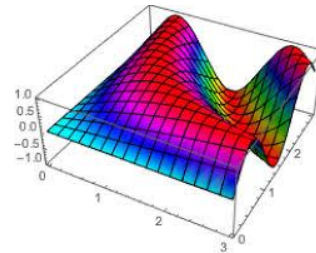
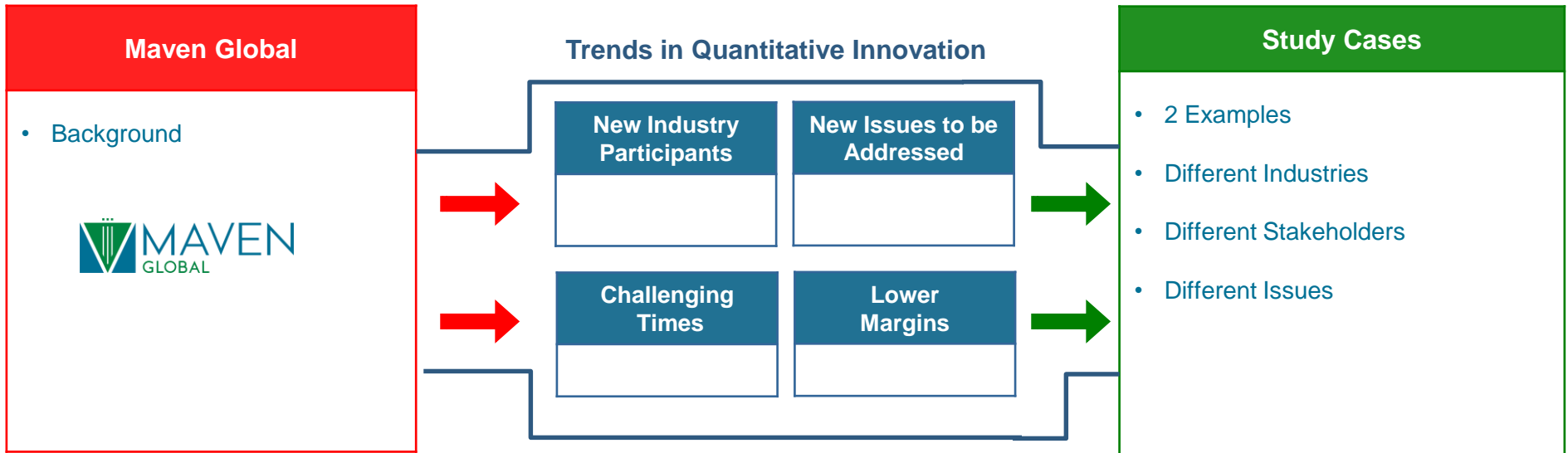


# Financial Innovations in the Shipping Industry: Case Studies

*18<sup>th</sup> November 2016*





## Asymmetry

### Situation Overview

- Shipping Firm looking to charter
- 4-year deal with profit share above strike
- Charterer asked for new terms

### Quantitative Approach

- Create Monte Carlo model for freight rates
- 500,000 future paths over next 4 years
- Quantify value of each financial option

### Challenge

- 3 key dimensions: annual cash flows vs. 4-year cash flow, profit share, strike
- Negotiation involved all 3 parameters
- How much dollar value per each change?

### Outcome

- Shipping Firm better off by \$2.5m on deal
- Dollar value of asked amendments was substantially less than concessions
- Different values in different environments



# Case Study 2: Credit Analysis for Chinese Shipyards

## Situation Overview

- US Private Equity Firm + Shipping Firm
- Potential Order for number of Newbuilds
- Chinese yards offered impressive deals

## Quantitative Approach

- Credit Analytics used for Corporate Bond portfolios in Emerging Markets
- Traditional and Shipping Credit Metrics
- Ranked yards by probability of default

## Challenge

- Key Reason for discounts: poor pipeline
- Number of Chinese yards closing down
- If yard closes down during project → significant costs for consortium

## Outcome

- Unsurprisingly, yard with best offer was most likely to default
- Innovation on Credit Analytics: One factor
- Yard was asked for additional safeguards

