

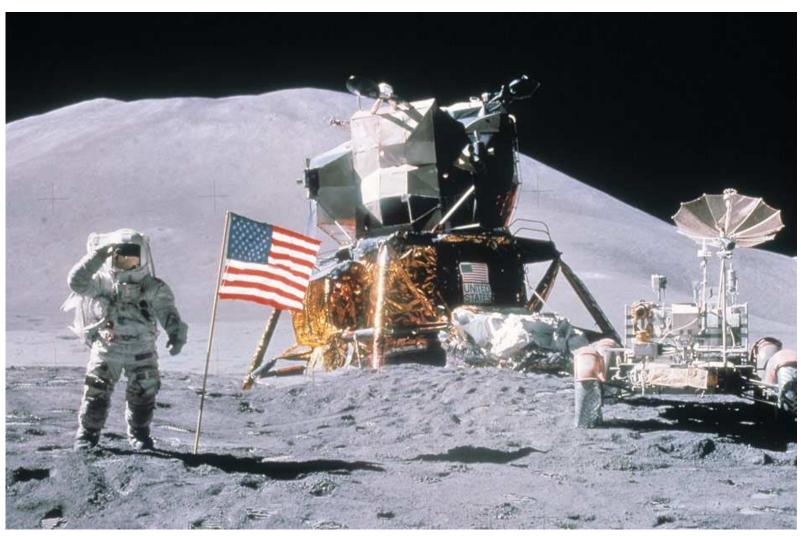
Mats Magnusson

- Professor, KTH Royal Institute of Technology, Stockholm, Sweden
- Permanent Visiting Professor, Luiss School of Business and Management, Rome, Italy

• E-mail: matsmag@kth.se







What camera was used?

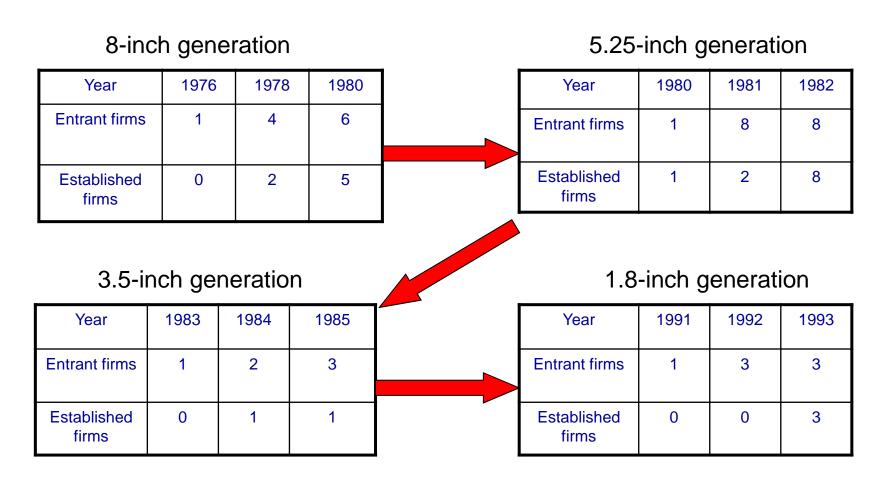


The gamechanger



Technology shifts in the Hard Disk Drive industry – impact on new and established firms

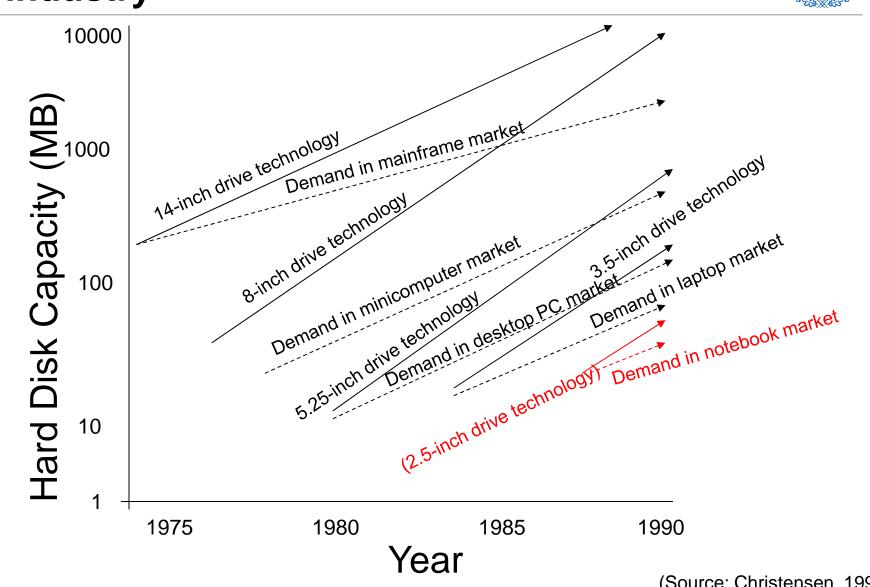




(Source: Christensen, 1997)

Technology supply and demand in the HDD industry

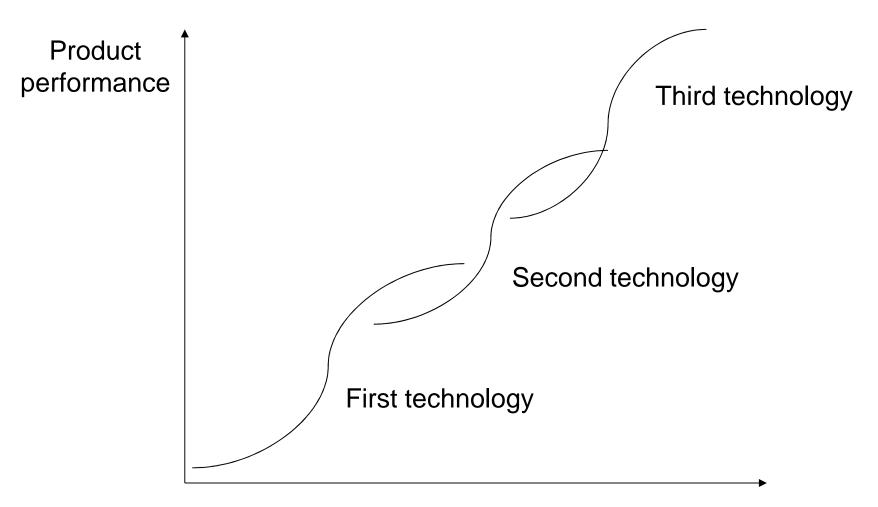




(Source: Christensen, 1997)



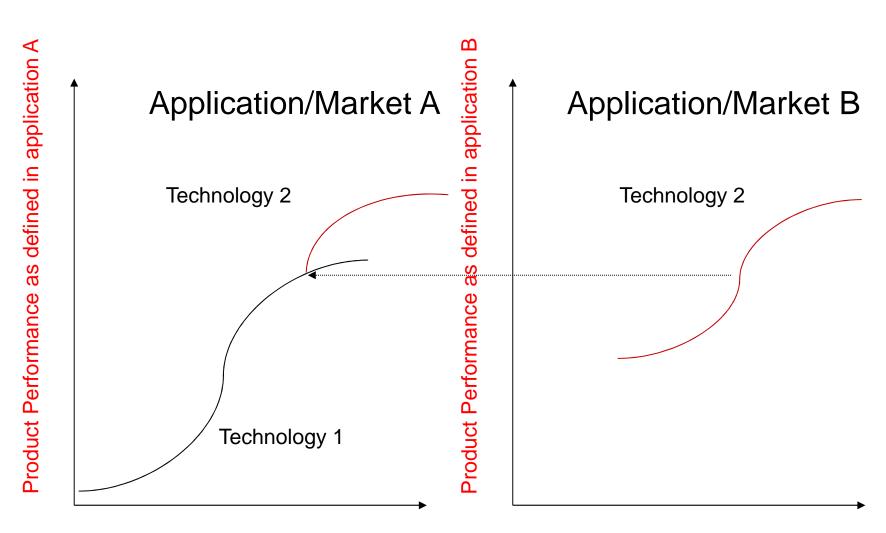
Conventional technology S-curves



Time or engineering effort



Disruptive technology S-curves



Time or engineering effort

(Source: Christensen, 1997)



Sustaining and disruptive technologies

 Sustaining technologies improve the performance of established products, along the performance dimensions historically valued by mainstream customers in major markets.

 Disruptive technologies bring a different value proposition to the market than what had been available previously. Normally, these technologies result in inferior product performance, at least initially.



Definition of Disruptive Innovation

- "An innovation in the (product or process) technology, or in the business model. The disruptive innovation increases customer perceived value in at least one of the following two ways:
- 1. By introducing a new performance dimension to the product/service and therefore creating a new market.
- 2. By providing a less expensive solution often in trade-off for reduced performance targeting customers who do not value the extra features/high performance of the existing product/service, or simply cannot afford it.

What does a Disruptive Innovation look like?



- An ugly duckling
 - Different
 - Disliked at first
 - A great future!



- A tiger piglet
 - Different
 - Nice and sweet at first
 - A dangerous threat in the future!



Examples of disruptive digital innovations



Digital cameras



Online newspapers



• IP telephony



Streamed music



Streamed film/TV



The roots of disruptive innovation

- Companies depend on customers and investors for resources.
- Small markets do not solve the growth needs of large companies.
- Markets that do not exist can not be analyzed.



Firms get locked into value networks and thereby miss out disruptive innovations.

Challenge Traditional Innovation Strategies!



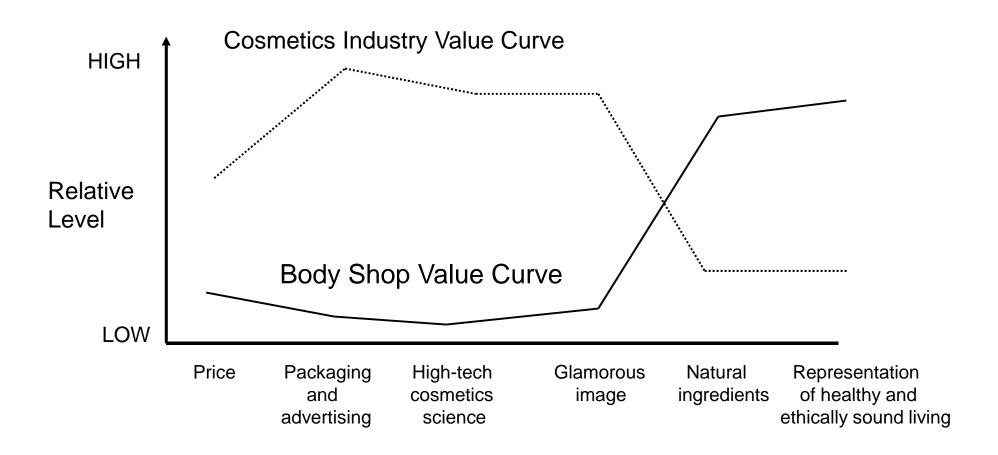
Traditional Way

Disruptive Way

Focus on the existing customer base	Focus on satisfying the needs of niche customers who will be the customer base of tomorrow
Better and better product performance is necessary	Lower performance and lower price is more attractive for many
Only big market segments can provide the growth we need	The biggest market segments of tomorrow may still be small today



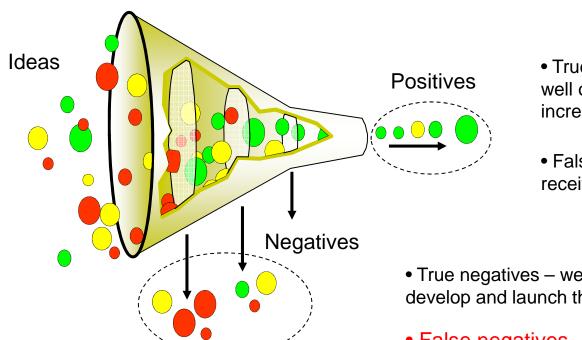
Redefine the business value curve!



Key elements of product, service and delivery value



Be aware of False Negatives!



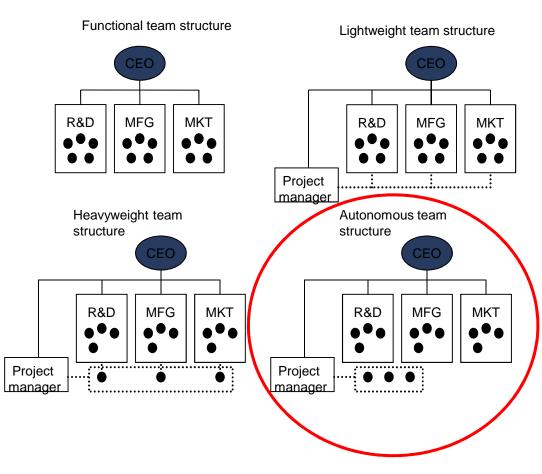
- True positives launched and received well on the market. However, mainly incremental innovation
- False positives launched but not received well on the market.
- True negatives we save money since we did not develop and launch these ideas.
- False negatives we stop ideas that would generate a lot of money in the future. These could e.g. create new markets. Among the false negatives we frequently find disruptive ideas and breakthrough innovations.

- Incremental ideas
- Border-line ideas
- Radical and Disruptive ideas

Incubate and integrate disruptive innovations!

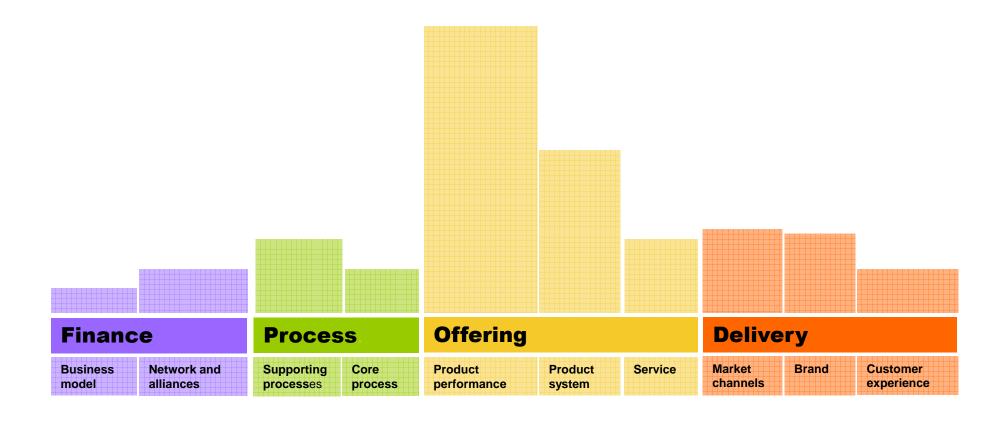








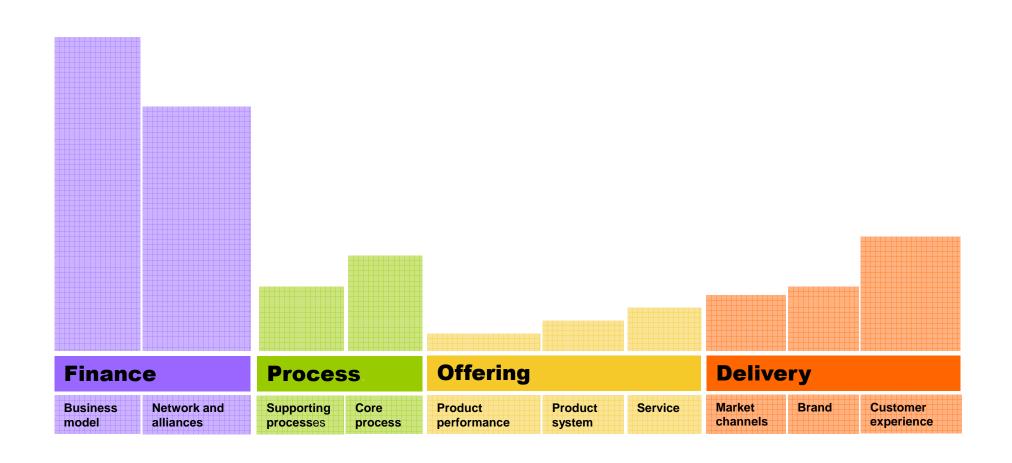
10 dimensions of innovation - efforts



Source: Roos, 2008; Doblin Inc.



10 dimensions of innovation - effects



Create ownership of business model innovation!



- Who should be in charge of innovation need for innovation manager roles?
- How should business model innovation and product innovation be coordinated and integrated?
- Responsibility of a select few, everybody's responsibility, or nobody's responsibility...?



Actively manage the value network!

- Map the value network
 - Capture the stakeholders involved.
 - Analyse how different stakeholders' value is changed by disruption (both organisations and actors inside the organizations).
- Redesign the value network
 - Exclude and/or include different parties.
- Align competences and incentives
 - Address changing competence needs by providing training for other stakeholders.
 - Modify the revenue model to create clear and aligned incentives.