IOM 599: Data Analytics Driven Dynamic Strategy & Execution

Spring 2014
Units: 3.0
Schedule: Tuesday, 6:30-9:30pm
Office Hours: TBA

Instructor: Sid Mohasseb (BIO Attached)
Email: Sid.Mohasseb@marshall.usc.edu
949-254-9280, cell

Course Introduction

The advent of BIG DATA has had a significant and life changing impact on all business, large and small. The ability to harness vast amount of information and to quickly turn that data into actionable insight has empowered companies to get closer to their customers, discover challenges and opportunities previously hidden and formulate more dynamic and responsive strategies to improve their competitive position through a more agile and connected execution. Technological advances in processing significant amount of data in an expedited fashion and capabilities to access the ever expanding knowledge embedded in previously inaccessible unstructured data offer a unique opportunity for growth and creating new competitive advantages. Data Analytics provides the tools and techniques to unleash the value of BIG DATA. This course focuses on the use of Data Analytics for business advantage across the value chain. It addresses advanced thinking in leveraging Data Analytics and achieving and sustaining competitive advantage in today’s era of BIG DATA and tomorrow’s unavoidable future of BIGGER DATA.

This course is not focused on teaching tools, discussing data manipulation methods and/or covering statistical and modeling techniques. It assumes prior knowledge of business analytics and use of basic tools and techniques and aims to advance the students ability to apply that knowledge to solve critical strategic or tactical business challenges and to discover opportunities for enterprise advancement.
### Data Analytics Driven Dynamic Strategy and Execution Concepts

There are a number of conventional and new strategy formation and execution models, as well as Data Analytics applications and methods will be examined. At high level the key concepts will include but is not limited to:

<table>
<thead>
<tr>
<th>Key Concepts</th>
<th>Remarks</th>
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| **Connected Enterprise**                          | • Framework of connected enterprise and extraction of noise, signals and patterns  
• Use of integrated analytics in identification of emerging trends  
• Advanced applications of data analytics in product design and development, demand forecasting, supply chain optimization, customer experience and churn, marketing and positioning, sales and channel management |
| **Probabilistic Causation, Chaos Theory & Game Theory** | • Framework for mathematical probabilistic causation models and concepts overlaid on strategy formulation models.  
• Review of Chaos Theory & Game Theory and applications and impacts of dynamic strategy formulation and execution |
| **Value of Unstructured Data**                     | • Understanding the role of unstructured data and triangulation with structured data at both internal and external levels  
• Discussion of Natural language Processing  
• Discussion of Machine learning applications |
| **Shifting Focus, Agility, and Convergence**       | • Role of analytics in creation of strategic focus and corporate agility  
• Concepts and elements of strategic “achievability” explored through analytics.  
• Discussion of the “Essential Eleven” factors for dynamic strategy and execution powered by Data Analytics. |
| **Achieving Sustainable Competitive Advantage**    | • Tactical and strategic execution across the value chain powered by data analytics  
• Targeting sustainable competitive advantaged through use of data analytics  
• Measurement systems and use for effective execution at various functional, business and corporate strategy levels.  
• Getting results out of analytics driven strategies : organizational rhythm, achievability concept, etc. |
| **Exploration & Discovery**                       | • Framework for opportunity and challenge recognition based on “discovery” methods and concepts  
• Analytics insight extraction methods – exploring value of noise, outliners, signals, and shifts in patterns. |
| **Big Data Value Zones**                          | • Data analytics driven methods and concepts for extracting actionable insight from BIG DATA – understanding the concept of “VALUE ZONES” – analytics containment of BIG data by focusing on growth, effectiveness and risk zones of data and business value.  
• Comparable universes creation as analytics foundation  
• Creation of algorithmic models for insight extraction – e.g. remarkable anomalies, exceptional exceptions, impactful trends, etc. |
Learning Objectives

In this course the student will learn:

- Practical applications of dynamic data analytics in achieving and sustaining competitive advantage
- Advanced approaches to strategy formulation and execution in the “new” dynamic era of BIG DATA
- Applications of Data and Analytics with a connected enterprise view, utilizing both structured and unstructured data
- Methods and approaches for distilling continuous and analytics driven insight from BIG DATA
- Fundamentals of Machine Learning, Natural Language Processing and Text Mining applications and turning unstructured data into structured.
- Use of predictive modeling in planning and execution at functional, business unit and corporate levels

Course Format

This course meets for 15 class sessions (except for any conflicts with holidays), including final exam. Lectures will be focused on concepts and guest speakers - real life experience summaries, videos and case studies will be utilized to provide color to the concepts and group work / projects will be used to have the students gain hands on experience. A number of teaching techniques will be used including:

- Use of case studies – from educational institutions such as HBR, Sloan, etc., as well as, providers such as IBM, McKinsey, etc.
- Expert Guests “fireside type chats” – speakers and experts from the industry, Venture Investors with futuristic views of trends in data analytics and Big Data, service and platform providers discussing in field implementations of analytics and results
- Group projects design to apply data analytics to real life issues that students may be facing at their work
- Interactive lectures
- Demonstration of “live” tools and systems and platforms

Students are expected to read the materials in advance of class, come to class prepared to discuss the readings, apply analytics skills to assigned projects, and present their project or assigned research activities in class to demonstrate their data-driven decision making and creativity. Students are encouraged to collaborate with others on their project to foster ideas and get feedback for improvements.
Recommended Preparation

- Advanced use of spreadsheets & presentation tools
- Moderate to advance – practical knowledge of – modeling tools such as SAS, R, etc.
- Knowledge of decision trees and networks, sensitivity analysis, and experiment design
- Moderate to advance knowledge of statistical methods, regression and correlation analysis
- Basic knowledge of simulation modeling and linear programming concepts

Course Reading Materials

Students are required to purchase a course reader from the USC Bookstore. Following is an initial list of the material that will be covered in as advance reading or for in class discussions. Additional material may be added based on the specific class dynamics.

**Books**

- The signal and the noise by Nate Silver; publisher: Penguin Press ; ISBN: 978-1-59420-411-1 -- Reading of the entire book is recommended, the key chapters will however be chapters 1,2,3,4,5,6,7,12,13 and the conclusion.
- The Good Strategy Bad Strategy by Richard Rumelt; Publisher: Crown ; ISBN:878-0-307-88623-1 -- Reading of the entire book is recommended, the key chapters will however be chapters: 1,2,3,5,7,12,13 and 14.
- Predictive analytics by Eric Siegel, Publisher: John Wiley & Sons ; ISBN: 978-1-118-35685-2 -- Reading of the entire book is recommended, the key chapters will however be chapters 1,3,4,5,6 and plus the introduction.
- Selected excerpts from position papers (not published yet) titled “Exertive Strategy Concept <Esc> : Data Analytics Driven Dynamic Strategy Formulation And Execution”, by Sid Mohasseb – to be provided on blackboard.

**Articles**

- Big Data: The Management Revolution
  - Harvard Business Review - By: Andrew McAfee and Erik Brynolfsson
- Competing on Analytics
  - Harvard Business Review - By: Thomas Davenport
- Analytics and Business Performance
  - Transforming the Ability to Compete on Analytics into a Lasting Competitive Advantage
  - Harvard Business Review - By: Thomas Davenport and Jeanne Harris
- Data, Analytics and the Path from Insight to Value
  - MIT Sloan - By: Steve Lavelle, Eric Lesser, Rebecca Shockley, Michael Hopkins, and Nina Kruschwitz
- Untapped Customer Insight
  - Harvard Business review – By Chris Zook
- Use of Internal Data to Find Profit Opportunities
  - Harvard Business review – By Herman Simon, Frank F. Bilstein, and Frank Luby
Cases

1. Building Watson: Not So Elementary, My Dear! - HBR
2. The Sophomore Jinx - Darden University of Virginia
3. Predicting Customer Churn at QWE Inc., Darden Business Publishing Ctrip: Scientifically Managing Travel Services - HBR

Articles and cases will be available to purchase at:
https://cb.hbsp.harvard.edu/cbmp/access/22289839

Course Grading

Several dimensions of performance factor into the grades for students:

- **Business case analysis.** Students will analyze four business cases and create a PowerPoint summary for each case that captures the key issues and describes the ideas that can be transferred successfully to other companies. Analysis report is due on the day the case is discussed in class. These analyses will provide students the opportunity to reveal insights about analytics, strategy and execution.

- **Group Project.** Students will apply the business concepts and analytics concepts to extract relevant and value centric strategic insights in the selected areas of supply chain management, marketing, product development, sales, distribution or overall corporate strategy. Students will present their business analytics project in class to showcase their data-driven decision making and innovation. Students will be encouraged to collaborate with others on their project to foster ideas and get feedback for improvements. Guidance and instructions will be provided. Student will work in teams and select a real life challenge and company to explore.

- **Industry Reports:** Students will be assigned an industry to research on – their findings and report should include common practices in use of analytics in that industry, innovations in the horizon and applications of analytics across the supply chain for the target industry. Students are encouraged to do independent research as well as attempt to reach out to industry experts within the assigned industry to gain knowledge of the topic. Students will work in assigned groups and are expected to present their finding in class and be prepared to defend and explain their findings in a class discussion.

- **Article Reports:** Students are expected to prepare a short maximum 2 page report on every article (total 6 articles) that will be discussed in the class – reports will be due on the day the article is discussed in class. The report should include an understanding of the key topics discussed in the article and offer opposing views or critical opinions about the position of the author. Students are encouraged to expand their analysis beyond the article content.
• **Exam #1: Mid-term.** In order to highlight key concepts as well as provide evaluative feedback to students, there will be a quiz. This exam serves many purposes including facilitating focus on key principles, providing students an opportunity to share their understanding of the material, and identifying areas where further explanations are needed.

• **Exam #2 - Final Exam:** The final exam will be comprehensive and cover all materials presented in all classes. This exam will provide students the opportunity to demonstrate their knowledge.

• **Class participation.** Class participation will be assessed subjectively. All students will be expected to contribute to the class discussions.

The following table defines the detailed breakdown of the course grading.

<table>
<thead>
<tr>
<th>Grading Type</th>
<th>Description</th>
<th>Grade Breakdown</th>
<th>Grade Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article Reports</td>
<td>Students are expected to prepare a short maximum 2 page report on every article that will be discussed in the class. The report should include an understanding of the key topics discussed in the article and offer opposing views or critical opinions about the position of the author. The articles will be discussed in detail in class. This is an individual assignment.</td>
<td>Maximum 2.5% for each report – total of 6 reports</td>
<td>15%</td>
</tr>
<tr>
<td>Industry Report &amp; Presentation</td>
<td>A report on applications of data analytics in the assigned industry; including examples of analytics applied across the supply chain of the assigned industry and the insight and resulting action options. Eight different industries will be covered with this assignment. This is a team assignment.</td>
<td>All team members will receive the same grade</td>
<td>15%</td>
</tr>
<tr>
<td>Case Analysis</td>
<td>For every case that is discussed in the class, each student should prepare a PowerPoint report that will summaries the key points and discuss and provide analytics results as needed. Cases will be discussed in detail in class. This is an individual assignment. Analysis report is due on the day the case is discussed in class.</td>
<td>A total of 4 cases will be assigned each can earn 2.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Group Project</td>
<td>Focused on solving a business problem dealing with one of the following: corporate strategy, Product strategy, sales strategy, marketing strategy, supply chain management. This is a team assignment.</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Exam #1: Mid-term</td>
<td>Will cover all materials discussed in class, cases, articles and lectures.</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Exam #2: Final</td>
<td>Will cover all materials discussed in class (lectures, cases and articles) and all assigned reading from the beginning of the course; including the recommended chapters of the course books and the exertive strategy concept position paper.</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Class participation</td>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>100%</strong></td>
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## Course Outline and Schedule

<table>
<thead>
<tr>
<th>Class Session</th>
<th>Discussion Focus</th>
<th>Speakers / Videos</th>
<th>Articles / Cases</th>
<th>Due Dates &amp; Exams</th>
</tr>
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</table>
| #1 – 1/14/14  | • Framing Data Analytics Driven Dynamic Strategy Formulation & Execution  
• Assignment formats  
• Course Administration (expectations and objectives) | • Video: What is big data?  
• Video: The dark side of Big data  
• Video: Big Data and the Rise of Augmented Intelligence  
• Video: Eric Siegel, PhD Discuss His New Book: Predictive Analytics | • ---- | • Industry Reports: Team Assignment |
| #2 – 1/21/14  | • What it was, what it is, what it could be – strategy & execution – Evolution and key concepts. The role of Analytics in future. | • Video: Exploring the collective Consciousness  
• Video: What is Strategy? Porter  
• Video: Good Strategy/Bad Strategy - who succeeds in business?  
• Video: The art of strategy – McKinsey | • Article 1: Big Data: The Management Revolution | • Due: Article #1 Report  
• Group Projects: Team Selection |
| #3 – 1/28/14  | • Pillars of Success: The essential eleven of dynamic approach (session 1): Enterprise Rhythm, Achievability, Discovery, Dynamic Focus, and Value Zones & Value Exchange. | • Video: Making data analytics work: Three key challenges  
• Video: Elementary, Watson: The Rise of the Anthropomorphic Machine  
• Video: IBM Watson Why Jeopardy!  
• Video: The Science Behind the Answer | • Case 1: “ Building Watson: Not so elementary | • Due: one PAGE Group project concept document  
• Due: Case #1 Report |
| #4 – 2/4/14   | • Pillars of Success: The essential eleven of dynamics approach (session 2): Probabilistic View, Simplicity, Creative Crisis, Continuity, Connectivity and Common Sense | • Video: How advanced analytics are redefining banking  
• Video: CEO Talk Radio: Competing on Analytics on Tom Davenport | • Industry Report: Banking  
• Article 2: Competing on Analytics | • Due: Banking Industry Progress Report  
• Due: Article #2 Report |
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| #5 - 2/11/14  | • Data Analytics Innovation Trends | • Speaker: Venture Investment Expert  
• Video: Innovate: Unlocking Big Data – IDC Research  
• Video: Tracking consumer trends with digital analytics: Retail – Deloitte  
• Video: Big Data Demand Signal Analytics in Retail – Velocity the vendor  
• Video: Speaking of the Future: Data Analytics (Lockheed Martin)  
• Internet of Things – Cisco / Trends | • Industry Report: Consumer Goods  
• Article 3: Analytics & Business Performance | • Due Article #3 Report  
• Due: Consumer Goods Industry Progress Report |
| #6 - 2/18/14  | • Value Centric Connectivity: Direct Market Dynamics, Eco system Dynamics, Enterprise Performance, Enterprise Capabilities. | • Video: How big data can revolutionize pharmaceutical R&D  
• Video: Chip Conley: Measuring what makes life worthwhile | • Industry Report: Pharma  
• Case 2: The Sophomore Jinx | • Due: Pharma Industry Progress Report  
• Due: Case #2 Report |
| #7 - 2/25/14  | • Theories: Machine Learning, Game Theory & Chaos Theory, Bayes Theorem, the Observer Effect, etc.  
• The living Enterprise. | • Video: Machine Learning: The Basics  
• Video: Explanation of Game Theory & the Nash Equilibrium Point  
• Video: Analyzing the Major Contracts of the JSF Program  
• Video: The Science and Psychology of the Chaos Theory  
• Video: Explaining real-time predictive analytics with big data  
• Video: Game theory | • Article 4: Big Data, analytics and the path from insight to value  
• Industry Report: Intelligence & Defense | • Due Article #4 Report  
• Due: Intelligence & Defense Industry Progress Report |
| #8 - 3/04/14  | • Mid-term Quiz  
• Challenges & Opportunities from a technology perspective | • Speaker Technologist | • ----- | • Exam #1: Mid-term. |
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| #9 - 3/11/14  | • Discussion of group project – challenges – entire class participation  
• Dynamic & Sustainable competitive advantage | • Video: Business Analytics: Making the complex simple at Westfield | • Industry Report: Insurance  
• Article 5: Untapped Customer Insight | • Due: Group Project update / progress report – two page maximum  
• Due: Insurance Industry Progress Report  
• Due: Article #5 Report |
| 3/18/13       | BREAK             |                   |                 |                   |
| #10 - 3/25/14 | • Predictive Analytics Methods, Definitions and Tools  
• Challenges & Opportunities Service provider perspective | • Speaker: service provider / consultant  
• Video: IBM’s Big Data Strategy  
• Video The nature of the firm, BCG & Economist  
• Video: Achieving High Performance with Accenture Analytics | • Industry Report: Airlines  
• Article 6: Use Internal Data to Find Profit Opportunities | • Due: Airlines Industry Progress Report  
• Due: Article #6 Report |
| #11 – 4/01/14 | • Visual Analytics – extracting insight  
• The analytics Framework  
• Insight Funnel  
• D&A / DNA map  
• Visualization, Aggregation & Triangulation  
• Team & Process needs | • Video: Big Data, Big Opportunities: Energy & Utilities  
• Video: What we learned from 5 million books  
• Interactive Data Analysis - Jeffrey Heer  
• Video: The three ‘.tives’ of business analytics, predictive, prescriptive and descriptive | • Industry Report: Utilities  
• Case 3: Predicting Customer Churn at QWE Inc., Darden Business Publishing | • Due: Utilities Industry Progress Report  
• Due: Case #3 Report |
| #12 - 4/08/14 | • Challenges & Opportunities from the enterprise perspective  
• Organizational Readiness  
• The Shape of Future  
• Value of Signal and Noise | • Speaker: Industry Expert | • Case 4: Ctrip - Scientifically Managing Travel Services  
• Industry Report: Government | • Due: Case 4 Report  
• Due: Industry Progress Report Government |
| #13 - 4/15/14 | • Class Review – pulling it all together – summary  
• Group Project & Industry report discussions – dealing with challenges. | • Video: How to separate fact and fiction online – truth is binary & human |  
|               |                   |                   | --- | --- |
## Course Communication

Course communication occurs through the posting of class materials into Blackboard (http://blackboard.usc.edu), email, and announcements in class. All of the presentation materials will be posted into Blackboard, and class announcements will be sent via email using Blackboard. Therefore, all students are required to have an active Blackboard account that they use regularly and this account needs to define a correct email address.

## USC and Marshall Policies

### Add/Drop Process
The end of the third week of classes is the last day to add this class, and it is also the last day to drop this class without a mark of “W”. The end of the twelfth week of classes is the last day to drop this class with a mark of “W”.

### Marshall Grading Guidelines
Marshall does not have a “curve” or hard target for the distribution of grades for individual assignments or the course as a whole. Our principle is that students should be given the grade they deserve based on class performance and should not be assigned an undeserved grade simply to fit a curve. Instructors determine what qualifies as an accurate grade. Historically, the mean GPA for graduate courses is 3.3 for core and 3.5 for electives.

### Retention of Graded Coursework
Final exams and all other graded work which affected the course grade will be retained for one year after the end of the course if the exam or other graded work has not already been returned to the student. If the exam or other graded work has been returned to the student, it is the responsibility of the student to retain it if he or she desires to do so.

### Technology Video/Audio Policy
Videotaping faculty lectures is not permitted, due to copyright infringement regulations. Audiotaping may be permitted if approved in advance by the professor. Use of any recorded material is reserved exclusively for USC students.
Statement for Students with Disabilities
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the professor as early in the semester as possible. DSP is located in STU 301 and is open from 8:30am to 5:00pm Monday through Friday. The phone number for DSP is (213) 740-0776.

Statement on Academic Integrity
USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles. SCampus, the Student Guidebook, contains the Student Conduct Code (available at http://scampus.usc.edu).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review should there be any suspicion of academic dishonesty. The Review process can be found at http://www.usc.edu/student-affairs/SJACS/. Failure to adhere to the academic conduct standards set forth by these guidelines will not be tolerated by the USC Marshall community and can lead to dismissal.

Emergency Preparedness/Course Continuity
In case of an emergency that causes travel to campus to be difficult, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies. Professors should be prepared to assign students a “Plan B” project that can be completed at a distance. For additional information about maintaining your classes in an emergency please see http://cst.usc.edu/services/emergencyprep.html.
Incomplete Grades Explanation
An incomplete (IN) grade may be assigned due to an “emergency” that occurs after the twelfth week of classes. An “emergency” is defined as a serious documented illness or an unforeseen situation beyond the student’s control that prevents a student from completing the semester. Prior to the twelfth week, the student still has the option of dropping the class. Arrangements for completing an IN course should be initiated by the student and negotiated with the professor. Class work to complete the course should be completed within one calendar year from the date the IN was assigned. The IN mark will be converted to an F grade should the course not be completed.

Sexual Harassment
USC policies prohibit sexual harassment. According to Faculty Handbook 2008 Section 6-D, sexual harassment consists of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when: (a) submission to such conduct is either explicitly or implicitly made a term or condition of an individual’s employment, appointment, admission, or academic evaluation; (b) submission to such conduct is used as a basis for evaluation in personnel decisions or academic evaluations affecting an individual; or (c) such conduct has the purpose or effect of unreasonably interfering with an individual’s work or academic performance, or creating an intimidating, hostile, or offensive working or learning environment.

Who is Sid (Saeed) Mohasseb?

Prior to the KPMG acquisition of Wise Window, Inc. in April 2012, Sid Mohasseb was the Chief Executive Officer and Chairman of the Board for WiseWindow, Inc. At KPMG, he is a Managing Director for Data Analytics and the national lead for Data Analytics Dynamic Strategy & Execution practice as well as a member of the KPMG US DA leadership team. Prior to WiseWindow, Mohasseb was the Managing Director of Venture Farm LLC, a seed funding firm and served as the CEO of Vital Source, Inc., a global distributor of electronic components with offices in the US, Europe and Asia, where he led the company on a 30-fold revenue growth over a three year period. He was also the Chairman / CEO of Competitive Knowledge, Inc. (CKI) – a, data focused, VC backed Internet Company. After his tenure as a partner at the SGS Group (a national management consulting firm), he founded Anabasis-Straub, a strategy and operations management consultancy entity, serving municipalities and Fortune 500 clients.

Professional and Industry Experience

- **Data & Analytics Powered Strategy Formulation and Execution:** Acted as a strategy and operations management consultant for large and medium sized organizations across various industries. Founded companies that grew based on extensive use of analytics and data as their strategic weapon – commercially applied analytics. Architect of the “Exertive Strategy Concept <Esc>: Dynamic Strategy Formulation & Execution, Powered by Data Analytics.

- **Development and Commercialization of Intellectual Property:** Building and positioning Data and Analytics centric software and hardware solutions across 20 plus industries. Chief architect for award-winning software solutions such as the process re-engineering / Resource Allocation
model – winner of the California Kleps Award for Innovation, HOPES Utility Forecasting system and the Sentence Screening system.

- **Funding and Financing – Mergers and Acquisitions:** Instrumental in a number of corporate acquisitions, post-acquisition and turnaround activities, serving as an investor and advisor, as well as an executive operator in the technology, banking, home furnishing, and aerospace sectors. Instrumental in securing tens of millions of dollar for early stage companies as a member of the management team and/or board member.

- **Building and Harvesting: Start-ups and Turnarounds:** Started multiple early stage companies, managed their growth and ultimate acquisition. As an operator, board member and investor helped manage multiple corporate turnarounds.

**Publications and Speaking Engagements**

- CEO Express, “Transcending Transaction: Achieving Competitiveness Through the Internet”
- USA Technology, “Components as Commodities”
- Management Handbook of Strategy, “Knowledge: The True Return on Information”
- Featured speaker at TEDx Orange Coast, “Exploring the Collective Conscious”
- Frequent Speaker at various universities on entrepreneurship and commercialization

**Other Activities**

- Former Advisory Board member, Chapman University Business School
- Former Advisory Board member, University of California at Irvine Business School
- Adjunct Professor of Entrepreneurship, Chapman University

**Function and Specialization**

- Data & Analytics action centric solution formulation across the information connected enterprise, focusing on balancing Growth, Risk, and Effectiveness.
- Strategy Formulation
- Corporate Restructuring and growth management
- Early and mid market venture investment

**Professional Associations**

- Founding President of the Orange County Chapter of TiE
- Past President of Tech Coast Angels, Orange County

**Corporate Board Service - examples**

- Anabasis, Inc. – Chairman
- Clupidia, Inc.
- Vital Source, Inc.
- Competitive Knowledge (chairman)
- Trend Point Systems, Inc
- AccuScore (Orion, Inc.)
- Wise Window (Chairman)

**Education, Licenses & Certifications**

- B.S. and M.S. from the University of Southern California (USC) in Industrial Engineering/Operations Research
- Harvard Business School trained negotiator