

FALL 2022
MGMT 661 AND MGMT 690
PROJECT DESCRIPTIONS

MGMT 661 Experiential Learning in Operations Management
MGMT 690 Corporate Consulting

Project A: Fleet Management

Industry: Building Products Distribution

Client has accumulated one year of data and dashboards for maintenance issues on their existing truck fleet. Analysis of this data would allow client to make more informed decisions regarding vehicle reliability, environmental use and preventative fleet maintenance.

- Analysis will focus on the following questions:
- Do certain types of trucks have more maintenance issues?
- Are specific issues for specific truck types more common in certain regions/environments?
- Is a particular vendor/manufacturer not meeting their expected reliability?
- How do we establish a KPI to define expected reliability going forward to more robustly measure the health of our fleet from a maintenance perspective?

Project B: Demand Planning Process Analysis

Industry: Food and Beverage Distribution

Forecast Accuracy has been challenging since the beginning of COVID with the macro-economic conditions it has placed on our customers. Customers are more erratic in their ordering decisions as well as vendor fill rates have from our suppliers have been at a historic low. Being able to predict our customers ordering needs is crucial for the business as it ensures we have the right product in our warehouses at the right time.

- Project outcomes, in order of priority:
- Analyze and determine value add based on demand planning incremental changes
- Determine demand planning parameters within current system
- Additional outcomes, if time permits:
- Research forecasting methods, determine best case scenarios or recommend best in class methods
- Deliver final recommendations for forecasting methods

Project C: Backlog Management Process Design

Industry: Communications Equipment Manufacturing

One of the responsibilities of the Supply Chain Operations team is to be responsible for determining what supplies are available to ship against customer requested demands. In cases where supply is significantly less than demand, a priority of how the backlog will be filled must be determined and then the order schedules update to reflect this.

- This project seeks to answer the following questions:
- Can we quantify the level to which customers “True” needs are different from the way that the ordering process delivers sales orders to client with requested delivery dates?
- How can data be collected, in a scalable way, on customer’s most immediate needs, that will be different than the request dates placed on their orders?
- How can a weighting be determined to measure the needs of different customers against each other and the potential return of servicing one customer over another?
- Can this information be aggregated and reported in a manner that will reduce the amount of ad hoc escalation and questions that exist today?
- How can the outcomes of a newly defined process be integrated with the larger backlog management process to maintain the sales order backlog effectively?

Project D: 3PL Transition Planning

Industry: Consumer Tech Manufacturing

Client is growing during an inflationary time. This project will involve assessing current and potential 3PL cost structures (warehousing, B2B and DTC fulfillment, etc.), creating a project plan and working with cross-functional stakeholders (e.g. inventory management, transportation, e-commerce, finance) to switch from the existing provider to a new service provider.

- Expected Deliverables:
- potential cost saving calculation
- project plan with milestones, owners and due dates
- inventory ramp / ramp down plan
- volume migration plan (by channel)

Project A: Opportunity Analysis

Opportunity Analysis in Firms new opportunity incubation group

This company has a large portfolio of ideas is looking for some individuals to assist in screening the opportunity for these ideas. This will include working with the company's strategy directors as well as doing secondary and primary research to better understand consumer problem. There will be several problem sets and market opportunities in the search set. The groups will be working on each problem area for around one month and will have the opportunities to explore multiple areas. Purdue's role is to determine the nature and range of the problem so technology experts will have enough information to design a solution.

Project b: Market Analysis

Market Analysis for precision electronics.

Key duties will include:

- Conduct market research
- Identify and talk to potential customers
- Develop marketing plans
- Create presentations and marketing materials
- Participate in brand awareness efforts
- Work on pricing strategy

Project c: ESG Project in Inventory

ESG project in inventorying best practices for upstream partners

This is board level exposure in the emerging field of ESG. this company is working to improve their role in assisting upstream partners in regenerative Ag practices in order to lower their carbon footprint.

Students will better understand how large companies are implementing ESG initiatives as well as how they consult with their suppliers. Students will understand the scope terminology for ESG and how to implement carbon footprint reduction best practices by understanding how supply chain impacts total carbon reduction initiatives.

Students will also gain a better understanding of how to communicate these initiatives to the board and work with the sponsor to prepare board level presentations.

Project D: Entrepreneurial Ecosystem Best Practices

Entrepreneurial Ecosystem Best Practices for Entrepreneurial Growth

Economic development does not happen by accident. Systems, Events, and Networks are put into place and actively managed in order to stimulate economic development. The question is, what are the things which need to be put in place in order to facilitate Sources of Funds and companies which are worthy for Uses of Funds.

Once funds are secured by a company, what are the things which need to be in place in order for the firms to succeed.

Students will gain a better understanding of the process of seed to maturity in the funding and growth stages fledgling businesses.

Project E: Market Opportunity Alaysis

Market Opportunity Analysis for Acquisition Target

Students will screen one of many acquisition targets. This company is a small group of talented managers following the same process as private equity in order to grow their company. The company is primarily involved in the medical instrument space with a growing portfolio of companies. They are continually looking for new opportunities and this team gets to advise on go/no-go decisions for one of their acquisition targets.

Project F: High Margin Compliments

Marketing of High Margin Compliments

This company has a rather advanced portfolio of consumer IoT consumer electronics. These can be used for home automation and marketing. While the electronics are very advanced in capabilities, the products are moderate margin. There exists room to expand the total margin by selling complement services such as home monitoring (ie ADT). While the company has some of these services in place, they believe they can grow this portion of the business and increase the total lifetime value of their customer base.