



Forecasting and Scenario Planning

Herb Rubenstein, JD, MPA, DSS, SMP

About the Presenter

- Herb Rubenstein

- Lawyer, Author, Public Speaker, Educator
- Leadership and Management Consultant
- Lecturer, Graduate School of Business of the University of Colorado Denver
- Founding Member – Association of Professional Futurists
- Advisor to Companies and NonProfits on Scenario Planning and Forecasting

Overview

- Section 1 – The Increasing Need for Scenario Planning and Forecasting
- Section 2 – Forecasting
- Section 3 – Scenario Planning
- Section 4 – How Scenario Planning and Forecasting Improves Decisions
- Conclusion

Overview (Con't)

- Neither Forecasting nor Scenario Planning is expensive
- Can promote great conversations within the company
- Can include customers, other stakeholders, thought leaders
- Can provide great insights

Overview (Con't)

- Does require staff time
- Must be organized about doing this
- Should be done with a budget and timeline (90 days max)
- Might want to buy data, consultants to manage this the first time
- Great source - competitive advantage

Overview (Con't)

- At least two scenarios and two separate forecasts should be created
- Helps identify unintended consequences
- Helps identify possible responses to decisions
- Helps prepare for the future

Overview (Con't)

- Not the same as predicting the future
- Must be open to their being several possible futures
- Requires listening to all ideas about the potential future
- Bottom up process more than top down
- Better to be inclusive in the process

Section 1: The Increasing Need for Forecasting and Scenario Planning

- Major disasters including Three Mile Island, Deepwater Horizon and Fukushima were easily predictable with scenario planning
- Wells Fargo's debacle could have been seen with adequate scenario planning

Section 1: The Increasing Need for Forecasting and Scenario Planning (Con't)

- Volkswagen – Scenario Planning would have predicted new testing – in actual road conditions – and doom
- Yahoo – Take away telecommuting and bad, bad effects were easily predictable
- Yahoo – don't disclose spying and hacking – scenarios kill value

The Need (Con't)

- Forecasting makes us create plans for possible events such as:
 - Drops in oil and gas prices
 - Budget overruns
 - Potential internet based disasters like the first month of the Affordable Health Care Act Website
 - Fines for Volkswagen and others

The Need (Con't)

- We live in volatile times, but very little is unforeseeable
- Low probability events can be picked up in scenario planning
- Low probability events are causing major disruptions in the world
- Scenario planning – future studies

The Need (Con't)

- Forecasting/Scenario Planning helps us deal with uncertainties
- We live in uncertain times
- Health care companies – great uncertainty
- Global Trade – uncertainty
- Climate Change and Energy Sources

Section 2: Forecasting

- Essential to create future budgets
- Can be highly mathematical
- Must be based on solid causal models and be logical
- Highly mathematical and based on assumptions and modeling

Section 2: Forecasting

- Can start with qualitative inputs from “expert panels”
- Great science in this field in operations research and see www.forecastingprinciples.com
- Every future oriented organization does forecasting

Dangers of Forecasting

- Merely extrapolating past data can lead to disastrous predictions
- Must understand the external environment and causal relationships do change over time – called “decoupling” like GDP and employment growth decoupled in 2004

Dangers of Forecasting (Con't)

- Beware correlation does not mean causation, but with big data and very large sample sizes, correlation may be all you need to know
- Beware of inaccurate data, test it rigorously

Forecasting is Essential

- Organizations are predictive by nature
- The better an organization is able to predict the future, the better it can be prepared
- External environment is always changing, especially in globalized markets

Forecasting is Essential (Con't)

- Forecasts essential regarding the future cost of capital, future revenues for the sector and industry, future profits, globalization
- Forecasts can be kept confidential or can be made public – self-fulfilling prophecy concept

Forecasting Future Costs

- Known relationships between level of overall economic activity in a sector and production costs
- \$15 an hour minimum wage for Los Angeles – can you forecast its impact on low wage jobs in LA and other communities – will they follow

Forecasting Future Costs (Con't)

- Big data is business's and forecasting's best friend as forecasting is getting easier
- Essential to lay out your model in layman's terms not just mathematical equations

Forecasting Future Costs and Revenues

- Investment grade data and analysis is the goal
- Underestimate and over perform –
- Revenue Forecasts – The story of Solar City
- Assumptions are the key to support all revenue projections

Assumptions Behind Forecasts

- Essential to lay out your model in layman's terms not just mathematical equations
- State your assumptions
- Confer with other experts as you are creating your assumptions

Assumptions Behind Forecasts

- Beware of both “conventional wisdom” and mathematical rigidity
- Trends have drivers – you need to know the drivers to determine if they will grow or decline
- Trends change, have tipping points and forecasts often miss this

Shelf Life of Forecasts

- People think farther out more useless
- Think of driverless cars – 30 years
 - Impact on insurance sector
 - Impact on legal sector, including courts
 - Impact on human productivity
 - Change your forecasts when the facts differ from what you expected

Publishing Forecasts

- BP publishes forecasts
- Government agencies publish them
- If you want to change something, you have burden of proof of showing forecasts that show benefits of what you are proposing

Publishing Forecasts (Con't)

- Your company or nonprofit might want to publish a forecast
 - Positions you as a thought leader
 - Helps promote conversations
 - Could lead to greater business
 - Improves credibility, branding

Section 3: Scenario Planning

- Similar to Forecasting, but starts out more qualitative and based on feedback from stakeholders and individuals in structured meetings
- Shell Oil is one of the leaders in scenario planning
- Any level of complexity, simplicity

Section 3: Scenario Planning (Con't)

- Useful guide to seeing the interrelationships between one thing that might occur in the future and how that will impact other things, second and third order effects –
- Focus on interrelated stories, if X happens then, A, B, C, and D follow

Scenario Planning Process (Con't)

- Meetings (preferably) or surveys to share their view of different types of future trends, activities, occurrences they believe might happen
- Each meeting written up and then all meetings' findings put together

Scenario Planning Process (Con't)

- Boil down all of these possibilities into two to four “comprehensive” or “overarching” scenarios
- Give each scenario a name for internal and external communications
- Different scenarios should be distinctively different

Section 4 - Once Scenarios Built

- Can make mathematical models, gather data and then make predictions for each scenario as to specific inputs and outputs
- See how each of these potential alternative futures could impact your business, your sector, overall economy and know the interrelationships

Section 4 - Responding and Decision Making Through Scenario Planning (Con't)

- Once scenarios are created, companies can prepare simultaneously for alternative possible futures by making early bets
- Test customer/market response
- Allows for better positioning in the future to prepare for multiple possible futures

Section 4 - Responding and Decision Making Through Scenario Planning (Con't)

- Can make internal changes – may need more training
- Can lead to better strategic alliances
- Can identify new market segments (Yellow Tail wine for beer drinkers)
- Ringling Brothers Circus and Cirque de Soleil

Section 4 - Responding and Decision Making Through Scenario Planning (Con't)

- See growing role for sustainability
- See growing role for ethics
- Consumers becoming prosumers
- Old question: What do your customers want?
- New Question: Who do your customers want to be? Scenario Based Question.....

Conclusion

- Forecasting is essential for future budgeting and planning – a budget is a plan in numbers/dollars
- Scenario planning is very useful for understand how possible futures could impact your organization

Conclusion (Con't)

- Each costs money and each can miss key future events that will impact the company or sector
- Your company can make your forecasts and scenario planning public or keep it as internal trade secret information – good reasons for doing it either way

Conclusion (Con't)

- Internet of things (IoT)
- GE has bet the company on this
- Sold off real estate, finance for this
- Offshore Wind in America – new today, was new 40 years ago in UK
- Costs of litigation, controversy, fines skyrocketing

Conclusion (Con't)

- All predictable
- Ask yourself the question: What is the future of X and you will need to:
- Use scenario planning or forecasting
- Insights fueled by the wisdom of crowds – do not do this alone
- Help your clients do this

Contact Information:

Herb Rubenstein, JD, MPA, DSS, SMP

herb@sbizgroup.com

herbrubenstein.com

Videos on YouTube and Vimeo

303.910.7961