Generating Market Insights: “Voice of the Customer” Method and Outcome Driven Innovation
Methods for generating ideas & concepts

Generating Concepts

Creating concepts internally:
Using a managed process run by the innovation team

Market Research (Voice of the customer)

Creativity Techniques

Gathering (existing) ready-made concepts from the periphery:
Customer Co-Creation

Collect concepts from others inside the organization

Collect concepts from outside the organization
ODI for Concept Generation in the Big Picture

Source: Lercher 2016, 2017
Listening to the voice of the customer

Customers are not aware of their needs
Which customers to ask?
Different language
Interpretation of results

“*The customer rarely buys what the company thinks it is selling him*”
*Peter Drucker*

Identify existing problems and desired outcomes

Growth potential due to new customers
Listening to the voice of the customer

The idea of **Outcome Driven Innovation** (ODI):
Identification of latent needs
and “**jobs of a product**“
Outcome-Driven Innovation

**What**
- Company has to **identify the real problems users/customers face**: (latent) needs and existing **pains and gains** of customers
- **Job-based thinking**: Identify the “job” a **product** is doing for its customers

**Why**

**How**

**Goals**
Job-based thinking for innovation

“People don’t want to buy a quarter-inch drill…

...they want a quarter-inch hole!”
- Theodore Levitt

Solution: What?

Job: Why?

J  Job-to-be-Done
Context-specific problem facing a customer

O  Objectives or Outcomes
Functional, emotional, social metrics

B  Barriers
Factors inhibiting getting job done (pains / gains)

S  Solutions
Products, services, compensating behaviors

A „job“ is a stable factor over time – products or services are temporary solutions which are evaluated based on their contribution to a solution.

Different solutions over time -- outcomes, however, are constant over time!

**Job: Listen to recorded music.**

**Outcomes:**
- As many selectable tracks as possible.
- Finding a track as fast as possible.
- Ordering tracks in playlist as fast as possible.
- Delete a track as fast as possible.
  ...

Customers intuitively apply three kinds of criteria to evaluate a solution:

- *time required, (effort)*
- *error margin, productivity (outcome).*

Source: Pattera 2008
Outcome-Driven Innovation

**What**
- Company has to **identify the real problems users/customers face**: (latent) needs and existing **pains and gains** of customers.
- Identify the “**job**” a **product** is doing for its customers.

**Why**
- Identifying market opportunities = Systematic analysis of open needs of customers.
- **Understand problems, not gather list of solutions.**

**How**
- Approach of dedicated **market research** (stakeholder contacts) to understand problems.
- Qualitative research: Ask set of customers in a clever way about **problems with existing solutions**. These problems have to be independent of any particular solution that might be developed.
- ...
Formulating jobs: Three dimensions

Formulating jobs: Examples

1) **Action verb** (with direction)
2) **Object of action**
3) **Contextual clarification**

The example of a powertool (driller)

**Functional**: „Reduce likelihood of hitting the water pipe when renovating an old house“

**Emotional**: „Provide me with larger satisfaction once I finished the task“

**Social**: „Reduce the disturbance for my neighbors“
How does a firm find out about customers’ problems / latent needs?

Sources & methods for problem based concept generation

- Market research (surveys, interviews, focus groups)
- Routine market contacts
- Direct inputs from technical and marketing departments
- Scenario analysis

The process of an ODI project

- Determine **product or activity category** for study
- Identify appropriate users & other stakeholder
- Gather set of problems (mainly by qualitative interviews)
- Establish a hierarchy of needs (by internal validation or quantitative validation survey)
### Outcome-Driven Innovation

| What | Company has to **identify the real problems users/customers face**: (latent) needs and existing **pains and gains** of customers.  
|      | Identify the **“job” a product** is doing for its customers. |
| Why  | Identifying market opportunities = Systematic analysis of open needs of customers.  
|      | **Understand problems, not gather list of solutions.** |
| How  | Approach of dedicated **market research** (stakeholder contacts) to understand problems.  
|      | Qualitative research: Ask set of customers in a clever way about **problems with existing solutions**. These problems have to be independent of any particular solution that might be developed.  
|      | Quantitative research: Validate and prioritize these problem statements with large group of customers. |
| Goals | Products are easy to copy – **integration around a job** creates **defensible differentiation**.  
|       | Opportunities to **excite customers** when addressing latent needs  
|       | **Growth potential** due to new insight about actual market and competitors. |
Integrating an innovation around a "job to be done"

This leads to a different understanding of some basic terms:
Three important differentiations: Jobs, Outcomes, Solutions

Markets → Jobs

Needs → Outcomes
Independent of solutions & measurable

Innovation → Solutions
Predictable success

Companies that segment markets by job often find that:

- The market is much larger – their share is smaller!
- Their real competitors aren’t in their product category.
- Growth potential is greater, because non-consumption is usually a major competitor.
- They can create excitement and differentiation by integrating properly.
- Often, the required innovation is a service or business model innovation.
- Competitors can’t easily copy.
Many specific techniques in the innovation process for internal concept generation...

- Task: **identify "latent needs", i.e. problems** faced by the (potential) users of a product or service which are not fulfilled by the market yet → opportunity to innovate.
- Needs / problems become **starting point for concept generation activity.**
- "**Outcome-driven innovation**" as common approach following the paradigm of “find problem, solve problem”, based on surveying and interviewing different kinds of users.
- Idea is to identify **the "job" of a product / service.**
- **Elaborated techniques** to gather, document, interpret, and rank identified problems (needs).
Sources and further readings

• See also Appendix B of Crawford & Di Benedetto (2011) for an extensive list of further methods of concept generation
• Further Readings: Clayton M. Christensen, Harvard Business School.
Empathic Design: Observing customers and users
Methods for generating ideas & concepts

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Market Research
(Voice of the customer)

Creativity Techniques

Gathering (existing) ready-made concepts from the periphery:
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Collect concepts from others inside the organization

Collect concepts from outside the organization
Observation / Empathic Design in the Big Picture

Source: Lercher 2016, 2017
Empathic Design (Observations)

**What**
- Identify **latent customer needs** by observing customers in a non-intrusive way in their **usage environment**
- **Gathering information**: Interaction, habits, validation of emotional and aesthetic product features
- Core method of “Design Thinking” approach

**Why**
- Customers have **difficulties envisioning future solutions**, but also **formalizing their real needs**
- Field observation can reveal opportunities to commercialize innovations existing users have **already developed** to improve products

**How**
- **Specialists or methodological knowledge**
- (1) Search field definition; (2) Capturing data; (3) Evaluation & documentation; (4) Reflection & Analysis
- **Related technique**: "Netnography" (observations in online forums and social media)

**Goals**
- Develop concepts based on **unarticulated customer needs**
- Achieve **breakthrough designs** in potentially **shorter product development cycles**
- Create opportunities for **differentiation strategies**
Co-Creation: Gathering Ideas and Concepts from the Firm’s Periphery
Methods for generating product concepts

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Co-Creation for Concept Generation in the Big Picture

Idea generation phase

Source: Lercher 2016, 2017
Methods for concept development using Co-Creation

How to identify/generate ideas to capture opportunities?

- Internal Brainstorming & Creativity Sessions
- Idea Management / Database
- Market research (Consumer insights)
  - Co-Creation
    - Lead User Method
    - Netnography
    - Idea Contests
Lead users as the source of functional novel innovation

Users as the source of innovation:
User as originators of first-of-type innovations and major improvements of existing products

Mountain bike
Open Source Software
Scientific Instruments
Petroleum Processing
Lead users as the source of functional novel innovation

**Lead Users** are users that:

1. Have needs that **foreshadow general demand** in the marketplace.

2. Expect to **obtain high benefits** from a solution to their needs. Such users are more likely to innovate: “Necessity is the mother of invention!”

3. Have **solution skills** to transfer need into a feasible solution.

**Perceiving a need before the general market does:** Some users innovate before manufacturers do.

“Voice of the customer” methods start here
Two sources of innovation

Two major factors influence the sources of innovation – and the resulting kind of innovation:

- Relative ability to profit from an innovation
- Costs of transferring “sticky information” about needs and solutions

The “functional” source of innovation depends upon the functional relationship between innovator and innovation.

An INNOVATION is anything new that is actually used (“enters the marketplace”) – whether major or minor

| An innovation is a USER innovation when the developer expects to benefit by USING it | An innovation is a MANUFACTURER innovation when the developer expects to benefit by SELLING it. |
User and manufacturer innovation tend to differ:

- Problem solving is dominated by local search.
- Users tend to have “better” need information, manufacturers “better” solution information.

Manufacturer-Centered Innovation Paradigm

- Manufacturers identify user needs, develop products at private expense, and profit by protecting and selling what they have developed.
- Resulting innovations tend to be dimension of merit improvements.

User-Centered (Open) Innovation Paradigm

- Lead Users innovate to solve their own needs at private expense, and then freely reveal their innovations (Harhoff et al. 2003).
- Resulting innovations tend to be functionally novel.
Co-creation for concept development

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Lead User Method
Netnography

Ideation Contests
Lead user method

**What**
- Identifying people with lead user characteristics
- Identify lead user inventions (prototypes)
- Work with lead users to develop innovative ideas and concepts

**Why**
- Generate insights into trends and new market needs
- Get access to novel solution knowledge and technical opportunities
- Learn about future markets opportunities by “looking outside the box”

**How**
- Systematic process of open direct search by company:
  1. Definition of search field
  2. Trends research and state of the art
  3. Identification of lead users via networking (pyramiding) or screening
  4. Lead user workshop

**Goals**
- Identify users in extreme situations that can become partners for innovation
- Go beyond generating market insights, but get need and solution knowledge in form of concrete prototypes
Netnography (Observations / Empathic Design 2.0)

Netnography: Observing users in online communities

- Listen to the "voice of the customer"
- Spot new trends and opportunities
- Build emotional bonds with customers

Online Communities

Advantages

- Open online communities
- Private proprietary online communities
- User organized forums
- Firm-organized communities
- Pilot user communities

Enable customer support

Leveraging Brand Knowledge from Customers through Brand Communities

Leveraging Product Knowledge from Customers through PPP Communities
<table>
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User engagement in online communities

Who engages in user communities?

Drawbacks to analyzing online communities

- Member privacy
- Confidentiality
- Content ownership
- Problems with existing products
- Unwillingness to become "exploited"
- Unwillingness to become "exploited"
- Companies often lack the capability to communicate with communities
- Finding real insights is time consuming (Scalability)

They show “lead user characteristics.”

High involvement to the product/brand

Specific solution skills

Trendsetters

Extreme situations
## Netnography

### What
- Internet & Ethnography: Empathic, **non-obtrusive observations** in existing **online communities**.
- Qualitative assessment of **explicitly verbalized** and **implicitly existing needs**, wishes, experiences, motivations, attitudes, and perceptions of consumers towards products, services and brands.

### Why
- **Access to user innovations**, user generated content as well as **product prototypes** without direct interaction between users and companies
- Rather low cost, low risk method

### How
- **Listening to consumers** rather than asking them, **understanding** rather than measuring
- (1) Definition of research field, (2) selection of sources, (3) Community observation and software aided data gathering; (4) Qualitative in depth analysis, interpretation and aggregation, (5) translation into product and service solutions

### Goals
- **Classification and positioning** of products and brands; **Typologies** of user groups
- Gain **unbiased consumer insights**, especially in the early stages of the innovation process
“Real” co-creation is a more active process

Open brings in the idea of transparency, so that non-participants can easily see the collaborative process.

Ongoing implies that it’s not a one-time shot at obtaining input and then taking the rest of it in-house.

Interactive means that there is feedback and iterations of activities between the participants and the company.

An open, ongoing and interactive collaboration between employees and/or customers to create value in form of products, services, processes, experiences, ideas or (technical) information

Collaboration brings in the spirit of teamwork. Employees and customers are peers in the process. In many cases, the company simply serves as a facilitator of the process.

Value: Joint creation of value, that can have many different forms. Value co-creation also implies that the value is shared, i.e. the co-creation process has to be a win-win situation.
## Ideation contests (crowdsourcing of ideas)

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Active co-creation: Ideation contests

Web 2.0 technology delivers the technological background of modern idea contests

Wiki Principle
Collaborative working on ideas

Look & Feel
Enhances pleasure and motivation on the idea generation

Web 2.0 Technology

Crosslinking
Active cross linking of ideas and knowledge

Evaluation
Community evaluates and discusses

Work collaboratively on ideas….
# Ideation contests (crowdsourcing of ideas)

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| • Web-based contests to generate ideas and concepts for new products, services, or designs, addressing a specific task – but not a general complaint or feedback line  
• An indirect or delegated process of open search ("crowdsourcing") | • The challenge gets people involved as a response to a given task  
• Tournament situation to foster creativity and effort of participants. At the same time using collaborative mechanisms to iterate, comment, and improve ideas in a given time period. | • Based on crowdsourcing principle of an open call for participation: Broadcasting a task widely, Self-identification of participants with special task motivation or dedicated pre-knowledge.  
• Participants can be external (customers, retail partners, etc.) or internal (employees).  
• Submissions are usually evaluated by an expert panel, based on a pre-evaluation of participants. | • Generate a pool of new ideas/solutions and market insights also from non-conventional audiences  
• Identification of experts (lead users) who possess special need and solution information |
Five rules to create a good co-creation platform

Inspire participation
- Trigger people to join your challenge: Open up and show what's in it for them.

Select the very best
- You need the best ideas and the best people to deal with today's complex issues.
- Create an incentive for "self selection".

Connect creative minds
- You have to enable bright people to build on each others ideas, both on- and off-line.

Share results
- Giving back to people - and finding the right way to do it - is crucial.

Continue development
- Co-creation is a longer-term engagement, in- and outside your company. Only then it will deliver results.
Co-Creation in the Big Picture

Source: Lercher 2016, 2017
One way to generate concepts to address an opportunity identified is to **utilize existing concepts from the firm's periphery**.

These are developed by **lead users**, stated in **online communities**, observed by "**Netnography**", but also coming from competitors, sales people, trend research … **Notion of customer co-creation**

**Elaborated techniques** to gather, document, interpret, and rank identified problems (needs)

- Either **focus on discovering existing solutions**, concepts, or even working prototypes from the customer domain (consider distribution of need and solution information!)
- Or **provide a dedicated infrastructure to “co-create”** with customers and users (and external experts), addressing a task given by the focal firm
- Customer co-creation **supplements** existing forms of gathering customer need information
Ralf Reichwald und Frank Piller unter Mitarbeit von Christoph Ihl und Sascha Seifert: Interaktive Wertschöpfung: Open Innovation, Individualisierung und neue Formen der Arbeitsteilung", 2. Auflage, Gabler Verlag, Wiesbaden: 2009, 29.90 Euro (Free Download: www.open-innovation.de); Chapter 4

Fronteer Strategy (2009). successful co-creation initiatives share five common rules.


Existing research about ideation contest:

- Positive aspects of ideation contests (e.g. Terwiesch & Xu, 2008)
- The novelty of ideas generated (e.g. Poetz & Schreier, 2012)
- Personal characteristics of contributors (e.g. Bayus, 2013)
- The problem solving effectiveness (e.g. Jeppesen, 2005)
- The design of incentive schemes (Boudreau et al. 2011; Füller et al. 2012)