

Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie – Prof. Aßmann - Software as a Business

"The hard part is finding a problem to solve"

[Kevin Systrom from Instagram]

13. Instruments for Deep Pain-Gain Analysis (Improved Value Proposition Design)

Prof. Dr. Uwe Aßmann Softwaretechnologie Fakultät Informatik Technische Universität Dresden 2018-0.4, 11/8/18 http://st.inf.tu-dresden.de/teaching/saab

- 1) Value Proposition Analysis
- 2) Pain Analysis
- 3) Gain Analysis
- 4) Pain-Gain Banana
- 5) Stickiness and Virality

- A. Osterwalder, Y. Pigneur et al. Value Proposition Design. Wiley.
- [BlankDorf] Steve Blank, Bob Dorf, Nils Högsdal, Daniel Bartel. Das Handbuch für Startups – die deutsche Ausgabe von 'The Startup Owner's Manual'. Deutsche Übersetzung von Kathrin Lichtenberg. 2014. O'Reilly.
 - http://www.daniel-bartel.de/das-handbuch-fuumlr-startups.html
- https://blog.strategyzer.com/posts/2014/10/13/10-characteristics-of-great-value-pro positions
- https://blog.strategyzer.com/posts/2014/9/16/why-every-company-needs-a-chiefcorporate-entrepreneur





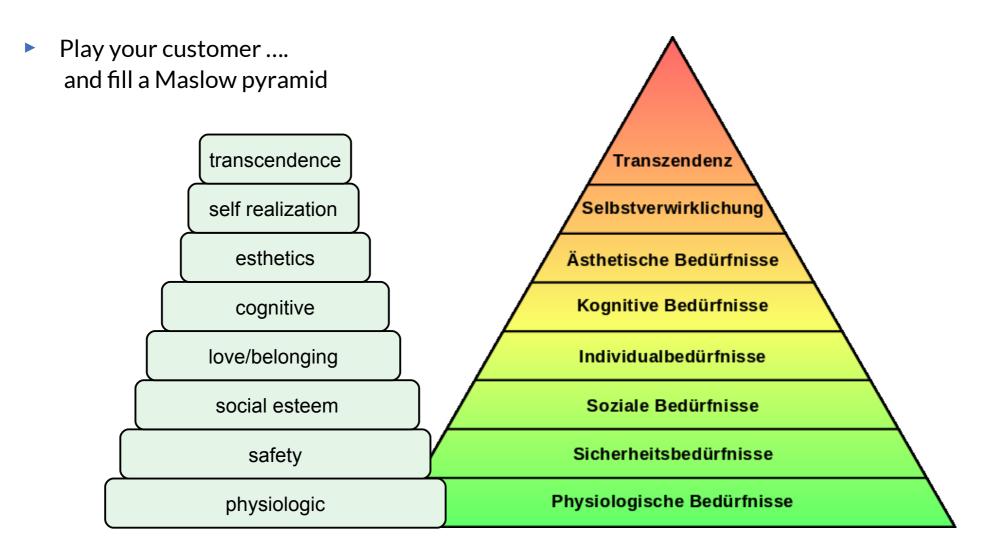
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13.1 Deep Pain Analysis with Different Types of Pains

• .. diving into the VPC

Customer Analysis with Maslow

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http://upload.wikimedia.org/wikipedia/commons/thumb/2/2c/Erweiterte_Bed %C3%BCrfnishierarchie_%281970%29_nach_Maslow.svg/600px-Erweiterte_Bed %C3%BCrfnishierarchie_%281970%29_nach_Maslow.svg.png



The Pain Hierarchy: Pain Drives Selling and Buying

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For business, find a good pain.

A clear catastrophy or force sells.

A fear of catastrophy sells almost always

A fear of force sells almost always

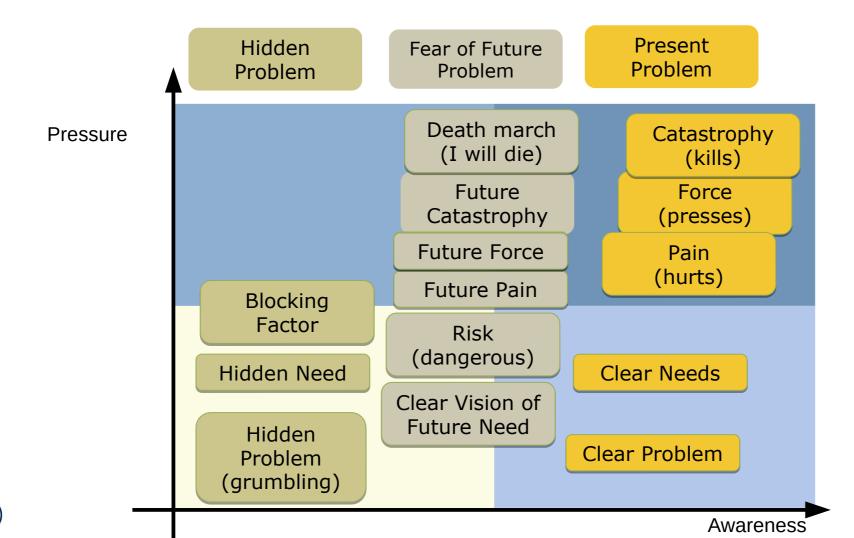
A **blocking factor** is an immediate problem to be removed

A **clear pain** is half the business



Pain analysis in the **Pressure/Awareness-Product** (Pain Portfolio)

- Pressure and awareness are two important factors influencing customer decisions. Their product determines decisions
- Problems with high pressure and awareness MUST be solved and lead to buy decisions





Examples of Future Force

- New country-wide governance rules
 - New finance rules of tax authorities
 - Laws (e.g., the EU law on dynamite)
 - New taxes, raise of taxes
- New social governance rules
 - Gender equality issues
 - Quotas
- Health problems: Age, illness, Alzheimer, heart attack
- Future Force of Competition Change
 - New competitors and competing products
 - USP and UCA gets lost
 - New business models of competitors



How to Achieve Disruptive Innovations (Game Changers)

- A Blocking factor is a (hidden) problem directly hindering that the goal of the customer is reached
- A Blocking factor remover (block remover, overcomer) is a special kind of pain killer, applicable to different types of innovations
 - It enables a discontinuous revolutionary, radical innovation (*enabler* for a discontinuous innovation)
 - A discontinuity enabler (blocking factor changer) is a pain killer removing a blocking factor that leads to a change in a market
 - A disruption enabler (game changer): It may even enable a disruptive innovation
- An innovative company should work on **blocking factor removers and game changers**
- Questions for Game Changers:
 - What blocks the radical innovation?
 - What blocks the disruptive innovation?



Pain Analysis and Pain Priority List

- The pain priority list is an extension of the problem/pain diary with the list of pains prioritized by pressure-awareness product from the pain portfolio
- Produce with G-A-P analysis: **Generate** pains, **Assess** them, **Prioritize** them

| Problem | Pressure | Awareness | Pain Priority |
|------------------------------|----------|-----------|---------------|
| tooth pain | 10 | 10 | 100 |
| tooth inflamation | 10 | 5 | 50 |
| tooth hole | 3 | 8 | 24 |
| weak tooth health inherited | 1 | 1-5 | 1-5 |
| ignorance of health measures | 1 | 1 | 1 |
| forgetting to brush teeth | 1 | 4 | 4 |
| eating too much sugar | 1 | 3 | 3 |



Exc.: Classify: is it a Problem, Need, Pain, Catastrophy? Determine Pain Priority

- Climate catastrophy
- Deodorant
- Partnership portals
- Islamistic terrorism in the West
- Odol mouth water
- Glasses
- Attack on your software
 - threat modeling, attack modeling



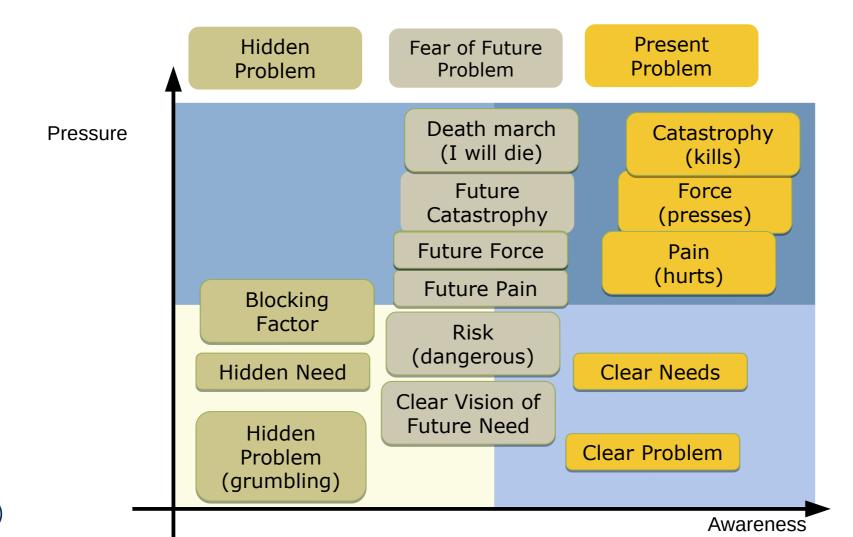
Exc.: Getting Research Funding with Pain

- Funding for the Climate Catastrophy
- Funding for the Hadron Collider
 - Gain: World formula
- Funding for the Energiewende



Exercise of Pain analysis for Your Project

- Pressure and awareness are two important factors influencing customer decisions. Their product determines decisions
- Problems with high pressure and awareness MUST be solved and lead to buy decisions





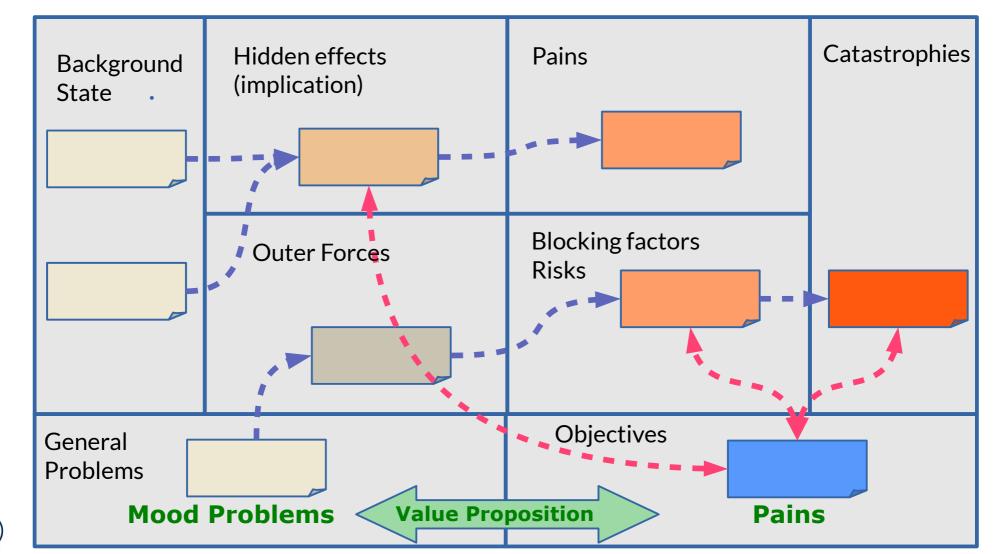
Pain Refinement with the Pain Canvas

- A problem hypothesis is tested in pain analysis. If it is validated, it becomes a tested (real) pain (fact).
- A pain canvas (problem classification canvas) classifies the problems into different classes of pains
- It forms the left part of the Pain-Gain Banana and can be used for
 - Stating a problem hypothesis in VPA
 - Specifying questions for costumer interviews
 - Preparing selling and sales interviews.
- The problem canvas is derived from different sources, e.g., SPIN, Maslow, ZOPP



Pain Refinement with the Pain Canvas (Problem Classification Canvas)

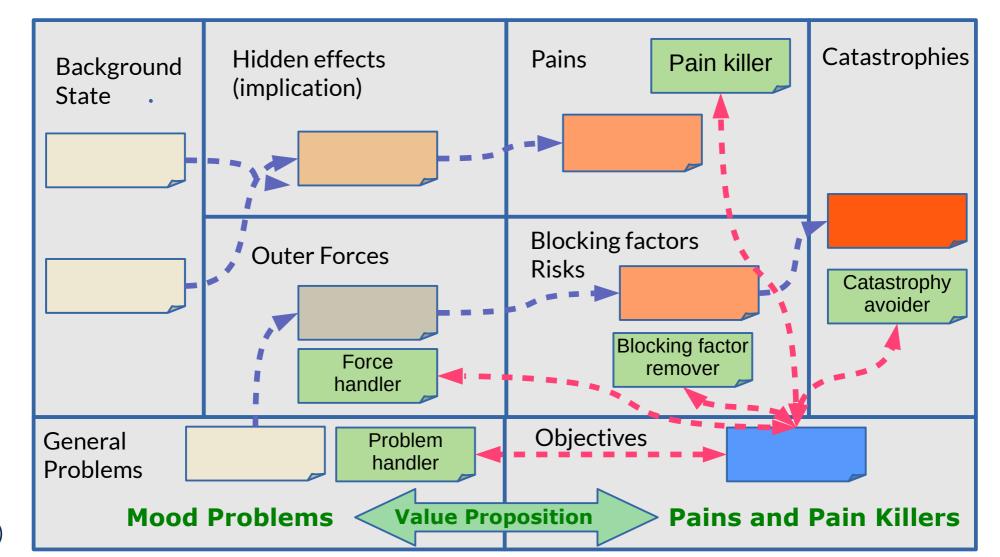
- Put a problem first into the "General" or "Background" field, then classify it and refine it (from left to right)
- > Think about which stakeholder has which objectives. First untested, then tested





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By adding *pain killers*, the Pain Canvas can be extended to the **pain killer canvas**







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13.2 Pain Management

Pain management is an essential activity of a startup

Like Risk management (→ course Softwaremanagement)
Put up a PDCA process
Identify pains, assess pains, classify pains with pain portfolio and Problem canvas

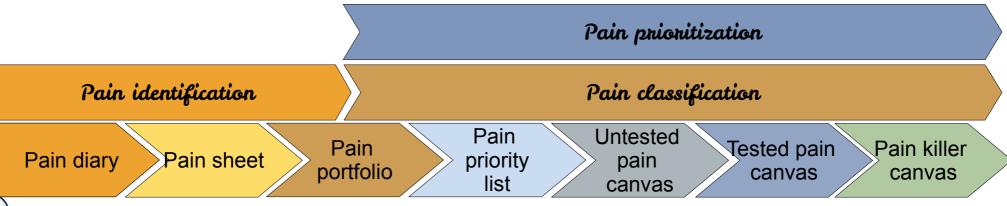
Pain Management with Pain Diary, Pain Sheet, Pain Priority List, Pain Canvas, Pain Killer Canvas

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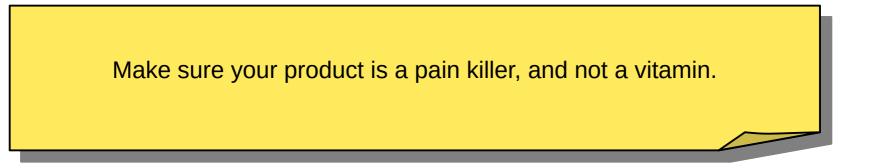
- A pain diary is a diary in which all problems, pains, deficiencies of techniques and tools are recorded day by day
- A pain sheet [Bosworth] suggests this 3-step table (reasons → impact → capabilities) for thinking about the cause-effect relationships of the pains of the customers

| Reasons/ Causes | Impact/ Effects | Capabilities |
|--------------------|--------------------|--------------|
|--------------------|--------------------|--------------|

- A pain priority list ranks all known pains with a priority (product awareness * pressure)
- An untested pain canvas classifies all pains into different classes, but is untested
- A **tested pain canvas** has verified hypotheses about the pains
- A pain killer canvas is a tested pain canvas with annotated pain killers



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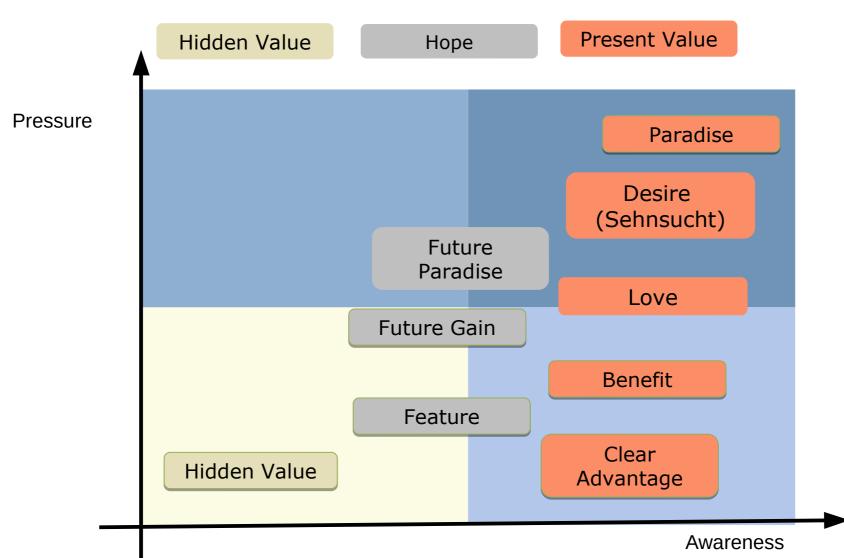
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13.3. Deep Gain Analysis

After pain analysis, you should do a gain analysis with your customer. There are different kinds of gains...

Gains/ValueProduct in the Pressure-Awareness Portfolio

- **Hope** is a strong motivation
- Hidden value is implicit gain





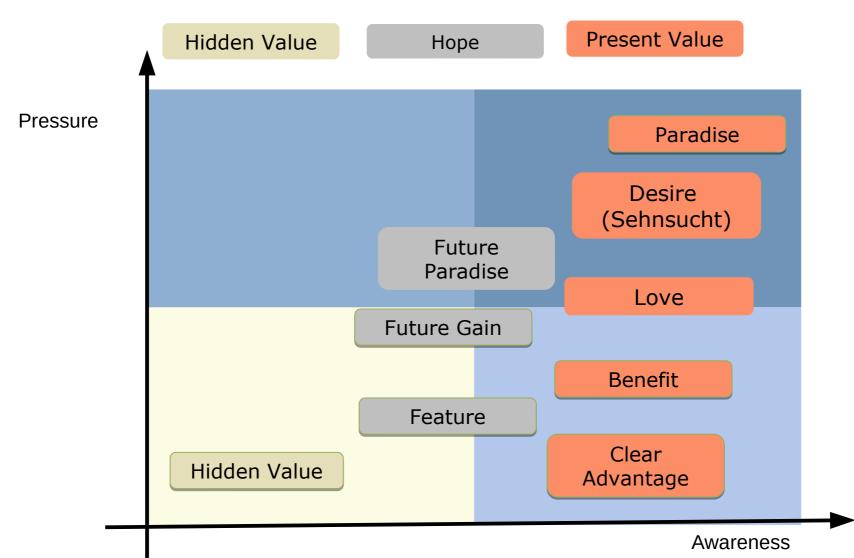
Exc.: Classify: is it a Gain, Benefit, Desire? Determine Gain Priority

- Hadron Collider
- Google Glass
- Mobile phone
- Tablet computer
- Communism
- Socialism
- Vom Tellerwäscher zum Millionär
- Lottery



Exercise Gains/Value

- Hope is a strong motivation
- Hidden value is implicit gain







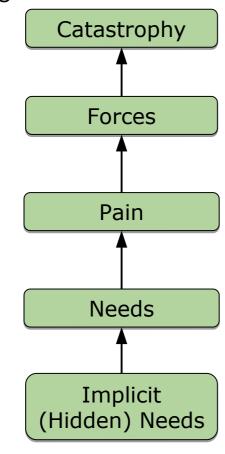
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13.4 Another Question-Guided Travel Through the Sales Funnel: Pain-Gain Analysis with the Pain-Gain Banana

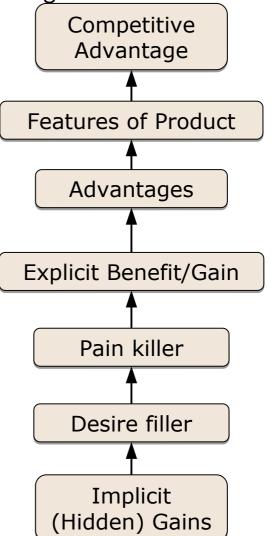
Guiding your potential customer LIVE through a pain/gain analysis, increasing the pain pressure and awareness for her

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Pains are differently severe. The following levels can at least be distinguished:



 Gains are differently severe. The following levels can at least be distinguished:



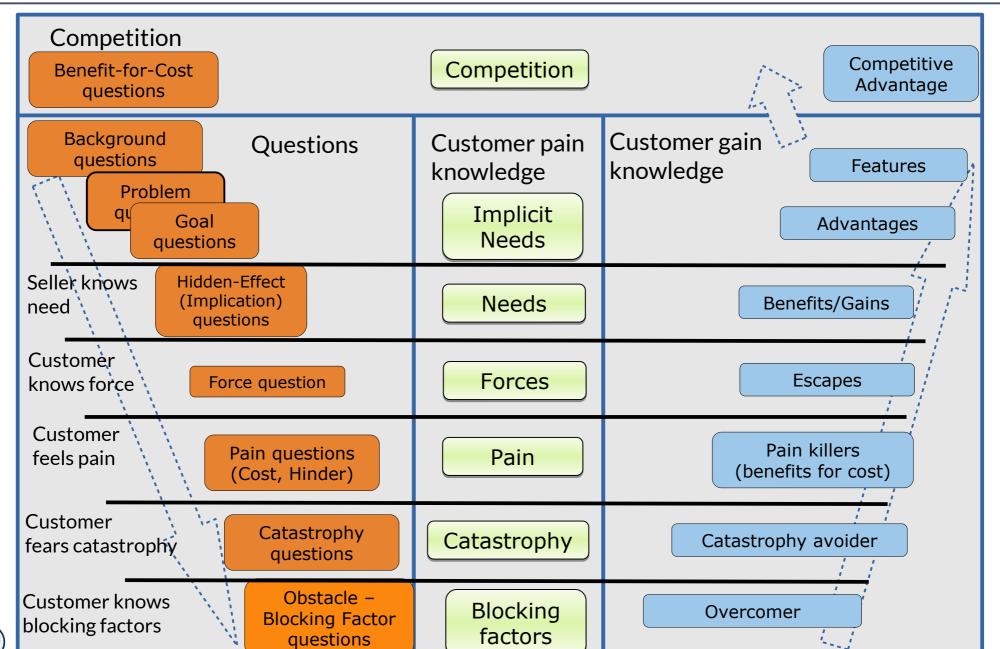


- We can define now a third Sales Funnel Travel based on the different levels of pain and gain
- The **Pain-Gain Banana** canvas can be used for customer pain-gain analysis
 - Canvas transforms hidden pains to competitive gains
 - Derived from SPIN® selling, ZOPP, NABC and VPC
- Blocking factors directly transform pains to gains
- Goals transform future pains to future gains
- Catastrophies require urgent action



Pain-Gain-Banana Question Canvas: The banana intensifies the pain and the gain

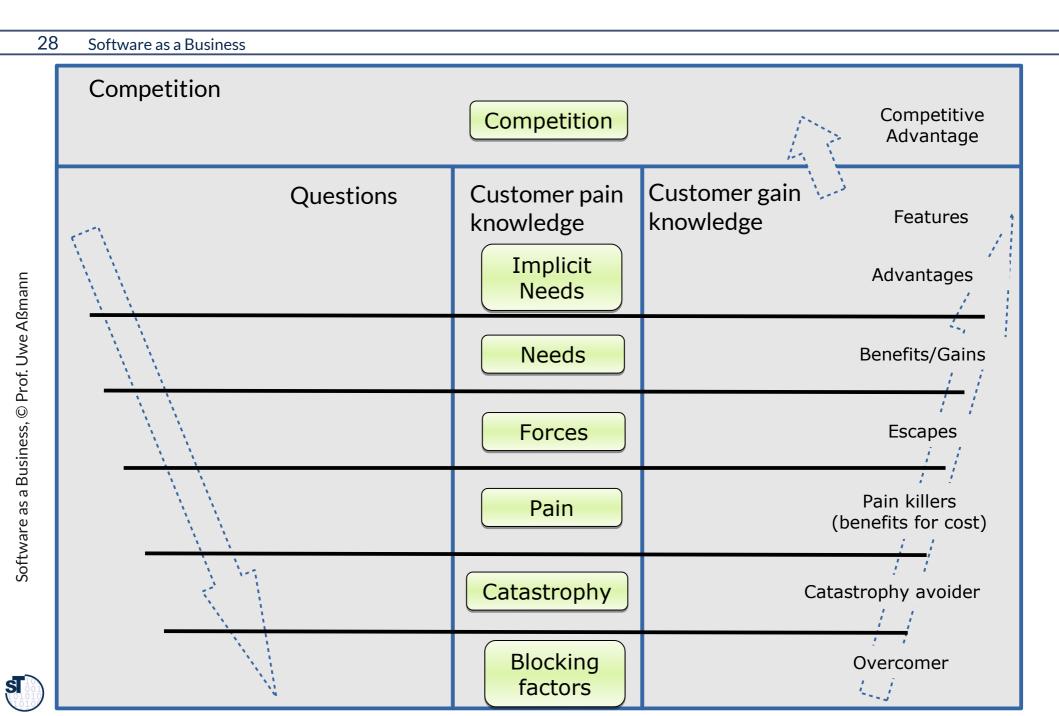
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Pain-Gain-Banana Stripped Form



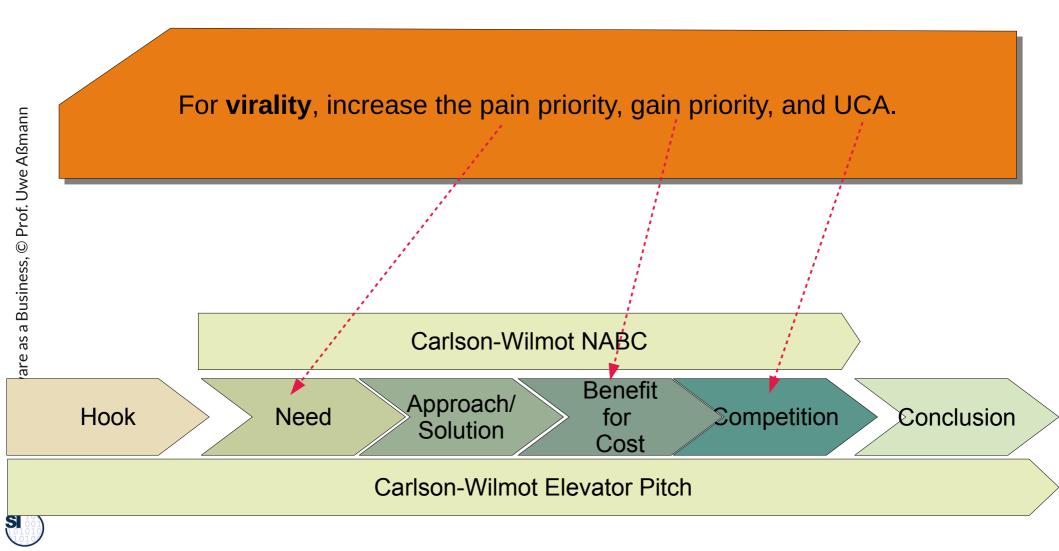


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13.5. Stickiness and Virality of a Feature – The Influence of the UCA

.. how to achieve that the news spreads itself (how to achieve mouth-to-mouth words)

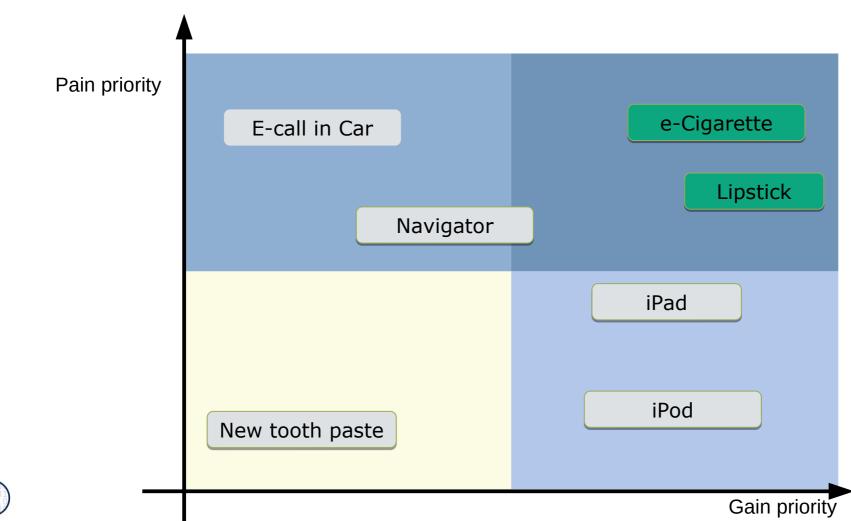
A viral product/service is one about which news spreads easily, because people talk about it.



Pain-Gain-Stickiness as Pain/Gain Product

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A *sticky* product/service has high pain **and** gain priority. (green: infectious)

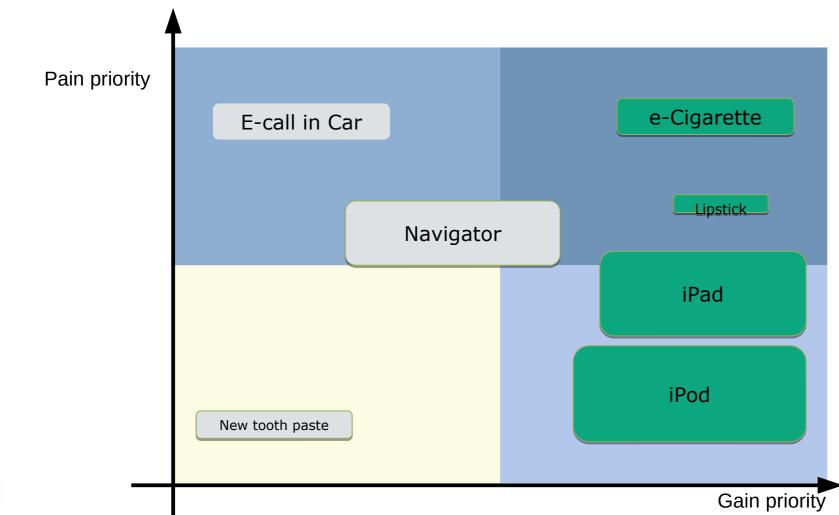


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Pain-Gain-UCA-Virality

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A *viral* product/service has high pain, high gain priority, and high (ultimate) competitive advantage. (visualized here with the size of green boxes)



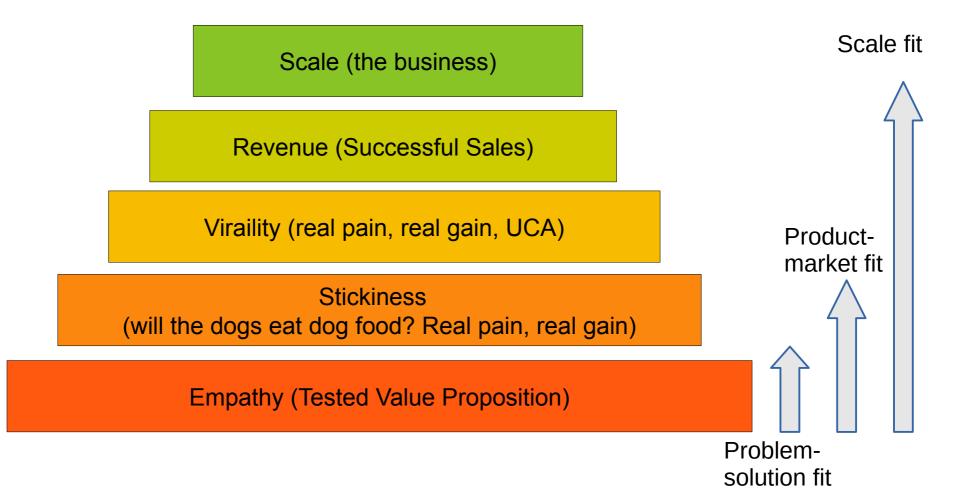


The "Lean Analytics" Stages and Their Metrics

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[LeanAnalytics]

- The Lean Analytics Stages are a simple stage system for product/service productmarket fit.
- [LeanAnalytics] contains metrics for every stage





The Pirate Metrics AARRR for Web Site Visits

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- "Even pirates need metrics." (Dave McClure)
- Example: the story of Dropbox starting with a *smoke video* of a non-existing product
 - http://techcrunch.com/2011/10/19/dropbox-minimal-viable-product/



Acquisition (how do customers know from you?

[LeanAnalytics]

[Dave McClure http://www.slideshare.net/dmc500hats/startup-metrics-for-pirates-long-version]





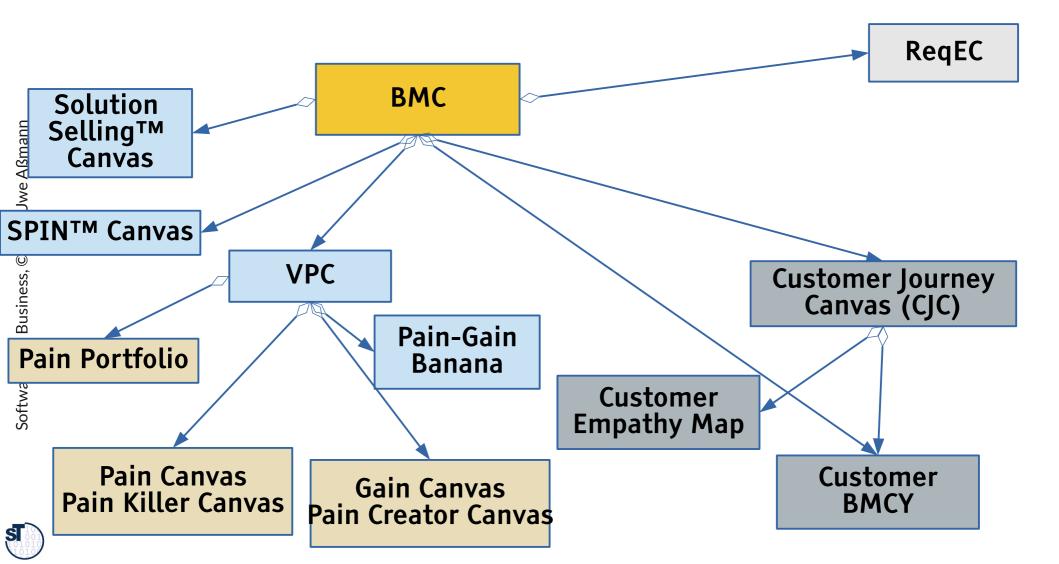
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13.6. The Evolving Cactus of the Nested BMC

The Dependency Structure of Canvases (the Nested BMC)

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How would you maintain an evolving cactus for all these canvases?



Most Important for Startups

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Deep Pain (and Gain) management

Stickiness, Virality, and UCA management



- Explain the difference between customer empathy, activation, stickiness, virality and referral.
- What is the difference between untested, assessed, and tested canvases?
- What is a strong real tested pain?
- Why are catastrophies better for a good value proposition than blocking factors?
- Explain the influence of the UCA for virality.
- Why is the pirate metrics important for building good value propositions?
- How can you cross the border between Virality and Revenue in the LeanAnalytics stages?
- Explain the differences between the SPIN[™] Canvas and the VPC. Which canvas do you prefer for a cold call?
- Explain the differences of SPIN Canvas and Pain-Gain Banana.
- What is virality? What is UCA?

