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# **The Analytical MBA**

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# Outline

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- **General Observations**
- **The Ecole Polytechnique model**
- **The Goldman Sachs/McKinsey model**
- **An overall strategy**

# General Observations

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- **In Europe and in Asia, CEOs of technology companies are typically people with engineering degrees, but not MBAs.**
- **Our current brand is not particularly distinct from many of our competitors.**
- **Typical senior management team in leading US companies are Harvard graduates not MIT graduates.**
- **MIT has arguably the premier engineering school in the world and a long tradition of excellence in technology, science and engineering that constitute the MIT brand.**
- **If we aspire to become the premier management school in the world in something, significant change and some risk are necessary.**

# The Ecole Polytechnique model

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- **Mission: Train very talented young engineers and scientists to become CEOs of technology companies.**
- **Implication: Younger students, with more analytical backgrounds (scientists and engineers).**
- **Competitive advantage: Leverage MIT's engineering school**
- **A typical student: 24 year old, finished his/her CS degree at MIT with a 4.9 GPA, started an entrepreneurship venture at age 22, aspires to become a CEO of a technology company.**

# The Ecole Polytechnique model

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- **Strengthen entrepreneurship, leadership, 5<sup>th</sup> floor skills.**
- **Teach quantitative subjects more rigorously than today.**
- **Make 50K a more integral part of the program.**

# The Goldman Sachs/Mc Kinsey model

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- **Mission: Graduate students with superior analytical abilities and knowledge that will be attractive to the Goldman or Mc Kinsey type employers.**
- **Implication: Admit students who have can learn analytics, increase coordination around the school.**
- **Competitive advantage: Leverage the MIT brand for superior analytical abilities and the strength of our faculty**

# The Goldman Sachs/Mc Kinsey model

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- **Instead of teaching spreadsheet optimization models, teach students to solve large scale optimization models with state of the art software for solving problems with hundreds of thousands of variables.**
- **Instead of teaching students 19<sup>th</sup> century statistics with spreadsheets, teach them the latest data mining methods, and use state of the art software for solving problems involving millions of observations.**
- **Instead of teaching students the rudimentary option pricing models, teach them how to price multidimensional derivatives using large scale simulation models or solving PDEs.**
- **Develop new case studies that show how quantitative models and analytical reasoning can make a significant difference.**

# Overall Strategy

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- **Should these be separate programs ?**
- **Regular MBA**
- **Analytical MBA**
- **Leaders in technology**