



Data Strategies for Solving Strategic Corporate Challenges

Real Applications of Blockchain, Big Data and Machine Learning

Why This Program is Unique

New technologies are changing the world today. Data Strategies leveraged by blockchain and AI will change the way we look at Trust, Automation, and Business Models in the Digital Age. This will affect every company at every level.

Most companies are not prepared for this revolution. It demands:

- a) developing ***in-company Innovation Mindsets***,
- b) the ability to ***understand data in depth***,
- c) methods to ***leverage data and algorithms*** to solve daily challenges in ways like never before,
- d) an approach to connect into ***global start-up resources and world-class experts***, and
- e) new ways of looking at ***leadership***.

A Silicon Valley approach to solving real corporate problems using emerging technologies

This workshop covers the most common smart emerging technologies and data-driven business models that are being used today to monetize data – along with an insightful understanding of the emerging capabilities in ***Big Data, Blockchain, Machine Learning, and Data Science.***

Moreover, the challenge for firms today is larger than data science alone. Business creation and business transformation are still business problems. And as such, this workshop allows for a discussion of ***how data and algorithms projects relate to a firm's general business strategy, leadership, innovation mindset, culture, and business objectives.***

What you get from this program

1. Understand what drives innovations today.
2. Introduction and real case descriptions of blockchain, big data and machine learning.
3. How can you use blockchain, Big data and machine learning can innovate in your firm?
4. Learn to develop solutions to some of your corporate challenges using blockchain, big data or machine learning
5. How to develop a medium and long term innovation strategy for your firm
6. Learning by doing: Participants work on a real team projects and present them to Instructors

Preparation

1. Each executive writes down what are the 1 to 2 major challenges in their area.
2. What are the current largest sources of competition or threats to the business today? And what is the currently planned response/strategy?
3. From your perspective, what is the 1 or 2 most significant opportunities that could be pursued?
4. Do you feel any of these company threats or opportunities have a synergy with Data, AI, or blockchain?

Sample 3 Day Schedule

Day 1: Defining the Challenge	Day 2: Action Scoring with Deep Technology Dive	Day 3: Closing the Gap
<p>Welcome Keynote and Introduction</p> <p>Data-driven business models: Includes case-studies on data, AI Business Models and Technical Overview</p>	<p>Tools of Data Science, AI, and Blockchain (Incl Demo).</p> <ul style="list-style-type: none"> - ML: Pandas / SKT / Tensorflow - Data Storage - Natural Language Processing - Intro: CNNs, RNN, and RF - Blockchain Tools 	<p>Data-X: Next steps</p> <p>Identify and discuss challenges and opportunities with the participants</p> <p>McKinsey Report on Progress with Data Projects</p> <p>Next steps discussion on How to Achieve Technology Outcomes</p>
<p>Group Exercise (Moderated by Faculty)</p> <ul style="list-style-type: none"> - What are the challenges from each group - Discussion: How do you develop a comparative advantage - Berkeley Innovation Index Survey 	<p>Project, Architecture and Design Issues using Technology Strategy Cases for Examples</p> <ul style="list-style-type: none"> - Developing technology architectures - Holistic Considerations - Leveraging New Ventures 	<p>Advanced Blockchain Module: Smart Contracts and Blockchain Technology</p> <ul style="list-style-type: none"> - Decentralized networks of trust (Trustless) - Solidity and Ethereum's Virtual Machine - Cryptocurrencies - Blockchain system architectures and blockchain engineering
<p>Lunch Break</p>	<p>Lunch Break</p>	<p>Lunch Break</p>
<p>Blockchain primer: An in-depth introduction to blockchain, the most disruptive technology of the last 2 decades</p>	<p>Data and AI Case Examples</p> <ul style="list-style-type: none"> - Modern systems beyond recommendation and classification - Reinforcement and recurrent 	<p>Progress report with group presentations about topic: Project and Architecture — Next Steps, with validation from faculty, learning models, and implementation reviews.</p> <p>Review and continuation of data strategy.</p>
<p>Innovation and Leadership: How new technologies have changed the rules.</p> <p>Strategy Exercise — For Alignment: How do we Prioritize and Align a Data Strategy</p>	<p>Blockchain Business Models</p> <ul style="list-style-type: none"> - Two case studies of successful implementations - How to develop a blockchain business strategy - Where to find and how to attract blockchain talent 	<p>The Future of Data and Blockchain (Including Research Directions)</p> <ul style="list-style-type: none"> - Methods of accessing global resources - Berkeley research directions - Issues on Jobs, Policy and Artificial Intelligence

Take Away Questions

How do we win? Where do we play?

What are the core competencies vs competitor competencies?

What are the capability gaps?

What do you have to learn?

What management process will be needed?

How can we externalize innovation more? How can we leverage startups?