



TECHNOLOGY  
MANAGEMENT  
UNIVERSITY OF CALIFORNIA | SANTA BARBARA

# Estimating Market Size

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# Seminar Schedule

- Business Models
  - Canvas, 1/16/13
  - Environment, 1/22/13
- Marketing
  - Sizing a Market, 1/29/13
  - Product & Promotion, 2/5/13
  - Pricing & Market Validation, 2/6/13
- Operations, 2/12/13
- Finance
  - Basics, 2/19/13
  - Planning, 2/20/13
  - Measurement, 2/26/13
- Teams, 2/27/13
- Technology, 3/5/13
- Law
  - Intellectual Property, 3/12/13
  - Company Formation, 3/13/13
- Investors
  - Financial, 4/2/13
  - Strategic, 4/9/13
  - Presentation, 4/16/13

# Markets & Marketing

## Markets

- How big is the opportunity?

## Marketing

- Communicating your Value Proposition
- 3 P's
  - Product (or Pservice)
  - Price
  - Promotion



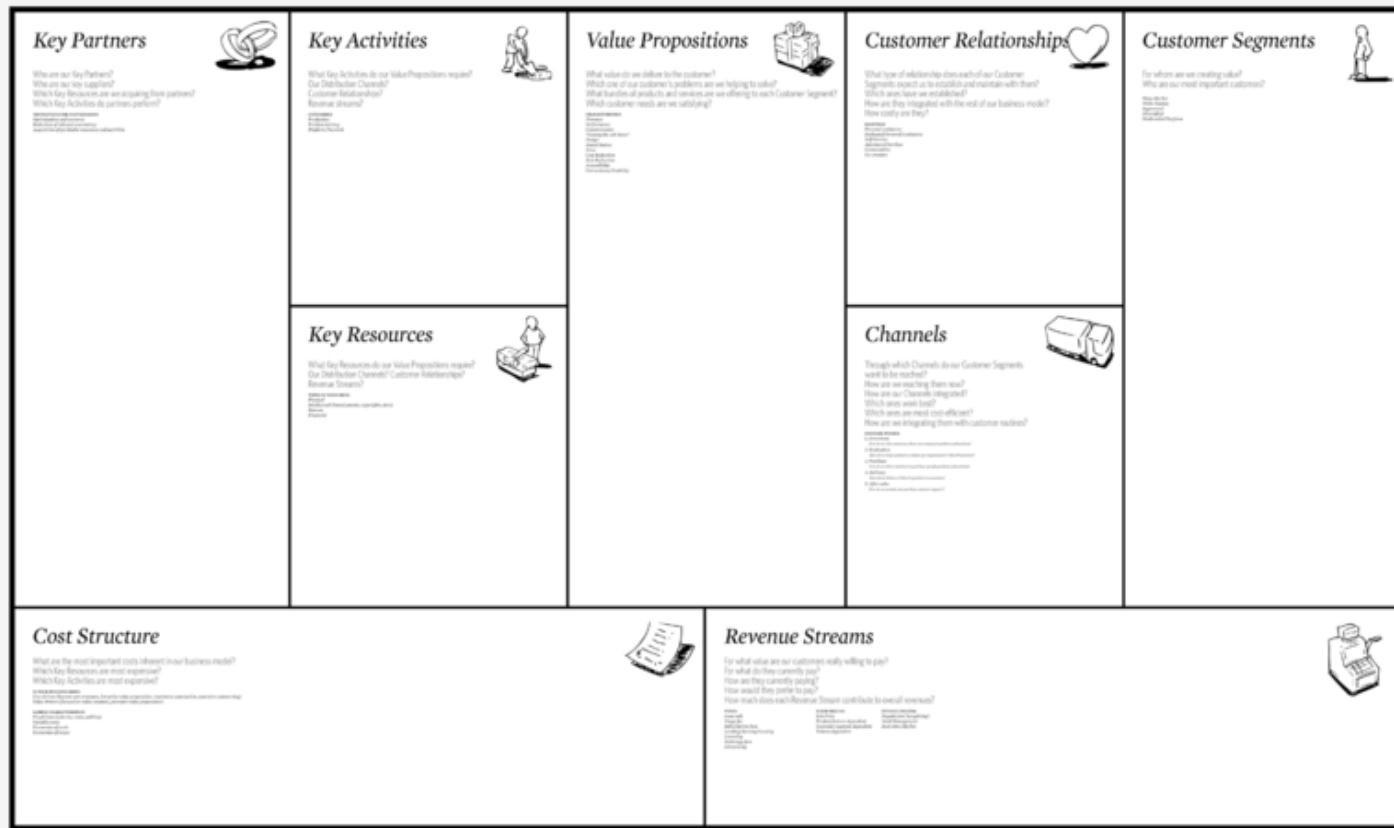
# This is your Business Model Canvas...

## The Business Model Canvas

Designed for:

Designed by:

On:  Date:  Iteration:



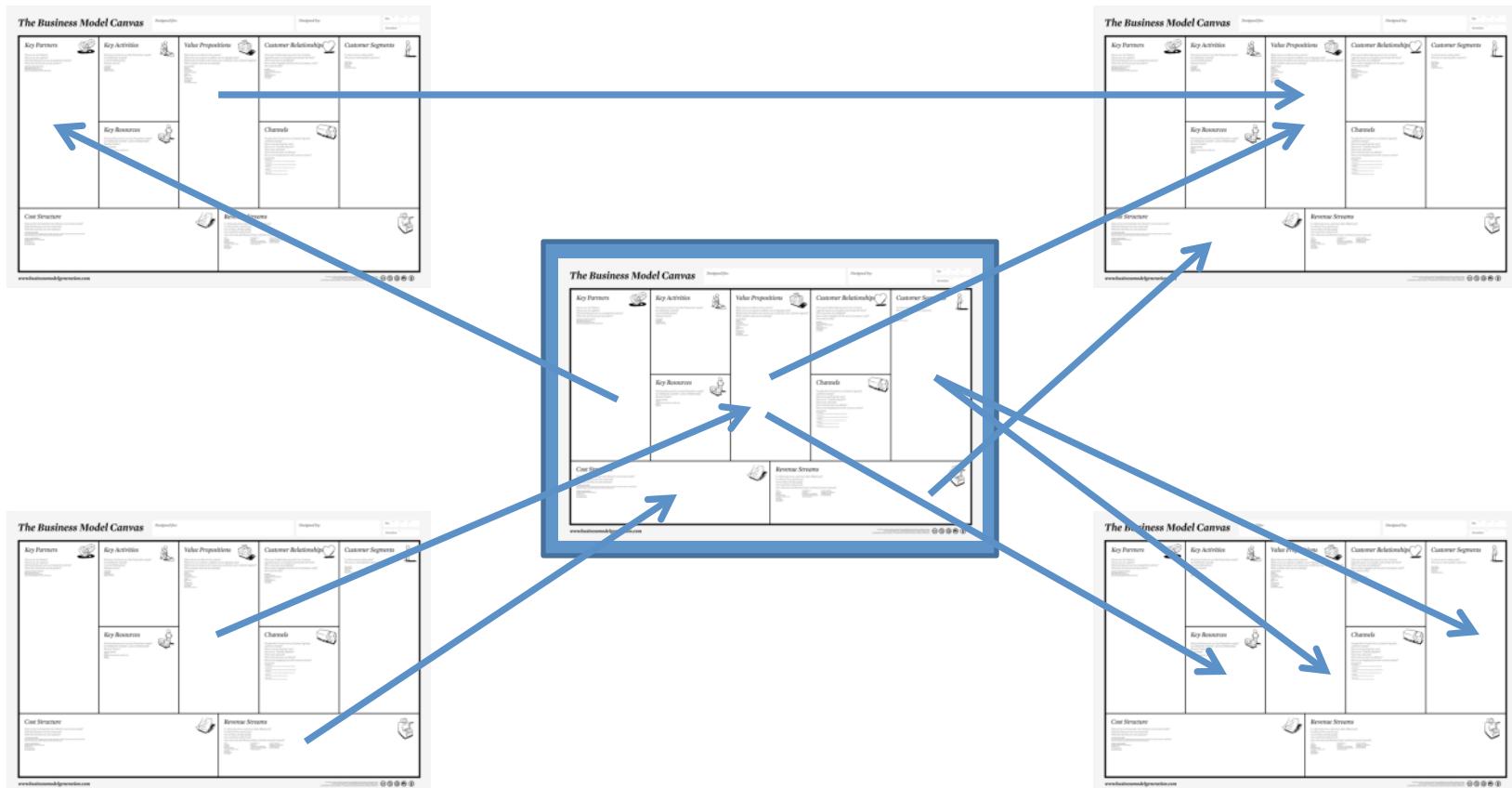
[www.businessmodelgeneration.com](http://www.businessmodelgeneration.com)

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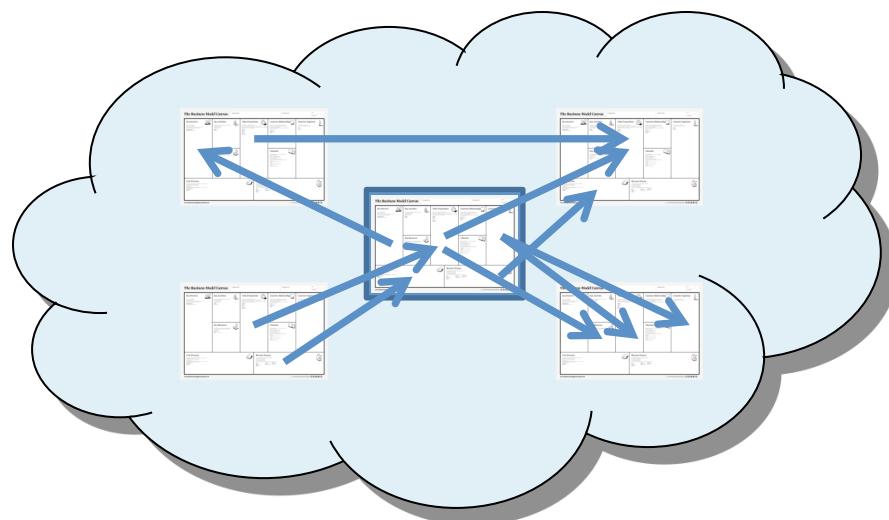




# ...Business Model Canvases are CONNECTED



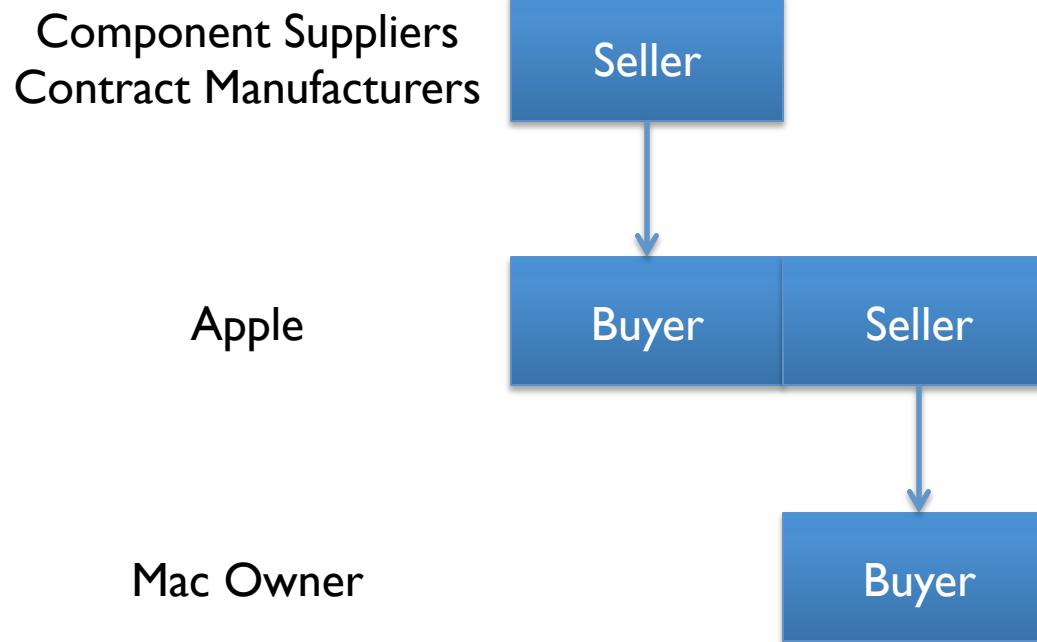
# A Market is the mechanism by which a business delivers its value proposition.



There are at least two roles in a market:



# Most markets consist of chains of buyer and seller relationships.



## Market Size

- Quantifies the financial potential of your business.
- Helps you refine Business Model Canvas hypotheses:
  - Very small market size may not be worth pursuing.
  - May be difficult to gain traction in a gigantic market.
- Two measurements:
  - Money (usually USD)
  - Units
    - People
    - Consumption (e.g. washloads, room nights, kilowatt hours, etc.)

# Three Market Size Estimates



- **Total Addressable Market (TAM)**: Value of all of the buyer/seller relationships participating in the market.
- **Served Addressable Market (SAM)**: The part of the TAM for which your business model's value proposition is strongest.
- **Target Market**: (Usually) demographic segment of the SAM with the most direct path to success.

## Total Addressable Market (TAM)

- Quantifies the entire chain of buyer/seller relationships in your market.
- Only need to estimate the value of the relationships at point of consumption (incorporates the value of all relationships in the chain)
- Usually very broad.
- Easiest to estimate.
- Examples:
  - Mobile apps
  - Energy consumption
  - Health & fitness

## Served Addressable Market (SAM)

- A value proposition rarely applies to an entire TAM.
- Opportunity to sharpen your focus on a particular part of the market.
- If TAM and SAM aren't that different, just estimate an addressable market.
- Examples:
  - Mobile healthcare apps for seniors
  - Self-generated renewable energy storage
  - Health & fitness at work

# Target Market

- Process not that different than for SAM.
- One more level of refinement.
- Often a demographic target.
- Examples:
  - Mobile healthcare apps for seniors, targeting retirement homes and large gerontology practices.
  - Self-generated renewable energy storage, targeting the oilfield services, food manufacturing and automotive industries.
  - Health & fitness at work, targeting new male employees aged 25-40 in companies with annual sales of \$500M or more.

# TAM, SAM and Target Markets?



# TAM, SAM and Target Markets?



# TAM, SAM and Target Markets?





## TAM, SAM and Target Markets?



# Quantifying Market Size

- If you're lucky:
  - Find an industry or market study that fits your business model
- If you're not:
  - Build a market model
- Important to differentiate:
  - Facts
  - Assumptions
  - Extrapolation Algorithms
- Run multiple scenarios
- Two time frames:
  - Now
  - In 5 years

## Example

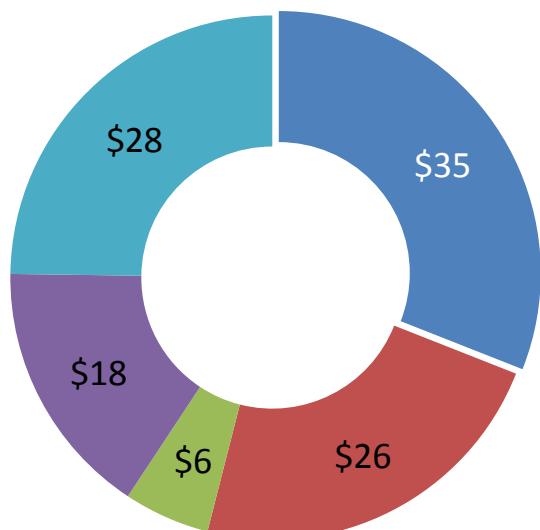


- The internet revolution changed the travel industry forever. **But it didn't change the whole travel industry.**
- The travel industry's meetings & events segment is hampered by **inefficient business processes** and **ineffective pricing models** that do not leverage modern technology, especially for hotel accommodations.
- **GroupRes** is Software as a Service (SaaS) that makes it easy for event guests to reserve a hotel room, while **increasing profit** for event planners and hotels.



## Example

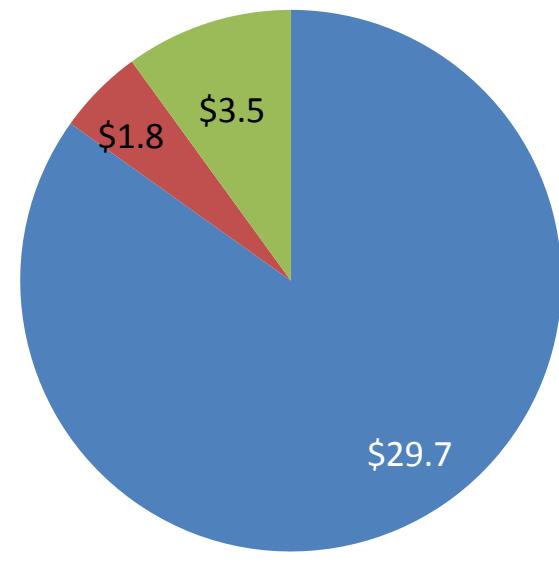
Total Addressable Market (TAM) of Accommodations represent the largest share (31%) of T&E Spending for U.S. Meetings (\$113B Total)



\$Billion  
Source: PwC

■ Accommodations ■ Food & Beverage ■ Car Rental  
■ Air Travel ■ Other

Served Addressable Market (SAM) is \$5.3B, or 15% of spending on commissions and fees.



■ Net to Hotel ■ Technology Fees ■ Commissions



# Example

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Market</b>						
>Meeting Growth Rate		0%	0%	0%	0%	0%
Meetings	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
Room Nights/Meeting	139	139	139	139	139	139
Room Nights	250,000,000	250,000,000	250,000,000	250,000,000	250,000,000	250,000,000
Room Nights/Reservation	2.5	2.5	2.5	2.5	2.5	2.5
Reservations	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000
>Avg Price per Room Growth Rate		2%	2%	2%	2%	2%
Average Price per Room	140	143	146	149	152	155
Room Revenue	35,000,000,000	35,700,000,000	36,414,000,000	37,142,280,000	37,885,125,600	38,642,828,112

# Data Sources

Data Compendia		Consultancies	
CIA World Factbook	<a href="https://www.cia.gov/library/publications/the-world-factbook">https://www.cia.gov/library/publications/the-world-factbook</a>	Accenture	<a href="http://www.accenture.com">http://www.accenture.com</a>
NationMaster	<a href="http://www.nationmaster.com">http://www.nationmaster.com</a>	Booz Allen	<a href="http://www.boozallen.com">http://www.boozallen.com</a>
Wikipedia	<a href="http://www.wikipedia.org">http://www.wikipedia.org</a>	Deloitte	<a href="http://www.deloitte.com">http://www.deloitte.com</a>
Government		Forrester	<a href="http://www.forrester.com">http://www.forrester.com</a>
Bureau of the Census	<a href="http://www.census.gov">http://www.census.gov</a>	IBM	<a href="http://www.ibm.com">http://www.ibm.com</a>
Data.gov	<a href="http://www.data.gov">http://www.data.gov</a>	McKinsey	<a href="http://www.mckinsey.com">http://www.mckinsey.com</a>
U.S. Energy Information Administration	<a href="http://www.eia.gov">http://www.eia.gov</a>	PwC	<a href="http://www.pwc.com">http://www.pwc.com</a>
Business		Universities	
Barrons	<a href="http://www.barrons.com">http://www.barrons.com</a>	Industry Groups	
The Economist	<a href="http://www.economist.com">http://www.economist.com</a>	And if all else fails...	
Wall Street Journal	<a href="http://www.wsj.com">http://www.wsj.com</a>		



# Google



## Helpful Hints

- USA-only estimates OK (unless the foreign market is critical to success)
- Make citations clear
- Solid, well-reasoned market size estimate adds credibility to your investor pitch

## Next Steps

- Financial projections
- Estimate market share
- Common fallacies:
  - “Our SAM is 50 gazillion dollars, so if we achieve one hundredth of one percent market share, we’re a billion dollar company.”
  - “We target a \$5 million niche and expect to capture 75% of the market.”
- Test against Business Model Canvas
  - Adjust market size assumptions
  - Re-visit Value Proposition, Customer Segments & Channels

## Rules of Thumb

- Market size projections are usually large numbers.
- Shoot for 10-25% market share within 5 years.
- The smallest business that might attract outside investors should project \$10 million in sales within 5 years (minimum \$40 million SAM).

# Assignment

- Research and estimate market size for your business. Estimate at least one of TAM, SAM and Target Market.
- Upload to <http://nvc2013.istart.org> by Feb 15:
  - Business Model Canvas
  - Business Model Environment
  - Market Size Estimate