



Software product management

Product process: Identify opportunity

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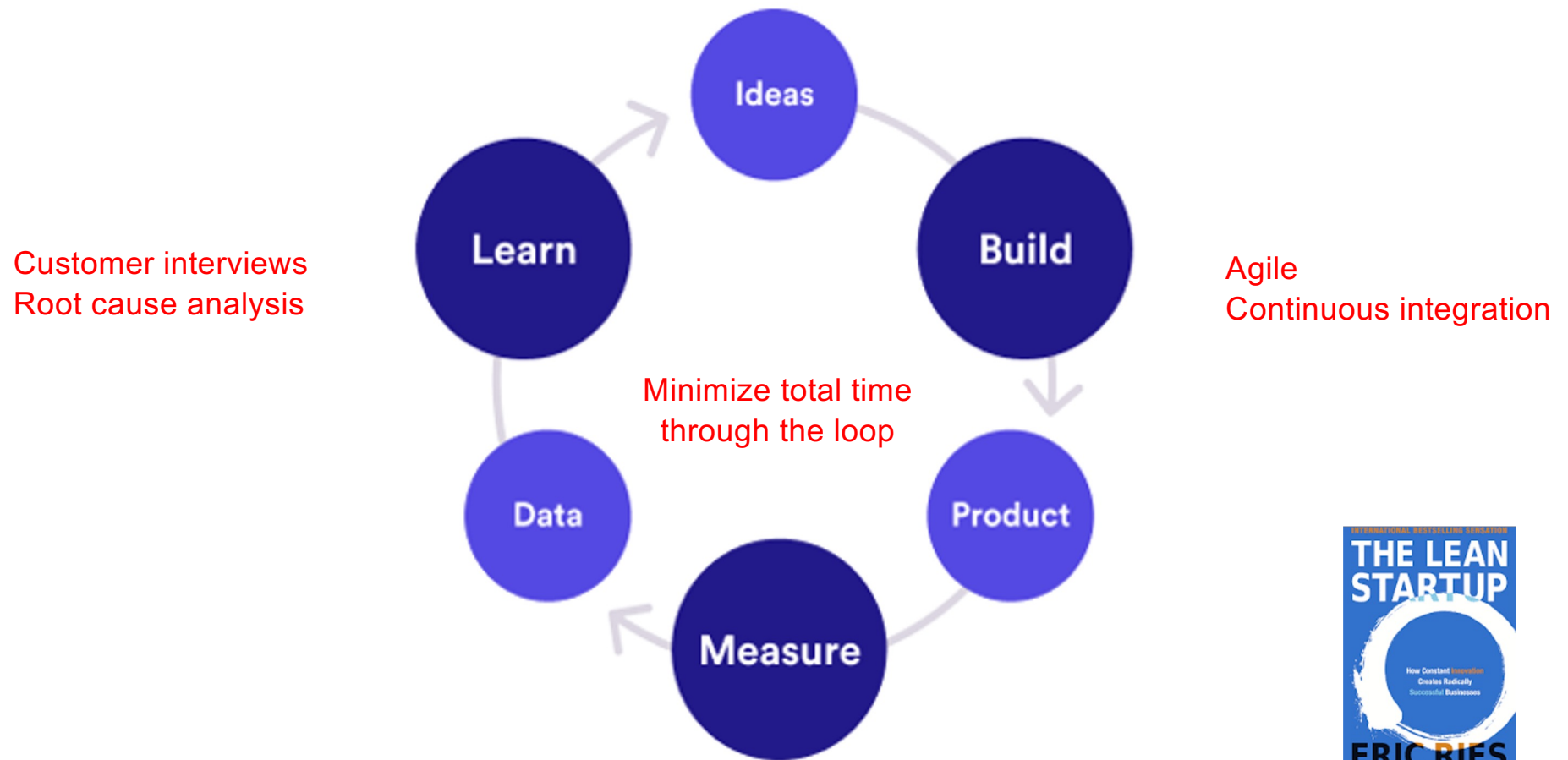
- Overview of product process
- Identifying opportunity

Overview of product process



- Identify opportunity
- Assess the opportunity
- Create business plan
- Specify product features
- Specify Minimum Viable Product (MVP) feature set
- Test your MVP
- Iterate & Pivot to improve product-market fit

Build-Measure-Learn cycle



- # Visits, conversion, retention
- How many use new feature?

Identify opportunity



- Identify underserved customer needs (LPP)
 - Sources of innovation ([Peter Drucker](#))
 - Hack days (Inspired)
 - Ideation techniques (Cooper & Edgett) (SPM book)
 - Case study: DBS Bank
 - Case study: Innovation ideas from ID Foods - Mustafa
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Identifying underserved needs



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- Observe
 - Experience
 - Fortune at the bottom of the Pyramid – CK Prahlad
 - Desire to do social good can find new opportunities



Observe



- Toyota Sienna
 - The car was successful in Japan
 - Toyota wanted to understand the specific needs of US market
 - A senior manager spent several months driving 70,000 miles across length & breadth of US observing how people use cars
 - In US children sit in the backside of the mini van
 - So changes were made to make the back seats more comfortable, safe, etc.
 - When it was launched the car became a big hit



Observe



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- Oyo: Economy hotels were not clean, lacked basic amenities, etc.
 - Sketch: Observed that Photoshop was not easy to use
 - Slack: Collaboration between teams was clumsy
 - Spotify: People wanted to listen to music legally when illegal music sharing sites were banned



Experience

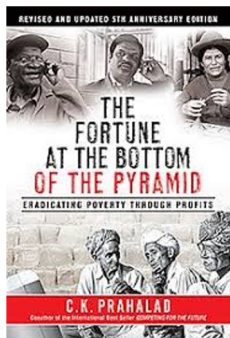


- Ola cabs: Founder was travelling in a cab and cab driver demanded exorbitant amount to change the destination
- DropBox: Founder kept forgetting to carry files in pen drive
- Tally: Experienced that existing accounting packages had a User interface that catered to accounts / finance professional. But not to non-finance folks

Opportunities are in plenty at the bottom of the Pyramid



- Opportunities are aplenty if look at the right market
- CK Prahalad wrote a book 'Fortune at the bottom of the Pyramid'
- Large business tend to target the middle class and upper middle class
- However there is a huge market at the bottom of the pyramid of society
- They need products but can not afford high price
- If the products are priced right, there is a big opportunity
- Examples:
 - Shampoo sachet for Re.1
 - Micro credits to rural people to buy a sewing machine, a cow to start milk business, etc. It was observed that default by rural people is significantly less compared to urban people because of the fear of o
 - Jio, Nirma are other examples of targeting the bottom of the pyramid



Desire to do social good can find new opportunities (Social entrepreneurship)



- Grameen Bank: Mohammad Yunus helped poor to stand on their own legs through micro-businesses
 - Aravind Eye Hospitals: Free eye surgery for poor, funded by rich patients, developing low cost intraocular lenses
 - Narayana Hrudalaya: Dr Devi Shetty offeres low-priced heart surgeries by employing efficient operation procedures, low cost insurance schemes
 - Selco: Dr. Harish Hande developed solar lamps to helps silk farmers harvest mulberry leaves which needs to be done during cooler hours – late evening or early morining
 - Rivigo: Helped truck drivers lead a stigma free life through relay based truck logistics
 - Apna: Developed an app for finding blue collar jobs such as delivery boys
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Case study: Qalara

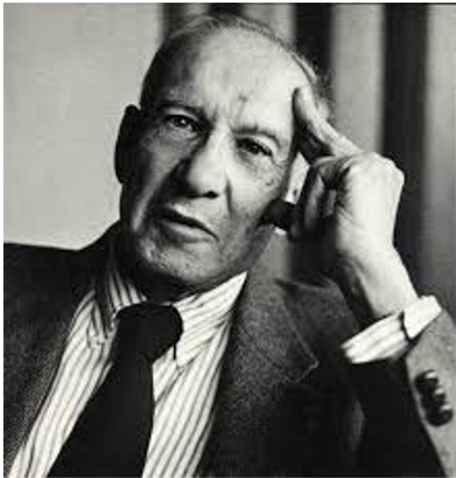


- What was the opportunity identified by Qalara?
- How did Qalara identify the opportunity?



Qalara

Sources of Innovation: Peter Drucker



Father of management
&
A Social scientist



Discipline of novation - Druc



Sources of Innovation: Peter Drucker



Drucker argues that most innovative business ideas come from methodically analyzing seven areas of opportunity

- Some of which lie within particular companies or industries
- Some of which lie in broader social or demographic trends.

Astute managers will ensure that their organizations maintain a clear focus on all seven

Sources of innovation: Peter Drucker



- Unexpected occurrence
 - Incongruities (incompatibilities)
 - Process needs
 - Industry & market changes
 - Demographic changes
 - Change in perception
 - New knowledge
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Sources of innovation: Peter Drucker



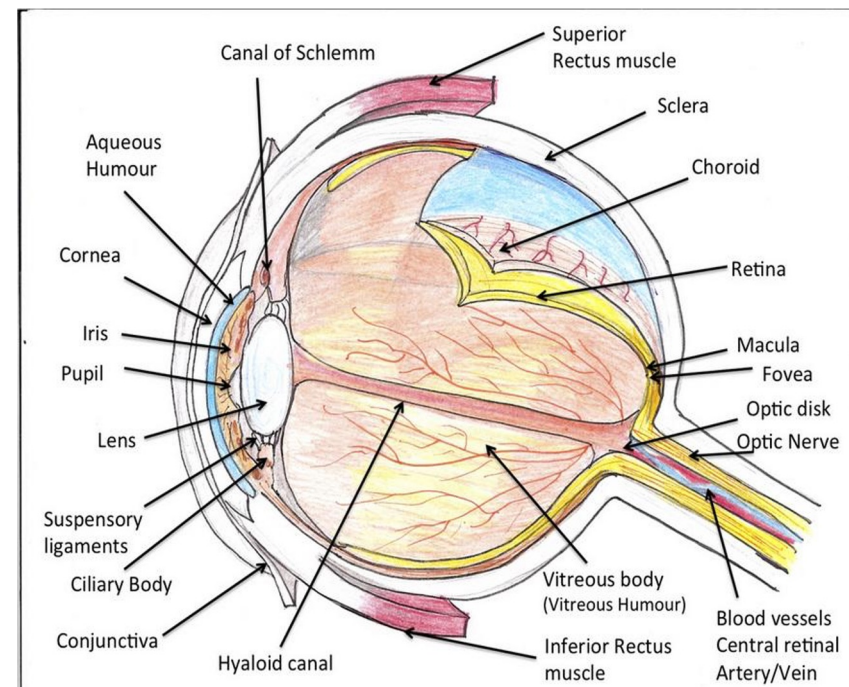
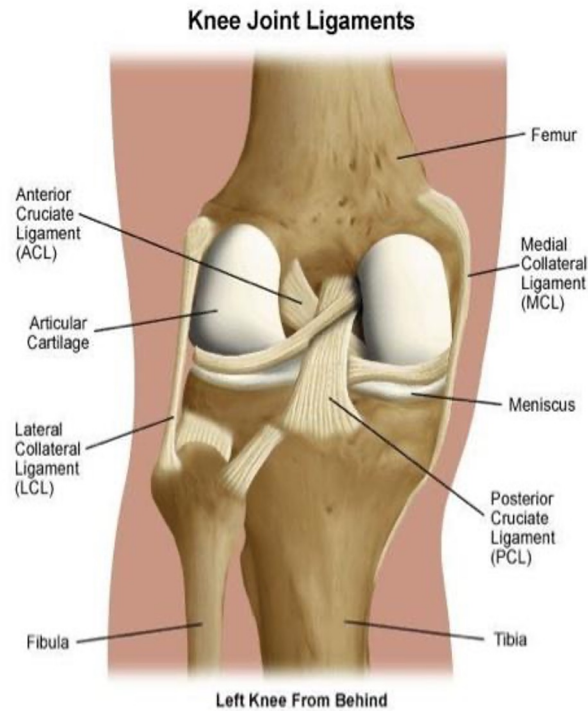
- Unexpected occurrence
 - IBM developed accounting machines in 1930s. Banks did not have money to buy. But libraries had money and they bought 100 machines
 - Ford Edsel was very carefully designed. But people bought cars for lifestyle. This resulted in newer models like Mustang



Sources of innovation: Peter Drucker



- Incongruities (incompatibilities)
 - Cataract operation: Cutting eye ligament is difficult. Instead used enzyme to dissolve ligament



Sources of innovation: Peter Drucker



- Incongruities (incompatibilities)
 - Shipping industry trying to improve speed and fuel efficiency. But problem was time wasted at ports to load & unload. Adopted containers used in railroad and trucks



Sources of innovation: Peter Drucker



- Process needs
 - Newspapers needed a faster way to print. This resulted in Linotype machine
 - Those days newspapers did not make much money. So they invented advertisements and kept the cost to customer low
 - Industry & market changes
 - Retail industry changes: E-Commerce
 - Banking changes: Payment banks
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Sources of innovation...



- Demographic changes
 - 1970s saw baby bust and education explosion. This led to shortage of workers. Japan created Robots
 - Affluent educated young people wanted a different kind of holiday. This led to resort business
- Change in perception
 - In spite of fall in mortality rates, Americans were concerned about cancer, heart disease, etc. This led to health mags, gym, healthy foods
- New knowledge
 - Computers
 - Etc.

Principles of Innovation – Peter Drucker



- Go out, look, ask, listen, because innovation is conceptual & perceptual
 - Keep innovation simple and focused. Else people get confused
 - Start small: Example putting the same number of match sticks into a matchbox (it used to be 50), gave Swedes a world monopoly for half a century
 - Aim at leadership from the beginning, else it is unlikely to be innovative enough
 - Innovation requires knowledge, ingenuity, and, above all else, focus. Edison worked in electric field only. Citibank did not venture into health care
 - If diligence (careful), persistence, and commitment are lacking, talent, ingenuity, and knowledge are of no avail. Like in any other endeavour
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Identify opportunities...



- Annual Idea generation by Bill Gates
 - 2 weeks shut out from world
 - Go through ideas submitted by employees
- Hack days (Inspired)
 - *Hack days – directed and undirected.*
 - *Eg of directed hack day with a theme – reduce customer churn, increase life time value (Inspired)*

Ideation techniques (Cooper & Edgett)

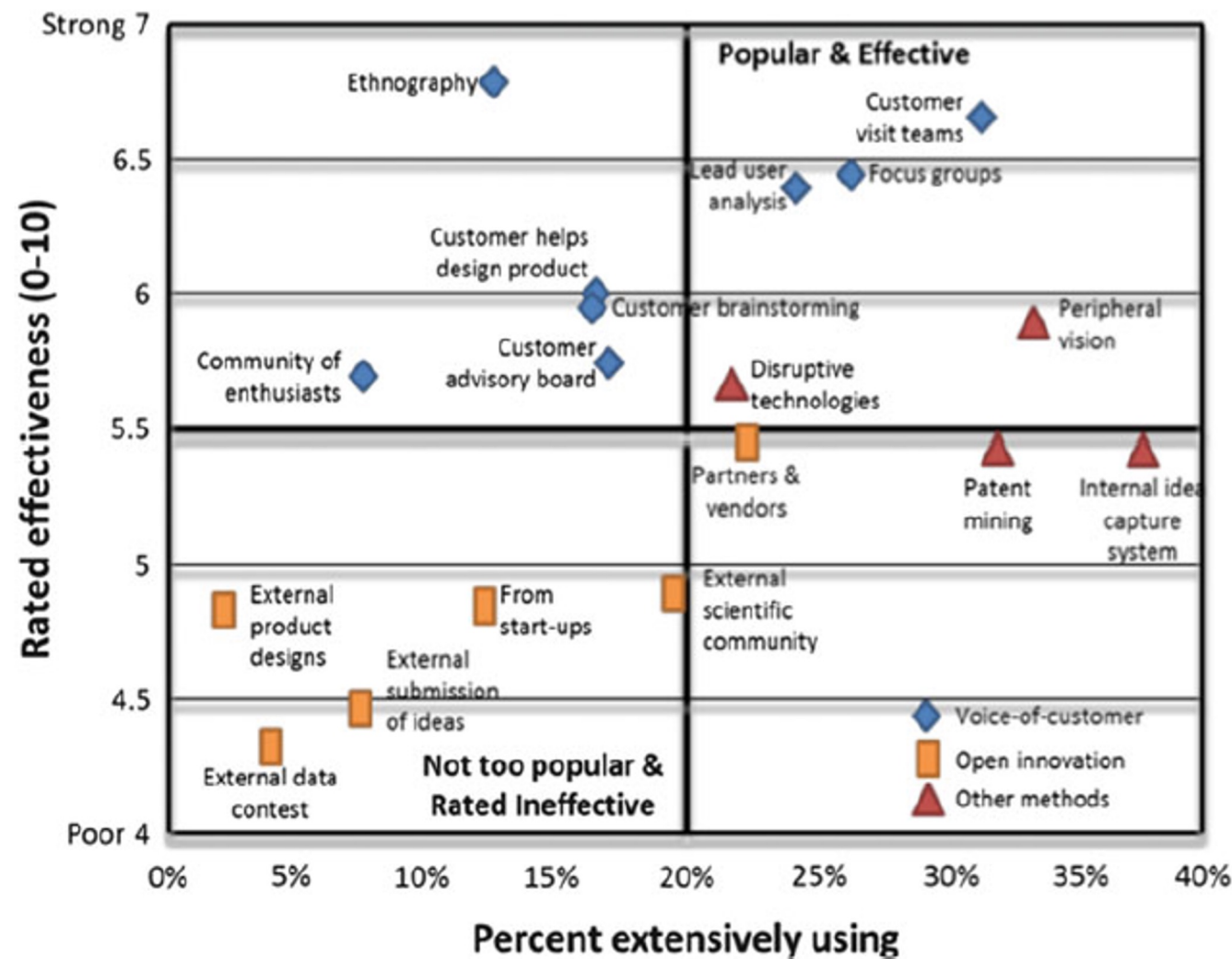


Fig. 5.5 The effectiveness vs. popularity of ideation techniques [CooEdg09]. Used with permission

Case study: DBS



Are you really innovating around customer needs? – HBR

- What is the assumed need & real need of the customer of DBS?
- How did DBS satisfy that need?



DBS case - HBI

Case study: ID Fresh Foods



Innovation ideas from ID Fresh Foods – PC Musthafa

What innovation lessons can we learn from ID Fresh Foods?

- Fresh & preservative free is possible
- Packaging innovation – Vada
- Marketing innovation: Trust shops



ID Fresh foods

Exercise



Consider your current job & company

Think about the unmet / underserved needs of your customers

Give one example of such a need & its compelling value / benefit to customer.



Appendix



The Lean Startup BY ERIC RIES

