

## **Gill Inc., a Multi-disciplinary Teaching Case Using a Cloud ERP**

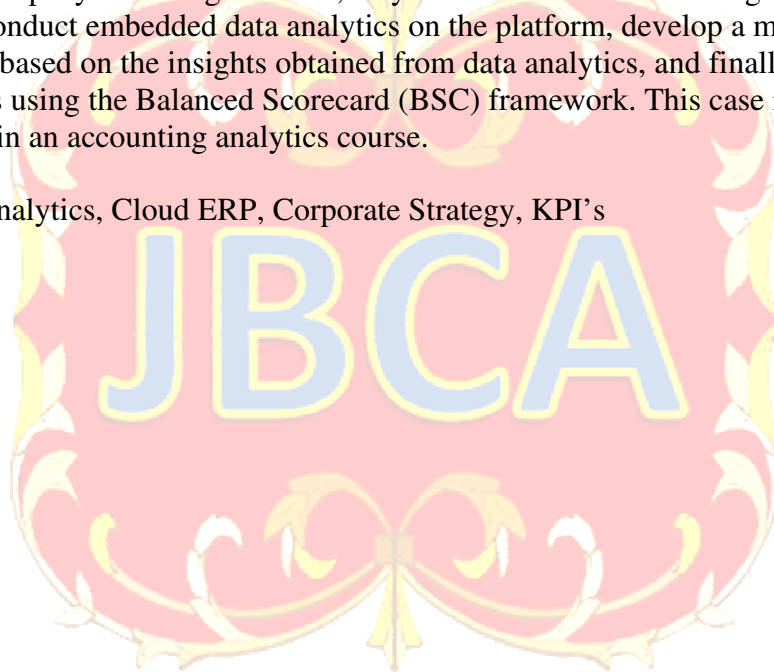
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### **ABSTRACT:**

The objectives of the Gill Inc. case study are to teach students how to apply data analytics in the context of corporate strategy and KPI (key performance indicator) development. The case gives students the opportunity to access an ERP account that provides data from multiple functions of the company. Working in teams, they will understand and manage the data flows within the ERP, conduct embedded data analytics on the platform, develop a medium-term company strategy based on the insights obtained from data analytics, and finally, create a digital dashboard of KPIs using the Balanced Scorecard (BSC) framework. This case is appropriate for graduate students in an accounting analytics course.

Keywords: Data analytics, Cloud ERP, Corporate Strategy, KPI's



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## 1. THE CASE

### 1.1.Introduction

This simulation case involves utilizing NetSuite ERP – a comprehensive cloud-based enterprise resource planning system to apply data analytics in the context of corporate strategy and KPIs (key performance indicators) development. Students assume an employee role at a fictitious retailer, Gill, Inc., and work with an ERP account that gives access to data from multiple functions of the company, working in teams to understand the data flows within the ERP, learning how to conduct embedded data analytics on the platform, develop a medium-term company strategy based on the insights obtained from data analytics, and finally, create a digital dashboard of KPIs using the Balanced Scorecard (BSC) framework.

### 1.2 Gill, Inc.

Gill, Inc., founded 35 years ago, is an authorized retailer of over 2,000 consumer electronic products from more than 70 brands. The company operates several retail stores and fulfillment centers in California as well as an online store off the website: <http://tstdrv1500192.shop.netsuite.com/s.nl/c.TSTDRV1500192/it.I/id.6/f>. The company boasts a 93% average in-stock rate and offers a guarantee that, if a product is not readily available, Gill will take 10% off the price and have it shipped to the buyer's home for free. The company also emphasizes knowledgeable personnel and high-quality services as critical factors for its success.

Gill's sales have remained flat at around \$1 million per month for much of the fiscal year 2024 until September when there was a surprising surge to \$3.43 million (based on the provisioned data in NetSuite as of 11/1/2024) (Appendix 1 - Exhibit 1). Meanwhile, the company's FY 2024 income statement shows a 52% gross margin<sup>1</sup> but a meager 4.4% net margin and the balance sheet indicates reasonably good financial health (Appendix 1 – Exhibit 2).

Like any other retailer, Gill faces fierce competition in a highly saturated market. From a competitive perspective, Gill needs a clear strategy and a set of KPIs to guide its actions forward. According to Gill's website, the company does not currently seem to have such a strategy or KPIs.

### 1.3 Data Analytics

Data analytics in business is the practice of harnessing data to improve business operations and decision-making. It is a process comprised of six steps in an IMPACT model (Isson and Harriott, 2012):

- 1) Identify the questions
- 2) Master the data
- 3) Perform the test plan
- 4) Address and refine results
- 5) Communicate insights
- 6) Track outcomes

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<sup>1</sup> This gross margin ratio sounds unrealistically high for a retailer. Students should take a critical view of the simulation data in their analysis of Gill, Inc.

While many course assignments focus on the discrete steps of the data analytics model, this case project offers you an opportunity to engage with the entire data analytics cycle. More importantly, the simulation on the NetSuite cloud ERP platform allows you to experience the process of data analytics application in a highly realistic work setting, as described below:

- 1) Identify the questions – Develop an actionable company strategy and KPIs for Gill, Inc.
- 2) Master the data – Extract relevant, historical and/or real-time data from multiple sources in Gill’s ERP system and prepare datasets for use.
- 3) Perform the test plan – Use analytics tools within the ERP platform or external tools to analyze data and identify KPIs that align with your strategy for Gill, Inc.
- 4) Address and refine results – Collaborate with team members to refine your strategy and KPIs.
- 5) Communicate insights – Create a live dashboard on your EPR account homepage and share it with pertinent coworkers.
- 6) Track outcomes – Monitor the KPIs on the dashboard to provide feedback on the implementation of the strategy. In the real world, the feedback may lead to changes in the execution of the strategy of the strategy itself.
- 7)

#### 1.4 NetSuite ERP

The NetSuite ERP, a product of Oracle Corporation, is adopted by more than 40,000 customers worldwide. According to Oracle Corp., NetSuite ERP “is an all-in-one, AI-powered, cloud business management solution ... With a single, integrated suite of applications for managing accounting, order processing, inventory management, production, supply chain, and warehouse operations, NetSuite ERP gives companies clear visibility into their data and tighter control over their businesses.”<sup>2</sup>

From the data analytics perspective, NetSuite ERP may offer the following advantages over data analytics without such a platform:

- Enables strategic or operational decision-making for finance leaders through real-time financial and operational reports.
- Connects processes and data across the organization – from financials, customer management, inventory management, warehouse management, supply chain, and more.
- Brings together current financial and operational data with historical data from other systems to help with planning and running a business.
- Creates customized, up-to-date dashboards, reports, and visual analytics to provide a summary-level overview or an in-depth account of business activities.
- Enhances data integrity and data processing efficiency.

Oracle Corp. provides free NetSuite instances and learning resources to educational users through its Oracle Academy NetSuite Program<sup>3</sup>. For the current case project, each student will be assigned a NetSuite account pre-populated with simulation data relating to the different business functions of Gill Inc., including accounting, finance, internal operations, and human resources. It

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<sup>2</sup> To learn more about NetSuite ERP, visit <https://www.netsuite.com/portal/home.shtml>.

<sup>3</sup> To learn more about the program, visit <https://academy.oracle.com/en/oa-web-overview.html>.

should be noted that, while Gill, Inc. and the populated data are fictitious, the ERP system and its functionalities are real and similar to what Oracle, Corp. markets to its real customers<sup>4</sup>.

All students will assume a management (i.e., administrator) role at Gill, Inc. and work collaboratively with teammates on the project. This role grants everyone unrestricted access to data from all functional areas within the ERP.

There are two ways to retrieve data for analysis from your NetSuite account. First, use the “Reports” tab to request pre-formatted reports such as financial statements or generate customized reports. Second, go to the “Analytics” tab and use the pre-built workbooks or create new workbooks. The SuiteAnalytics tool allows students to perform quick data analytics within NetSuite<sup>5</sup>. Additionally, students can export data for analysis using external tools such as Excel, Tableau, or Power BI, etc.

### 1.5 Strategy development

A strategy is “the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.” (Chandler, 1962). Without a clear strategy, companies risk fragmentation in decision-making and operational misalignment, potentially leading to inefficiency and market irrelevance (Mintzberg, 1994). Porter (1996) later emphasizes that strategy is not just about operational effectiveness but making distinctive choices that position a firm differently from competitors, which is key to achieving sustainable competitive advantage.

Your first task for this simulation project is to develop, as a cross-functional team, a medium-term (3 to 5 years) competitive strategy for Gill, Inc. to guide its actions forward. In order to accomplish this, each team should consider crafting a mission, a set of core values and a vision for the organization and developing strategic goals and objectives based on the firm’s overall direction. In addition, read the strategy-related sections of the recent Form 10-Ks of two similar companies in the retail space, Best Buy Co., Inc.<sup>6</sup> and Esty, Inc.<sup>7</sup>, to obtain insights into how these real companies articulate and execute their strategies.

Note that strategy development in today's rapidly evolving markets has become an increasing iterative process rather than a one-time endeavor, and the approaches to strategy development may differ across companies. Agile strategy development emphasizes flexibility and ongoing adaptation, often leveraging feedback loops and cross-functional collaboration. Additionally, the best practice of strategy development usually involves engaging stakeholders across all levels of an organization to foster a sense of ownership and facilitate smoother implementation.

As strategy development requires frequent adaptation to actual implementation outcomes and broad engagement with real stakeholders, neither of which is easy to simulate in a classroom, the purpose of this case project is not to engage in a rigorous process of strategy development. Rather, it is intended to increase understanding of how a state-of-the-art ERP system can be used to aid strategy development. In particular, students can learn how to leverage

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<sup>4</sup> Of course, functionalities may be customized for different customers.

<sup>5</sup> The *SuiteAnalytics Workbook* provides comprehensive instructions and examples for conducting analytics in NetSuite.

<sup>6</sup> Available at: [Best-Buy-FY23-Annual-Report.pdf \(q4cdn.com\)](https://www.bestbuy.com/assets/pdf/Best-Buy-FY23-Annual-Report.pdf)

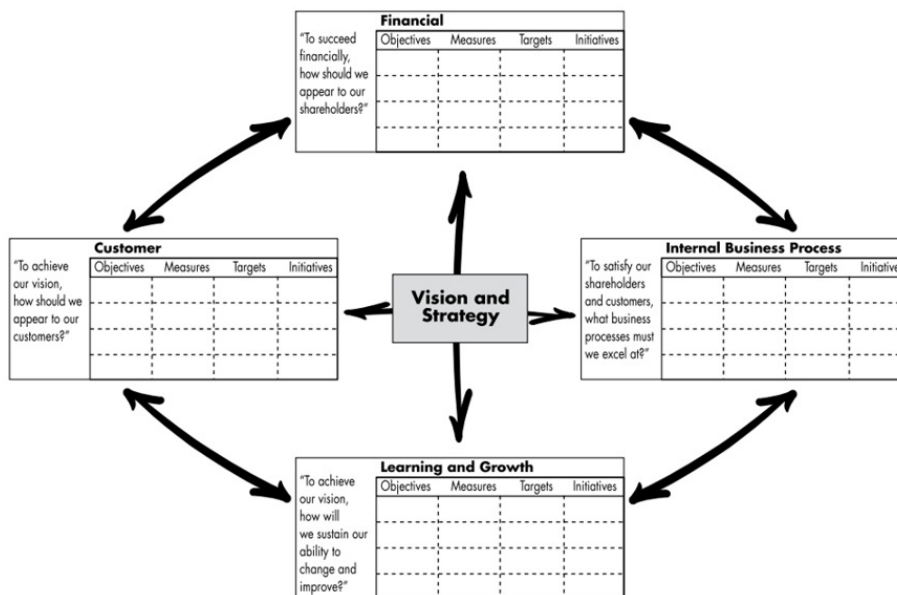
<sup>7</sup> Available at: [0001370637-24-000013 \(d18rn0p25nwr6d.cloudfront.net\)](https://www.esty.com/assets/pdf/0001370637-24-000013_(d18rn0p25nwr6d.cloudfront.net))

two distinctive capabilities of NetSuite cloud ERP, embedded data analytics and cross-functional collaboration.

## 1.6 KPIs and Balanced Scorecard

Once each team has a strategy articulated for Gill, Inc., the second task for the case is to develop a set of KPIs aligned with the strategy using the Balanced Scorecard framework (Kaplan and Norton, 1992, 1996, & 2008). That is, performance measures should come from four interconnected perspectives: financial, customer, internal business process, and innovation and learning. The balanced scorecard not only allows for students to look beyond the short-term financial measures and focus on the key drivers of long-term success for Gill, Inc., but also forces students to think about how to clarify, simplify, and operationalize company vision and strategy and how to bring together the efforts of different units of the company towards achieving its strategic objectives. Ensuring the balanced scorecard is regularly reviewed and updated is critical to track progress and adapt, if necessary, to changing circumstances. (see the depiction in Figure 1).

Figure 1 Translating Vision and Strategy: Four Perspectives



Source: Kaplan & Norton (1996)

Read Kaplan and Norton (1992) and A Practitioner's Guide to Balanced Scorecard (Pages 11-33) (Mackay, 2004). Consider the following suggestions in building the required balanced scorecard:

- Demonstrate how your KPIs are aligned with your strategic objectives.
- Establish the linkages between measures. The measures should reinforce each other.
- Avoid overloading the BSC with too many measures. Choose KPIs that are most relevant to your strategic objectives. There should be no more than 3 KPIs from each perspective.
- Design the BSC as a double learning loop that allows for revisions based on implementation feedback, internal performance, and market condition changes.



- e. All measures must be reliable, verifiable and have continuing validity. In addition, consider the availability and updating frequency of data needed for the measures in the NetSuite ERP.

KPIs need to be presented on a dashboard displayed on the homepage of each team's NetSuite account upon each login. Dashboards can be designed in such a way that the most important KPIs (usually 1-3 of them) appear at the most salient spots. Furthermore, the cloud feature of NetSuite enables publishing and sharing the dashboard with the pertinent personnel of Gill, Inc. (e.g., among team members) from any place and at any time. The visualization and communication of performance measures is an important step in the data analytics cycle (Step 5 of the IMPACT model). More important, because NetSuite ERP is a real-time management system, most of the KPI measures will get automatically updated based on the most recent transaction data. All students will get a chance to closely monitor the progress on the KPIs against the targets set by each team, a valuable experience from the simulation project.

### **1.7 Case Activities, Requirements and Deliverables**

The case entails the following group activities, requirements, and deliverables:

#### **(1) Setting up the NetSuite Account**

- Go to <https://system.netsuite.com/pages/customerlogin.jsp?country=US> and log in using the assigned NetSuite account with the provided credentials. Reset the password as prompted.
- Choose “Administrator” as the default user role in the system to grant access to data across all business functions. Change the company name from Gill, Inc. to Gill, Inc. – Group X, with X standing for the group number. Set the fiscal year the same as the calendar year for the last five years. Finally, add all group members to the employees list to enable sharing work later.

#### **(2) Learning about NetSuite cloud ERP. For the Purpose of the Project, Focus Efforts on:**

- Understanding the data (especially accounting information) generation and flows in the system.
- Exploring the content within the “Reports” tab to learn how to retrieve pre-formatted reports or create custom reports.
- Exploring the content within the “Analytics” tab to learn how to conduct workbook-based data analytics with the SuiteAnalytics tool. Use the SuiteAnalytics Workbook (Appendix 2A) as a study guide. Alternatively, try exporting workbooks for analysis using external tools, e.g., Excel, Tableau, and Power BI, etc.

#### **(3) Proposing a Competitive Strategy for Gill, Inc.**

- Complete the assigned readings on strategy and Balanced Scorecard (Appendix 2B).
- Conduct an analysis of Gill, Inc. with regard to its competitive situation. Use the SWOT (strengths, weaknesses, opportunities, and threats) analysis framework, or Porter's (1980,

2008) five-factor analysis framework<sup>8</sup>. Use data from the ERP system or any external data source that is found useful.

- Propose a medium-term (3-5 years) strategy for Gill Inc. based on the analysis. Suggestion: If any students are to follow Best Buy's example (on Page 4 of its 2023 annual report), limit the proposed strategic areas/initiatives to three or fewer to reduce the complexity of the case assignment.

#### (4) Creating KPIs and the Dashboard

- Watch the video tutorial "[Optimize Your Reporting in NetSuite](#)" on YouTube to learn about customizing KPIs and dashboard in NetSuite as a way of visualizing and communicating company performance metrics. Please be encouraged to watch more similar tutorials on the same topic.
- Develop a list of KPIs that align with the proposed strategy for Gill, Inc. using the BSC framework. Use no more than 3 KPIs for each perspective. Make sure to set targets (thresholds) for the KPIs.
- Create a custom dashboard of KPIs in NetSuite that optimizes the reporting for Gill, Inc. On the dashboard, present any combination of portlets for scorecards, KPI meters, workbooks reminders, etc.
- Publish the dashboard or select dashboard components to share with team members. The following are the deliverables each group should submit for the case project:  
Deliverable 1: A write-up of 4-5 pages containing: 1) the strategy for Gill, Inc. and a brief description of the development process; 2) the KPIs developed using the BSC framework; and 3) explanation of the alignment between the KPIs and the strategy.  
Deliverable 2: The dashboard (screenshot(s) attached to the write-up and shared in NetSuite).  
Both deliverables should be submitted by a representative from each group.

## 2. TEACHING NOTES

### 2.1 Motivation and Unique Features of The Case

There has been an increasing integration of data analytics into business curricula due to the growing demand for data analytics skills in the workforce. Daniel and Butson (2020) argue that business programs need to adapt to the "data revolution" by incorporating analytics training that is both technically rigorous and contextually relevant to business decision-making. To that end, educators have emphasized the value of case-based teaching, as cases allow students to explore real-world problems and apply analytical techniques to complex business issues (Daniel and Butson, 2020; Kim & Bailey, 2022; Ramirez & Cox, 2020).

While case-based teaching of data analytics is common, some have pointed out several gaps and insufficiencies in current practices, highlighted below:

Lack of real-world data complexity - While data in practice is often incomplete, messy, or unstructured, many cases use clean datasets that don't reflect the challenges students will face

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<sup>8</sup> The five factors are: threat of new entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitute products, rivalry among existing competitors.

in professional settings. This simplification can lead to students developing an unrealistic expectation of how data analytics operates in real-world businesses (Ramirez & Cox, 2020).

Insufficient focus on data interpretation - There is a need for teaching cases that not only teach technical skills but also help students understand how to derive meaningful insights and translate them into actionable business strategies. (Ramirez & Cox, 2020; Daniel and Butson, 2020)

Limited cross-disciplinary collaboration - Many analytics teaching cases are confined to the domain of data science or operations management, without integrating other business functions such as marketing, finance, or human resources. Real-world data analytics projects often require collaboration across multiple departments, but teaching cases rarely replicate this cross-functional collaboration. This limits students' exposure to how data analytics impacts all areas of a business (Smith, Clark, & Hay, 2021).

Outdated case materials and data sources - some teaching cases use outdated data sources or scenarios that don't reflect the rapid pace of change in the field of data analytics. As businesses increasingly adopt advanced technologies such as artificial intelligence (AI) and machine learning (ML), cases must evolve to include these technologies and provide students with up-to-date experiences. Cases studies that are accompanied by digital simulations and dashboards are particularly effective in improving student engagement and allow for a more comprehensive understanding of business analytics applications (Miller & Foster, 2021).

This simulation case provides students with a valuable opportunity to work collaboratively on a cross-disciplinary data analytics task in a highly realistic business setting. Specifically, it has a number of unique features that address all the aforementioned gaps and insufficiencies. First, the case directly answers Miller and Foster's (2001) call for using digital simulation and dashboards for data analytics. Second, unlike many teaching cases where students work with clean, well-structured datasets—typically publicly available corporate financial data—our case challenges students to navigate the entire analytics process, including data processing tasks that closely mirror the complexities of real-world environments. By using NetSuite ERP as the embedded analytics platform, students are given an opportunity to work with both financial and nonfinancial data that are traceable to past and real-time transactions.

Third, the development of strategy and balanced scorecard based on data analytics serves the very purpose of helping students understand how to derive meaningful insights from data and translate them into actionable business strategies or decisions. Fourth, our case provides an ideal scenario for students to exercise cross-functional collaborations. NetSuite ERP is a comprehensive system that integrates various company functions, including accounting, finance, marketing, customer relations, and human resources, among others. To develop a strategy and define corresponding KPIs for Gill, Inc., the team members, acting as employees, must analyze data from various ERP functions and present their respective insights. Furthermore, NetSuite's cloud functionality provides an efficient platform for students to collaborate with their team members.

One the other hand, there is a longer tradition of using case studies to teach strategy (Heskett & Bartlett, 2015) and the Balanced Scorecard (Mendes Junior & Alves, 2023). However, the authors are not aware of any published teaching case that incorporates a real-world, contemporary ERP platform like NetSuite ERP to help students understand strategy and BSC development.



## 2.2 Learning Objectives

The case presents a rich set of opportunities to help student achieve the following learning objectives (LO):

- LO 1: Understanding the supportive role of data analytics in daily operations in a real-world work environment
- LO 2: Identifying relevant data and extracting, transforming, and loading (ETL) different types of enterprise data from multiple sources
- LO 3: Creating dynamic data visualization in support of business decision-making
- LO 4: Navigating a full data analytics cycle on a real-world cloud-based ERP platform
- LO 5: Performing data analytics to support corporate strategy development and implementation
- LO 6: Understanding the concept and implementation of the BSC framework
- LO 7: Designing a BSC in alignment with a company's strategy
- LO 8: Developing teamwork skills and collaborative mindset in data analytics

## 2.2 Implementation Guidance

### Intended Audience

The case is most suitable for a graduate business analytics course. It is also appropriate for use in an upper-level undergraduate data analytics course in either accounting or management. It has been used in an online MBA analytics course, part of a three-course series on analytics required for a Business Analytics Certificate. The case may be fully or partially adopted, depending on how much time the instructor is willing to spend or which part of the case the instructor plans to emphasize (or, in other words, the number of learning objectives to be achieved). For example, the authors have also used the case partially in an undergraduate accounting analytics course, with focus on performing analytics in NetSuite to evaluate Gill Inc.'s operating efficiency and financial performance (LO1 – LO4).

### Pace of Implementation

The case is ideally assigned in the back half of an analytics course. As the case requires the mastery of materials and resources from multiple business disciplines (e.g., accounting, finance, management, and business analytics, cloud ERP, etc.), should it be adopted fully, it is crucial to give students adequate preparation time to familiarize themselves with NetSuite and digest the supporting materials. The case assignment itself could take two weeks to complete and students should be encouraged to continue to monitor the implementation of their BSC in NetSuite even after the submission of their case deliverables.

We suggest that instructors acquire NetSuite class accounts provisioned with data for Gill, Inc. via the Oracle Academy Program and distribute them to students at least one month ahead of the scheduled assignment of the case. Ask students to get a head start with exploring the ERP system. Provide students with the supporting documents “ERP Fundamentals – Student Guide” and “NetSuite Essentials – Getting Started” (Appendix 2A). Optionally, encourage students to go over the “NetSuite Accounting Modules” (Appendix 2A) to obtain hands-on experience of creating and managing data flows in the cloud ERP.

Upon announcing the case assignment to the class (about a month later), form student groups (of 4 or 5 members) for the project. Ask students to continue to explore NetSuite ERP but now with focuses on learning how to conduct embedded analytics in NetSuite and analyzing Gill, Inc. as a group (Students can always export retracted data or reports for analysis using external tools). Provide students with the supporting document “SuiteAnalytics Workbook” (Appendix 2A). Students should also be learning how to create KPIs and dashboards in NetSuite. Meanwhile, provide students with the packet of readings on strategy development and BSC (Appendix 2B). Ask each group to develop a strategy and an aligning BSC based on their analysis of Gill Inc., then visualize the BSC as a dashboard of KPIs on the homepage of their NetSuite accounts.

Give students ample time to collaboratively explore the functions and features of NetSuite ERP (while standing ready to offer technical support). After setting up their dashboards, encourage them to continuously monitor KPI performances to gain insights into how embedded data analytics can assist companies in making timely, informed decisions.

While letting the student teams work on the project outside the classroom (or offline), we usually run a parallel class discussion session featuring the following questions:

- a. What are some of the likely scenarios in the real-world workplaces where data analytics is used to support daily operations and/or strategic decision-making? What are the similarities and differences between those scenarios and the present simulation case?
- b. What are the advantages and limitations of utilizing data analytics embedded in an ERP system such as the NetSuite cloud ERP?
- c. How does a cloud-based ERP support cross-functional collaboration?
- d. What should be the two or three best KPIs for Gill, Inc. from each of the four perspectives in the BSC?
- e. What layouts of dashboard could best demonstrate the alignment between Gill Inc.’s strategy and the BSC on the dashboard?
- f. In the implementation of the BSC, how often should a company revise its targets for the KPIs and adjust its strategy?
- g. What are the benefits and risks of linking incentive compensation to the KPIs in the BSC?

### **Student Group Formation**

The group project is an excellent opportunity for students to develop essential teamwork skills. Particularly, due to the comprehensive nature of the case, it necessitates collaboration across various business functions. To maximize students’ learning experience, it would be most beneficial to form groups with members from diverse work backgrounds. This has found to be very achievable in MBA classes as most students are working professionals. In addition, even though every student is able to access all functional areas in the ERP, it is still desirable to ask each member of a group to assume a different employee role (e.g., accounting/finance, marketing, management, etc.) in Gill, Inc. and try to bring their unit’s perspective to the table in the simulation.

### **Emphasizing Justification of KPI Selections**

This case requires students to develop a balanced scorecard of KPIs aligned with Gill, Inc.'s strategy, which should be based on their analytical work for the company. However, experience shows that students may be tempted to quickly pick a few standard KPIs from NetSuite's existing list, without fully engaging in the extensive and difficult thought process required to design a meaningful scorecard. To address this, instructors should emphasize the importance of justifying their KPI selections—explaining the logical connections between the company's strategy and the chosen KPIs—and assign appropriate weight to this in the grading criteria.

### **Emphasizing the Value of Embedded Analytics**

As outlined in the learning objectives, the case is designed to provide students with hands-on experience in applying data analytics, effectively simulating its application in a real-world work environment. In companies that adopt state-of-the-art cloud ERP systems, analytics is seamlessly integrated into employees' daily workflows to support both operational and strategic decision-making. These systems enable employees to work collaboratively with historic as well as real-time data to gain timely insights into a company's performance relative to its strategic goals. The true value of the case lies in the experience students gain with the embedded data analytics features in NetSuite through the simulation. Therefore, instructors should guide students to focus on leveraging data analytics in NetSuite rather than striving for a flawless strategy and scorecard for Gill, Inc.

### **3. EVIDENCE OF CASE EFFICACY AND STUDENT FEEDBACK**

This case has been used in an analytics course in an MBA program for the past six academic years. In perspective, it has consistently remained relevant and carries a very low risk of becoming outdated (Miller & Foster, 2021). This is due to the enduring importance of strategy, performance measurement, and data analytics in business, as well as the use of NetSuite, a state-of-the-art cloud ERP platform, as a real-world analytics tool.

Each semester only minor modifications are made to the case materials mainly to: 1) offer more clarity to the case instructions; 2) provide updated financial information about Gill, Inc.; 3) highlight the availability of new relevant tools or functionalities in NetSuite ERP; or 4) add new supplementary reading materials or NetSuite training resources.

Because the case was not initially written with the intention for publication, formal assessment of case efficacy was not conducted until the most recent term of adoption. In spring 2024, instructors administered a voluntary post-case assignment survey in the aforementioned MBA course. Students were asked to what extent they agree with the statements that are tied to the case learning objectives with regard to cloud-based ERP, strategy development, balanced scorecard, data analytics on an ERP platform, and teamwork. A 5-point scale for the responses was used (Strongly Agree =5, Agree = 4, Neither Agree nor Disagree =3, Disagree = 2, and Strongly Disagree = 1). Sixteen out of the 22 students in the class participated in the survey. As indicated in Table 1 (Appendix 1), the majority of the students agree that the case has helped them to improve their understanding of cloud-based ERP systems, corporate strategy development, and the balance scorecard framework and that the case has also help enhanced

their data analytics and teamwork skills. Based on the two-tailed t-t tests, the mean scores for the questions are all significantly different from the neutral point of 3 (Neither Agree nor Disagree), an indication of the case efficacy.

In addition to the survey results, we also received numerous unsolicited student comments on the case assignment over time, with positive feedback significantly outweighing the negative. Although rare, the negative feedback highlights two potential barriers to implementing the case:

- (1) Insufficient time to fully explore NetSuite and comprehend all the supplementary materials. Being new to NetSuite ERP, some students felt overwhelmed by the system's complexity and its abundance of functionalities. They sometimes encountered technical difficulties that were time-consuming to resolve. As a result, their unfamiliarity with the ERP prevented them from fully appreciating the system's benefits. It also hindered their ability to implement embedded data analytics for the case assignment. The time constraint was further exacerbated by the fact that most of our MBA students are full-time working professionals. This student feedback highlights the importance of providing students with access to the provisioned NetSuite accounts and supplementary materials well in advance of the actual case assignment date (refer to the Pace of Implementation).
- (2) Challenging to employ multi-disciplinary knowledge. The case requires students to bring their knowledge in accounting, finance, management, and data analytics into their group work and use these skills to complete various tasks. However, not all students are equipped with a complete set of knowledge and skills. For example, students without an accounting background may have difficulty interpreting the accounting data in the ERP system or understanding how specific business transactions can affect Gill, Inc.'s financial performance. Moreover, some students may find it challenging to synthesize their individual work in order to complete the case tasks. Therefore, it is important to provide students with clear and specific instructions. It is also helpful to simplify case tasks and deliverables.

The positive student feedback, on the other hand, touches upon various aspects of the case while highlighting students' excitement with the learning opportunity involving the NetSuite ERP. The following are some sample commentaries:

“This was my favorite week of the course. I enjoyed refreshing my memory on the Balanced Scorecard, but I especially liked working with NetSuite. I did spend much more time this week than I have in the past but it was enjoyable.”

“I found the exercises the most helpful as I am a "hands on" learner.”

“Thought the overall assignment was nice learning opportunity and the readings were good complements to the assignments.”

“Again, group assignments are great to learn other styles and ways of thinking.”

“The NetSuite tool was very useful as it represents real-world platforms being utilized by companies. It was good to see how powerful this is upon perusing.”

“I enjoyed the group project, as we got to work with a few individuals and learn from their perspective. The discussion also was helpful in allowing us to learn from various individuals about NetSuite features.”

#### **4. DATA AVAILABILITY STATEMENT**

The data provisioned for Gill, Inc. are available in students’ NetSuite accounts. Students may also use any public data they find useful for the case project.

#### **5. GRADING RUBRIC**

The suggested grading rubric is available from the corresponding author upon request.





**Appendix 1**

Gill, Inc. Financials

Exhibit 1 Twelve-Month Sales Trend (as of 11/1/2024)

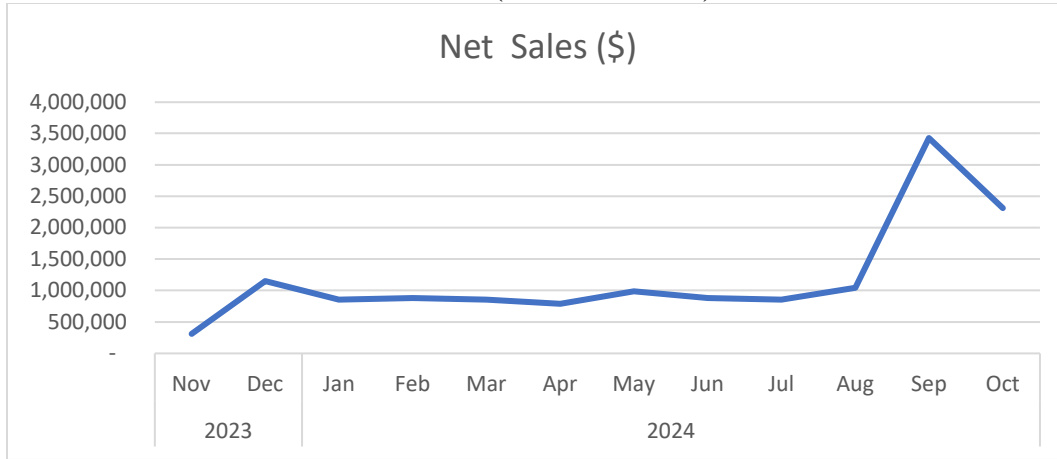


Exhibit 2 Income Statement and Balance Sheet for FY 2024

Gill, Inc.  
Income Statement  
For FY Ended December 31, 2024

<b>Revenue</b>	
4010 - Sales	\$18,182,938
4210 - Returns and Allowances	(\$206,705)
4250 - Discounts	(\$419,319)
4900 - Intercompany Revenue	<u>\$1,002</u>
Total - 4000 - Revenue	\$17,557,916
<b>Cost Of Sales</b>	
Total - 5000 - Cost of Goods Sold	<u>\$8,423,667</u>
Gross Profit	\$9,134,249
<b>6000 - Operating Expenses</b>	
7300 - Salaries & Wages	\$1,793,167
6950 - Office Expense	\$1,241,144
7200 - Rent Expense	\$1,101,313
6010 - Advertising	\$738,151
6300 - Commission Expense	\$689,975
6650 - Insurance Expense	\$580,511
6990 - Uncategorized Expense	\$468,548
6750 - Professional Fees	\$327,925
6800 - License Expense	\$303,037
6550 - Freight Expense	\$262,898
7000 - Payroll Tax	\$150,232

6150 - Bad Debt Expense	\$137,756
6850 - Maintenance Expense	\$137,651
6350 - Depreciation Expense	\$99,747
Other expenses	\$333,063
Total - 6000 - Operating Expenses	<u>\$8,365,119</u>
Operating Income	\$769,131
8000 - Other Income/Expenses	
8100 - Gain (loss) on Sale of Assets	(\$2,674)
z8060 - Purchase Discounts	\$11,369
8520 - Rounding Gain/Loss	(\$0)
8900 - Realized Gain/Loss	<u>(\$782)</u>
Income before Income Taxes	\$777,044
Provision for Income Taxes	=
Net Income	\$777,044

Gill, Inc.

Balance Sheet

As of December 31, 2024

## ASSETS

## Current Assets

## Bank

1000 - Cash	\$1,385,948.40
-------------	----------------

Total Bank	\$1,385,948.40
------------	----------------

## Accounts Receivable

1100 - Accounts Receivable	\$410,266.50
----------------------------	--------------

Total Accounts Receivable	\$410,266.50
---------------------------	--------------

## Other Current Asset

1200 - Inventories	\$1,761,700.00
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1300 - Prepaid Expense	\$246,105.05
------------------------	--------------

1400 - Intercompany Payable/Receivable	(\$50.00)
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Total Other Current Asset	\$2,007,755.05
---------------------------	----------------

Total Current Assets	\$3,803,969.95
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## Fixed Assets

1500 - Property Plant and Equipment	\$469,711.82
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1600 - Accumulated Depreciation	(\$91,802.63)
---------------------------------	---------------

Total Fixed Assets	\$377,909.19
--------------------	--------------

Total ASSETS	\$4,181,879.14
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## Liabilities &amp; Equity

## Current Liabilities

Accounts Payable	\$3,087,966.07
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Credit Card	\$775.00
-------------	----------

Other Current Liability	\$293,566.75
Total Current Liabilities	\$3,382,307.82
Long Term Liabilities	
2800 - Long-Term Debt	\$60,000.00
Total Long-Term Liabilities	\$60,000.00
Equity	
3000 - Owners Equity	
3100 - Capital Stock	\$441,106.82
Total - 3000 - Owners Equity	\$441,106.82
Retained Earnings	\$460,227.46
Net Income	(\$161,762.96)
Total Equity	\$739,571.32
Total Liabilities & Equity	\$4,181,879.14

Table 1 Post-case assignment survey (N=16)

Survey question	Mean	Std. Dev.	P-value*
The case assignment has helped to:			
1. improve my understanding of cloud-based ERP systems.	4.13	0.72	0.000
2. improve my understanding of corporate strategy development.	3.94	0.68	0.000
3. improve my understanding of the balanced scorecard approach to performance measurement.	4.13	0.72	0.000
4. improve my skills of business/accounting analytics based on internal enterprise data.	3.63	0.62	0.001
5. enhance my teamwork skills.	4.13	1.02	0.001

\* The p-values are based on two-tailed t-tests of the mean difference from 3 (Neither Agree nor Disagree).

## Appendix 2 List of Supplementary Case Materials

### A. NetSuite resources (all available via students' simulation account):

- “ERP Fundamentals – Student Guide”
- “NetSuite Essentials – Getting Started”
- “NetSuite Accounting Modules”
- “SuiteAnalytics Workbook”

### B. Readings on strategy and Balanced Scorecard

- “*The Balanced Scorecard: Measures that Drive Performance*”. 1992. Robert Kaplan and David Norton. *Harvard Business Review* 70, no. 1: 71–79.
- “*A Practitioner’s Guide to The Balanced Scorecard*”. 2004. Allen Mackay. The Chartered Institute of Management Accountants. [www.cimaglobal.com](http://www.cimaglobal.com).
- “*Using the Balanced Scorecard as a Strategic Management System*”. 1996. Robert Kaplan and David Norton. *Harvard Business Review*, 74(1), 75-85.
- “*Develop the Strategy - The Starting Point for Strategic Execution*”. Chapter 2 of “*The Execution Premium: Linking Strategy to Operations for Competitive Advantage*”. 2008. Robert Kaplan and David Norton. Harvard Business Publishing.

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### C. Company annual reports containing information on strategies

- “*Best Buy Co. Inc. FY 2023 Annual Report*”, <https://investors.bestbuy.com/financials/annual-reports/>.
- “*Etsy, Inc. FY 2023 Annual Report*”, <https://investors.etsy.com/financials/annual-reports-and-proxy/>.

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