Background on the Analytical Consulting Lab

The Analytical Consulting Lab (ACL) is part of the Kellogg experiential learning initiative. The specific interest in the Analytical Consulting Lab comes out of the deep demand for business leaders that can provide guidance in analysis and focus that analysis to specific business questions. Additionally, many recruiters and employers have commented that finding talent that bridges the business and analytical communities is difficult. The ACL strives to provide a real-world learning experience for students to work with sponsoring companies on business questions that revolve around analysis. Students work in teams using analysis (broadly defined) to answer current and important business questions.

Kellogg has a strong tradition in bringing analysis to bear on business questions. In fact, the Analytical Consulting Major is the second most popular major at Kellogg, suggesting that not only does the ACL support this major, but it will resonate strongly with the goals of many a Kellogg MBA student.

Course Details

The ACL is offered as DECS-915, a full credit course. Most projects in the ACL are sponsored by Kellogg alumni, at very senior levels in their organizations. Students taking the ACL are assured a strong learning experience and a commitment from the firm to provide access to decision maker and information that will make the experience meaningful.

Details on projects, companies, and information about selecting projects is available at: http://kellogg.northwestern.edu/faculty/walker/htm/acl
Application Process
Students interested in the ACL must submit an application for project selection.

The application permits optimal project assignment, based on student goals, client needs, and project requirements.

Applications are accepted by the Kellogg Experiential Learning system. Students should apply for DECS 915 via the Kellogg Experiential Learning System, at: https://www4.kellogg.northwestern.edu/el/

The application start date is Oct 13.
The application close date is Oct 24.
Decision date is on or before Round 1 bidding

Key parts of this application include:
• Resume or CV
• List of courses taken at Kellogg with grades
• Description of any professional Analytical Experience (no specific experience needed)
• Description of any professional Consulting Experience (no specific experience needed)
• Special service to Kellogg
• Reasons for taking the ACL
• Goals for taking the ACL
• Project Choice #1
• Project Choice #2
• Any fellow desired Kellogg student for a team (limit of one student to specify). Team member preference is only considered if both people select each other.
• Other information that you may wish to share in your application, personal goals, career aspirations, etc.

Student teams that are fully formed (a team of 4) are encouraged and will be given special preference. If you are forming a team and submitting as a team, do make that clear in the application and stress how your team has come to select the project and how it meets your goals.

Student information in the application process is used in formulating teams and assigning projects so that goals, backgrounds, skills, and expectations are all best aligned.

Project Assignment
Student assignments to client projects will be based on individual preferences, requested skill sets and industry experience, and team member diversity. Every attempt will be made to grant students their first or second choice of projects. Student information is collected via the application. Students may select one fellow student for a project. This fellow student selection is honored as possible, if the both students select each other.
Students will be notified about their project assignments during the term before the class. All efforts are taken to accommodate first choices, while forming teams with an appropriate set of skills and interests. Preference is given to pre-formed teams.

**Case Packet and Readings**
As this course is an experiential one, there are no specific cases to prepare. However, many students have looked for examples of companies that have excelled at Analytics. Also, as the course emphasizes consulting and best practices in a professional client engagement, there is a need to consider some of these best practices. Given this, the following texts are recommended and optional:

2) Competing on Analytics, Tom Davenport and Jeanne Harris, HBS

These texts are easily purchased on-line and used at great prices, so these are not requested in the bookstore.

**Course Meetings**
As with other experiential courses, the focus is on the team project and its delivery to the sponsoring company.

Teams will meet with the Professor on a regularly and frequent basis in order to discuss the analysis, flow of work, final presentation and delivery to the sponsoring team. The class will also meet with the prescribed schedule to review concepts and themes important in being successful with the analytical consulting function and in order to provide presentations for the purpose of group learning.

All Group Meetings are to be held with the team and the Professor at a pre-defined time that works mutually. Meetings with the Professor and Client must conclude before 4:30PM on weekdays. PTMBA students are welcome to the class, but cautioned on this scheduling constraint. Students who cannot make meetings in person are encouraged and welcomed to join via telephone.

**Pre-term activities**
- Project identification
- Team formation
- Identification of Team Liaison to Client
- Identification of Team Liaison to Professor
- Client Introduction
- Project description
- Schedule first group meeting with Professor
- Schedule first client meeting with Client

**Week I:**
- Class Session I (Jan 6, 2016)
  - Getting Started with DECS 915
Managing Project Ambiguity
Managing Teams
Overview of the Consulting Approach
Dealing with Data
Descriptive Statistics
Using Tools: JMP, Excel, @Risk
STATA Resources at Kellogg

Guest Speaker: NWU Librarian:
Using Business Databases from the NWU Library for market and firm measurement.
Bring your laptop and be ready to explore databases!

Week II:

Group Meeting I:
- Developing a Work Plan, Project Analysis
- Examples of Past Analysis
- Use of Graphics
- Best Practices in Presentation of Data
- Building Points Through Analysis

Week III:

Group Meeting II:
- Preliminary Analysis of Data
- Teams to bring descriptive statistics to meeting with Professor

Work Plans due to Professor

Week IV:

Group Meeting III: Focus on Data and Analysis
- Address questions and issues in analysis

Week V:

Group Meeting IV: Prep for Midpoint Check-in

Class Session II (Feb 3, 2016):
- Mid-term progress review and team mini-presentations
- Mid-point document due at beginning of class

Week VI:

Group Meeting V:
- Mid-point feedback, planning for next phase

Week VII:

Group Meeting VI:
- As per team needs

Week VIII
Group Meeting VII:
As per team needs

Week IX
Group Meeting IX:
Dry-run of presentation with Professor

Week X
Class Session III (Mar 9, 2016)
Project Findings
Final project deliverable due to Professor and Client on Mar 9, 2016
Meetings with Clients to be held and presentations made to client in person
during or before final week of classes.

As in any professional consulting engagement, the students are requested to regularly meet with
the client to receive input, data, direction of project goals, and feedback on the progress as
needed. All clients are committed and dedicated to fulfilling the learning and business aspect of
the project.

Teams may schedule additional time with the Professor as needed and as available.

Grading

Grading of the project is driven largely by the quality of the team project. The Professor will
evaluate the project, its analysis, presentation, and delivery on the following major points:

• Analysis:
  o Quality of analysis (thoroughness, appropriateness)
  o Clarity and quality of model summary and description
  o Intellectual impact (was the analysis creative, novel, clever, or otherwise
    compelling?)

• Project Document
  o Quality of project description
  o Quality of analysis summary
  o Quality of recommendations and conclusions
  o Use of meaningful graphs, graphs, and presentation of data

• Presentation Documents
  o Quality of presentation
  o Professional impact of the presentation
  o Ability to communicate main points of the analysis and recommendations

• Team Meetings
  o Preparation
  o Organization
  o Progress

The Professor will ask the client company to provide feedback on the same above points.
Peer evaluations will also be collected from each member. Each student must rate their teammates on the following dimensions:

- Intellectual and creative contribution
- Workload and willingness to take initiative
- Organization, preparation, and availability
- Collaboration and respect for peers

Peer evaluations will be on a 1-10 scale with 10 being excellent and 1 being poor. All peer evaluations will be treated confidentially.

All ACL students must participate, as participation is also important to make this a meaningful learning experience for all involved.

**Grade Breakdown**

- Professor Evaluation of Final project materials and presentation: 30%
- Professor Evaluation of Work plan and Mid-point review: 20%
- Client Evaluation of Final project materials and presentation: 20%
- Peer Evaluations (*): 15%
- Preparation during team meetings and class participation: 15%

* Note: The Professor reserves the right to adjust any student’s final grade up or down by a full letter grade in the event that the student’s peers unanimously score his or her contributions significantly above or below the overall team effort. Feedback from the client on individuals who have not contributed can also result in letter grade adjustments.

**Role of the Professor**

The Professor serves as an aide, counselor, and advisor for the team. The Professor does not conduct the analysis, but will provide detailed direction on analytical approaches. The Professor does not serve as the team liaison or representative to the client. The team must organize itself and identify such a liaison.

In the event that the client or the ACL student team encounter an incompatibility or encounter an issue, the Professor will intervene to remedy the situation.

The Professor may also resolve project assignments, as needed.

**Role of the Team**

The team will consist of 3 or 4 Kellogg MBA students working as a team to complete analysis, as defined by the client as agreed to before the start of the academic term.

The team should be mindful to control the amount of time that is required of the client. This means being prepared for meetings, having a designated liaison to schedule meetings, request information, and follow-through with next steps. This level of preparation and understanding is
needed as most clients sponsor this project but do not allocate a full-time associate to work with the ACL team.

The team should expect to contribute about 300-400 hours over the 10-week period to this ACL project. This is a reasonable expectation for a team working on a project and is consistent with other experiential and lab courses at Kellogg. This translates to 8-10 hours per person per week.

The team will produce a white paper that documents the study, results, and recommendations. The team will also prepare a presentation and deliver it in person to the client and its team. A reduced version with emphasis on key findings is also to be presented at the last class.

Role of the Client

The client provides the real-world learning opportunity, data needed to complete the appropriate analysis, and feedback on the quality of the project and its analysis. The Client is not expect to solve the problem, but should provide ample expertise, data, and contextual information to the ACL team.

Prerequisites

All students in the ACL must have completed DECS core. There are no other requirements.

Some FAQs:

What is the Analytical Consulting Lab?
It is a course available to Kellogg MBA students that are interested in the use of analytics in business. Students must take specific prerequisites and have strong academic performance in such classes to take the Analytical Consulting Lab. Students work in teams to resolve a real-work business problem using analytics.

What do you mean by Analytics?
It is meant to be broad but includes the use of specific quantitative approaches, such as regression analysis, time series analysis, forecasting, market segmentation, data mining, optimization, logistical analysis, scenario simulation, and risk analysis, as examples. In particular, we mean solving a business problem using data and applying one of these quantitative approaches.

How can PTMBA Students participate?
The ACL is open to PTMBA students on a limited basis, subject to all meetings with the Client and Professor being conducted during normal business hours, which are taken as before 5PM on weekdays only. Please contact Dr. Russell Walker on any questions regarding your interest on the course. PTMBA students should organize in groups.

How can Saturday MBA Students or MSMS students participate?
At this time the ACL is not available to Saturday MBA students or MSMS students, given the need to meet in person with the Client and Professor on a regular basis outside of the format of these Kellogg programs.
How does this experience benefit the students?
Kellogg MBA students taking the ACL will work on a real-world problem under the direction of a Kellogg faculty member. The opportunity to apply analytical theory and learn about a business, make recommendations, and bring together many aspects of their business education is unparalleled. We also ask that the students focus on how to communicate the results of analysis in the context of business decision-making. For students interested in moving to an industry to deepen in analytics after graduation or developing new business skills in analytics, this course will be very attractive.

The Analytical Consulting Major is one of the most popular majors at Kellogg and students have expressed deep interest in developing strong skills in analytics. This course meets an interest in our students and provides them an experiential learning opportunity that will prepare them for business opportunities.

How does the Client benefit from this opportunity?
The ACL is an intensive analytics elective that attracts some of our most analytically talented MBA students. It is expected that the student group of 4 will commit about 400 working hours to the project. Additionally, the student project will be overseen by a Kellogg faculty member that has expertise in analytics and its application in business.

We expect that the project deliverables, recommendations, and report will provide direct value to your organization. However, we also believe that the project provides your organization and opportunity to determine how and where to invest in more analytics. If this includes the acquisition of more analytical talent, the project provides an excellent conduit to members of our student body that are talented and interested in this space.

How does the team work with the Client?
For the student team, the partnering company is a client. They will conduct their analysis and provide recommendations through a report and presentation in the same format and in the same manner as a consulting service. The faculty member also serves as an important liaison between the partner and the student, serving to manage time commitments and negotiate deliverables. It is expected that the student team can meet with and speak with key members of your team that can help them answer questions relevant to the analysis.

Which software will we use?
It really depends on the project and your familiarity with software packages. This course is software agnostic, meaning most software packages are acceptable. The course does not have as a goal to teach a particular package, but rather to enable analytics in a business project. You are welcome to use software of your choice. Most projects can well be completed with a combination of Excel and one statistical package. Students having taken DECS 915 have found using JMP, STATA, R, SPSS, and @Risk useful. Kellogg provides support and access to STATA. Access to JMP, @RISK, STATA, and SPSS will be discussed in the course. If you are unsure or unfamiliar with statistical software, we will discuss that during our first meeting. Some packages may have a minimal cost.

What about the data?
To make this experience valuable to the students and the to solve the business problem at hand, we do need access to data. It is important that the data be available before the project begins. Additionally, the project should make use of “scrubbed” data, that is data that is free of specific information that would be sensitive or otherwise governed by a law, such as social security numbers of customers or names of customers.

**What types of business problems can be considered?**
As analytics is helpful in many business functions, we are open to many applications of analytics. Specific business problems in marketing, forecasting, customer segmentation, pricing, commodity analysis, logistics, risk management, operations, inventory leveling, supply chain improvement, and scenario planning are sure to provide great analytical opportunities.

**Will the analysis become public?**
The work between the students and your organization is considered confidential. If necessary, the students may be asked to sign a non-disclosure agreement. If this is necessary, we ask that the non-disclosure agreement be such that it does not prevent the students from seeking employment or from building on their experience gained on the project.

From time to time, such company-student projects lead to very interesting business lessons. As a leading business school, we are interested in sharing such lessons with our next generation students and business leaders. We do this through business cases. If such an opportunity exists with your project, we will seek your permission to relate the business lesson through a case study.

**How to I join the Class?**
First, you must meet the prerequisites. Then submit your application to Professor Russell Walker before the deadline. The application is used to build teams, assign you to one of your top project choices.

**Contact Information**
Please contact Russell Walker, Ph.D.
Via e-mail at russell-walker@kellogg.northwestern.edu
or via phone at +1 847 467 2148.
Welcome the Analytical Consulting Lab!

In the following pages, you will find candidate projects from sponsoring companies under the Analytical Consulting Lab (DECS 915) for Winter 2016.

The projects listed include working with actual company data, developing meaningful analytical models for managerial decision-making, and presenting results and recommendations to company executives. Most projects will require some level of Non-Disclosure Agreement (NDA) with the sponsoring company.

More information about the class can be found at its website: http://kellogg.northwestern.edu/faculty/walker/htm/acl/

Please feel free to contact me at 847 467 2148 or russell-walker@kellogg.northwestern.edu with any questions and interest

Thanks for your interest.

Russell Walker, Ph.D.
Clinical Associate Professor
Kellogg School of Management
Northwestern University
**Super Bowl Advertisement Social Media Study**

**www.kellogg.northwestern.edu/news/superbowl/**

The Study

Professor Tim Calkins has conducted research and analysis on the success of Super Bowl advertisements for many years as part of the Kellogg Super Bowl Advertisement Review. As companies look to leverage advertisement and customer/fan engagement in new ways, there has been a direct link and, often, an immediate signal from social media sites (Facebook, Twitter, LinkedIn, etc.) on the value, attractiveness and even engagement regarding specific Super Bowl Advertisements. This provides firms a new means to reach customers and to measure their engagement and define the success of the Super Bowl Advertisement. This study, under the direction of Professor Russell Walker and Professor Tim Calkins will look to answer a few important questions for Super Bowl Advertisers:

1) Does social media activity show meaningful response to Super Bowl advertisements immediately after and during the Super Bowl?
2) What factors in an advertisement (humor, surprise, shock, etc.) suggest or predict the greatest likelihood for customer mention and redistribution via social media?
3) Which industries/firms/brands/products benefit most from social media activity in Super Bowl advertisements?
4) Develop a strategy to leverage and capture the social media opportunity via Super Bowl advertisements.

As part of this study, Professor Tim Calkins is inviting the team to participate in the 2014 Super Bowl Advertisement Review. Students will also need to be resourceful, creative, and ambitious in assembling meaningful social media data.
Element Bars
www.ElementBars.com

About
We are a custom energy bar company located in Chicago. This means that at http://www.ElementBars.com, customers can create their own custom energy bar by selecting from all natural and organic ingredients and then naming their own bar. Our whole food ingredients are carefully handpicked and kept as nature intended. Then we hand make our bars using the ingredients our customers choose, bake them in our ovens and deliver them freshly baked from our ovens to their doors. The Founder and CEO Jonathan Miller is a Kellogg alumnus from the Class of 2008. He has worked with several students from Kellogg – including hiring summer interns and serving as clients for other class projects.

The Analytical Consulting Lab provides another great opportunity to provide students with rewarding experiences while allowing Element Bars to leverage student skills. Below are projects of interest. The Analytical Consulting Lab provides another great opportunity to provide students with rewarding experiences while allowing Element Bars to leverage student skills.

The data we can provide includes purchase behavior, Google Adwords access, and Google Analytics access.

Project 1 – Demographics of Purchasers via Google Analytics
We have purchase data that is stored on our web analytics platform (Google Analytics) and also our internal order system, but this data has not been tied to demographic data (either internally collected or via 3rd party sources). We would like to tie these data sets together and then analyze the highest (and lowest) value customers for demographic trends.

The data we can provide is sales data, customer data, and Google Analytics data.

Project 2 - Social media marketing
Explore different social media advertising (most likely with a focus on Facebook) and how their demographic targeting overlaps with our target segments. Run test campaign to see conversion. Analyze (very) old social media campaign to see what targeting works best.

The data we can provide is sales data, customer data, Google Analytics data, Facebook access. Jonathan Miller founder and owner of Element Bars is a Kellogg alum, Shark Tank Tamer, and longtime ACL sponsor.
NIKE ANALYTICAL CONSULTING LAB PROJECT

NIKE/Team Background:
The NIKE North America Analytics (NAA) team is comprised of cross-functional partners and analytics professionals who work together to identify, scope, and execute high-impact analytics projects across the North America organization. We use data and analytics to validate new strategic business opportunities and to prescribe actionable recommendations to leverage those opportunities. We also play a pivotal role in elevating analytics throughout the organization and in spearheading initiatives that instill the importance of data driven-decisions.

Project Vision: Develop a model to assess marketplace potential and provide insights into how and where NIKE should focus its growth in the U.S. over the next 3 years.

Project Description:
NIKE is on the offense always and, thus, is continually looking for opportunities to evolve and grow its business in critical geographies like North America. As part of this constant evolution, the NIKE Analytics team is tasking you with analyzing the US market to determine areas of highest growth potential for NIKE business and to better optimize how and where NIKE sells and distributes their products. This means looking across DMAs (Designated Market Areas), dimensions of distribution (e.g. digital and brick and mortar channels), demographics and historical performance in order to tease out insights about where NIKE should focus its growth over the next 2-3 years. In particular, your analysis should help to answer the following key questions:

1. Which markets offer the largest growth opportunities for NIKE?
2. What external factors, such as demographics, are correlated with NIKE sales?
3. Do certain groups of DMAs have similar profiles or characteristics as it relates to the different dimensions (e.g. NIKE.com, NIKE stores) of NIKE’s business?
4. Is there any correlation between NIKE’s digital business (i.e. NIKE.COM) and their brick and mortar store sales? Does it vary across different DMAs or demographic groups?

NIKE Contacts:
• Daniel Reaves, NIKE, Business Analytics Manager (Kellogg ’15 and ACL alum!)
• Todd Stamp, NIKE, Business Analytics Manager (Kellogg ’14)
The Chicago Bears Fan Marketing & Research department is responsible for growing and nurturing the fan pipeline, from infancy until late adulthood. In order to continue to grow the Bears fan base, a special focus has been placed on youth, female and Hispanic fan segments (the fastest growing NFL fan segments).

Over three-fourths (77%) of Bears fans become fans before the age of 13. Currently, the Chicago Bears have two youth initiatives: a Crib Club for fans under 5, and a Kids Club for fans age 5-12. However, there is no engagement or communication dedicated to fans ages 13-17.

Due to advertising restrictions, companies cannot gather data or directly contact a minor (defined as someone under the age of 18). Because of this and other legal constraints, most research companies are only able to provide data for adults ages 18 and over. To make sure the Bears comply with all policies, all communication for the Crib Club and Kids Club is addressed to the members’ parents.

Research shows that attending an NFL game at an early age drives fandom. The Chicago Bears have been sold out for 31 consecutive seasons, which reduces the opportunity to market tickets towards youth/teen initiatives. Fan events like Family Fest and Training Camp allow a wider variety of fans to engage with the brand outside of gameday, but many activity stations such as “Kids Zone” are geared toward younger children 12 and under.

**How do the Chicago Bears market to a demographic that they cannot engage with directly? How can they bridge the communication and engagement gap between the ages of 13 and 17? What data can be gathered to better understand this lifecycle? What tactics can the Bears employ to drive fandom during the 13-17 age range?**

The Bears challenge students in the ACL to think creatively and consider options beyond participation in youth football, video games and fantasy sports. We look forward to your recommendations.

The Bears team is expected to present their final recommendations to the Bears management team. The Chicago Bears are a returning sponsor of the ACL.
About the Project

The research of the Institute of EthnoMedicine has showed that cyanobacteria caused various neurological diseases. Cyanobacteria are photosynthetic bacteria of ancient date in the geological record. It is believed that cyanobacteria played a major role in generating the oxygen atmosphere of the earth. These cyanobacteria also occur in water bodies, like lakes and in particular, show large bloom cycles in the Great Lakes.

Neurological diseases that are believed to be caused by or otherwise amplified by cyanobacteria include ALS, Alzheimer's, Parkinson's and other tangle diseases. Data collected show a larger than expected occurrence of Alzheimer’s in various parts of the US that use water supplies subject to cyanobacteria occurrence.

Due to the molecular size of the neurotoxin originating from cyanobacteria, most common water treatment processes do not adequately remove the neurotoxin from water. The Institute of EthnoMedicine has study the neurotoxin, originating from cyanobacteria, and believed to be a factor in Alzheimer’s disease and other neurological diseases and has developed a patented filtration process that would remove the neurotoxin molecules from drinking water. This project will examine the economics developing and selling such a filter. As the Institute of EthnoMedicine desires to learn more about the presence of cyanobacteria in drinking supplies and its role in neurological diseases, learning filtration deployment will be focused on providing a means for additional data capture.

This project involves building a business case, economic evaluation, deployment recommendations for the filter, and marketing messaging for the Institute of EthnoMedicine.

About the Institute of EthnoMedicine

"We have only one wish at the Institute for EthnoMedicine: to discover new treatments for serious illnesses. This focus has led to the discovery of two promising new drugs for ALS, Alzheimer's, Parkinson's and other tangle diseases. We have a third drug in development. Our novel path to discovery has been exciting. Each step of this path, beginning in Guam, has brought us closer to a cure.” - Paul Alan Cox, Ph.D., Executive Director

The mission of the Institute for EthnoMedicine is to search for new cures by studying patterns of wellness and disease among indigenous peoples.

A major research initiative at the Institute is to find and fight the causes of ALS and other motor neuron diseases. ALS (Amyotrophic Lateral Sclerosis), sometimes known as Lou Gehrig’s disease, is characterized by death of motor neurons and muscle atrophy. Although ALS occurs at about the annual frequency of multiple sclerosis (MS), because of the lethal nature of the disease, it appears to be rarer since at any one time there only 25,000 patients living in the United States. Well-known examples of persons living with ALS include physicist Stephen Hawking, as well as...
the courageous professor with ALS portrayed in Mitch Albom’s best-selling book, Tuesdays with Morrie.

The Institute operates a state-of-the-art Research Center in Jackson Hole, Wyoming. The Institute also maintains a close association with the University of Miami Miller School of Medicine, the University of Dundee, Scotland, Portsmouth University, the University of Hawaii at Manoa, Chiba University, Japan, Stockholm University, and the University of California, Berkeley. The Institute collaborates with anthropologists, botanists, chemists, linguists, microbiologists, oceanographers, neurobiologists, neurologists, and other physicians and scientists throughout the world.
About the Project

**Topic:** Low Cost Carrier (LCC) Demand Stimulation in the Australian Domestic Market

**Objectives:**
- Determine the level of LCC saturation in the domestic market
- Provide a view on the optimal LCC presence
- Assess opportunities for further LCC growth

**Activities:**
- Assess global case examples of demand stimulated by LCC growth (U.S., Europe, Asia)
- With actual data provided by Qantas Group, analyse effects of growth from Jetstar and Tigerair over the last 10+ years
- Build predictive model on effects of further LCC growth

This project is sponsored by Reed Tanger, Kellogg alumnus, and Head of Strategy at Qantas. He and Qantas are pleased to be back in the ACL.
Cigna
www.cigna.com

Healthcare insurance Context

Health care is unlike most other experiences:
- The product (the insurance plan) is most often not specified and purchased by the consumer... it is purchased by a third party (employer) on behalf of the consumer (employee)
- When the consumer does have a choice, it is often limited by the employer, broker or exchange
- The insurance company does not deliver a product or service directly to the consumer... it is delivered by a third party (e.g., hospital, doctor, specialist, etc.) provider
- The provider (often) does not know how much the service will be billed at and ultimately what it will cost the consumer
- The product or service is often only used at a point of distress (illness, accident, injury, etc.)
- The consumer has no transparency into cost of the service at point of sale

The challenge is to uncover new ways of thinking about the issues at hand and develop products, services and solutions that could address these opportunities.

Though there are many issues pressing in our industry, we see the following as prime examples of challenges that we feel need addressing in the near term as the healthcare landscape is shifting.

1. Shift toward a more individual based approach: How can Cigna evolve its solutions from an employer or group driven approach to a differentiated individual consumer driven approach?

2. Navigation: Consumers don’t understand how to maximize the value of their health insurance and optimize what is available. How can we improve consumers’ navigation of the health care system in a way that drives value to consumers, Health Care Providers (HCPs) and Cigna while controlling or reducing cost? How do we help users (customers) get the most out of the benefits/features of their health plan?

3. The Change in Access To Care: How can Cigna drive improvements in its consumers’ overall access to care? What is the future of how medical care could be delivered remotely beyond Telehealth?

One of the key goals for the project is to bring a new and fresh perspective to the team. As we begin to build out our innovation capabilities, we are looking to outside sources to help us expand our thinking around problem solving. We feel that the student teams can help us to open our eyes to new possibilities of what the opportunities could be and how we could better understand and address needs in the market.

Consider these five areas to apply new thinking with the three challenges above:

- **Choose a Plan**: Pre-choose (gaining awareness), Choosing a Plan (enrollment)
- **Welcome Me**: Making & Comparing your Coverage Choices, Becoming a Plan Member (Being an insured customer)
- **Give Me Value**: Using Your Health Plan & Getting Value, Feeling Appreciated for Being a Member
- **Find Care**: Navigating the Health Care System, Finding Care and Learning About Your Options, Understanding Choices and Costs of Care
- **Eliminate Surprise Expanses**: Feeling knowledgeable and informed on Health Choices, Being Empowered to Work with Your Insurer and Health System Act as its Primary Advisor
There are 4 projects available with the NU Big Ten sports management team.

**Price Optimization study for Football and Men’s Basketball**

A comprehensive overview of our season and single-game pricing models for both sports, looking at segmentation of pricing as well as the perceived value of our events with the goal of maximizing revenue and attendance.

**An analysis on the effectiveness of Northwestern Athletics advertising/branding campaign**

An examination of the current advertising campaign that provides conclusions and insights on the current media mix and if it is effectively communicating the brand/positioning of Northwestern Athletics while also providing a sufficient call to action to increase ticket sales for football and men’s basketball. The focus on the advertising should look at the most effective ways to achieve these sales and branding goals as well as include an evaluation of the creative that is being utilized. Areas to explore include outdoor, digital, print, radio and transit.

**An analysis of our fans from a data standpoint, with the goals of helping us communicate with them better/spend our advertising $ more effectively**

Analyze the makeup of those who identify as Northwestern fans. Research the NU fan base, paying particular attention to their communication tendencies and buying habits. Also, identify who they are demographically, what they value (i.e. price, experience, ease of access) and how they consume information. Based on this research, provide recommendations to assist NU Athletics in communicating with this group as well as prioritizing gameday improvements.

**What is the perception of NU athletics relative to faculty/staff at NU and how can we better engage this population?**

Reach out to Northwestern departments throughout both the Evanston and Chicago campus to provide an analysis on the relationship of faculty and staff with NU Athletics. Determine what this group values relative to Northwestern Athletics as well as what drives their decision to attend a game, or become a season ticket holder. Some potential categories to explore – buying histories, geographical considerations and affinity to Northwestern. Ultimately, provide recommendations to Northwestern Athletics on how to better engage these two populations.
Company Bio:

Headquartered in Chicago’s West Loop (Harpo Studios), 120 Sports is a first-of-its-kind network delivering coverage of all sports in a digital format created for today’s fans. With the support of our key partners (Time Inc./Sports Illustrated, MLB Advanced Media, the NBA, NHL, NASCAR, the PGA TOUR, and Campus Insiders), 120 Sports currently offers 76 hours of live programming and over 1,200 video on-demand clips per week via our free app available on iPhone/iPad, all Android devices, Apple TV, Google Chromecast as well as on our website (www.120sports.com), MSN.com, SportsIllustrated.com and Fansided.com.

Project Description:

As a digital media network still in its early stages (launched in June 2014) of growth, 120 Sports is constantly examining creative and unique approaches to provide the best product and content to our target audience. As a consulting team, you will be asked to analyze our product (app) and determine what functionality is effective/lacking as well as that of our competitors. The team will also be asked to identify tactics and cost-effective marketing strategies that 120 Sports should employ to effectively increase our audience (downloads, etc.) based on a projected budget (budget to be provided), as well as analyze our competitors’ marketing approach to a similar audience (competitor/target audience date to be provided).

Over the last year, 120 Sports has targeted several “tent-pole” events/activations where the brand could capture content (programming, social media, etc.), execute activations and generate overall awareness of its brand. In your role, you will also be asked to conduct a strategic analysis of the events at which 120 Sports has previously activated and provide recommendations for future activations with attention towards improved audience engagement, target audience and budget.

As a matter of context, in addition to my role as Director of Business Affairs at 120 Sports, Marc Mugnos is a JV of a Kellogg student. As a result, he currently resides in Evanston and can be available to meet in-person.
Block Six Analytics
WWW.BLOCKSIXANALYTICS.COM

Situation
Block Six Analytics (B6A) is a sports marketing and analytics company that provides technology, consulting, and asset valuation service offerings to sports organizations, athletes, and regional sports networks. We also work with agencies and brands that operate in the sports industry. B6A clients include SMG @ Soldier Field, Comcast SportsNet Chicago, and Minnesota United.

B6A has created proprietary new metric called Revenue Above Replacement (RAR). RAR examines a player’s economic contributions to his or her franchise as compared to the minimum performing player that could play the same position. Last fall, B6A used RAR to evaluate the performance of NFL quarterbacks during the 2013 season to see which quarterbacks had added the most value to their teams. After the 2014 season, B6A expanded the analysis to include more revenue streams and more NFL players. B6A then examined how individual players help generate revenue in four revenue streams – ticket sales, television ratings, jersey sales, and sponsorship/other revenue. RAR also addresses how an athlete’s ability to help a team win impacts the organization’s revenue. In addition, RAR calculations were done for non-quarterbacks who have a similar degree of on and off-field impact as quarterbacks.

Task
B6A wants to expand the RAR metric to expand our service offerings, create a new revenue stream, increase brand awareness, and create an in-bound marketing tool.

Action
- Evaluate the RAR metric and recommend any possible enhancements to the model.
  - Determine the current and future on-field and off-field risk factors that could impact an athlete’s value in each revenue stream
- Determine how to apply the RAR metric applies to sports beyond football
  - Find the best sources of data to apply to other sports.
- Explore the best ways to create an inbound web-based marketing platform to present the data to current and potential clients.
- Create a media outreach strategic approach to connect with investors, team, media, agencies, and agents to enhance B6A’s brand awareness and brand perception.

Result
Kellogg students provide B6A with a new service offering that is a significant differentiator in the sports industry. RAR will become not only a product that B6A can monetize through direct sales but also a strategic marketing tool that can help promote the company and our core service offerings. This would allow sports organizations to understand the on-field and off-field risks and rewards associated with players.
Menus of Change
www.MenusofChange.org

Project Descriptions
There are 2 projects available with Menus of Change. Each looks at a critical input to the world’s food supply. Risks associated with the use, availability, pricing, and environmental impact follow and will drive the risk-decision approach to the use of these food inputs.

What Drives Meatier Returns or Less Meatier Returns

Much has been made in recent years about the environmental impact of meat and also the impact of climate change and water on meat and livestock production, including unprecedented cost increases and volatility. This comes at a time when a growing number of consumers are looking to increase the share of plant-based foods that eat, forgoing a meat for a few meals each week or seeking options that smaller amounts of meat. For instance, while McDonald’s is built around the quarter pounder, fast growing competitors like Five Guys feature a 1/8 pounder and Shake Shack and 1/2 mushroom patty and 1/2 beef double stack. New restaurant companies are being more overt, with companies like Chipotle, vc-backed Sweet Greens and Illinois own Roti Grille among the many that use meat as a condiment and offer a range of plant-based options. The shift towards offers that feature more plants and a bit less meat may match some consumer values and also drive health and environmental benefits. But what’s the impact on business performance?

The challenge would involve identifying and comparing a set of plant-forward companies and compare them to a set of legacy restaurant companies. This could include US or global restaurant or food companies, probably publicly traded and with regular public reporting and correlate their performance on key financial indicators (growth in shareholder value, revenue, profit). It also would take a close look and also the rate of “surprises”, or unforeseen problems, in their supply chain that they announce to the markets connected to the growing challenges of water, climate and the disease outbreaks in industrial livestock supply chains.

Sustainability, Transparency and Risk in the Food Industry

The food industry is at the intersection of some of the key risks impacting leading industries: Operational risk from climate and water constraints, reputational risk from poor labor and social conditions in supply chains, and financial risk from increasing volatility of key commodities. Some food companies are showing the strain on their bottom lines as supply chains grow more brittle while others are adopting new approaches that put transparency and corporate responsibility at the center of their strategies, creating vertically integrated “direct to farm” strategies like Mars and Starbucks which are investing in social development programs in key cocoa and coffee growing regions, Chipotle which selects the farmers its distributors and suppliers must work with, and others which are joining industry roundtables set up by global NGO’s like the World Wildlife Fund.
While all show concern, this project is intended to determine what leading sustainable food and agriculture sourcing strategies may already be driving business success. The project would involve identifying a substantial universe of large US or global restaurant and consumer-facing food companies, probably publicly traded and with regular public reporting and correlate the types of supply chain transparency and sustainable sourcing strategies they use, if any, with their performance on key financial indicators (growth in shareholder value, revenue, profit) and also the rate of “surprises”, or unforeseen problems, in their supply chain that they announce to the markets.

This project is sponsored by Arlin Wasserman, a Founder and Director of the Menus of Change and sponsor of previous ACL projects.
Operational and Cost Analysis of a Leading Craft Winery in Portland, Oregon

What is the cost of a bottle of wine? ENSO is a leading craft winery based in Portland, OR that is looking to better understand its production cost, by analyzing its operations and more appropriately allocating costs and identifying operational improvement opportunities. This project will look at the various input cost associated with manufacturing of each of its 6 main SKUs. Taking this costing information, the group will come up with a model that accurately projects it’s cost in the 5 different markets the products are sold, which will also include the cost the marketing.

This is an excellent project from teams interested in the alcohol business. The project is sponsored by Todd Paul, a serial entrepreneur, and a part owner of the winery. He is also a founder of Few Spirits and a repeat supporter of ACL.
About

The NorthShore Center for Simulation and Innovation (NCSI) at NorthShore University HealthSystem in Evanston, IL recently expanded its simulation center to 13,000 square foot, including 7 simulation rooms (2 fully operational trauma rooms, 3 patient rooms, and 2 operating rooms) and a surgical lab for advanced surgical training.

Our center is now in the top 5% nationally in terms of size for hospital-based simulation centers (ie not based directly on the campus of a medical school/university campus) and our learner throughput is likely in the top 1% as we have 400-800 learners come through our center on any given month. We are multidisciplinary in nature with attendees from nursing, pre-hospital, medical students, residents in various fields, and attending physicians. As an institutionally based simulation center, our audience focuses more on "adult" learners (ie current practitioners - physicians and nurses) more than university-based medical school simulation centers who focus more on medical students and nursing students.

The nature of complex surgical operations involves many levels and types of risks. The simulation center is inherently focused on risk reduction and operational excellence. The project objectives focus on meeting these overall goals.

1. Creating the business case and operational workflow necessary to increase utilization of B-Line Simulation Management Software.
   a. This project would have the students working with our techs to determine the various components of the simulation management software that could be optimized. (For example, today, only a fraction of our users are actively engaged and using the system fully.)
   
   b. Project goals
      i. Decrease time/effort spent performing manual data entry by leveraging the simulation management software
      
      ii. Identifying ROI associated with technology upgrades to facilitate integration of B-line in workflows (iPads, kiosks)
      
      iii. Improving overall utilization of the system in both surgical and medical simulation - providing gap analysis of current functionality that is used vs. that which is under, or not utilized – and then identifying workplan to achieve integration.
This is an excellent project to examine how new data and metrics on processes can improve the enterprise. Students will examine the value of the data in the context of a business environment. Northshore is a repeat ACL sponsor.