

# An Age Old Question: Make or Buy

MAKE OR BUY

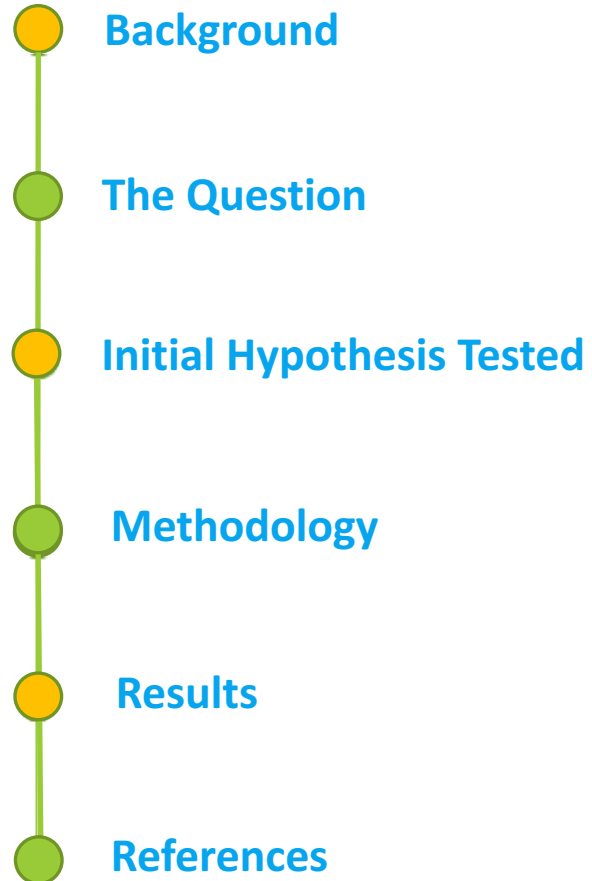


**Akansha Nidhi**  
**Fady Riad**  
**Master's in Supply  
Chain Management**



# Industry Case Learnings

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# Background

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# Industry Case Learnings



**Boeing's 787 Dreamliner,** their most ambitious project turned out to be an outsourcing nightmare.

- Components didn't fit together properly.
- Electrical systems failure.
- Led to 3 yrs. delay.
- \$1.2 bn over the budget.



**Split \$15 bn contract for IT Services** among Capgemini, Covisint, EDS, HP, IBM and Wipro.

- Multiple outsourcers encourage competition.
- System failure with one suppliers will not harm entire IT infrastructure.
- Short-term contracts minimizing long-term financial risks.



**Licensed North American production** to US-based -Miller Brewing Company (1970s)

- \$1.8 mn loss in revenues.
- Löwenbräu's customer's attractiveness fell.
- Product no longer had the catch of genuine German beer.



**Partnered with Google** for data research and clinical trial programs for robotic-assisted surgery pilot.

Pharmaceutical Industry:

- Expiring patents
- Tighter regulatory requirements
- Emergence of generic drugs and biosimilar
- Internal manufacturing for better control.
- Contract manufacturing non-core business like Packaging, Logistics.

# The Question

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# The Objective

To determine the most appropriate method of product realization using a structured methodology for evaluating alternatives - internal manufacturing or external procurement of products or services.



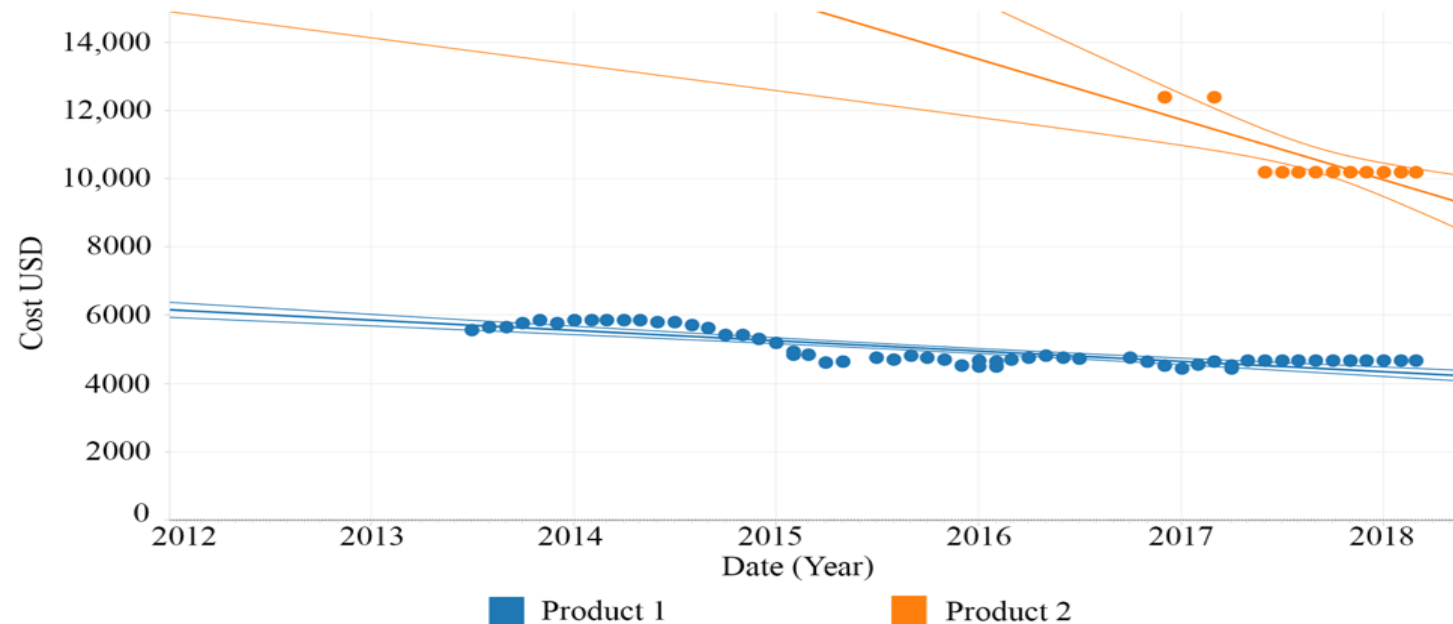
# Initial Hypothesis

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# Initial Hypothesis Tested

- ✓ Managers believe that quantities ordered vary with Boom/Bust cycles, which in turn varies external pricing.
- ✓ Managers believe that external pricing rises during boom cycles and falls during bust cycles.
- ✓ Managers believe that internal sourcing has a unified price that does not change with the Boom/Bust cycles.



Graph showing internal price fluctuations over a period of 5 years.



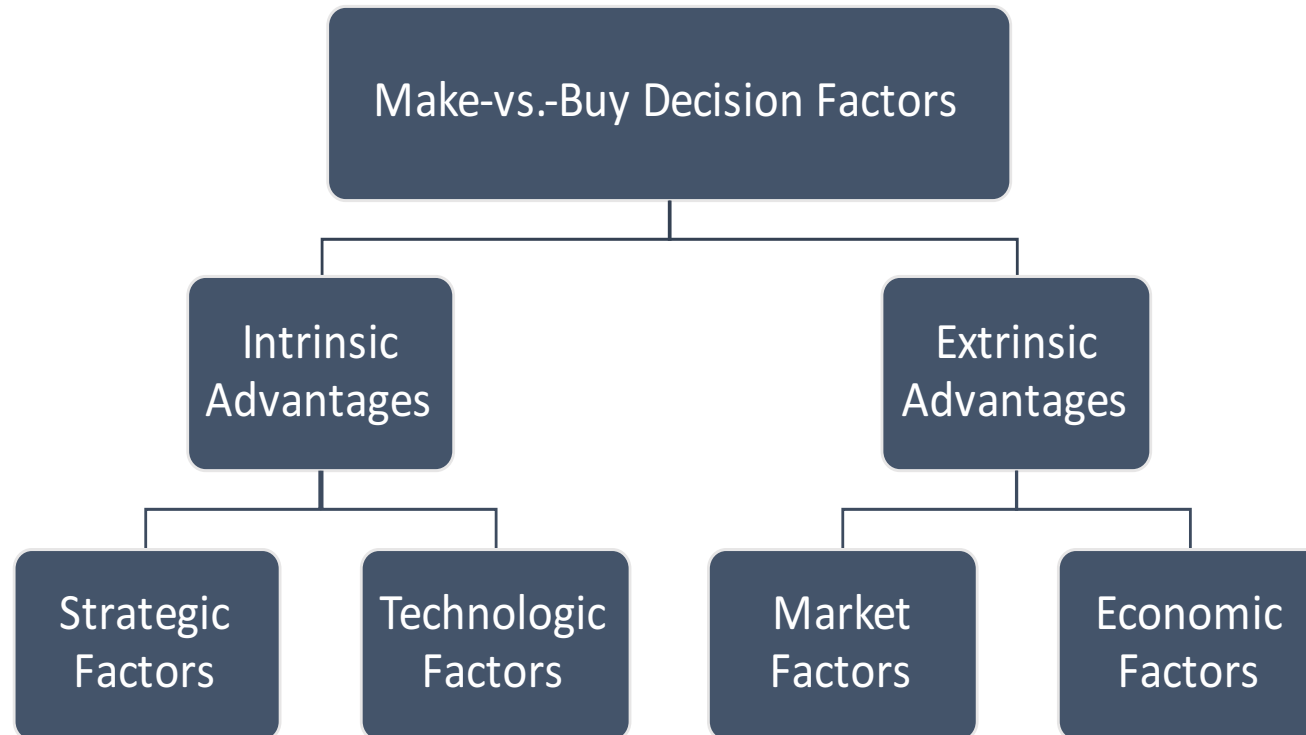
# Methodology

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# The Assessment Factors

- ✓ Interviewed Insourcing Category managers and Global Sub-category managers.
- ✓ Interviewed the manufacturing managers to explore the flexibility in their operations.
- ✓ Interviewed the global suppliers and partners to assess supplier risks.
- ✓ Analyzed Industry Cases – a. Boeing 787 Dreamliner Outsourcing Strategy.  
– b. Site Selection process of a multinational CPG company.



# Results

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# The Assessment Model

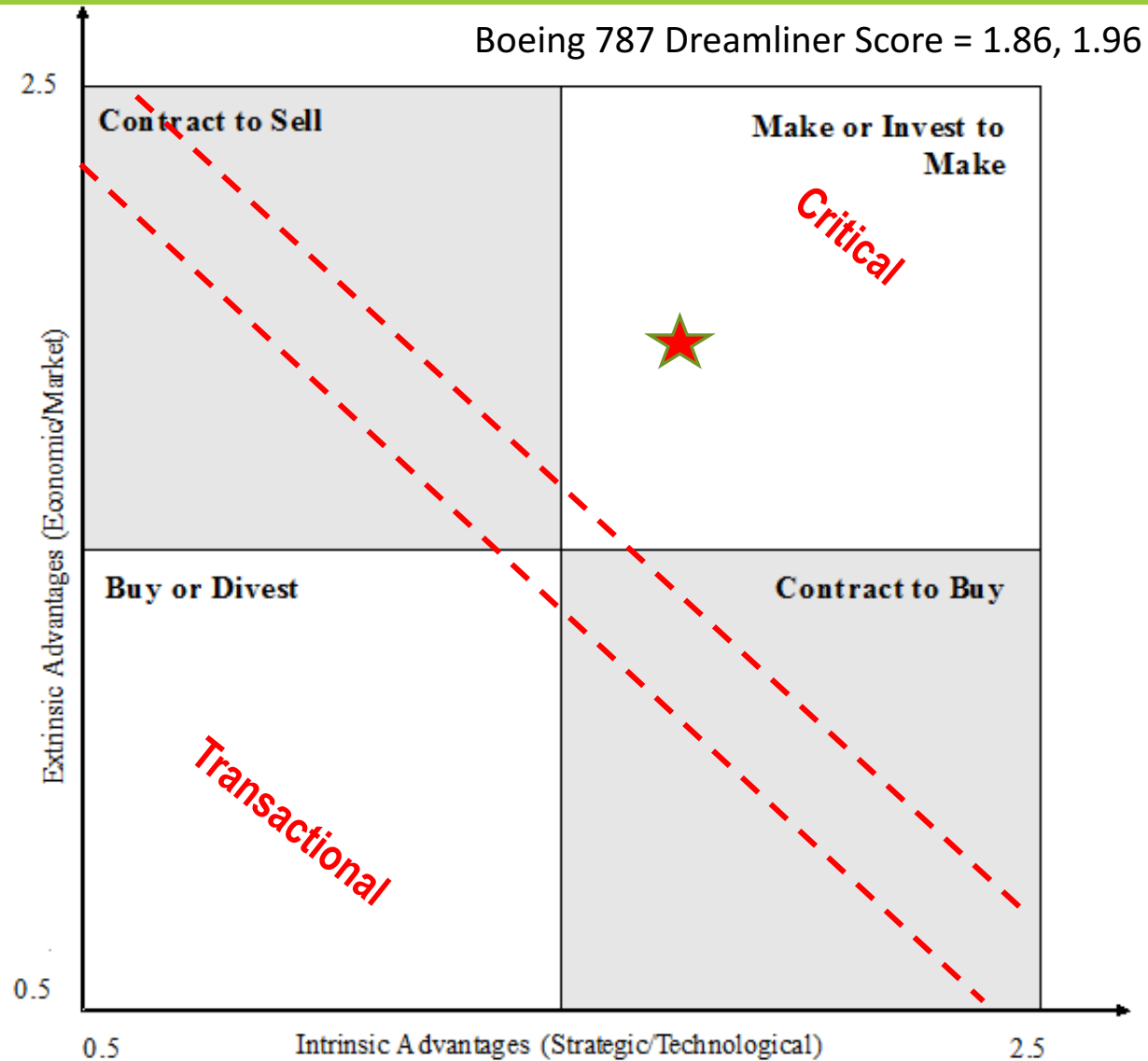
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# Results: The Assessment Model

Segment	Criteria	Weight	Evaluation Questions	Score 5-Exorbitant 3-Substantial 1-Minimal	Weighted Score
Intrinsic Advantage	Strategic Factors	5%	Does the product/technology fit the business strategy?	5	0.25
		10%	Is the product/technology core to the business?	5	0.5
		3%	Do we have the capacity to build the product?	3	0.09
		3%	Can we scale up the operations?	1	0.03
		3%	Do we have the skills to make the product?	5	0.15
	Technological Factors	10%	Is the product design modular for parts assembly?	1	0.1
		10%	Is the manufacturing/delivery lead time from suppliers significant?	5	0.5
		3%	Is the product/technology patented? Can we entail the risks of IP Loss?	3	0.09
		3%	Do we have a technology differentiation to make the product inhouse?	5	0.15
					Total
Extrinsic Advantage	Market Factors	0%	How significant are the barriers to entry?	0	0
		0%	Are the complementary assets available?	0	0
		4%	Can we achieve economies of scale with inhouse production?	1	0.04
		10%	Do we have alternate suppliers in the market?	5	0.5
		4%	Is the supplier market stable? What is the dependence risk?	5	0.2
		4%	What are the geopolitical risks involved?	3	0.12
	Economic Factors	10%	What are the switching costs?	3	0.3
		8%	Do we need a significant investment upfront?	5	0.4
		5%	What are the transactional costs for supplier management?	5	0.25
		5%	Is the currency exchange rate inflated for cross-country suppliers?	3	0.15
				Total	1.96

# The 2x2 Assessment Matrix



# Results: Analytical Model

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# References

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1)	<u>Harvard Business Review</u> – Strategic Sourcing – Make or not to Make
2)	A research paper: SUPPLY CHAIN DESIGN: THE MAKE-BUY DECISION PROCESS (The Second World Conference on POM and 15th Annual POM Conference, Cancun, Mexico, April 30 - May 3, 2004)
3)	Thesis Company's Procurement document
4)	Make Vs. Buy – Revisited by <u>AT Kearney</u>
5)	Make or Buy by PwC: <u>Three pillars of sound decision making</u>