Innovation & Entrepreneurship

Sessions 4 & 5:

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Innovation Examples

Tech : Internet, Mobile etc.

Product: Electric cars, Planes

Process: Lean, Kaizen, CICD

Finance:, Sub prime, VC

Cultural: Live -in, Entrepreneurship

Legal : Class Action Lawsuits, Patents

Eco System: Silicon Valley, Bangalore

Ten Types of Innovation (Doblin/Deloitte)

#	Innovation Type	Description
1.	Profit Model	How you make money
2.	Network	Connections with others to create value
3.	Structure	Alignment of your talent and assets
4.	Process	Signature of superior methods for doing your work
5.	Product Performance	Distinguishing features and functionality
6.	Product System	Complementary products and services
7.	Service	Support and enhancements that surround your offerings
8.	Channel	How your offerings are delivered to customers and users
9.	Brand	Representation of your offerings and business
10.	Customer Engagement	Distinctive interactions you foster

First Four (4) - Configuration

According to Doblin, the first four types of innovation center around the configuration of the company, and all the work that happens "behind the scenes".

- Non-Customer -Facing?
- Downstream Effect

CONFIGURATION











PROFIT MODEL

The New York Times pivoted from its traditional ad-driven media model to digital user subscriptions.

The New Hork Times



STRUCTURE

Google's "20% rule", which allowed employees to work on side projects, led to the creation of Gmail and Google News.





NETWORK

Henry Ford was one of the first industrialists to control his entire supply chain, a strategy later called vertical integration.





PROCESS

McDonald's franchisees were encouraged to develop and launch their own new food items, leading to wins such as the Egg McMuffin.





Innovation Types #5-6: "Offering"

- Product performance improvement is obvious but difficult type of innovation unless it's added by a deeply ingrained company culture towards technical innovation
- Combine multiple areas of innovation together

OFFERING





PRODUCT PERFORMANCE

Spotify created a seamless music streaming product that lapped competitors in terms of speed, responsiveness, and user experience.





PRODUCT SYSTEM

Apple has built an extensive ecosystem of products that work together, creating additional value for users.





Innovation Types #7-10: "Experience"

- Customer -facing
- Practical evaluation in customer's hands (risk)
- Early internet days, online shipping was precarious - Amazon Prime and free expedited shipping for all members has been a game-changer
- Executing on such a promise was no small task, but today there are 150 million users of Prime worldwide,

EXPERIENCE









SERVICE

Amazon Prime comes with free expedited shipping, which can have products come as fast as within 2 hours in some metro areas.





BRAND

Patagonia's brand activism and links to environmental causes gives it a unique position in the outdoor apparel market.





CHANNEL

Nespresso locks in customers with its Nespresso Club, as well as through ongoing sales of single-use coffee pods.





CUSTOMER ENGAGEMENT

Mercedes has launched an augmented reality owner's manual that replaces its bulky predecessor while also highlighting driver and car data.



Mercedes-Benz



Innovation Matrix Framework

- Incremental innovation is focused on iteration and modification of existing technologies or processes, usually to improve efficiency or costs, or reduce use of materials.
- Disruptive innovation is still based on the existing technology, but changes how things are done and what is achieved as a result.
- Radical innovation marks a break with previous technologies, processes, ideas and ways of doing things.

Sustaining

A significant improvement on a product that aims to sustain the position in an existing market.

MARKET

IMPACT

Disruptive

Technology or new business model that disrupts the existing market

Incremental

Gradual, continuous improvements on existing products and services.

Radical

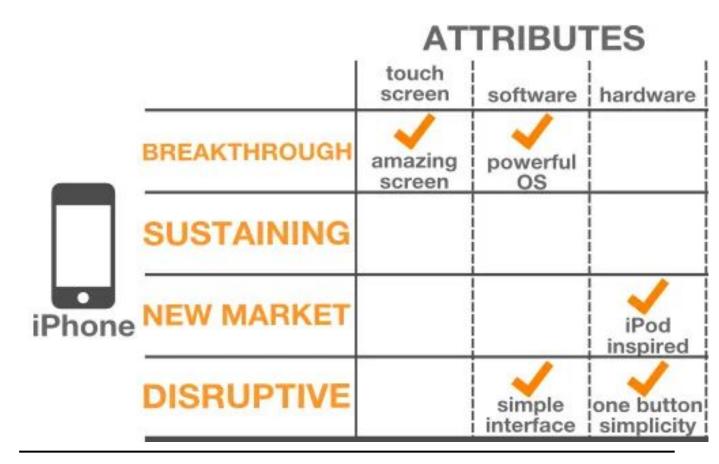
Technological breakthrough that transforms industries, often creates a new market.

LOW TECHNOLOGY NEWNESS

Examples of Innovation in iphone

 What applies to iphone 12?

 Can you map the same to a new version of phone you like?

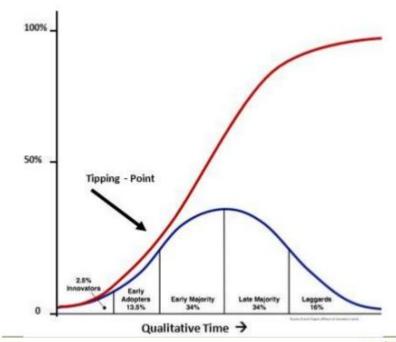


Technology Assessment of Innovation

S-Curve - What is it?

- S-Curve is a measure of the speed of adoption of an innovation
- First used in 1903 by Gabriel Tarde who first plotted the S-shaped diffusion curve
- Diffusion of innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread (Everett Rogers, 1962, Communication Studies Prof.)

Adoption and the S-Curve





S-Curve - Four (4) Components

Incubate. This phase describes products or an industry that is completely new and innovative. Organizations in this phase are in fierce competition to establish a dominant position in the market before the market becomes too established. In order to assure top-billing, organizations spend a lot of their time and effort researching and developing their products so that they are the best offered. This stage is located at the bottom of the S-shape as there is only a small amount of growth

Scale. In this phase, the product or industry has established its design or business model. In addition, the product or industry has proven to fulfill the needs of the market and is now gaining customer adoption. This phase is placed in the middle of the S-shape because it is characterized by hypergrowth, mass production and increasing market demand.

Maturity. A product or industry in this phase has reached the plateau of market acceptance. The product is well-established and widely used. Because of industry growth and the number of competitors, organizations usually spend time and money on improving their products or reducing their cost. Very incremental changes are made when it comes to innovation. As such, this stage is located in the peak of the S-curve as there is very little growth during this time.

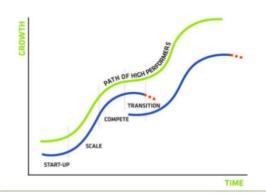
Discontinuity. As prior products or older industries reach their peak, there is opportunity for new ideas to take shape, which is where innovation occurs. This stage is considered to be "disruptive" as opportunities arise for new product appeal, new market segments or new technologies to work with. This stage is located at the bottom of the second S (which is higher than the first S to reflect upward growth), and essentially restarts the four steps.

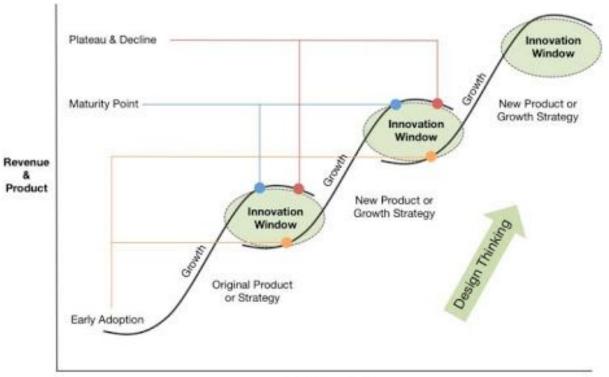
S-Curve - Growing the Curve

- How do we move the S curve
- Double S-Curve concept are more perception of high performing innovating companies

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Double S-Curve Model





Version & Time

S-Curve - Growth Trajectory

4 Types of S-Curves

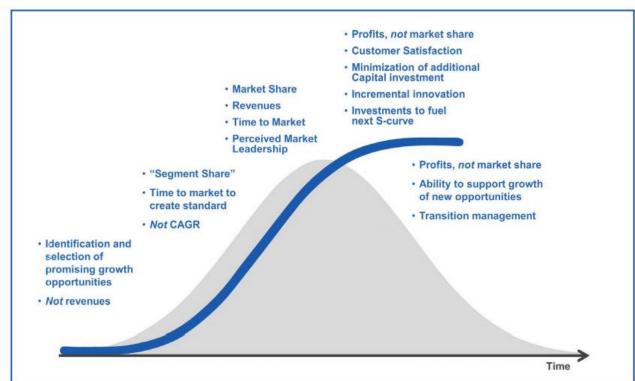
It is helpful to consider the numerous S-curves that can explain how a product or industry is changing over time:

- Level of Invention Breakthrough inventions lead to the appearance of new industries. Typically, a
 high-level solution solves a contradiction which delivers a new or potentially more ideal way of
 delivering an existing function. For example, the solid state transistor led to the semiconductor
 industry and manufacture of integrated circuits.
- Number of Inventions As an industry evolves over time, the number of inventions within it gradually rises until the decline stage.
- Performance As an industry evolves over time, the perceived performance of the products within
 it gradually rises. In the decline stage, the perceived performance declines relative to competing
 offerings.
- Profit As an industry evolves over time, the profits generated by it gradually rise until the decline stage.

Metrics - Across the Curve

Metrics across the lifecycle:

- Which metrics to track across which stages of life cycle are evident here
- Pick up triggers of growth or decline at each bend and track metrics to understand how and where to move the next innovation forward
- Which stage are you in?
- How many innovation projects?
- Team, Skills, Culture, Planning etc.



Market Assessment of Innovation

DISRUPTIVE INNOVATION THEORY: WHAT IT IS & 4 KEY CONCEPTS

What is disruptive innovation?

Uber, Lyft, Tesla?

What does "disruptive innovation" actually mean, and how can today's businesses—both the disruptors and the disrupted—form an understanding that will allow them to spot potential opportunities and threats?

DISRUPTIVE INNOVATION THEORY: WHAT IT IS & 4 KEY CONCEPTS

According to Christensen(who coined the term in 1990s), disruptive innovation is the process in which a smaller company, usually with fewer resources, is able to challenge an established business (often called an "incumbent") by entering at the bottom of the market and continuing to move up-market. This process usually happens over a number of steps:

- 1. Incumbent businesses innovate and develop their products or services in order to appeal to their most demanding and/or profitable customers, ignoring the needs of those downmarket.
- 2. Entrants target this ignored market segment and gain traction by meeting their needs at a reduced cost compared to what is offered by the incumbent.
- 3. Incumbents don't respond to the new entrant, continuing to focus on their more profitable segments.
- 4. Entrants eventually move upmarket by offering solutions that appeal to the incumbent's "mainstream" customers.
- 5. Once the new entrant has begun to attract the incumbent business's mainstream customers en masse, disruption has occurred.

HOW TO UNDERSTAND DISRUPTIVE INNOVATION THEORY

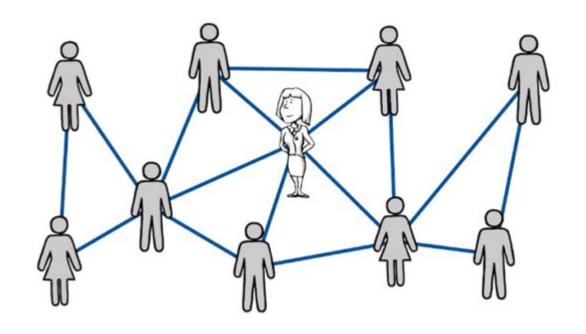
- 1. Not All Innovation Is Disruption: It is "what happens when the incumbents are so focused on pleasing their most profitable customers that they neglect or misjudge the needs of their other segments."
- 2. Disruption Can Be Low-End or New-Market
 - Low-end disruption refers to businesses that come in at the bottom of the market and serve
 customers in a way that is "good enough." These are generally the lower profit markets for the
 incumbent and thus, when these new businesses enter, the incumbents move further "upstream." In
 other words, they put their focus on where the greater profit margins are.
 - New-market disruption refers to businesses that compete against non-consumption in lower margin sectors of an industry. Similar to low-end disruption, the products offered are generally seen as "good enough," and the emerging business is profitable at these lower prices.

3. Disruptive Innovation Is a Process, Rather Than a Product or Service

Source: HBR article

- Demographics
- Research Customer, Product, Service, Competition
- Understand your customers - interview, focus groups, survey
- Competition Analysis (to be continued in next slide)
- Product Value Analysis

How to identify Target Segment?



RIVALRY AMONG EXISTING COMPETITORS:

- Number of competitors
- Diversity of competitors
- Industry concentration
- Industry growth
- Quality differences
- Brand loyalty
- Barriers to exit
- Switching costs

POWER OF SUPPLIERS

BARGAINING POWER OF SUPPLIERS:

- Number and size of suppliers
- Uniqueness of each supplier's product
- Focal company's ability to substitute

THREAT OF SUBSTITUTE PRODUCTS:

- Number of substitute products available
- Buyer propensity to substitute
- Relative price performance of substitute
- Perceived level of product differentiation
- Switching costs

THREAT OF NEW ENTRANTS





THREAT OF NEW ENTRANTS:

- Barriers to entry
- Economies of scale
- Brand loyalty
- Capital requirements
- Cumulative experience
- Government policies
- Access to distribution channels
- Switching costs

BARGAINING POWER OF BUYERS

BARGAINING POWER OF BUYERS:

- Number of customers
- Size of each customer order
- Differences between competitors
- Price sensitivity
- Buyer's ability to substitute
- Buyer's information availability
- Switching costs

Now go Innovate!