DNSC 6306 - Decision Models

Review and Wrap-up

GW | Business
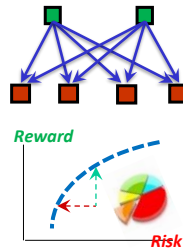
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in the future …

- more data
- more/faster computational power
- more/better data processing algorithms
- more/smarter Artificial Intelligence
- more complexity, uncertainty

- yet…, human brain still the same, with limited attention and cognitive abilities
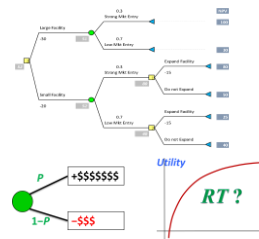
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Overview of Course Contents

❑ **Optimization models**
Model elements
Sensitivity data interpretation
LP, ILP, NLP
Linearizing w/ binary variables
Applications in Business Ops,
Finance, Resource Allocation,
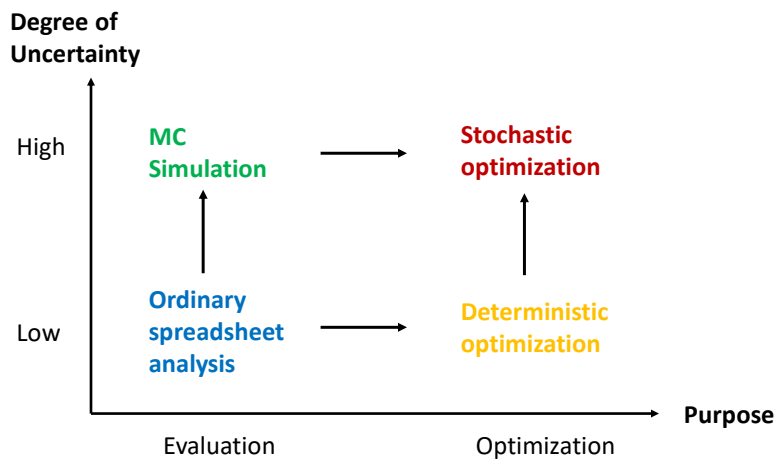Risk-Reward analysis

❑ **Decision Tree models**
Structuring strategic options under
uncertainty
Value of information and real options
Risk tolerance, Certainty Equivalents

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Broad Categories of Decision Models

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> *"... Logic, like science, must be the servant and not the master of man."*
>
> – **Winston Churchill**
>
> MIT's Mid-Century Convocation, 1949