Analyzing & Operating Digital Platforms: DECS 925
Department of Managerial Economics and Decision Sciences
Kellogg School of Management • Northwestern University

Professor: Russell Walker

Analyzing & Operating Digital Platforms
Syllabus
WINTER 2015

Background

Digital platforms have increased in importance to many firms, given the ubiquitous rise of mobile devices, apps, and the detailed and high velocity of data capture now enabled. The movement from Internet sites to mobile applications has also changed the nature of data capture. Machine to machine data creation and the Internet of Things has created a whole space of data creation void of human interaction or even initiation. Such passively gathered data provides novel opportunities for firms. Firms collecting data passively from consumers may encounter legal or ethical roadblocks, but are sure to find new insights in the data, making evaluation of the legal and ethical roadblocks an important part of operating digital platforms.

Indeed, many firms have arisen as strictly digital platform companies, with the goal of creating data assets. Examples like Foursquare, Pinterest, and even social media sites are some of the most well known. The value of data created by digital platforms has unleashed a plethora of start-up firms, with great interest in the measurement of personal health, personal habits, shopping patterns, driving patterns, and even moods. The opportunities to monetize such novel data through business transactions and business operations requires an analysis of the data and its economic importance.

This class will examine real-world digital platform firms (such as Google, Microsoft, Uber, and a host of game-changing and innovative apps and start-ups). The class will focus the examination and analysis of data created by these digital platforms and subsequent business decisions to be made about the use and monetization of the data. The class will have a lecture component and an experiential component (as in a Kellogg lab). In this approach, 1) the student is exposed to up-to-date frameworks and analytical capabilities used in digital platforms and 2) can apply these in a real-world setting.

Course Details
DECS-925 is 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/adigitallab/
Application Process
Students interested in the class must submit an application for project selection in addition to bidding points for the class.

The application does not limit or provide entry to the course. Students enter the course by clearing bidding. 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 925 via the Kellogg Experiential Learning System, at:
https://www4.kellogg.northwestern.edu/el/

The application start date is Oct 17, 2014.
The application close date is Oct 29, 2014.
Decision date is Nov 4, 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 Digital Experience (no specific experience needed)
• Description of any professional Consulting Experience (no specific experience needed)
• 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.

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

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 (Jan 7, 9:00-10:30)**
  - Getting Started with DECS 925
  - 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
Using Business Databases from the NWU Library for market and firm measurement. Bring your laptop and be ready to explore databases!

Week II:

Class Session II: (Jan 14, 9:00-10:30)
1) Examination of Models for Monetizing data from Digital Platforms
   In this lecture, we will examine when digital platforms should 1) Sell data, 2) Trade Data, 3) Make it Public or 4) Make it Exclusive. The analysis needed to support any of these strategies will be considered.
2) Analytical Techniques and Operations for leverage high velocity and high granularity data, as produced from digital platforms.
   Digital Platforms have the potential to create large amounts of data, with both high velocity and high granularity. It can be important for a firm to react to both as opportunities to interact with the consumer may have limited windows of opportunity and or require specification in a trigger event or even be driven by location specification.
3) Leveraging Digital Platform Data to Improve Internal Operations
   The creation of large amounts of data via digital platforms also provides firms an opportunity to improve internal operations, such as when offers are communicated to customers, when firm batch work should be done, and how and when new products and offerings can be rolled out.
4) Operating Analytical Environments Economically
   The rise of cloud computing, private clouds, and various outsourced analytical processes, provide firms new tools in achieve scale in analytical processes. Still, limiting factors include the availability of critical data and data scientists for model development. In this section, we will examine the operations of analysis at digital platforms.
   (Additional content presented to teams, as per projects)

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

Class Session III (Feb 4, 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 IV:
    Mid-point feedback, planning for next phase

Week VII
  Group Meeting V:
    Used as needed per team project

Week VIII
  Group Meeting VI:
    Used as needed per team project

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

Week X
  Class Session IV (Mar 13, 11:00-1:00 PM)
    Project Findings
    Final project deliverable due to Professor and Client by Mar 13.
    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
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 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 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 team.

The team should expect to contribute about 300-400 hours over the 10-week period to this 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 of a digital platform. The Client is not expect to solve the problem, but should provide ample expertise, data, and contextual information to the team.

**Prerequisites**

All students in the class must have completed DECS core classes. Additionally, each student must have completed an additional analytical course that is appropriate for the project of interest. This may include analytical courses in marketing, operations, economics, decision sciences, or finance. Your enrollment and selection of the project is subject to the approval of the Professor, based on courses taken and general performance in analytical courses.

**How can PTMBA Students participate?**

The class 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 class 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.

**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 Digital Lab – Analyzing and Operating Digital Platforms!

In the following pages, you will find candidate projects from sponsoring companies under DECS 925 for Winter 2015.

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/adigitallab/](http://kellogg.northwestern.edu/faculty/walker/htm/adigitallab/)

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.
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Google – Media Plans to Moment Plans

www.google.com

From Media Plans to Moment Plans

In a multi-screen, constantly connected world, the path to purchase is unscripted and unique to the individual. It's really a collection of moments – increasingly on mobile, spontaneous and immediate – at which brands/business can advance the ball... or leave the moment for a competitor's taking. In this world, we know that relevant, personalized messages are not only expected by consumers, but tend to be more valuable for businesses.

So how do we help marketing organizations -- eager to keep up with technology and digital opportunities (esp mobile) -- to move from the "I should build an app!" mentality to a "what are the moments I need to win?" mentality? How do we get them to analyze, and operationalize, consumer insights in a way that will drive consumer value in the moment? The hypothesis is that by understanding the moments they need to win and the consumer behavior in those moments, the technology solutions will fall out.

Google Search is a powerful lens to understand a key segment of consumer moments, as searches reflect one's intentions in the moment -- wherever or whenever that might be, across the whole spectrum of needs or curiosities -- from learning, to transacting, to getting confidence in a decision and much more. Increasingly these search moments are almost reflexive as consumers, enabled by mobile, can act on just about any stimulus or thought crossing their mind -- immediately. A bad hair day might spur a search moment in the bathroom for a new hairstyle. A confusing array of prices on the shelf might prompt a search moment in the aisle to understand product efficacy -- (Is the extra $20 really worth it!??). The item you just broke while washing dishes might prompt you to search and replace it, right then, while your hands are still wet.

Businesses/brands need to understand the situations and contexts at which they can "advance the moment" for people. After all, the moment is the new battleground for consumers. If you don't step in to help and assist, the consumer is there for your competitor's thinking. Winning the battle consistently requires thinking beyond a "media plan" to thinking about a complementary "moments plan" that addresses specific contexts in which consumers engage with your brand/category and at which the window of opportunity -- and tolerance for missteps -- is minimal.

Goals:
Develop the POV: Interview marketing thought leaders/faculty to understand the opportunity inherent in having a 'Moments Plan' and how it would augment or interact with a traditional media plan.

Recommend an approach: Assess how a business/brand might develop a 'Moments Plan' based on current or prospective analyses of their consumers' (search) moments. I.e. create a model or framework that could scale across businesses. What qual or quant data would best inform the moments to go after? How can Google's search advertising platform (AdWords) help a brand analyze and capture moments effectively?

Pressure test the approach: Create sample "Moment Plans" for brands/businesses from at least 2 verticals. I.e. What moment types should they prioritize? Why? What levers would a marketer have to win those moments (e.g. tailoring a message by location or by time of day or device)?
Zest Health
WWW.ZESTHEALTH.COM

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.
/// OPTION A ///

Project:
The Analysis of Skimble's "New Year Cohort" to Better Predict and Positively Influence Engagement Potential

Background and Project Goals:

Skimble is an SF-based mobile wellness company that strives to empower people to achieve their health & fitness goals anytime, anywhere. Their flagship app, Workout Trainer, provides thousands of multimedia workouts and custom training programs led by expert coaches and has been downloaded over 15 million times.

Skimble is seeking assistance with their understanding of the "New Year" exerciser in order to improve 'Daily Active User' (DAU) rate long term. Too often in the overall fitness space, people jump on the "New Year" fitness resolution bandwagon only to quickly jump off after less than one month.

In this project, the team will use a data set provided by Skimble such as Google Analytics information to provide recommendations that strive to improve Workout Trainer DAU for "New Year" exercisers and all registered users.

Your analysis will help answer:

What are the key metrics and behaviors that determine if a “New Year" user becomes an active user?
How can we take advantage of the “New Year” cohort and develop engagement tactics that not only improve their likelihood for success but to other cohorts within the Skimble system?
What are features and functionality that can be incorporated into Workout Trainer to add to the “New Year” cohort’s ability to meet their health & fitness goals?
Do the “New Year” exercisers have similar persona profiles to the existing Workout Trainer users? How can Skimble better target these users? Skimble will provide persona information about existing users.
Are there psychological studies and research reports that can be found online to help in Skimble’s quest to help people live healthier lives?

We look forward to working with you. This project is sponsored by Skimble, a startup that recruits from Kellogg with participation in the Kellogg Entrepreneurship Internship Program (KEIP).

/// OPTION B ///
Project:

Improving Outcomes through the Digital Delivery of Wellbeing Program(s) for Special Populations

Background and Project Goals:

Skimble is an SF-based mobile wellness company that strives to empower people to achieve their health & fitness goals anytime, anywhere. They have created a platform that offers dynamic coaching experiences offering targeted and customizable training programs. Built on their platform are Skimble's latest two applications:

Workout Trainer: thousands of multimedia workouts led by expert coaches (most popular workout app on Android & iOS, downloaded over 15 million times).

Coco's Workout World: gesture-based, interactive celebrity coaching app featuring the "Ice Loves Coco" stars (featured as a 'Best New App' on iTunes Jan 1, 2014).

Skimble seeks to leverage its platform to offer new coaching experiences for special populations. This project will examine opportunities in launching such new initiatives in an effort to deliver digitally-focused coaching that will improve health outcomes.

Your research will provide:

Forecast the degree of interest and potential for adoption of initiatives for special populations.
Analysis of competition and market impact.
Develop a business model incl. anticipated risk-retention, revenue opportunity, and Cost-Per-Acquisition (CPA) estimates.
Devise an adherence and Daily Active Users (DAU) plan.
For prioritized and green-lit project(s), devise a communication plan for the project.
Option: participate in launch. More information will be provided at the start of the project.
The problem
Despite spending $72 billion a year just in the US, companies still have a hard time recruiting employees that are qualified for a job and a good fit with their company. This is especially true for technical roles. In silicon valley where I live, this has reached extreme proportions. The same small pool of developers are ridiculously recruited by companies who try to outbid each other.

At the same time, there are many qualified people that are off the radar of these recruiters and hiring managers because they don't have the typical backgrounds, they don't "match the pattern". For technical roles this happens for a few reasons:
1) people with different educational backgrounds (i.e. don't have a CS degree);
2) people that aren't from the 'club' of usual candidates that know each other (i.e. minorities such as women, latinos, african americans), or
3) people that are locationally out of the picture when they could contribute very well from afar (i.e. outside silicon valley or even the U.S.)

About the Idea
This is a digital technology platform that helps organizations find and evaluate candidates, using social and online data, so that they can recruit and hire better.

First Segment
The first use case is technical hiring, specifically software engineers (of which I (Michelle Bonat, Datasimply Founder and CEO) am one!). I believe you can find qualified candidates and actually tell if they would be a good fit from their online data footprint. Later this could be expanded to other types of roles that have specialized expertise.

The Data
The data sourcing probably starts with their tweets. It would also include sources such as online code repositories (github), and places where they congregate offline and online (stackoverflow, meetup). There is ideally an element of peer respect, since people in the biz know who the good ones are. I'm not sure how to measure this. There is also an element of "good code' that they contribute to open source. I'm not sure how to measure this either, but I know it when I see it!

The Greater Good
The social good component is that current tech hiring excludes lots of people that are great but don't fit the mold, such as people who don't have a top school CS degree, or latinos, african americans, and women who aren't in the 'white boys club who got their CS from Stanford'. From a consumer standpoint, it helps people get hired into engineering and jobs where they may not have contacts.

Overall, the goal is to help companies find more qualified STEM candidates that they desperately need, outside their normal circles, and increase diversity. When companies increase diversity they become more competitive.
As an aside, I believe there is also a 'personality fit' component that is critical to hiring but often overlooked, and that this can also be determined from social data. When people are happy in their job, the world becomes a better place. Crime goes down, etc. etc.

**The Competition**
LinkedIn is a competitor for sure, but they don't handle this very well even though they charge a lot for it. I get numerous messages from technical recruiters on LI that are not at all a fit. For this reason LinkedIn is a potential acquirer. A company called Gild.com is doing well in this space. However I believe it can be solved better.
Google Commerce Innovation
www.Google.com

Initiative
The Commerce organization at Google is responsible for Google Shopping (google.com/shopping), Google Express (google.com/shopping/express), Google Wallet (google.com/wallet) and a host of other consumer-facing products in the retail space. This innovation initiative falls under the partnerships team that supports these products and the Commerce organization, generally.

As a product-enabling partnerships team, we have the opportunity to define, pilot and launch some of the most innovative products at Google. In addition to the innovation that emerges organically from our day-to-day operations, we have created a formal innovation workstream in 4Q14 that will carry into 2015. The goal of this workstream is to vet and, if appropriate, recommend new products and business ideas for development and release by the Google Commerce organization.

We are currently exploring many topics, some of which are included below and all of which would benefit from your contributions:

Available Themes

In-store Experience: Explore new and differentiated in/near store retail experiences that Google is uniquely positioned to enable

Shopping Discovery Experience: Explore new and differentiated browse and discovery experiences that Google is uniquely positioned to enable

Digital Wallet: Explore new and differentiated digital wallet applications that Google is uniquely positioned to enable

Loyalty Solutions: Explore new and differentiated methods to deliver unique merchant and consumer value propositions related to loyalty and rewards.

Expectations:
● Quantitative and qualitative research that validates market demand and potential impact
● Competitive analysis of potential market
● Mid-semester presentation on progress
● Final presentation that includes proposal of new product/business idea and research that supports proposal
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 this Lab. We feel, that we have a series of digital questions and activities, that the student team can help us answer, which will be crucial in our attempt to raise a Series B. Some of the these include:

App: We will have an app developed for both Mexico & the USA and the consumer trends would be beneficial to know.

-Advertising: We should be selling a larger portion of our inventory by then, we would love to understand the impact (ROI) that our advertisers (e.g. Coca Cola) are having with us.

-Expansion: We will most probably be ready to launch in a country like Spain, we are sure that understanding the trends of customers there can help.

-Video: We are developing a video strategy that will have a lot of analytical information.
Company overview
Emergis Global Capital Advisors (“Emergis or the Company”) represents a new generation in global merchant banking and offers the market a new approach to business transformation and capital formation. Emergis’ business model integrates and leverages on the core functions of Transformation Management, Thought Leadership and Strategic Advisory, Investment Banking and Private Equity, and Asset Management delivered to clients through a proprietary digital platform called the Emergis Capital Exchange (“Platform” or the “ECE”). Emergis will identify and implement revenue opportunities in both large cap and Small & Medium Enterprises (“SMEs”), providing these businesses with funding as well as a deep bench in transformational/innovation management and thought leadership. On the investment management side, the Company will deliver investment opportunities in Special Opportunity and Alternative Investment asset classes—bridging the gap between private capital markets and the capital needs of SMEs, widely recognized as a vastly underserved segment in both European and North American markets.
The Company’s principal (but not exclusive) geographic focus is Western, Central and Eastern Europe though Emergis is ideally positioned to also service the needs of investors seeking to invest in assets in the Americas.

Digital platform overview - The Emergis Capital Exchange
The Emergis Capital Exchange is a digital platform and core enabler of the overall Emergis business model. While the Platform bears some similarities with other platforms in the rapidly growing crowdfunding market, it is differentiated with regards to the services offered, investors targeted, and geographical coverage. In this project, Emergis would like to address the following preliminary questions:
● What is the value proposition of the Platform and the overall Emergis model for investors and issuers?
● What is the profit potential of various services that can be offered through this platform and how should these services be prioritized?
● What are the key regulatory requirements to operationalize the Platform in the targeted geography across Europe and North America?
● What technology partnerships should be established to accelerate the development of the platform?
● What operational capabilities should be acquired to manage the Platform?
Uptake Technologies
A LightBank Firm

Uptake technologies is a fast growing startup focused on building a visualization and analytics platform for the industrial internet. Uptake’s goals are to solve the following three challenges faced by the industrial world burdened by truly big data. First, we aim to ingest and visualize the high volume and velocity of data in real time. The purpose of this is to enable key stakeholders to understand and react to critical information that is buried in the noise. Second, we use cutting edge predictive modeling techniques to predict events such as failures and faults of assets to mitigate and eliminate the unplanned downtime for high value assets. Lastly, once we’ve predicted or experienced an event, we will predict the course of action or remedy with the max-likelihood probability of success. In doing so we can reduce downtime during planned and unplanned maintenance, increasing asset utilization and profitability. Ultimately, the Uptake goal is to develop this methodology beyond just a platform, and create the firmware for the industrial world.

Uptake is looking for self-starting technologists with the knowledge, know-how, and motivation to develop a modeling schema, requirements, and ultimately code. The purpose of this project is to approach and attach the 2 fundamental prediction problems faced by Uptake through the use of logistic regression techniques, machine learning methodology, autoregressive time series models, and advanced clustering algorithms. The project will be managed by the Director of Operations, and work closely with product management and the data science architect on projects as they arise during the duration. There will not be a single defined deliverable at the outset of the project, and we are looking for someone who is excited by that level of flexibility and uncertainty.

Uptake Technologies is founded by LightBank and some of the founders of Groupon.
Microsoft – Commercial Video
www.Microsoft.com

Future of Commercial Web Video

Online video service providers must develop hundreds of platform-targeted apps to establish an adequate device footprint. They must also encode video in multiple formats to target those individual platforms.

Assume that by 2020 recently developed international standards for the encoding, delivery and presentation of live and on-demand Web video will be in common use. Assume further that there will be nearly one billion connected TVs and fourteen billion connected mobile devices consuming this interoperable video, and that it will constitute 90% of Web traffic.

Taken as a whole these new standards function as a Web video ‘receiver’ standard. This has the potential to disrupt some business models, create opportunities for expansion of others, and enable entirely new models to emerge. Intelligent digital media platforms will be built around these standards, and this raises some interesting business questions. For example:

1. The appearance of both encoding and presentation standards for video will greatly reduce the online video service cost of entry, opening the way for mid-tier and long tail video content services. What might be the varieties of these new services, and for each what business models are likely to be the most successful?

2. An intelligent digital media platform will generate vast amounts of data about a consumer’s interests. There is already heightened concern over misuse of personal information harvested by digital platforms. What role would privacy and security issues play in creating an intelligent digital media platform? For discovery and recommendations? For targeted advertising?

3. The distinction between mid-tier commercial video content and user generated content has begun to blur, with some user generated content providers developing brand recognition and sharing in advertising revenue. How might the appearance of interoperable Web video standards enable user generated content to more easily make the transition to branded, commercial video content?

4. An important emerging trend is the use of “companion devices” in digital entertainment. There are emerging standards for the discovery of companion devices and for the creation of companion presentations. What new and unexpected business models could emerge based upon these existence of industry standards for companion devices? Would they be limited to the home, or extend to a mobile experience?
Simple Relevance

www.simplerelevance.com

SimpleRelevance wants to build amazing new ways to attract customers through data analytics. We take large amounts of data from a client, analyze it, feed that data into our machine learning engine, train our models to recommend interesting things to each customer of a client.

We use the data that our clients give us and the models we build to dynamically personalize emails and websites. Two big questions are: what else can we do with our data and what else can we do with personalization? One of the next steps for us is to take that data along with our recommendations and provide analytical tools that clients can use to gain insight into their customers and our engine. What we need to answer are what problems do our clients have, that they don't even know they have, that we could solve? How can we present our data in a way which makes the answers to their questions obvious.

The big question, though, is what hidden areas that no one ever thinks about could benefit from personalization?
Google – Maps and Skybox Imagery Data Usage

www.Google.com

Kellogg/Google project: Analyzing and Operating Digital Platforms

Background
From almost the moment mankind first took flight, we have been bringing cameras along to take pictures of our planet from the air. Today there is a robust remote sensing industry that harnesses images from dozens of satellites and countless planes to provide information to governments and a wide range of industries. Aerial and satellite images can help farmers be more efficient growing crops; disaster response agencies prepare for and respond to crises; natural resource companies optimize operations and mitigate environmental impacts; insurance companies assess risk; and many more use cases.

There are three trends, however, that have the potential to upend the current industry and radically change how we understand our planet and make decisions: 1) the availability of cloud computing, which is making it easy for anyone to have access to supercomputing; 2) the shift in satellite technologies from a handful of expensive, government funded satellites to thousands of inexpensive private satellites; and 3) the coming wave of UAVs, or “drones”, which will make aerial imaging much cheaper and more accessible.

Ever since the introduction of Google Earth in 2005, Google has played a leading role in this field. Today, Google has over 1 billion monthly users of or maps products, and imagery has played a critical role in this success. Our mission is to build the most accurate, comprehensive, and useful map of the world, and to do so we need the best possible images from the air and space. To further this mission, we have our own aerial imaging planes, and we recently purchased Skybox, the leader in microsatellite technologies. In addition, we also have “Google for Work,” where we provide Google solutions for businesses. Google Maps Engine is our business solution for visualizing and serving mapping data, and Google Earth Engine is our platform for petapixel-scale processing of imagery data in the cloud.

With the upcoming flood of data coming from inexpensive satellites and drones, the challenge will be in turning this flood of data into actionable information for government and industry.

Project details
Google is well positioned to take on this challenge of converting this flood of big data into insights. However, many questions remain as to how to best enter this market. For this project, pick one of the following market segment:

Agriculture
Insurance

The Google Maps for Work team is specifically interested in the following information for this market:
What is the product? - What capabilities should it have, and what questions should it answer?
What is the total available market for this product?
Who is the customer? - Which organizations will be our customers and who in those organizations will typically be the main buyer of the product?
Value to the customer - What value will this product have to the customer? What do customers do today, and how much does it cost them? Does this product replace existing solutions or grow the overall market or both?
Should we sell a PaaS product and allow others to build custom applications, should we build the applications ourselves, should we build vertical-specific derived data products, or ? How should this product be consumed: e.g. as a subscription service, on a per-transaction basis.
Overview
Paydunk is a mobile payment startup that will revolutionize the mobile checkout experience for consumers. Paydunk will simplify the checkout process by bringing the familiar in-store payment experience to mobile devices. By reducing the steps, time and inputs necessary to complete a mobile transaction, merchants will realize an increase in conversion rates and consumer satisfaction. Additionally, consumers will benefit from a simplified and streamlined checkout process similar to using a bank card for in store purchases.

Working with Paydunk
This is a unique opportunity to experience a startup in its infancy stage. Founded in July 2014, Paydunk is a fast-moving company that has already raised the seed funding to develop a fully functional application. Moreover, the founders have established relationships with key industry leaders and have begun working with enterprise retailers. The app is currently in production with a top mobile development company and is expected to be completed and ready for launch in the first quarter of 2015 on both iOS and Android. Upon signing of an NDA, students will have full access to all startup documentation and financial information. The student team will also interact directly with the founders of the company.

Objective
Paydunk seeks to establish an effective launch strategy. The current mobile checkout experience is cumbersome with the majority of mobile users abandoning their shopping carts due to the poor checkout experience. Paydunk is the solution to this problem. As a mobile payment application, Paydunk seeks to leverage existing industry data to help build models and financial projections. Students will leverage data from current market competitors such as PayPal, Google Wallet, Visa Checkout, Apple Pay and others to help define Paydunk’s initial trajectory. The analysis and recommendations provided by the student team will be critical in the strategy and launch of Paydunk.

Paydunk has two unique customers: 1) the retailer and 2) the consumer. Attracting and retaining each customer type will have its own set of challenges and opportunities.

Customer #1: Retailer Adoption & Traction
Paydunk wants to understand the most cost effective and efficient way to achieve retailer adoption. Student teams will leverage known payment solution data including:
• Abandon Rate
• Abandon Reason
• Conversion Rate
• Unique Visitors
• Repeat Visitors
• Checkout Page Exit Rate
• Impact of page load times
• Incentives offered to retailers
This data will be used by the student team to determine:
1. The cost to acquire a retailer
2. The projected incremental sales & conversion lift to the retailer
3. Contribution to EBITDA through Paydunk users
4. The lifetime value of Paydunk’s potential consumer to the retailer
5. A list of recommended launch retailers
6. Recommended launch market (Domestic vs. International, Regional vs. National)

Customer #2: Consumer Adoption & Traction
Paydunk wants to understand the most cost effective and efficient way to achieve consumer acceptance and usage. Student teams will leverage known payment solution data including:
• User Experience
• Length of time in checkout
• Information security
• Number of retailers available
• Features and functionality of the app
• Rewards / Incentives

This data will be used by the student team to determine:
1. The cost to acquire a consumer
2. Percentage of consumers driven to purchase because of the enhanced checkout experience
3. Percentage of consumers driven to purchase due to a unique discount or savings.
4. How much marketing capital required to get the customer to use the app
5. The lifetime value of the potential consumer to the retailer
6. Marketing spend analysis that shows consumer acceptance based on incentive value
7. Critical Mass of users for sustainability

The mobile eCommerce space is the fastest growing sector in digital today. Exponential growth is expected over the next five years that will drive online sales to over $700 billion dollars annually. Paydunk is uniquely positioned to capitalize on this emerging market.
Uber and Edelman

Uber & Disruptive Innovation

Entered market to enormous success but is now facing resistance and regulation in a number of countries including Germany and is fighting back --see http://online.wsj.com/articles/uber-technologies-cuts-fares-in-germany-to-comply-with-law-1412935246

At the same time, customers enjoy the flexibility, control, and cache that Uber provides. Uber is eager to map and prioritize the market and non-risks they face by stakeholder group to determine the go-forward strategy both on market entry and service(s) alignment.

The project will focus on risk facing Uber and the “sharing economy” made possible by digital platforms. The project also can examine deflationary forces brought on by digital platforms and the risks that this poses to the digital platform and its users. Questions about taxation, regulation, union activation, and wealth disparity are at work. The project is with Harlan Loeb of Edelman and his client Uber. Edelman is an internationally recognized risk management firm.
Summary
Viral Kadakia is currently Founder & CEO of 500 Miles, an early stage technology startup in the Silicon Valley that leverages publicly available signals about companies to orient new & recent college graduates toward a promising career in technology industry. Most recently, Viral was Vice President of Product Management at Hightail (formerly YouSendIt). In less than a year, his team transformed the legacy YouSendIt product into a brand new Hightail service that effectively competes with Dropbox and Box. Prior to Hightail, Viral led identity products businesses at LinkedIn, which included LinkedIn Profiles, Who Viewed My Profile and Linkedin Connections. In 2010, he founded TrustHop, a social marketplace for local services providers - a company that was acquired by LinkedIn.

During his over 17 years of experience in the technology industry, Viral has been an entrepreneur, general manager and held many different product leadership roles at LinkedIn, TrustHop (acquired by LinkedIn), Yahoo, Zimbra (Benchmark, Redpoint & Accel funded and acquired by Yahoo), Openwave (mobile messaging), Sun (grid computing), BEA (collaboration) and SGI (digital media). Viral earned his MS degree in Computer Engineering from University of Texas at Austin and MBA from Kellogg School of Management.

About 500 Miles
500 Miles is an early stage technology startup in Silicon Valley that orients new and recent college graduates toward promising careers in the technology industry. Each week, we hear about how new or recent college graduates struggle to find the “right” opportunity – one that sets them up for a successful career. Those who are lucky to have found one have a flourishing career waiting for them.

A great story is that of my Kellogg colleague and friend, Priti Chinai. After Priti graduated from Kellogg in 2003, she joined Google, then a young startup with a good search product. Through her hard work and intellect, she quickly rose to the role of Director of Strategic Partnerships. In 2009, Sheryl Sandberg, who had recently left Google to join Facebook (private company at the time), reached out to Priti to take on a leadership role at Facebook in Business Development. As far as career is concerned, there is no looking back for Priti now.

However, unlike Priti, there are countless others who pick what appears to be a great first employer at the time only to find out later that they missed the boat on the right one. 500 Miles plans to evaluate thousands of different signals about most companies (private and public) to analyze the company’s structural, operational and financial health. The product will then predict success trajectory for each company based on a trained dataset of known successes and failures. The service is expected to be rolled out as a mobile application in Q1 2015. It will be available for free to students.

Project Description
At 500 Miles, we believe we have a great story that resonates with our target segment. However, we have a lot of work cut out ahead of us.
We are looking for a team to help evaluate the potential business models we could employ and how we should pick the one that fits our value proposition the best. Also, we are looking for help on how we should position the service to students and businesses as we develop our go to market (GTM) plan.

**How can I help?**

I have witnessed growth in technology industry for the past couple decades. Also, as a serial entrepreneur and product executive, I have evaluated many strategic options and believe I know what works well in many situations and why. I will be happy to share my thoughts and knowledge with the team. I will also connect team members to executive