https://subsidytracker.goodjobsfirst.org/parent/tesla-inc>**Subsidy Tracker Parent Company Summary**

Parent Company Name: Tesla Inc.
Ownership Structure: publicly traded (ticker symbol Nasdaq: TSLA)
Headquartered in: California
Major Industry: motor vehicles
Specific Industry: motor vehicles and energy

SUBSIDY SUMMARY	SUBSIDY VALUE	NUMBER OF AWARDS
State/Local	\$2,496,769,455	29
Federal (grants and allocated tax credits)	\$333,086,039	80
TOTAL	\$2,829,855,494	109
LOAN / BAILOUT SUMMARY	TOTAL FACE VALUE	NUMBER OF AWARDS
State/Local loans, bond financing and venture capital	\$0	0
Federal loans, loan guarantees and bailout assistance (not including repayments)	\$466,500,000	2
TOTAL	\$466,500,000	2

Time Period for Federal Awards: FY2000 to the present

Assignment

In this exercise, you will analyze production and financial data from Tesla to conduct a Cost-Volume-Profit (CVP) analysis and use data analytics to support your argument on whether Tesla's growth is driven by its own success or government support. The exercise is divided into two parts: **Assignment 1** and **Assignment 2**.

- **Assignment 1** (30 points): Answer three discussion questions related to CVP analysis.
- **Assignment 2** (70 points): Use the provided data and Tableau to analyze Tesla's profit.

Detailed instructions for both assignments are provided below.

Assignment 1 – Conceptual understanding of CVP Concept

The quarterly financial data of Tesla and quarterly delivery and production data from 2013 to 2022 are provided in two files. The variables in the two files are summarized in Exhibit 5.

Exhibit 5. Variable Descriptions

Source: Authors' Notes

File Name	Variables	Description of Variables
production.xlsx	Earnings Date	Date of releasing financial results
production.xlsx	Datadate	Fiscal period end date
production.xlsx	Year	Fiscal period-year
production.xlsx	Quarter	Fiscal period-quarter
production.xlsx	Production_S_X	Production quantity of Model S/X
production.xlsx	Production_3_Y	Production quantity of Model 3/Y
production.xlsx	Total Production	Total production quantity
production.xlsx	Deliveries_S_X	Delivery quantity of Model S/X
production.xlsx	Deliveries_3_Y	Delivery quantity of Model 3/Y
production.xlsx	Total deliveries	Total delivery quantity
financial.xlsx	datafctr	Fiscal year and quarter
financial.xlsx	COGSQ	Quarterly cost of goods sold
financial.xlsx	OIBDPQ	Quarterly operating income
financial.xlsx	REVTQ	Quarterly revenue
financial.xlsx	XOPRQ	Quarterly operating expenses
financial.xlsx	XSGAQ	Quarterly selling and administrative expenses

Required:

1. Explain how you will use the data to conduct the CVP analysis. Specifically, identify the variables representing cost, volume, and profit, and define the profit equation using these variables. (10 points)
2. The dataset uses Operating Income before Depreciation. Explain why using Operating Income before Depreciation rather than Operating Income after Depreciation is more appropriate for Tesla's CVP analysis. (10 points)
3. Discuss how conducting a CVP analysis with historical data can provide insights into future performance. (10 points)

Assignment 2 CVP analysis assisted by Tableau

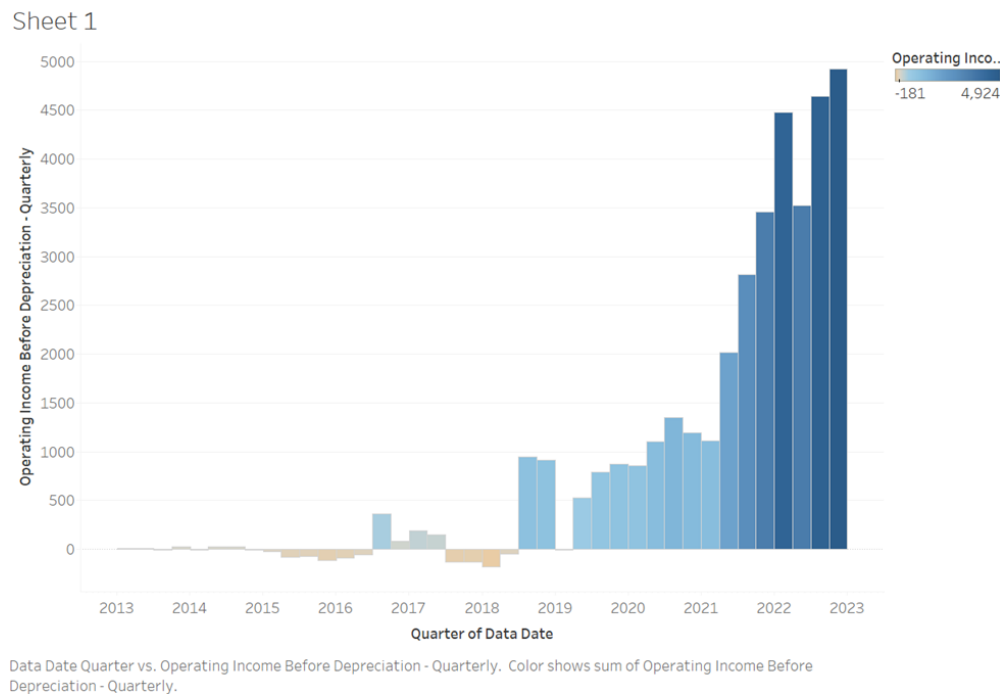
Tableau is a leading data visualization software. Tableau Desktop is required for this project. A free instructional license is available. You will use Tableau to perform data visualization and data analysis to answer questions related to Tesla's break-even point, cost trend, cost behavior, the impact of volume on business, and business forecast.

Required:

1. Use Tableau to visualize the trend in operating income similar to Exhibit 6 and identify the break-even point when Tesla started its positive profit. First, use Tableau to join the two datasets, clean the data if necessary, and create operating income bar charts similar to the example shown (note that you're not limited to producing the exact same graph—other meaningful visualizations are welcome). Then, explain and interpret your visualization in relation to Tesla's break-even point. (20 points)

Exhibit 6. Tesla's Quarterly Operating Income from 2013 to 2023

Source: Created by Authors in Tableau



2. Your next task is to use Tableau to analyze data and identify the factors that contribute to Tesla's growth. Follow the steps below to conduct a CVP analysis in Tableau, and for each step, provide a brief interpretation of your Tableau visualization. (50 points)
 - a) Use Tableau to create a graph plotting Revenue, Cost of Goods Sold, Selling and General Administrative Expenses, and Operating Income against Total Deliveries.
 - b) Plot linear regression graph in Tableau to examine the Cost of Goods Sold for the entire period, as well as for two sub-periods: from Q1 2013 to Q2 2017, and from Q2 2018 to Q2

2022. Before Q3 2017, Tesla only produced high-end vehicles, the Model S and Model X. Tesla introduced the lower-end Model 3 and Model Y, beginning production and delivery in Q3 2017, with scaling of production and deliveries starting in Q2 2018. Due to the significant difference in unit costs between high-end and low-end vehicles, as well as the low delivery volume of Model 3 and Model Y in their initial quarters, you can exclude a few transitional quarters when defining the sub-periods.

The linear regression model is $Y = a * X + W$

Y= cost of goods sold

X= variable cost per vehicle

W=quarterly fixed cost

c) Perform various analyses and visualizations to compare costs and revenue in relation to total deliveries:

- Create a visualization to show the trend of total deliveries over the data period.
- Calculate and present a table showing the average COGS and average SG&A costs for each year.
- Calculate and present a table showing the year-over-year percentage change in average COGS and SG&A costs.

Describe the cost behavior of COGS and SG&A with the increase in total deliveries.

d) Use Tableau's "Forecast" function to predict the Operating Income for the next year. From the forecast visualization, determine the projected Operating Income for Q1 2024.

Appendix B Assignment Grading Rubrics

Assignment 1 Grading

Discussion Questions	Excellent (90-100%)	Satisfactory (70-89%)	Needs Improvement (< 70%)
1. Explain how you will use the data to conduct the CVP analysis. Specifically, identify the variables representing cost, volume, and profit, and define the profit equation using these variables. (10 points)	Thoroughly identifies and explains all relevant cost, volume, and profit variables, including distinctions between financial and managerial accounting profit equations. Clearly describes the use of delivery quantity as volume and explains how fixed and variable components are identified.	Identifies most cost, volume, and profit variables, with a reasonable explanation of their relevance. Mentions delivery quantity but may lack detail in differentiating fixed and variable costs or connecting to the profit equation.	Fails to identify key variables or provide clear explanations. Omits critical aspects, such as the distinction between fixed and variable costs or the rationale for using delivery quantity.
2. The dataset uses Operating Income before Depreciation. Explain why using Operating Income before Depreciation rather than Operating Income after Depreciation is more appropriate for Tesla's CVP analysis. (10 points)	Provides a logical explanation of why Operating Income before Depreciation is appropriate, emphasizing Tesla's growth, capital intensity, and the clarity it offers for CVP analysis. Distinguishes between the operational focus of CVP and the role of fixed costs like depreciation.	Offers a reasonable explanation, highlighting the relevance of Operating Income before Depreciation, but may miss context about Tesla's growth or capital intensity.	Explanation is incomplete, unclear, or fails to connect the use of Operating Income before Depreciation to CVP analysis or Tesla's context.
3. Discuss how conducting a CVP analysis with historical data can provide insights into future performance. (10 points)	Clearly articulates how historical data informs future profitability, including cost behavior analysis, break-even insights, and efficiency evaluations.	Demonstrates an understanding of how historical data informs future profitability, but with limited detail or examples of specific cost behavior, break-even analysis, or efficiency insights.	Provides vague or incomplete discussion of historical data's use, with little to no explanation of how it informs future profitability or decision-making.

Assignment 2 Grading

Tableau Analysis Criteria	Excellent (90-100%)	Satisfactory (70-89 %)	Needs Improvement (<70%)
1. Use Tableau to visualize the trend in operating income and identify the break-even point when Tesla started its positive profit (20 points)	Successfully loads data in Tableau. Accurately creates a bar chart of Tesla's operating income trend. Correctly identifies Quarter 2 of 2019 as the stable break-even point, referencing data trends and profitability consistency. Recognizes alternative interpretation (e.g., Q3 2018).	Imports, cleans, and joins datasets in Tableau. Produces a bar chart of operating income trend, but may have formatting issues or inconsistencies. Provides a reasonable explanation of the operating income trend, but lacks depth or contains minor inaccuracies. May identify Q3 2018 as the break-even point without discussing Q2 2019's stability.	Imports, cleans, and joins datasets in Tableau. Produces a bar chart of operating income trend, but may have formatting issues or inconsistencies. Explanation is unclear, lacks sufficient detail, or fails to identify a plausible break-even point. Little to no connection to the visualization.
2. Your next task is to use Tableau to analyze data and identify the factors that contribute to Tesla's growth. (50 points)	Successfully creates all required visualizations (e.g., revenue, cost, deliveries trends, linear regression, forecast). Accurately interprets visualizations and provides detailed, logical explanations of trends, cost behavior, and forecast results.	Creates most visualizations correctly, with minor errors or omissions. Interpretations are clear but may lack depth or precision in explaining trends, cost behavior, or forecast results.	Fails to create accurate or complete visualizations, and interpretations are vague, unclear, or missing key insights.



Xiangge Wang is an Assistant Professor of Accounting at California State University, Los Angeles, College of Business and Economics. Professor Wang received her master's degree in accounting from California State University, Los Angeles, and her Ph.D. degree from Texas Tech University. Her research interest is to examine different factors that affect corporate tax strategies, tax planning, and corporate investment in corporate social responsibility activities. She offers several classes at Cal State LA such as Principles of Managerial Accounting, Cost Accounting, and Corporate Taxation.



Haihong He is a Professor of Accounting at the College of Business and Economics, California State University, Los Angeles. She earned her Ph.D. in Accounting from the University of Connecticut. Her research primarily involves empirical studies using archival data, with published work on accounting conservatism, real earnings management, asymmetric cost behavior, managerial ability, and international accounting. Recently, her research interests have expanded to accounting technology. She specializes in teaching managerial and cost accounting.



References

- Association to Advance Collegiate Schools of Business (AACSB). (2025, February 28). *Accounting Accreditation Standards*. Available at: https://www.aacsb.edu/-/media/documents/accreditation/accounting2018standards_feb-28-2025.pdf?rev=52344c2bc6a3408481d390022c0da916&hash=FD0A689EE985C5A2E9956B5089F1065D
- AICPA (2024). *CPA Evolution*. Available at <https://evolutionofcpa.org/>.
- Anderson, L.W. & Krathwohl, D.R. (2001). *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives: Complete Edition*. New York: Longman.
- Bloom, B.S. (1956). *Taxonomy of educational objectives: Cognitive and affective domains*. New York: David McKay.
- Dawkins, M.C. (2023). Commentary Declining Enrollments—A Call to Action! *Issues In Accounting Education*, 38, 1: 9–18.
- Dow, K.E., Jacknis, N. & Watson, M.W. (2021). A Framework and Resources to Create a Data Analytics-Infused Accounting Curriculum. *Issues In Accounting Education*, 36,4: 183–205.
- Hoelscher, J. & Mortimer, A. (2018). Using Tableau to visualize data and drive decision-making. *Journal of Accounting Education*, 44: 49-59.
- Stout, D.E. (2015). Regression analysis: Instructional resource for cost/managerial accounting. *Accounting Education*, 24,1: 57–73.
- Weygandt, J.J., Kimmel, P.D. & Mitchell, J.E. (2021). *Financial & managerial accounting (4th ed.)*. John Wiley & Sons.



Journal of Case Research and Inquiry

Peer-Reviewed Cases, Notes and Articles

A publication of the Western Casewriters Association

Vol. 10
April 2025

ISSN 2377-7389