

THE UNIVERSITY OF BRITISH COLUMBIA



2019 MFRE GRADUATING PROJECT PRESENTATIONS

Candice Zhang and Carolina Rodrigues Cunha. Pacific Institute of Culinary Arts.

<u>Competitive Analysis and Business Development.</u> This project provides a review of PICA's current position, market landscape, and revenue-generating strategies to map a range of competitor types including culinary schools and colleges in Vancouver, as well as in Canada and the United States. It then leverages the results of this competitive analysis to develop and review the feasibility of new services or courses, using a demand-and-supply analysis, together with a cost-benefit matrix, to provide a framework of strategies for future growth.

Eddie Guo. Canada China Sport Foundation Autism Care Foundation.

The two objectives for this project were to analyze, first, the market for establishing a test point in China, and second, the financial feasibility of doing so. Market research demonstrates a huge demand for such a resource in China's autism-care industry. Based on tax and policy research, however, further details need to be confirmed regarding financial feasibility.

April Feng and Ziming Wang. BC Ministry of Agriculture.

Econometric Forecasting Model Construction for BC Agricultural Commodities and Economic Impact Indicator Identification on Recreational Cannabis in BC. This two-stage project first develops econometric forecasting models that incorporate price and quantity for selected BC commodities, allowing the Ministry of Agriculture to better estimate its future budgets. Taking blueberries as the representative commodity, the project identifies and analyzes influential indicators. It then provides a multivariate forecasting model, or ARIMA, for blueberry price and production. Second, the project identifies the Ministry's data needs in evaluating the effects of recreational cannabis' federal legalization on the BC economy. Economic indicators used in Oregon, California, Colorado, Washington State, Spain, the Netherlands, Colorado, and Uruguay are examined. The recommended indicators will be used as a reference for the Ministry in analyzing cannabis' economic impact.

Olivia Qian. Look4Tutor.

<u>Market Analysis for Look4Tutor.</u> Based on an analysis of Vancouver's current undergraduate-tutoring market, this project lays out an expansion strategy for the online tutoring agency Look4Tutor. It also evaluates the agency's financial performance and conducts a SWOT analysis based on a review of other local tutoring institutions.

Stephanie Sun. Beijing TBC Education Development Co. Ltd.

<u>Competitive Analysis of TBC Education and Requirement Analysis of Qingdao Metro</u>. This project comprehensively analyzes the operational processes and competitive environment of e-learning companies in China. It then tracks and documents the process of designing and constructing a cloud-based e-learning system for Qingdao Metro.

Kai Zhao. Research Project.

The PVAR Granger Causality between Green Productivity and Agricultural Export Performance: A Directional Distance Function and Global Malmquist-Luenberger Approach. This study employs a directional distance function and global Malmquist-Luenberger approach for green total factor productivity (GTFP) measurement. It presents a dynamic PVAR data analysis between GTFP and agricultural export performance in 40 countries for the period 1961–2015.

Karen Ni and Joyce Qin. Holy Napoli Pizza.

<u>Market Expansion and Cash Flow Prediction for Holy Napoli Pizza.</u> Meeting Holy Napoli Pizza's need for a detailed business plan, this project includes a two-year cash-flow prediction and market research into export policies and pizza markets in Eastern Canada, the United States, and Asia. The report will serve as a reference for the company's future expansion planning.

Goodness Adesokan and Yico Zhang. City of Vancouver and CityStudio Vancouver.

<u>Repair</u>, <u>Reuse</u>, <u>Share</u>: <u>Zero Waste in the City of Vancouver</u>. Pursuant to Vancouver's goal of becoming a zero-waste city by 2040, this project provides and analyzes a comprehensive inventory of share-reuse-repair assets in Vancouver. Based on this inventory, the project offers research and policy recommendations for zero-waste activities to local government and businesses.

Espoir Tuyisenge. BC Food Processors Association.

<u>Safety Regulations & Standards Documentation for BC Commissaries and Commercial Kitchens.</u> This project analyzes and recommends common safety guidelines for commissary members of the British Columbia Food Processors Association. Recommendations are based on primary and secondary research, including interviews with the provincial government and regional health authorities that regulate commissaries.

Van Nguyen. BC Food Processors Association.

<u>A Shared-Logistics Framework for BC Commissary Kitchens.</u> A series of primary surveys and interviews grounds this project, which assesses the potential for a shared-logistics framework to provide food processors with more support, reduced costs, and increased profitability. The project report presents several recommendations for how commissaries should offer their members shared services in purchasing ingredients and delivering products to buyers.

Mingshan Guo. Faculty Brewing Co.

<u>Development of a Staff Training Manual and Financial Report for Faculty Brewing.</u> This project offers two main deliverables. The first is a training manual to support knowledge transfer from Faculty's owners and brewing team to its tasting-room servers. This improved transfer helps servers better answer customer questions and thus adds value to their interactions. The second is a financial report that supports product decision-making by analyzing financial data over several variables, including beer type, volume, and time-to-brew.

Kathy Xiao. Research Project.

The Impacts of Total Factor Productivity (TFP) on Agricultural Trade among Seven Asian Developing Countries. This project researches the impact of productivity on agricultural trade in select countries. It also investigates their correlation by analyzing TFP panel data and other variable data sourced from the United States Department of Agriculture and the World Bank. Based on regression model outputs, the TFP index is significant in explaining the value of exports.

Yu Zhang. Research Project.

The Conflict of Agriculturalization and Urbanization: The Impact of Rural-Urban Migrants on Agricultural Output in Guangzhou. With the objective of reviewing Chinese household registration system reform, this project applies fixed-effect panel-data analysis between rural-urban migrants and crop output value in eleven districts of Guangzhou between 2005 and 2013.

Carolyn Wang. True NOSH.

<u>Cost-Benefit Analysis of Organic and Non-GMO Certifications.</u> Taking the company's Asian sauce products as its sample, this project performs a cost-benefit analysis of organic and non-GMO certifications for True NOSH. It identifies and compares current and future organic and non-GMO sauce markets, presenting recommendations for which certification True NOSH should pursue in order to maximize profits.

Helen Li. Bank of China (Canada).

This project reviews the structure of Canada and China's respective banking industries. Specifically, it explores trends in digital banking and fintech with the objective of providing the Bank of China (Canada) with up-to-date information for future decision-making. The project's recommendations are based on primary research of audited financial statements and financial news.

Hanvu Wang. Bimbo Canada.

<u>Database Administration and Project Support for Bimbo Canada, Ltd.</u> Due to recent acquisitions and customer-base growth, Bimbo Canada must revise the legal territory maps included in its franchisee contracts. This project provides renewed property mapping based on up-to-date customer data, with a final deliverable of 450 maps.

Jake Abbott. Statistics Canada.

Consumption-Based Carbon Accounting for the Statistics Canada. Together with the UN Sustainable Development Goals team at Statistics Canada, this project furthers the implementation of a set of national indicators that measure Canada's progress toward sustainable development. It is the lead initiative in developing a data product that accounts for Canada's carbon emissions from a consumption-based perspective, using supply-use tables and multi-regional input-output analysis as its dataset.

Ziquiao Jin and Jasmine Zhu. Craft Grain.

New Market and New Product Development Analysis for Craft Grain. This project assesses potential markets for Craft Grain's fibre and protein supplements, which are derived from spent brewers' grains. An extensive and detailed cost-benefit methodology is applied to evaluate the investment feasibility of new equipment. Competition analysis is used to assess real-market position, while sensitivity analysis shows the break-even points for different production-rate scenarios.

Monica Chen. St. Jean's Cannery and Smokehouse and Raincoast Trading.

<u>Data and Customer Behaviour Analysis for Raincoast Trading.</u> With the goal of increasing both demand- and supply-side profitability, this project offers recommendations to Raincoast Trading for adjusting its product line and sales strategies. On the supply side, sales data analysis — including profitability, sensitivity, and price-elasticity analyses — helps deepen the company's understanding of sales patterns. On the demand side, observation and focus groups served to consolidate customer-perception data on the company and its products.

Ian Lederer, Columbia Basin Trust.

<u>Agricultural Land Transfer.</u> This project conducted a feasibility analysis of different land-transfer methods in the Columbia Basin. Its primary research was conducted in consultation with regional experts and organizations experienced in implementing land-transfer methods.

Kevin Wu. Farm to School BC.

<u>Data Analysis and Data Management.</u> Three major objectives guide this project. First, it provides a brief recommendation summary for provincial and departmental managers. Second, it reviews options for customer-relationship software to help the Farm to School program maintain long-term relationships with its constituent members. Finally, it analyzes survey data and highlights key results for professional audiences.

Stephy Zheng. Wise Bites.

<u>Analytics Focus Project to Support Decision-Making.</u> To help local health-food manufacturer Wise Bites stay responsive to ever-changing market demands, this project presents a set of recommendations based on sales-model analysis of various sales channels. In addition, a cost-benefit analysis of business operations reveals suggestions for how to make the most effective use of the company's labour force and resources.

Tracy Cheng. Monic Financial.

<u>Risk Analysis for Real-Estate Projects</u>. This project analyzes Monic Financial's real-estate projects from three perspectives: capital risk, financial risk, and business risk. The results of this analysis provide recommendations for offering customers sustainable, low-risk financial solutions.

Dionissios Batistatos. Vancouver Economic Commission.

Measuring the Value of Vancouver's Circular Economy of Food. This research lays out a consensus-based, inclusive approach to establishing sustainable food-ecosystems policy in Vancouver. By applying an analytical hierarchy process to group decision-making, it offers a policy development strategy for a regenerative local food system. A forecasting model suited to circular economic frameworks is also provided.

Yolanda Huo. Granola Girl Enterprises.

<u>Developing New Markets and Growth Strategies for Granola Girl</u>. Using SWOT and Ansoff analysis, this project identifies and strategizes growth opportunities for Granola Girl. It then provides a toolkit of contact lists and outreach materials designed to help the company identify and develop new markets in local hospitality, food service, and the catering industry.

Nick Gemperle. Agriculture and Agri-Food Canada.

<u>Apple Supply Chain Study: Retailer Survey Development</u>. The survey presented in this project will measure how satisfied Canadian retailers are with Canadian suppliers; what retailers look for in a new apple cultivar; and how retailers weigh different factors in the fresh-apple-buying decision-making process. Findings from an extensive literature review, expert interviews, and focus groups ground the validity of categorized decision-making factors and survey methodologies.

Yeon Zhoo. Farm Credit Canada.

<u>Risk Mitigation Survey and Scorecard.</u> This project addresses the need to understand industry concerns about, and strategies for mitigating, five major risks in agricultural sectors across Canada. A survey questionnaire was implemented to assess these risk-mitigation concerns and strategies, and the data has been analyzed to create a risk-mitigation scorecard.

Jill Smilestone. Canadian Food Inspection Agency.

<u>Cost-Benefit Analysis of Proposed Federal Regulations</u>. In collaboration with the Canadian Food Inspection Agency's economic affairs team, this co-op term involved determining and assessing the costs and benefits of proposed federal regulations pertaining to food safety, and animal and plant health. This included an economic analysis of the impacts of standardized date markings on food waste in Canada, which resulted in the successful monetization of the incremental food waste benefits of a proposed regulation.

Ely Weisbrot. Canadian Environmental Assessment Agency.

<u>Guidelines to Support the Transition of the Proposed Impact Assessment Act.</u> The purpose of this project is to provide guidelines on how to assess the economic impact of resource projects in Canada. The guidelines address the proposed impact-assessment process, providing both a rationale for scoping indicators and methods for analyzing their respective impacts on Indigenous communities and broader Canadian society.

Becky Li. TD Canada Trust.

<u>Customer Experience Co-op and Financial/Market Analysis.</u> This partnership with TD Canada Trust involved two phases. First, a co-op placement helped establish familiarity with TD's day-to-day operations, as well as facilitating face-to-face industry networking. A financial and market analysis project serves to link this direct experience to high-level insight into the banking industry and investment markets.