Analytical Consulting Lab Syllabus Fall 2014

June 20, 2014 Update

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 June 23, 2014.
The application close date is Jul 10, 2014.
Decision date is Jul 17, 2014 (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 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.

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 welcome 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 (Sept 24, 11:00-12:30)
  - Getting Started with DECS 915
  - Managing Project Ambiguity
  - Managing Teams
  - Overview of the Consulting Approach
  - Dealing with Data
  - Descriptive Statistics
  - Using Tools: JMP, Excel, KSTAT, @Risk
  - STATA Resources at Kellogg
FALL 2014 ANALYTICAL CONSULTING LAB: DECS 915
Department of Managerial Economics and Decision Sciences
Kellogg School of Management • Northwestern University
Professor: Russell Walker

Week II:

Class Session II: Oct 1 (11:00 -12:30)
Getting Started with a Consulting Project
Building a professional consulting deck
Best Practices in Consulting
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!

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 III (Oct 22, 2014 11:00 AM-12:30 PM):
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 IV (Dec 3, 11:00-12:30 PM)

Project Findings

Final project deliverable due to Professor and Client on Dec 3, 2014
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:
  - Quality of analysis (thoroughness, appropriateness)
  - Clarity and quality of model summary and description
  - Intellectual impact (was the analysis creative, novel, clever, or otherwise compelling?)

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

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

- Team Meetings
  - Preparation
  - Organization
  - 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

Required questions are as follows:

- What did you and each person do well?
- What would you do differently going forward and would you ask of each team member going forward?

Peer Evaluations will be collected at the midpoint presentation and also at the end of the class. This is to provide teams and individuals an opportunity to address any team dynamic issues.

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.

**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. The Professor may accompany the team to select team meetings and or participate in calls, but the Professor cannot in practically, attend all such meetings.

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.

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 participate?

At this time the ACL is not available to Saturday MBA students, given the need to meet in person with the Client and Professor on a regular basis outside of the Saturday format of the Kellogg Saturday MBA.

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 deep 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, KSTAT, SPSS, and @Risk useful. Kellogg provides support and access to STATA. Access to JMP, @RISK, KSTAT, 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 via the Experiential Learning website before the deadline (see above). 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 FALL 2014.

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
Jacksonville Jaguars
WWW.JAGUARS.COM

Project: Pricing Analysis for Ticket Sales

Background and Project Goals:

The Jacksonville Jaguars are seeking assistance with their ticket pricing decisions. Too often in professional sports, pricing decisions are made based on gut feel or some anecdotal evidence of what an entity thinks it can get for, say, a game ticket. The Jacksonville Jaguars would like to put more precision around its season ticket and single game pricing decisions.

We will provide primary market purchase history by section, opponent, and date, and secondary market purchase history, based on similar data.

Among the questions that might be illuminated through your analysis are:

1. Is there seasonality/weather sensitivity to our demand? Should that be reflected in our pricing decisions?

2. How can we take advantage of a strong home schedule and mitigate against a weak one?

3. Are we priced too high in certain sections, and what is the optimal pricing if we lower? Given how critical local revenue is to our franchise, lowering prices may meet with resistance, unless compelling data suggests a commensurate uptick in demand.

4. How should we be pricing our club sections? We have too many club seats for a market our size. Removal of these seats is not an option at this point.

These are a few of the questions with which we wrestle. We look forward to working with you.

This project is sponsored by Hussain Naqi, Kellogg graduate.
Project: Analysis of Season ticketholder Attrition

Background: Season Ticket Holders are the lifeblood of any sports organization. In addition to retaining the current season ticket holder base, developing new season ticket holders is a critical function. The Chicago White Sox offer a Full season ticket plan (81 games), a Split season ticket plan (27 games, weekend or weekday) as well as Flex plans (14 or 7 games). Each package comes with distinct benefits:
http://chicago.whitesox.mlb.com/cws/ticketing/season_tickets.jsp#benefits

Desired Deliverables: Using 2013 and 2014 sales data, we’d like an analysis of the purchasing behaviors of lost season ticket holders (i.e. Are they still coming to games? If so, how many? When?) as well as uncovering current individual game purchasers who, based on buying behaviors, could see cost savings and other benefits as a season ticket holder.

*We will need all participants on this project to sign an NDA.
Chicago White Sox Sponsor is Beth Grabowski, Kellogg alumna.
Soccerly and US Soccer Media Analysis
www.soccerly.com

Project: Analysis of Social Media, Google Analytics or Soccer Website Start-up

About the Study

Soccerly was created by Karlo Teran (KSM2Y 2009) and the same group of entrepreneurs (one Kellogg Alum, Miguel Ramirez KSM2Y 2004) who created Mexico's largest sports site, mediotiempo.com which they sold to Time Warner in 2010; now, we are based in the U.S. looking to create a leading soccer digital media site in English, soccerly.com, launched in January 2013 and the leading Spanish digital media site (U.S. / Mexico), juanfutbol.com. Soccerly (both sites) has a long-term vision and ambitious goals to create the most popular soccer destination taking advantage of the amazing growing opportunity that soccer represents in the U.S (for Spanish and English speakers). As you know, this June, World Cup will be held in Brazil so it's a huge soccer year. In addition, the announcement last month that the Copa America will be played in the U.S. in the summer of 2016, should be a huge driver for continuing growth of the sport. In addition, in October of 2013 we have received the backing of two Venture Capital firms, finally in March 2014, we reached a partnership agreement with NBC Universal, to be our partner.

Our team would love to have the opportunity to be a part of the Analytical Consulting Lab. We feel, that we have a series of questions, that the student team can help us answer, which will be crucial in our attempt to raise a Series B. Some of the questions we need to answer are:

What is the typical profile of our "reader" per region? (This would help us present to Advertisers/Partners that we can be a great platform for promoting a demographic driven type of content/ad target?)

What content are our readers reading and with what frequency? (MLS vs Champions League vs. Liga Mexico vs. etc...)

What writers / contributors drive traffic and how (social media referral vs direct referral, etc..)

What is our Customer Cost of Acquisition by channel and type of customer (FB vs. Outbrain vs Male 18-24Y old vs 35-45Y old vs. Los Angeles vs. NYC, etc..)?

What is the lifetime value of our potential customer/reader?

Video is the future both for mobile advertising and content: What would our consumer (customer profile) would want to see in our video strategy?

In addition, there are VAST amounts of data that we have in Google Analytics (Soccerly.com a lot 18-21 months) that we can analyze and I am SURE the class, could help us find key questions/answers, that we haven't taught about (the business model is significantly different for digital media companies that it was in 2010). We feel that the class would be a key component in our ability to have more data to pitch our current and future investors an increase our chances to get a Series B and fulfill our goal of becoming the leading digital media soccer property(es) in North America.
About Press Ganey
Press Ganey is the recognized leader in performance improvement. We partner with health care organizations across the continuum of care to improve the patient experience and create and sustain high performance.

We offer solutions that capture the voice of the patient, improve employee and physician engagement and drive targeted improvement through analytics and advisory services. For more information, please visit: www.pressganey.com

Analytical Projects: Analysis of Health Care Clients

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<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Functional Department</th>
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<tbody>
<tr>
<td>Client Segmentation</td>
<td>Identify the ideal market segmentation variables and optimize sales coverage based on the current sales resource count and segmentation insights</td>
<td>Marketing</td>
</tr>
<tr>
<td>Client Opportunity Analysis</td>
<td>Calculate probable client wallet size by clustering clients, determining the normal distribution of spend by product, and then determining remaining potential dollars by client</td>
<td>Sales</td>
</tr>
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Experience with Analytical Consulting Lab MBA Candidates
As a previous sponsor, I understand how important it will be for you to 1) receive clear instructions on what success looks like and the associated deliverables 2) gain access to ask clarifying questions after project kickoff and 3) enjoy the analytical work you will engage in and be able to gain experience on a real project that will be implemented. The previous ACL team’s work was fully implemented and provided great insight and shaped how our organization sold products to our clients.
FEW Spirits
www.Fewspririts.com

About FEW Spirits
Founded as a dry community, Evanston was home to many influential advocates for Prohibition who effectively kept the city free of alcohol for more than one hundred years.

Though the city legalized drinking in the late Nineties, it took the perseverance of our Master Distiller, Paul Hletko, to reverse the antiquated liquor laws. With roots going back to some of Europe's fabled brewing families, Paul and FEW Spirits have marked the end of Evanston's Prohibition and given the city its very own craft distillery. FEW Spirits has won many awards for its novel take on small-batch gin, whiskey, and specialty spirits. The team will work with the partners on the project.

Project: Analysis of Production Operations and Marketing Costs of Whiskey

What is the cost of a bottle of whiskey? FEW Spirits is a leading craft distillery based in Evanston that is looking to better understand its production cost. Some costs are easy to estimate, but maturation over many years and marketing pose some unique challenges. Products are matured at different rates and have different marketing and investment needs, too. This project will look at the various input cost associated with manufacturing of each of its SKUs. Taking this costing information, the group will come up with a model that accurately projects it’s cost in the 35 different markets the products are sold.
Candidate Projects
There are multiple candidate projects with United Airlines and the Mileage Plus frequent flyer program. The projects will generally involve a study of customer redemption, reward use, search use and Internet tracking, new revenue creation, and partner involvement. The Mileage Plus program is an internationally recognized rewards program of premier status. Student teams will work on real projects, with real data, and present to senior executives. These projects are sponsored by executives in Mileage Plus, who have overseen previous ACL projects with Kellogg. Students may select from the below. Multiple projects with United are possible.

Project 1: Economics of and Changes to Economy Plus

Situation:
The airline industry has historically struggled to maintain healthy profit margins.
Companies are increasingly relying on ancillary service fees as a growth driver in this difficult and competitive industry.

United has committed to generating an additional $700M in annual revenues from ancillary services, totaling $3.5B by 2017.

Economy Plus is our flagship product, with its revenue growth a key component in meeting our 2017 goals

Problem:
Competitor airlines (AA/DL) have introduced extra legroom products that have varying inclusions, such as priority boarding and onboard amenities.

Including extra benefits with Economy Plus can be costly, and has not historically driven incremental purchases.

Analytical Inquires:
Can United increase the take rate for Economy Plus by expanding on the product benefits?
If so, what additional amenities or features should Economy Plus include?
What is the cost of expanding product benefits of Economy Plus, and what is the gain for United? (ancillary revenue, customer satisfaction, share shift, etc.)
**Project 2: FareLock Study**

Review the financial impact of FareLock. Specifically, we’d like for the team to review the revenue associated with FareLock purchases, and the average price/availability on the flights where FareLock was purchased (to the extent we can get the data). Ultimately, we’re trying to determine:

- The demographics of a FareLock customer (MP status, leisure vs. business traveler, etc.)
- Purchase behavior (days from departure, booking class, likelihood of ticketing, etc.)
- Likelihood that the seat would have been purchased with/without a FareLock purchase
- Ideally, we’d like to include inventory spoilage implications, since these customers are holding inventory on flights without having purchased a ticket.

**Project 3: First Class and Business Class Auctions**

Situation:

United flies 38,000 upper cabin seat segments per day (United Global First, United First, United BusinessFirst or United Business).

Customers gain access to these seats in a range of ways: buying the fare, upgrading with miles, purchased upgrades and complimentary upgrades, etc.

Some carriers have introduced upgrade auctions (NZ, TP, VS, KL, SN, etc.).

Problem:

United is interested in evaluating auctions as an additional way to sell upper cabin seats if doing so will generate incremental revenue.

Diluting existing revenue streams would be an unacceptable outcome.

Analytical Inquiries:

Do conditions exist in which upgrade auctions could be expected to outperform offering upgrades for a fixed price?

If so, what conditions are ideal and what conditions indicate high risk?

Long term, how might upgrade auctions alter current demand and revenue driven by the outright sale of premium fares?
Firm Description:

Zest Health, a venture-backed mHealth startup headquartered in Chicago, offers a comprehensive window to the individual’s health. Zest enables members to be more informed health consumers, guides them to the appropriate care and helps them secure a lower cost as a result. Backed by Lightbank and 7wire Ventures, Zest’s dual focus on healthcare innovation and consumerism is deeply engrained in the company’s DNA.

Through its platform and accompanying set of mobile apps (iOS, Android), Zest offers 24/7 immediate connectivity to a trusted healthcare professional, symptom checking, provider scheduling support and a consolidated view of key healthcare benefits information.

Project #1: Customer ROI, Segmentation, and Forecasting for Health Site

As we continue to grow and onboard additional employer customers, we would like to engage the student team to conduct their analysis and provide recommendations specific to potential financial scenarios as well as the development of additional ROI models. These correspond to business problems making use of analytics across forecasting, customer segmentation, pricing and scenario planning.

Project #2: (preferred) Analysis of Risks and Rewards in Business Model

We are currently in development on the next set of sprints and iterations tied to our marketplace offering. We would like to engage the student team to support the design and subsequent refinement of our marketplace loyalty and economics model(s). This would also include detailing out accountability and liability tied to revenue as well as earning, redemption and fulfillment vehicles.

Project #3: Analytics and Operational Efficiency

As we make further progress toward the marketplace, we would like support from the student team to map out marketable and desirable provider services as well as analytical and reporting offering that would enhance their operational efficiency.

Jonathan Ozeran’s Bio

Jonathan is a product designer, software engineer, team builder and startup evangelist. He has held product and engineering leadership roles at several Chicago-based startups, shipped several dozen B2C and B2B mobile applications and also led research & development at Tribune Interactive.
He currently serves as VP, Product at Zest Health, a venture-backed mHealth startup that is reinventing the way consumers experience healthcare and how employers pay for it. Jonathan is responsible for their platform, mobile products (iOS and Android), analytics and internal web applications. He also holds an Adjunct Lecturer role at Northwestern University where he teaches mobile application design & prototyping.

He has a bachelor’s degree in political science from the University of Michigan and a master’s degree in computer & information systems from Northwestern University.

**Shawn Ellis Bio:**

Shawn Ellis currently serves as Vice President Operations at Zest Health. He previously served as Chief of Staff to the CEO of Zest Health.

Prior to Zest Health, Shawn served as a Vice President of investments at 7wire Ventures. He focused on 7wire’s healthcare investments. Shawn is experienced advising portfolio companies in strategy, finance, and mergers and acquisitions contexts.

Shawn joined 7wire from the Boston Consulting Group, where he focused on corporate development and organizational change topics in BCG’s healthcare and industrial goods practice areas. Previously, Shawn worked in Finance Strategy at McDonald’s Corporation, a special projects group reporting to the corporate CFO. Shawn began his career working in Lazard Middle Market’s healthcare practice.

He holds an MBA from Northwestern’s Kellogg School of Management and a BA in Economics from the University of Chicago.
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 3 projects of interest.

Project 1 – Search Engine Marketing and Search Engine Optimization
Element Bars shows up in the search results set of Google for both “organic” search results (Search Engine Optimization - SEO) and paid placement (Search Engine Marketing – SEM). We would like to analyze which keywords are driving the highest lifetime value of customers and then think about transitioning expensive and competitive keywords to SEO, while keeping cheap and non-competitive keywords within our Adwords SEM campaign.

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

Project 2 – 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.
Chicago Bulls

www.nba.com/bulls/

Project Description: Analysis to Improve Revenue from Corporate Sponsors

The Chicago Bulls Analytics Department is excited to partner with the Kellogg School of Management on a project for the Analytical Consulting Lab.

The Bulls Analytics Department is dedicated to improving revenue streams (e.g. tickets, sponsorship, merchandise), driving enhanced fan engagement and optimizing overall marketing efforts. The specific challenge to be addressed focuses on examining corporate sponsorship trends and identifying revenue opportunities for the Chicago Bulls. The project will likely involve secondary and primary research on corporate sponsorship trends, an assessment of willingness to pay for specific sponsorship inventory, an analysis of the major sponsorship categories/industries, and a deep dive assessment into high priority category opportunities. The resulting findings will be used by the Bulls Corporate Sponsorship team to better prospect potential sponsors and assess their current sponsorship inventory.

This is a unique opportunity to introduce yourself to the Bulls and work with employees across several functions including Analytics and Corporate Sponsorship. The Bulls look forward to collaborating with students excited about working in sports.

Students will work with Matt Kobe, Director of Analytics for the Bulls, Kellogg MBA grad and ACL alum!
Company Overview: Founded in 1985 and headquartered in Chicago, Intersport has grown into a nationally recognized sports and entertainment marketing company known for its leadership, innovation, and client service in: Television Production, Distribution, Experiential Marketing, Sponsorship Activation, Branded Entertainment, Corporate Hospitality, Online & Mobile Programming, Multiplatform Marketing Solutions and Program Development. We pride ourselves on creating content and experiences that attract and engage passionate audiences.

For this project, students will be consulting for Intersport’s Content Group, which houses our television and digital production arm, as well as our digital distribution, social media and digital innovation initiatives.

Relevant Content Group Background: Right now a significant portion of our group’s revenue comes from contract and production-for-hire work. Over the past year we have made a real push to create “ownable” digital products that will generate consistent revenue for our group once they’re up and running. These new owned digital products will help us mitigate risk by becoming more financially independent and less reliant on client renewals.

One such product that we are in the process of building is courageinsports.com. This website will be the focus of your consulting project this fall.

What is courageinsports.com?: For the past 24 years, Intersport has produced a television show called Courage in Sports, which profiles individuals who have overcome tremendous odds and demonstrated remarkable courage on the path to achieving athletic excellence. We have featured big name stars like Alonzo Mourning, who suffers from kidney disease, as well as relative unknowns like Conner Stroud who is an accomplished tennis player despite being born with no legs. The common theme is always courageous acts of overcoming adversity in the sports world. Courage in sports airs on CBS sports and is one of Intersport’s most successful and recognized television shows. With 24 years of archived content and millions of viewers, a website will allow us to extend the reach of our show and grow our brand.

Project Description: We currently have a live beta version of the website, which we will be working to develop and improve over the course of the summer. We are aiming to scale quickly and need your help to figure out how to do that. The main challenges we would like you to tackle over the course of the project are:

- Audience acquisition projections
- Forecasting of growth and scale
· Market Segmentation of users + any key learnings and recommendations derived from that analysis
· Promotional strategy (data-supported tactics for driving users to website)
· Website optimization recommendations

We are currently collecting data through Google Analytics and YouTube Analytics. This data will be available for students to access and use over the course of the project.

This should be an interesting project for students interested in the digital space.