

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





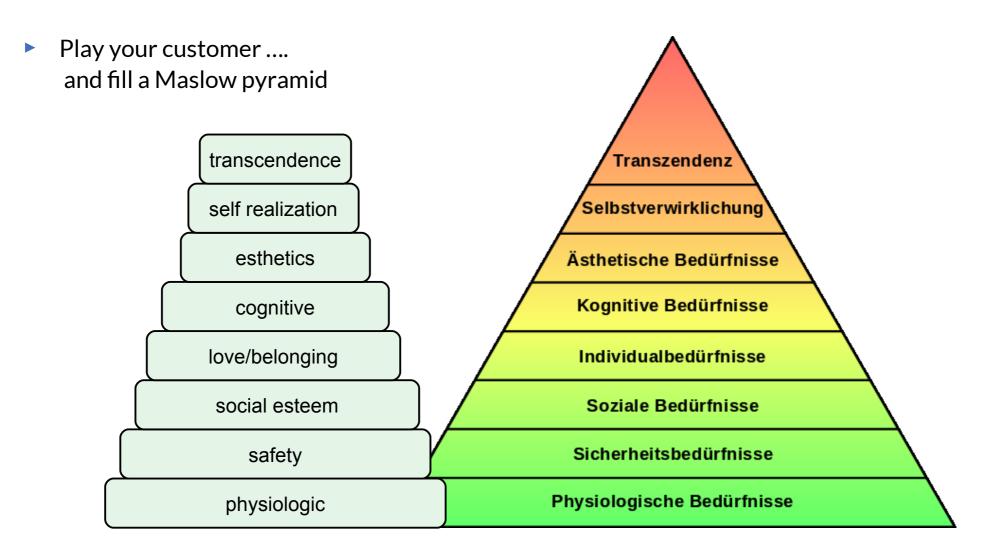
Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie – Prof. Aßmann - Software as a Business

13.1 Deep Pain Analysis with Different Types of Pains

• .. diving into the VPC

Customer Analysis with Maslow

4 Software as a Business



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

5 Software as a Business

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

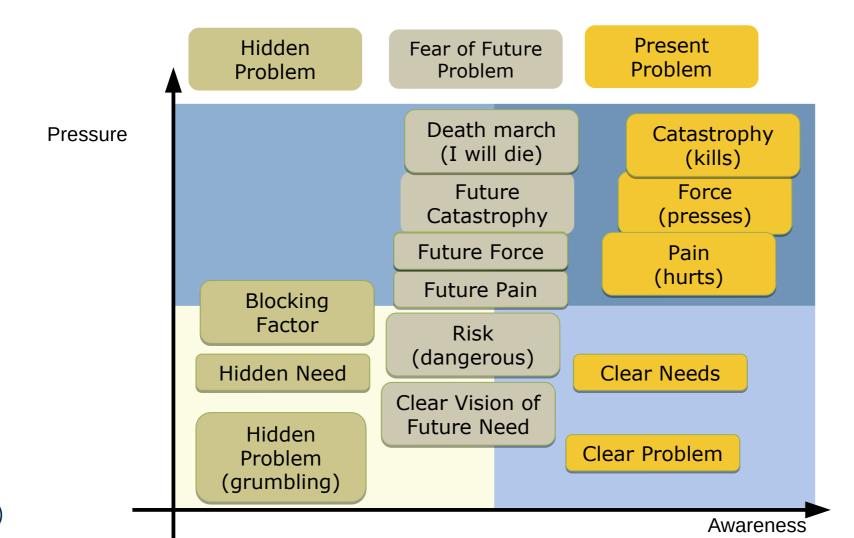
A **blocking factor** is an immediate problem to be removed

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



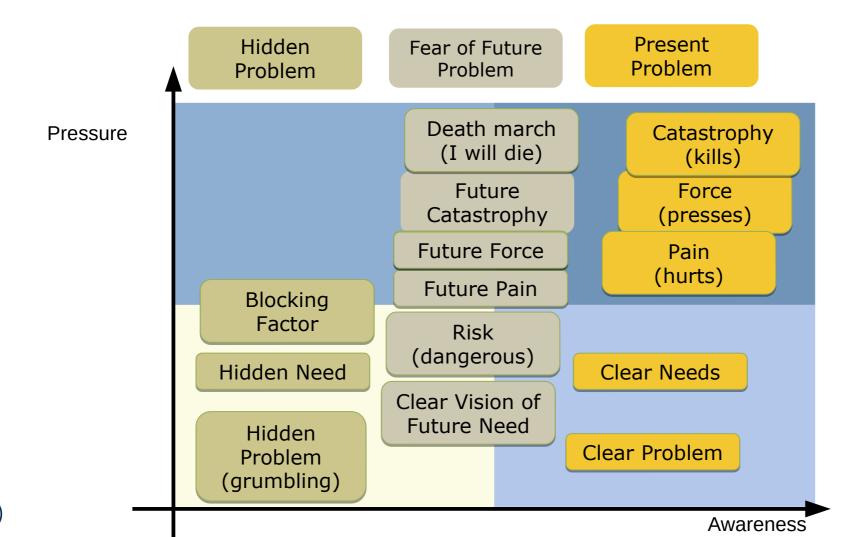
Exc.: Getting Research Funding with Pain

- 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





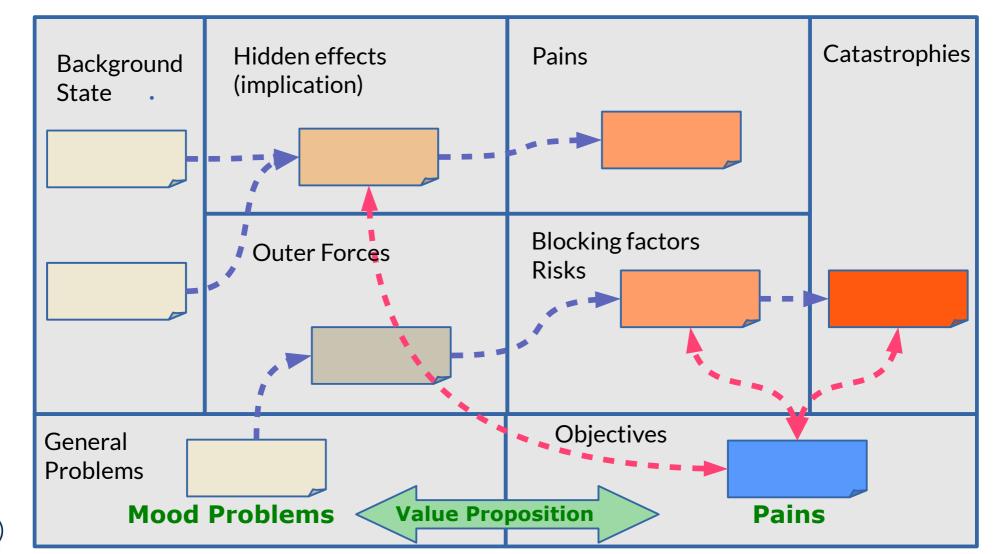
Pain Refinement with the Pain Canvas

- 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)

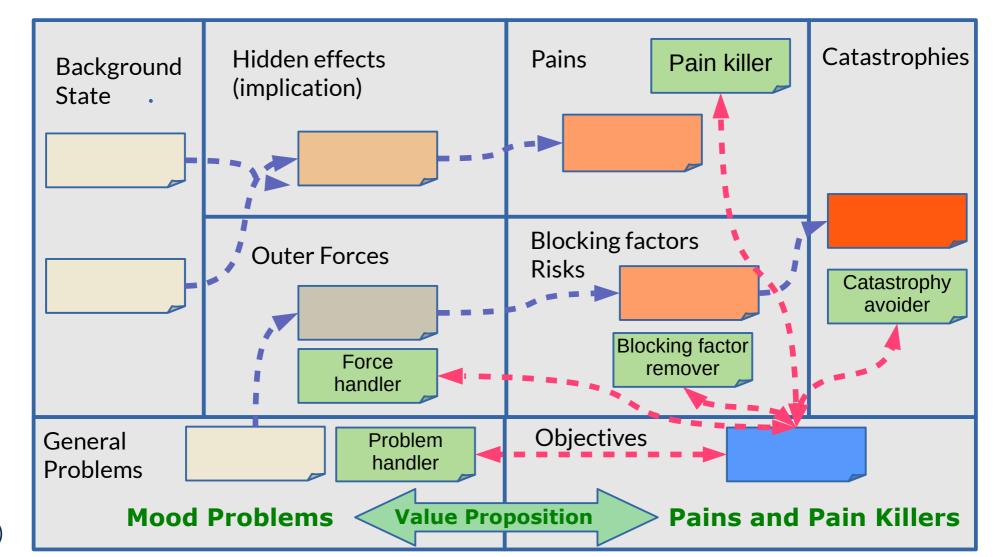
- Put a problem first into the "General" or "Background" field, then classify it and refine it (from left to right)
- > Think about which stakeholder has which objectives. First untested, then tested





16 Software as a Business

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







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

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

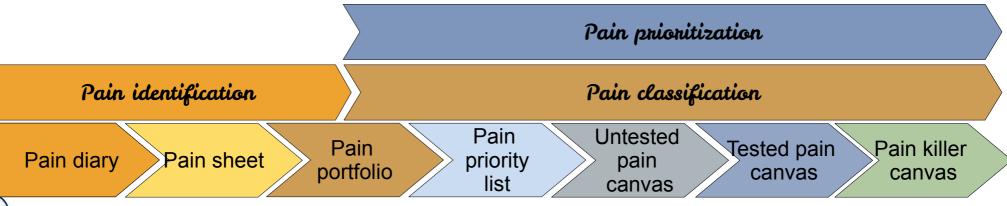
Pain Management with Pain Diary, Pain Sheet, Pain Priority List, Pain Canvas, Pain Killer Canvas

18 Software as a Business

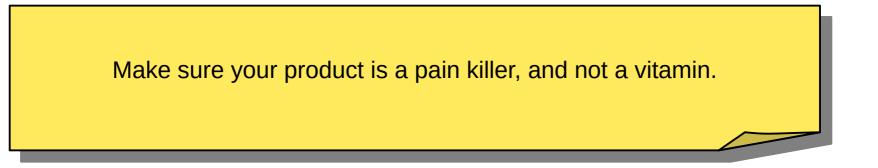
- A pain diary is a diary in which all problems, pains, deficiencies of techniques and tools are recorded day by day
- A pain sheet [Bosworth] suggests this 3-step table (reasons → impact → capabilities) for thinking about the cause-effect relationships of the pains of the customers

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



S







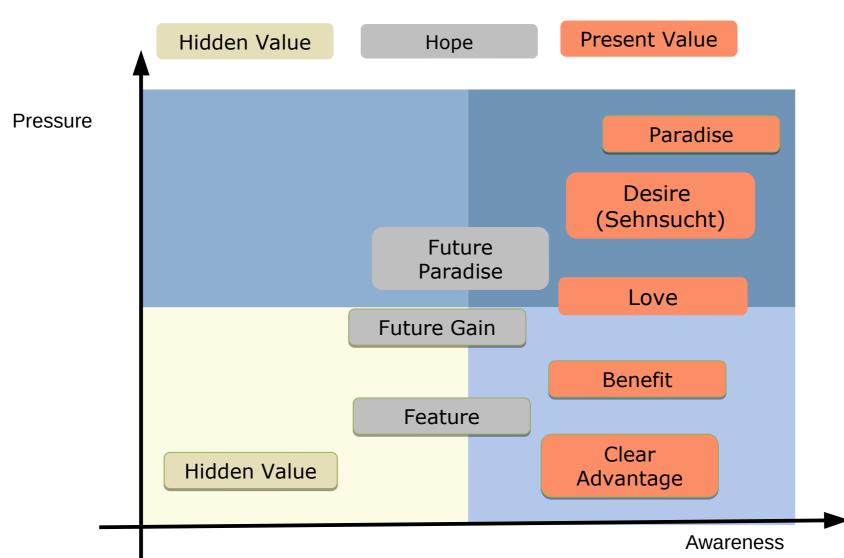
Fakultät Inforfraktikät Imfortortafiktivastetuu Softwalienediatetolikinedi SteftwaiketeenostogieSoftwafreeenostogieSoftware as a Business

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





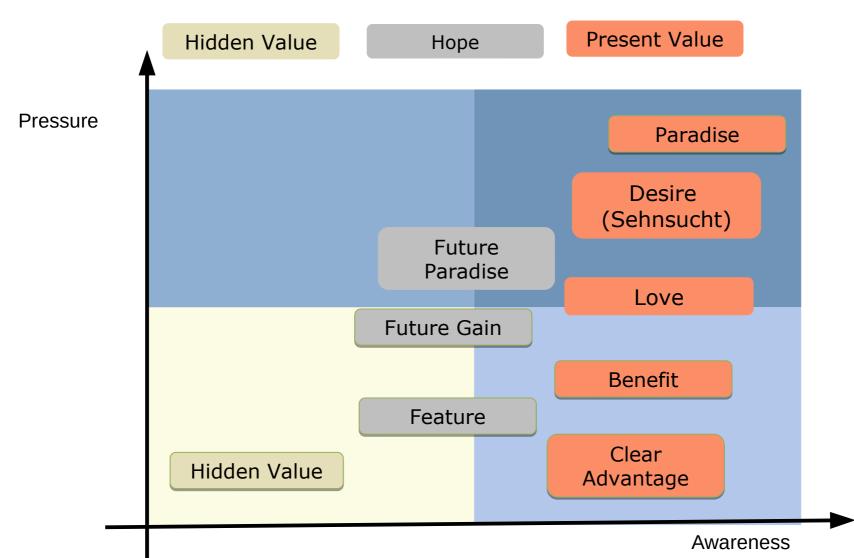
Exc.: Classify: is it a Gain, Benefit, Desire? Determine Gain Priority

- 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







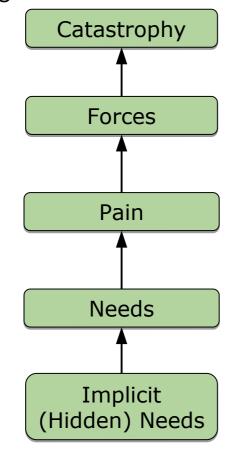
Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie – Prof. Aßmann - Software as a Business

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

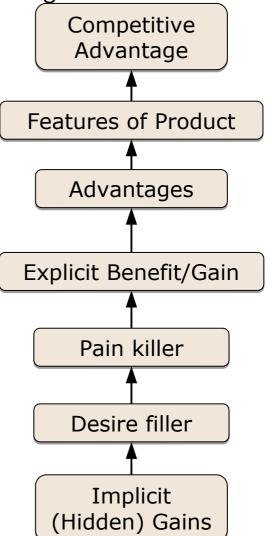
Guiding your potential customer LIVE through a pain/gain analysis, increasing the pain pressure and awareness for her

25 Software as a Business

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



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



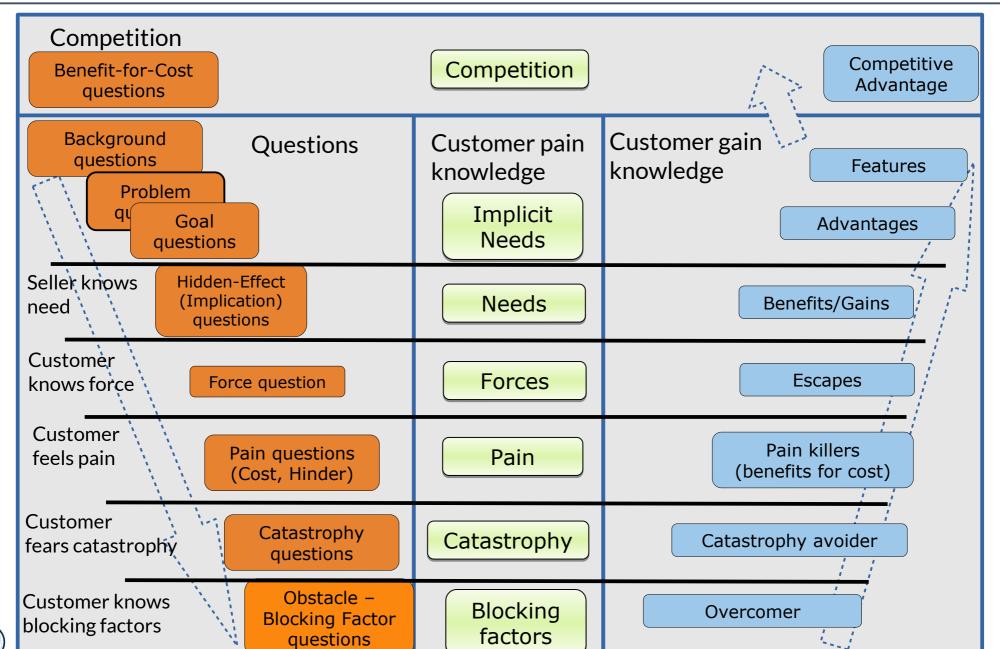


- We can define now a third Sales Funnel Travel based on the different levels of pain and gain
- The **Pain-Gain Banana** canvas can be used for customer pain-gain analysis
 - Canvas transforms hidden pains to competitive gains
 - Derived from SPIN® selling, ZOPP, NABC and VPC
- Blocking factors directly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

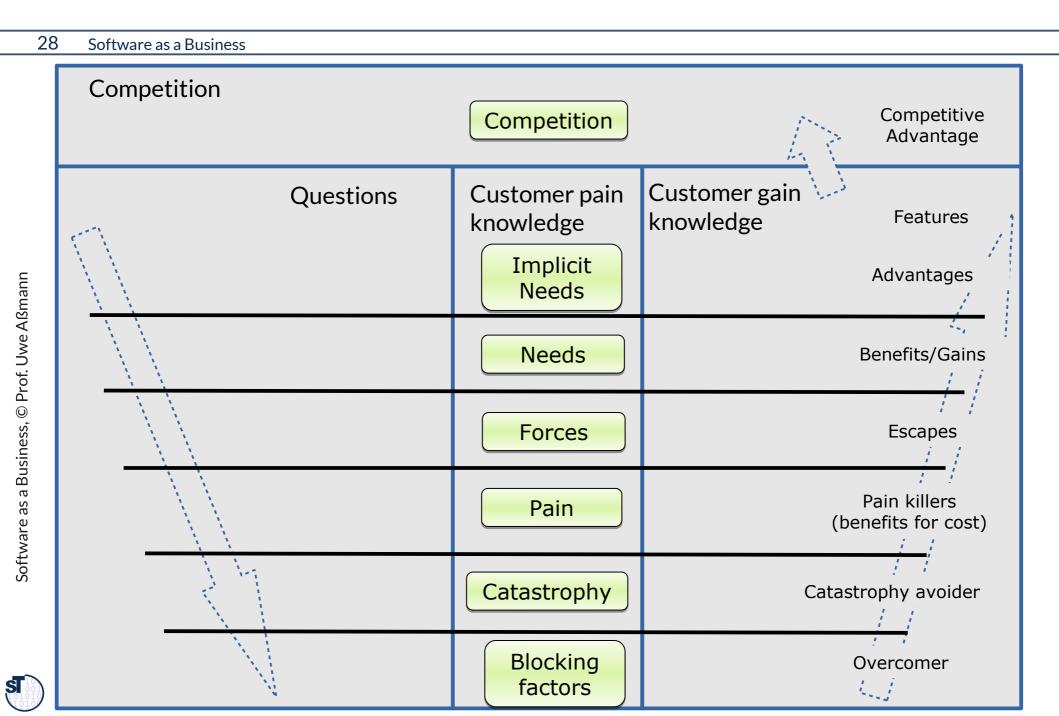
27 Software as a Business



Software as a Business, © Prof. Uwe Aßmann

S

Pain-Gain-Banana Stripped Form



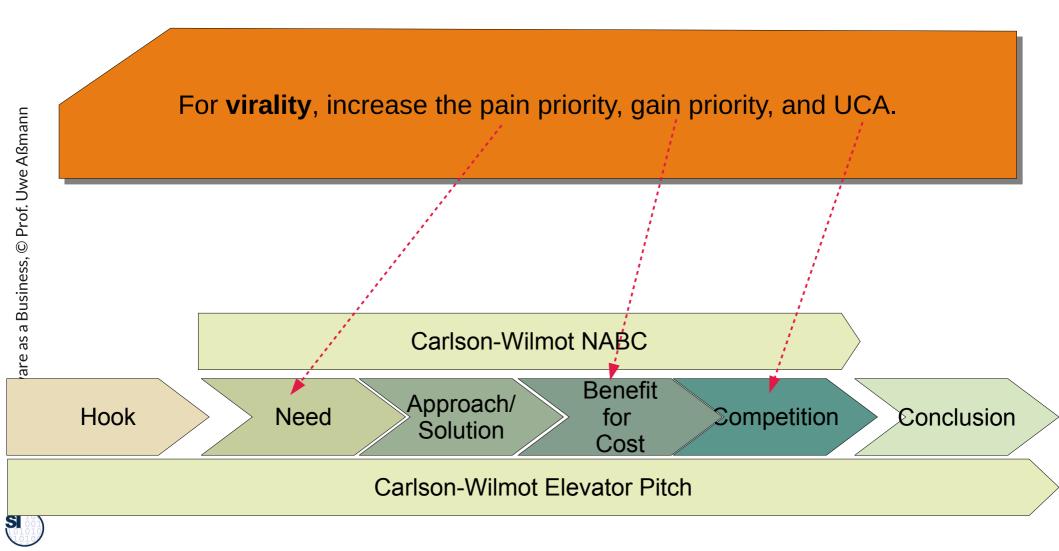


Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie – Prof. Aßmann - Software as a Business

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)

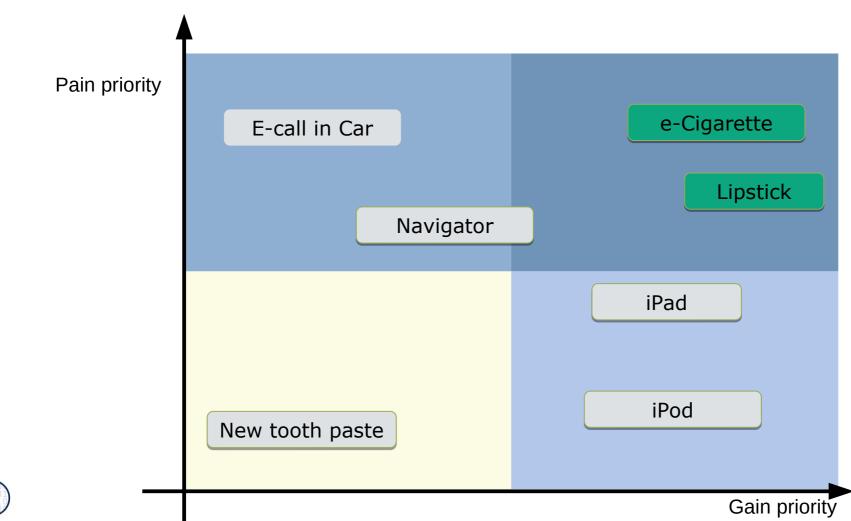
A viral product/service is one about which news spreads easily, because people talk about it.



Pain-Gain-Stickiness as Pain/Gain Product

32 Software as a Business

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

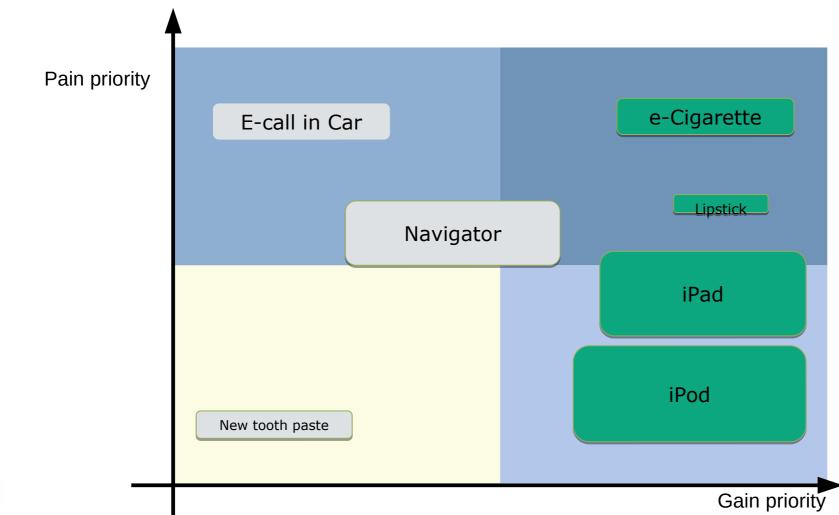


S

Pain-Gain-UCA-Virality

33 Software as a Business

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



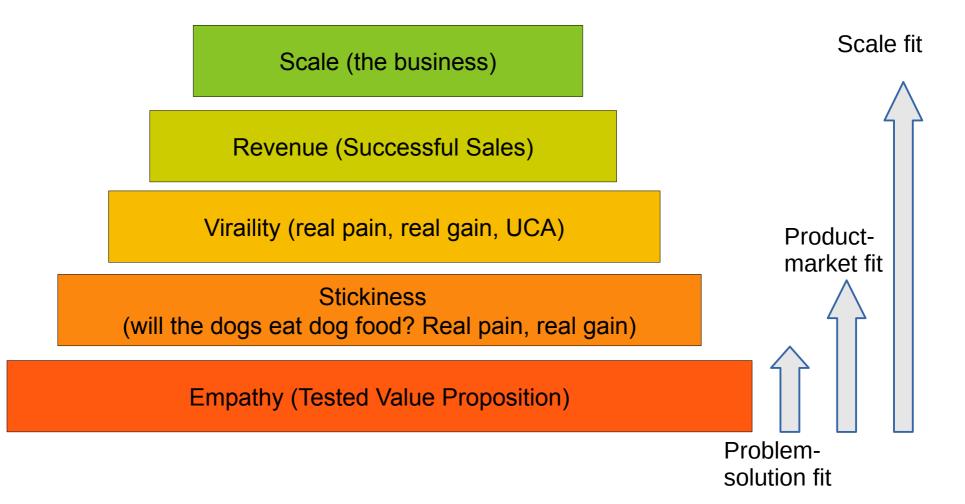


The "Lean Analytics" Stages and Their Metrics

34 Software as a Business

[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

35 Software as a Business

- "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]





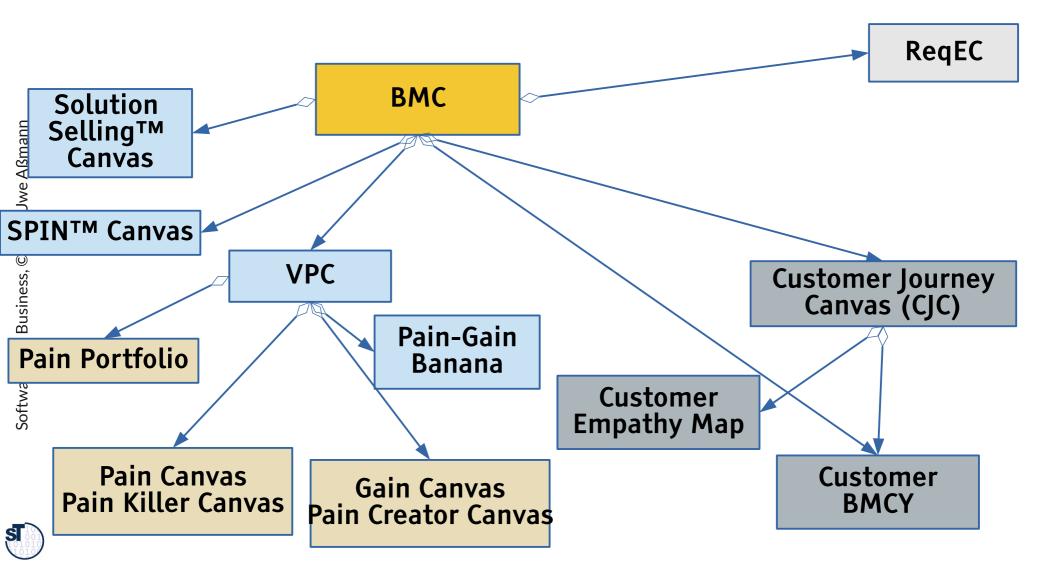
Fakultät Informatik - Institut Software- und Multimediatechnik - Softwaretechnologie – Prof. Aßmann - Software as a Business

13.6. The Evolving Cactus of the Nested BMC

The Dependency Structure of Canvases (the Nested BMC)

37 Software as a Business

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



Most Important for Startups

38 Software as a Business

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?

