„The hard part is finding a problem to solve"

[Kevin Systrom from Instagram]

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

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http://st.inf.tu-dresden.de/teaching/saab

1) Value Proposition Analysis
2) Pain Analysis
3) Gain Analysis
4) Pain-Gain Banana as another Customer Travel
5) Ultimative Competitive Advantage
   1) Stickiness and Virality

Obligatory Literature

- 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-propositions

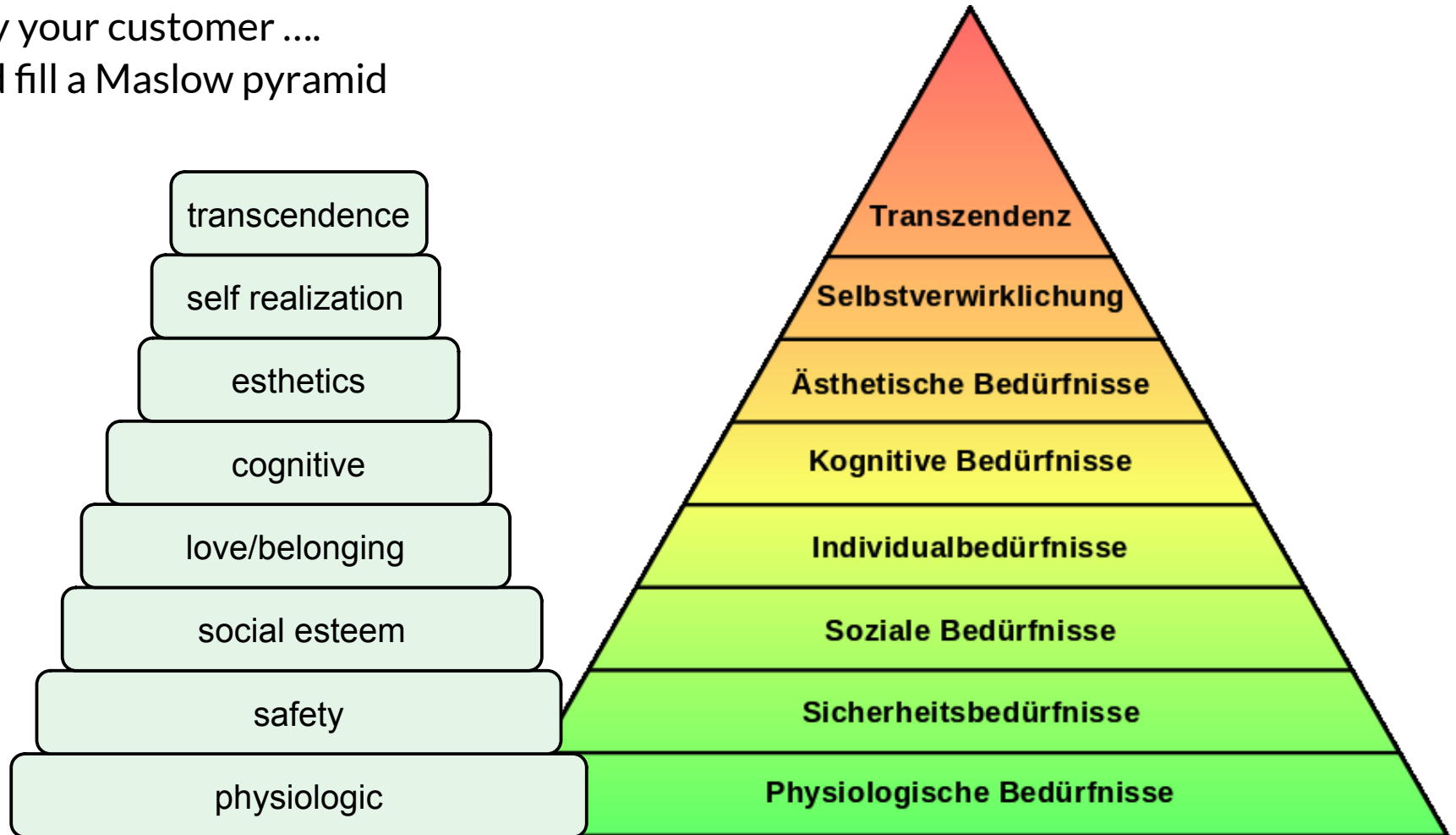- https://blog.strategyzer.com/posts/2014/9/16/why-every-company-needs-a-chief-corporate-entrepreneur

13.1 Deep Pain Analysis with Different Types of Pains

- .. diving into the VPC
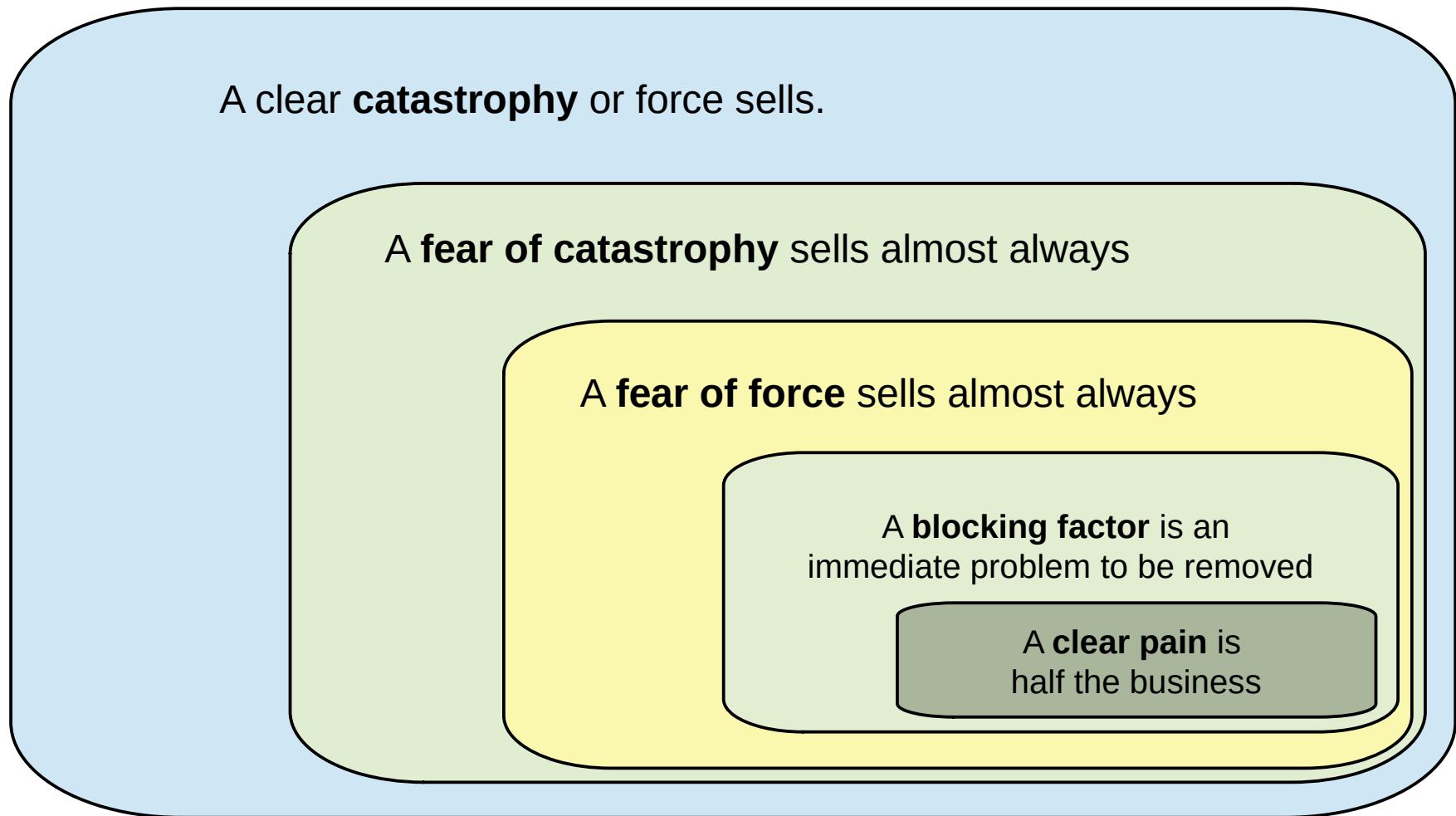
Customer Analysis with Maslow

▶ Play your customer ....
  and fill a Maslow pyramid

transcendence	Transzendenz
self realization	Selbstverwirklichung
esthetics	Ästhetische Bedürfnisse
cognitive	Kognitive Bedürfnisse
love/belonging	Individualbedürfnisse
social esteem	Soziale Bedürfnisse
safety	Sicherheitsbedürfnisse
physiologic	Physiologische Bedürfnisse

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

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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

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Hidden Problem	Fear of Future Problem	Present Problem

Pressure

	Death march (I will die)	Catastrophy (kills)
Blocking Factor	Future Catastrophy	Force (presses)
	Future Force	Pain (hurts)
	Future Pain	
Hidden Need	Risk (dangerous)	Clear Needs
Hidden Problem (grumbling)	Clear Vision of Future Need	Clear Problem

Awareness
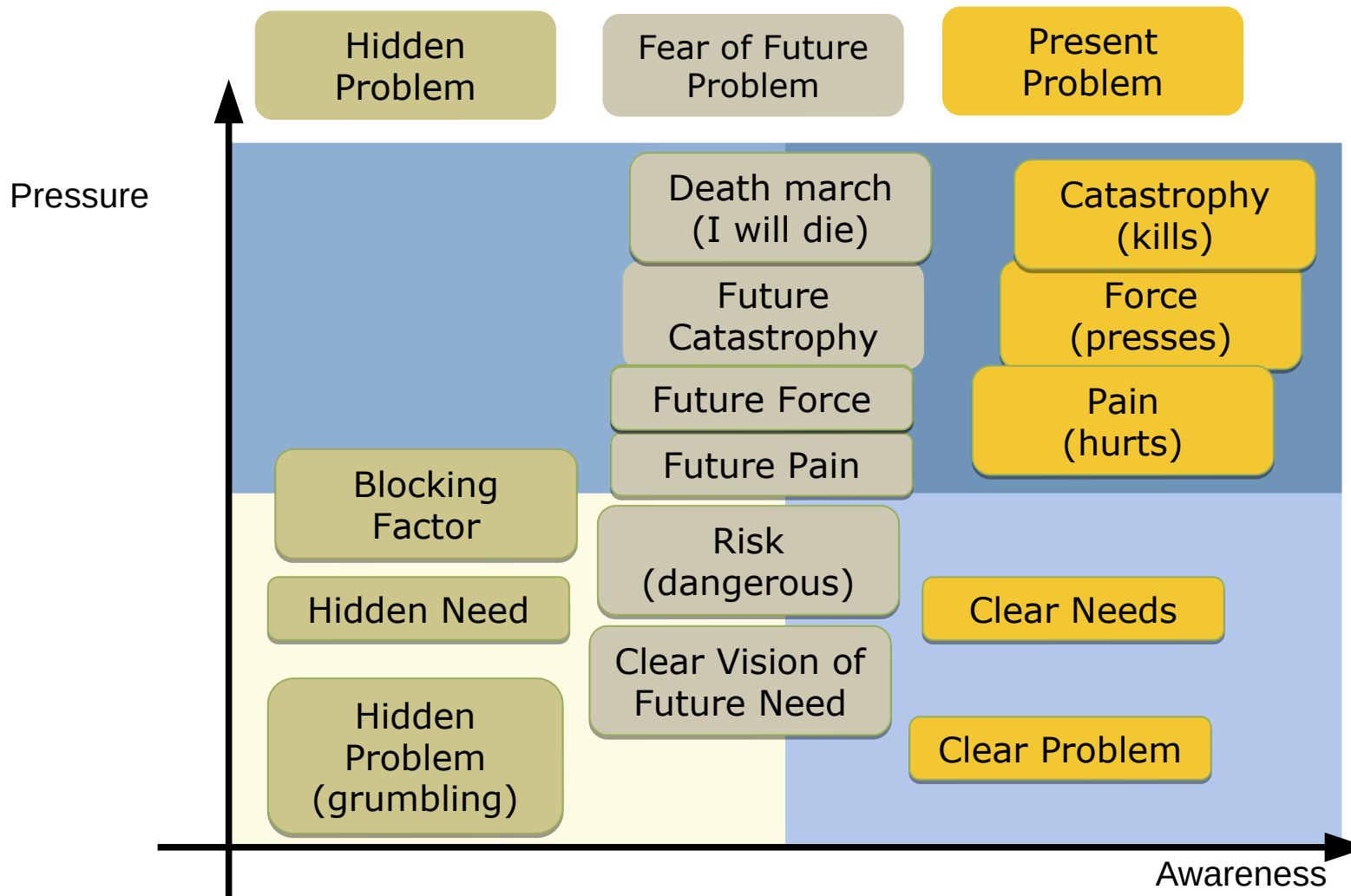
Examples of Future Force

▶ 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 Software problems:

- Year 2000 Problem
- European rules for data protection (DGUV)

▶ Future Force of Competition Change

- New competitors and competing products
  - USP and UCA gets lost
- New business models of competitors

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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?

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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

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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
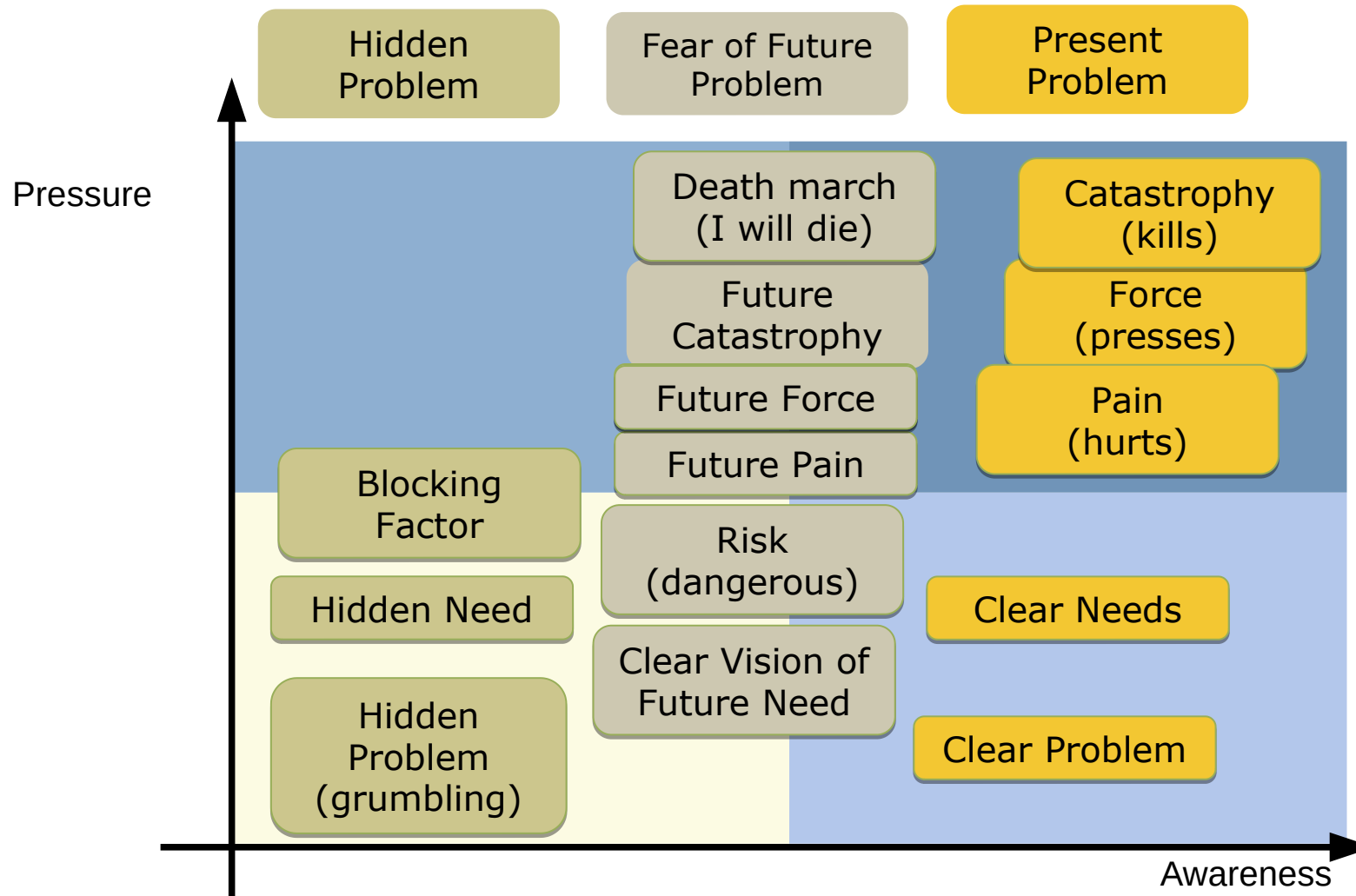
Pain Refinement with the Pain Canvas

- 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

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Pain Refinement with the
Deep 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
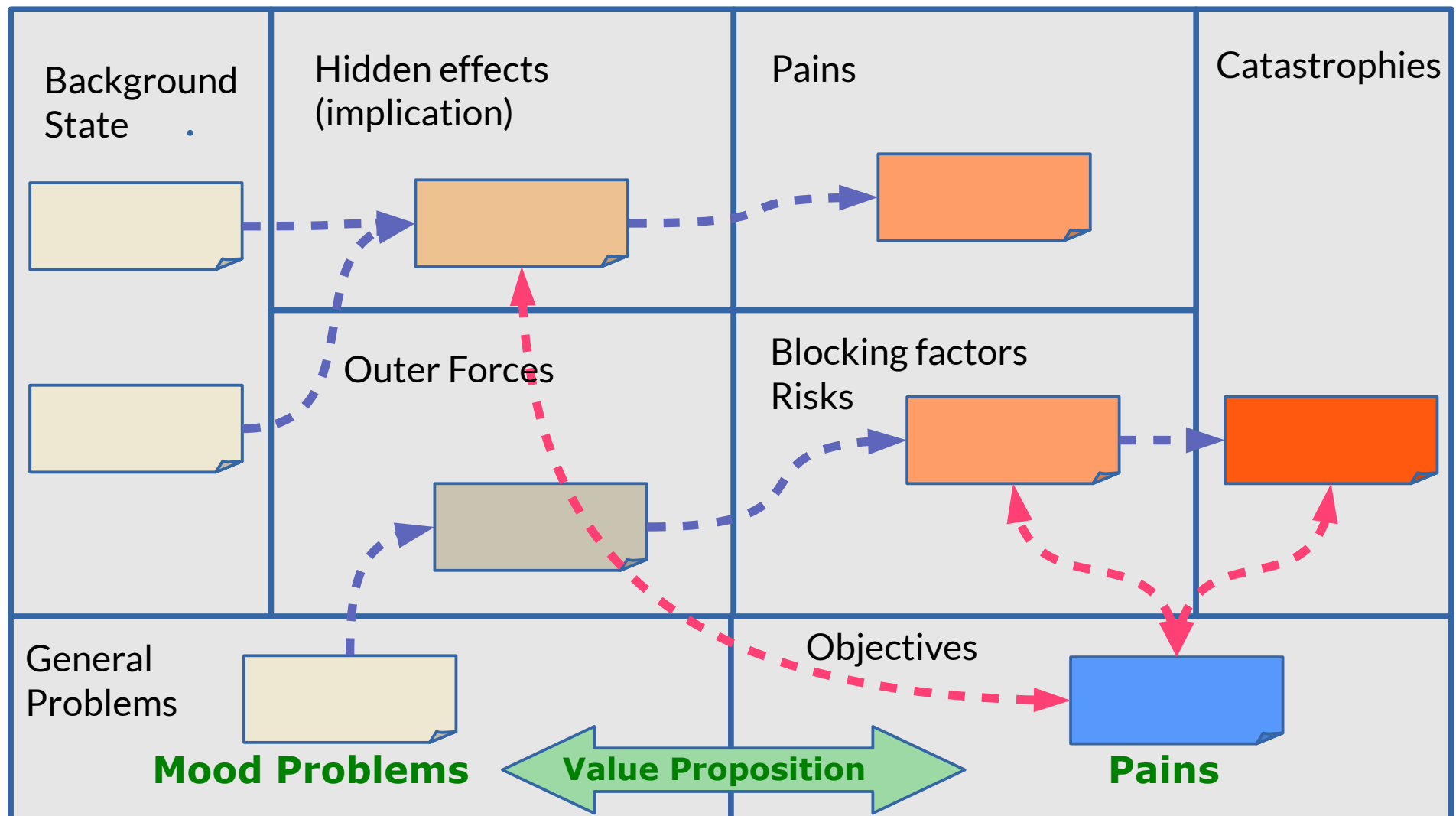
Pain Killer Canvas

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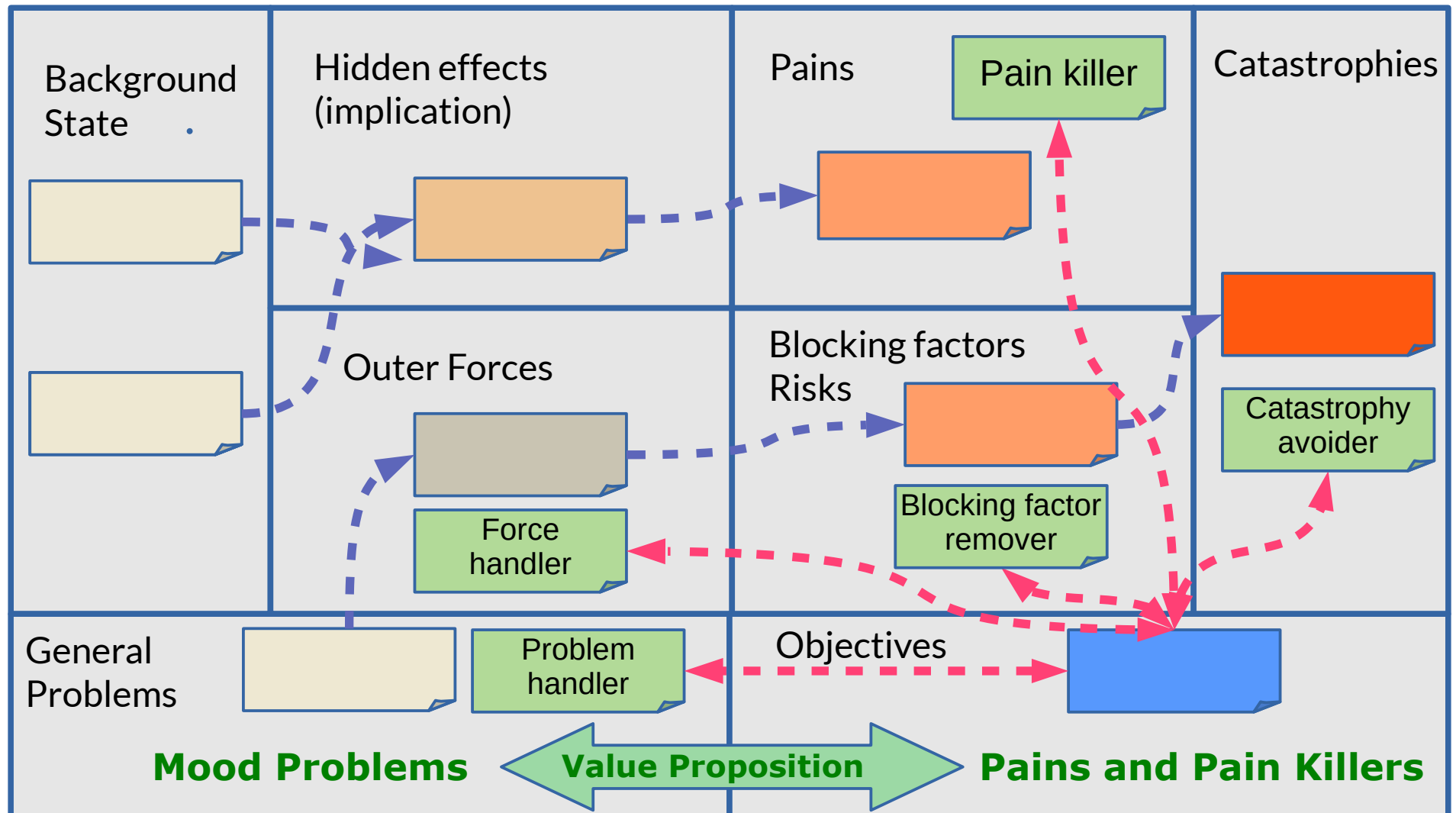
13.2 Pain Management

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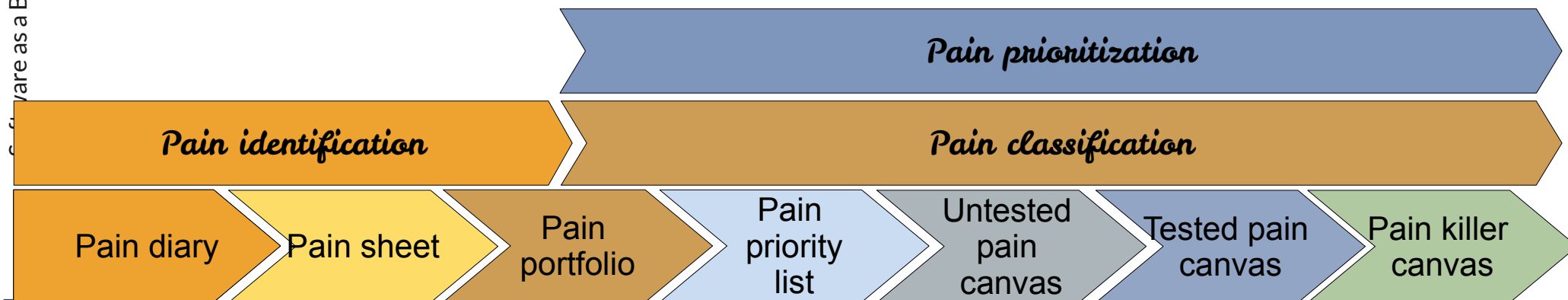
Pain Management with Pain Diary, Pain Sheet, Pain Priority List, Pain Canvas, Pain Killer Canvas

▶ 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

Pain prioritization

Pain identification

Pain classification

Pain diary → Pain sheet → Pain portfolio → Pain priority list → Untested pain canvas → Tested pain canvas → Pain killer canvas

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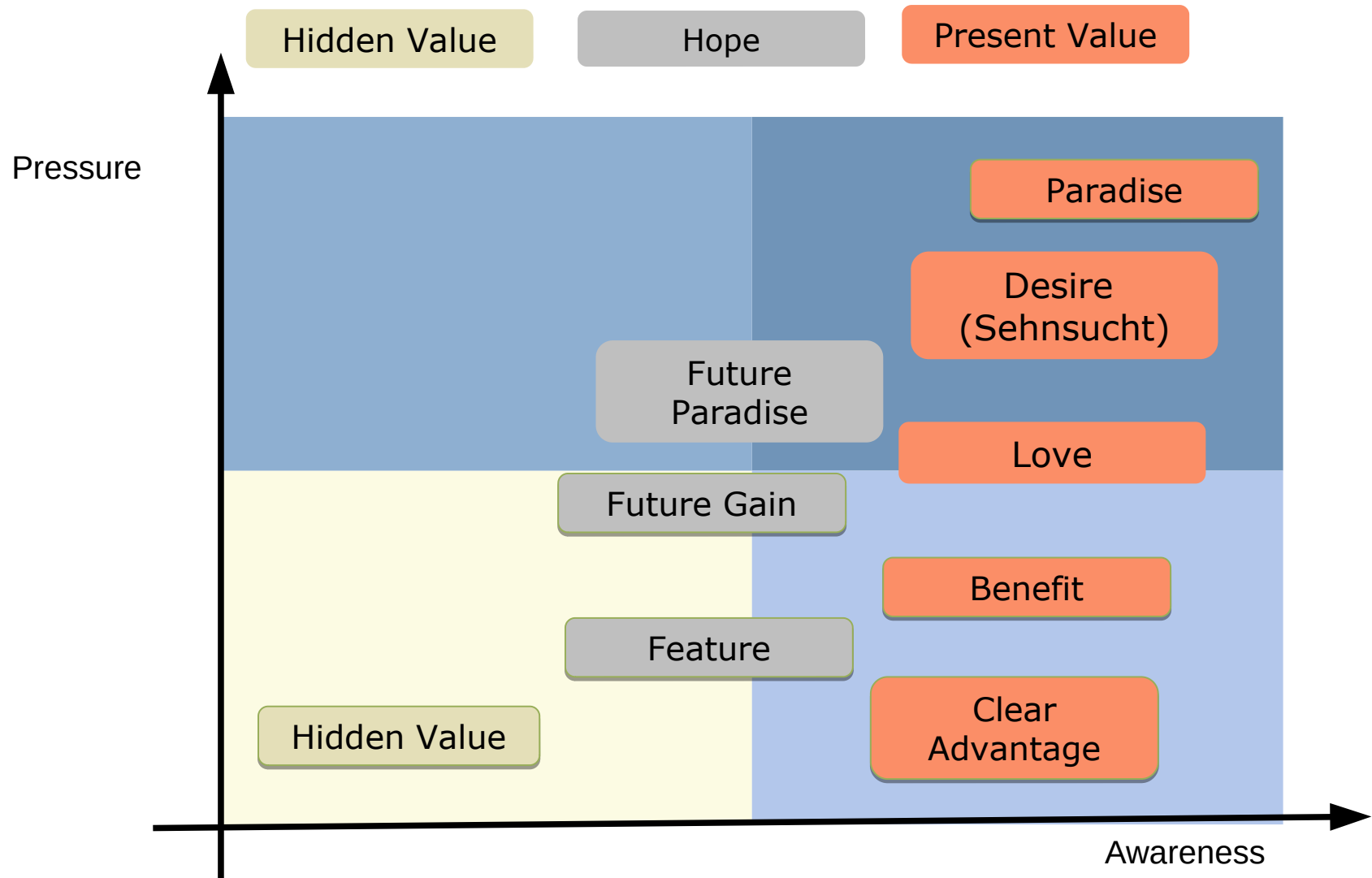Make sure your product is a pain killer, and not a vitamin.

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
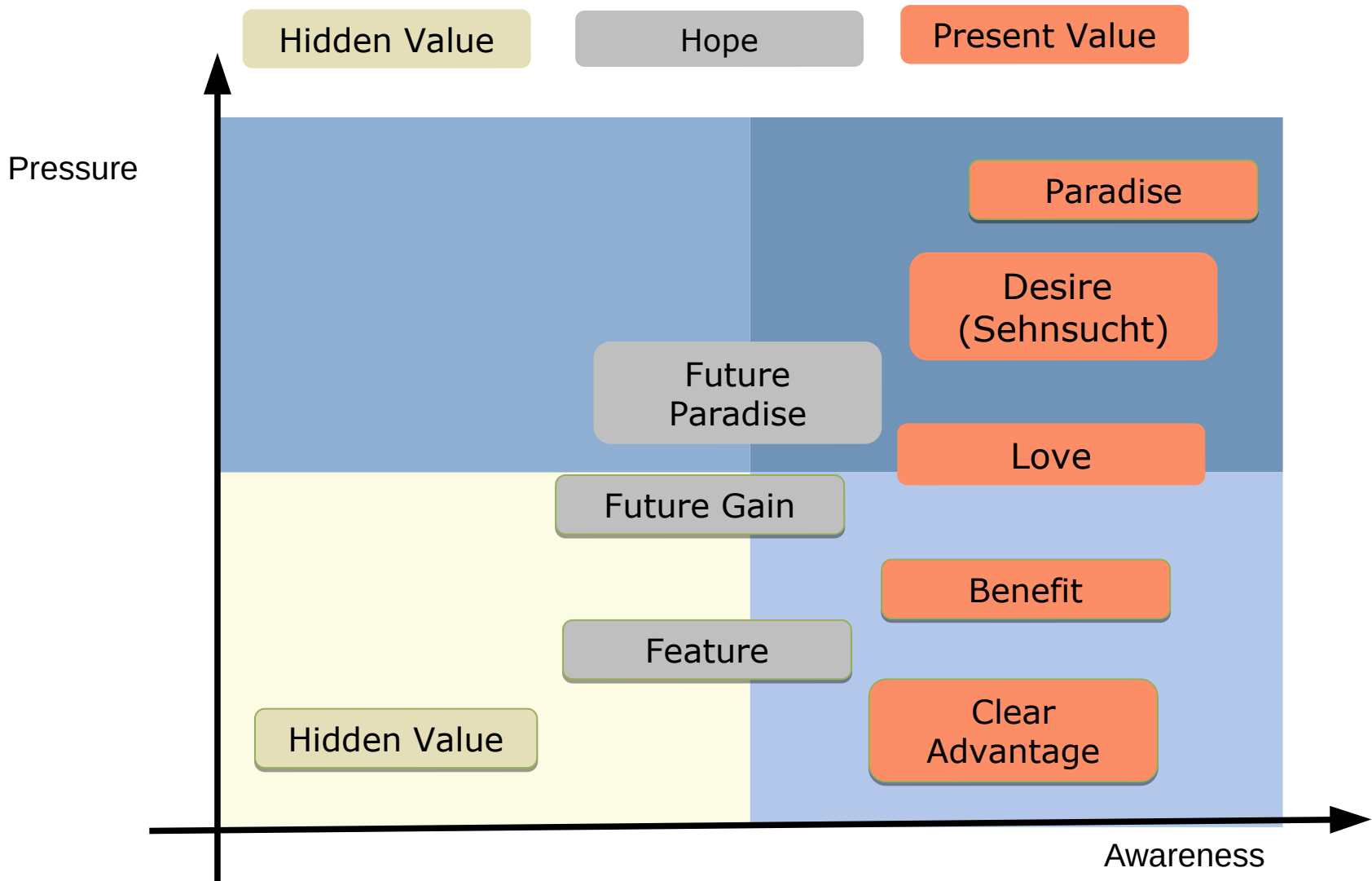- ▶ **Hidden value** is implicit gain

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

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Exercise Gains/Value

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

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| Hidden Value | Hope | Present Value |

Pressure

Paradise

Desire (Sehnsucht)

Future Paradise

Love

Future Gain

Benefit

Feature

Hidden Value

Clear Advantage

Awareness

13.4 Another Question-Guided Travel Through the Sales Funnel To a Valid Value Proposition: Pain-Gain Analysis with the Pain-Gain Banana
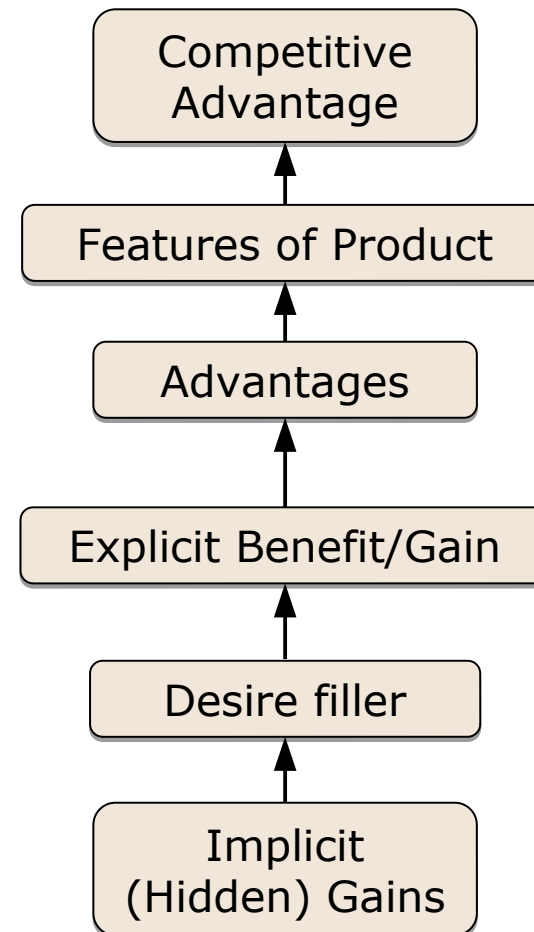
Guiding your potential customer LIVE through a pain/gain analysis, increasing the pain pressure and awareness for her

Severity Levels of Pain

- ▶ **Pains** are differently severe. The following levels can at least be distinguished:
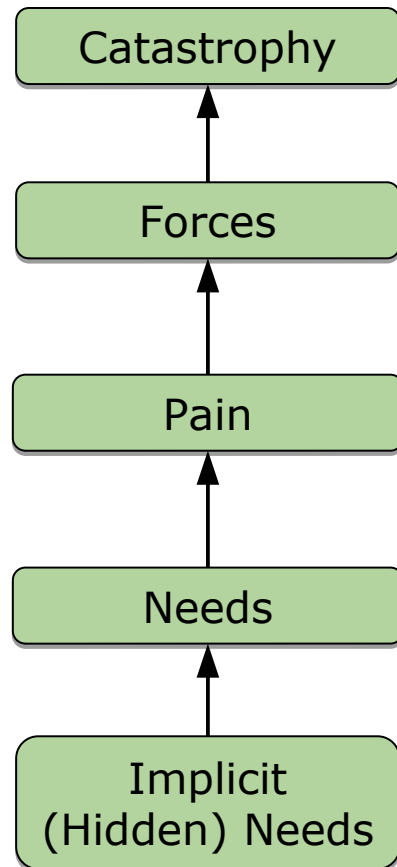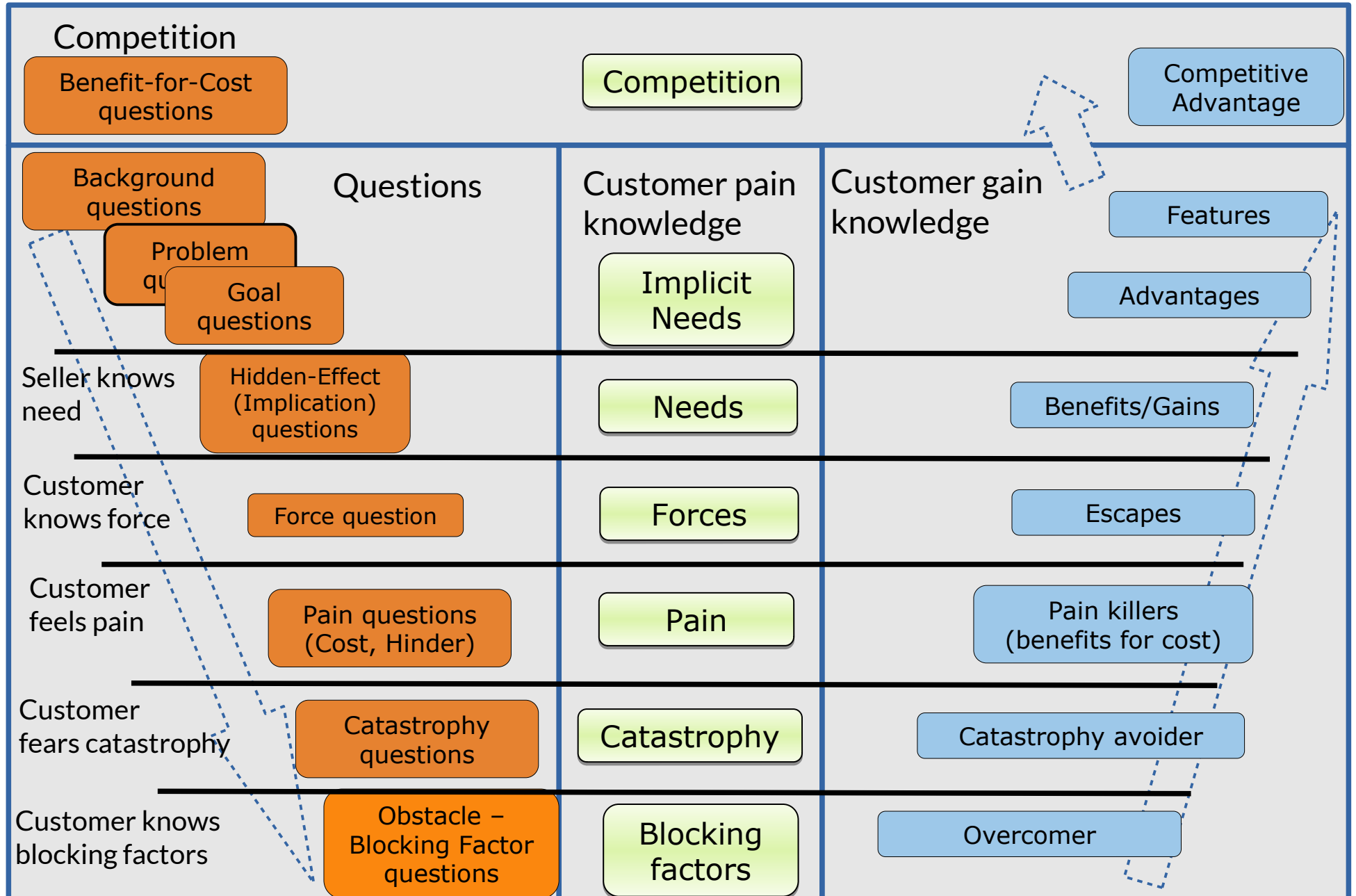
- ▶ **Gains** are differently severe. The following levels can at least be distinguished:

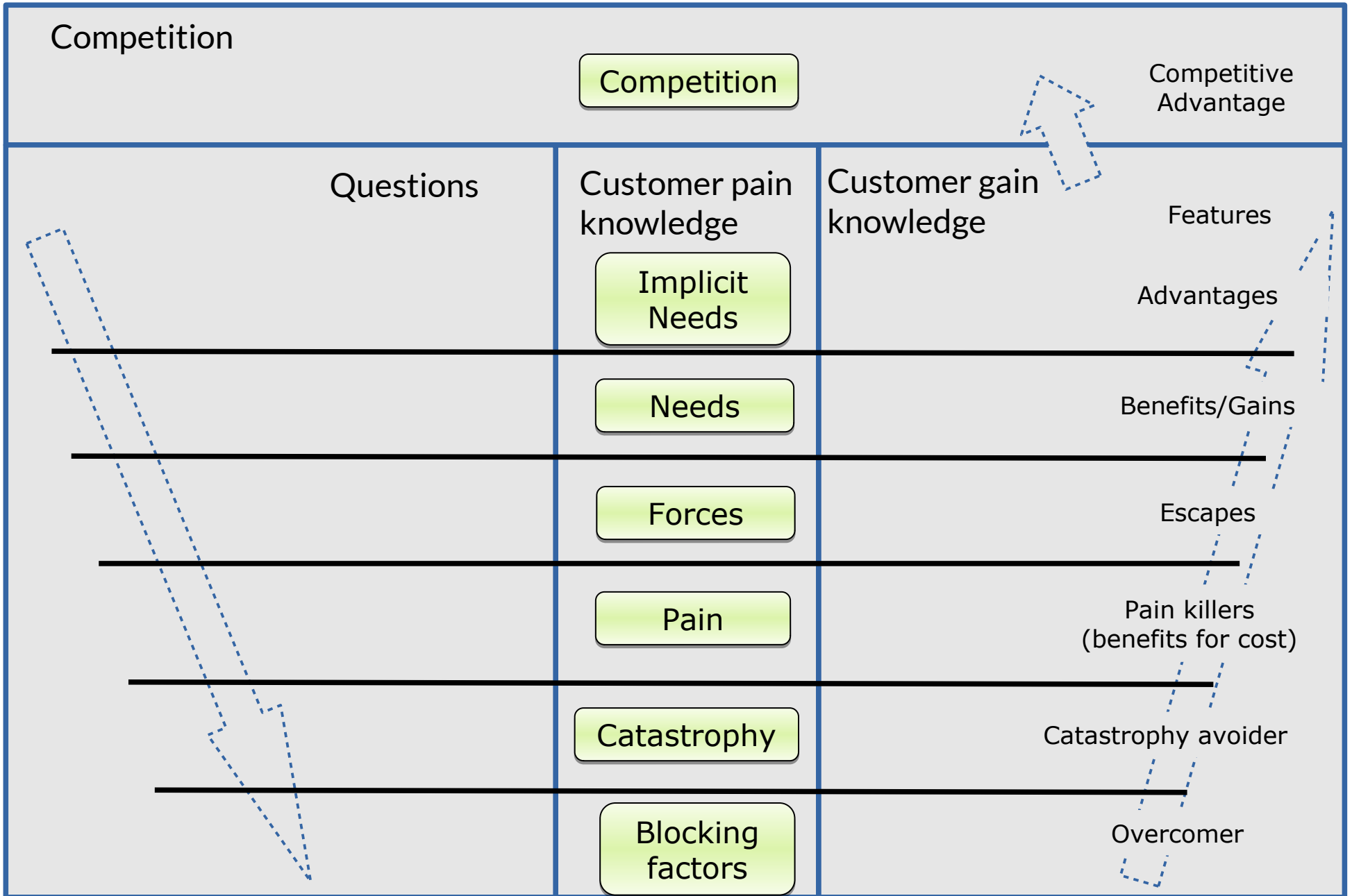Catastrophy

↑

Forces

↑

Pain

↑

Needs

↑

Implicit (Hidden) Needs

Competitive Advantage

↑

Features of Product

↑

Advantages

↑

Explicit Benefit/Gain

↑

Desire filler

↑

Implicit (Hidden) Gains

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Pain-Gain-Banana for Deep Pain-Gain Analysis

▶ 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

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

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Competition		
Benefit-for-Cost questions	Competition	Competitive Advantage

|	Questions	Customer pain knowledge	Customer gain knowledge
Background questions / Problem questions / Goal questions		Implicit Needs	Features / Advantages
Seller knows need	Hidden-Effect (Implication) questions	Needs	Benefits/Gains
Customer knows force	Force question	Forces	Escapes
Customer feels pain	Pain questions (Cost, Hinder)	Pain	Pain killers (benefits for cost)
Customer fears catastrophy	Catastrophy questions	Catastrophy	Catastrophy avoider
Customer knows blocking factors	Obstacle – Blocking Factor questions	Blocking factors	Overcomer

Pain-Gain-Banana Stripped Form

13.5. The Ultimate Competitive Advantage of a Feature or of a Product (UCA)

When we are talking about the features of our products, an UCA is important to beat the competition.

„Werden Sie Entrepreneur. Es gibt keine bessere Alternative." [Faltin]
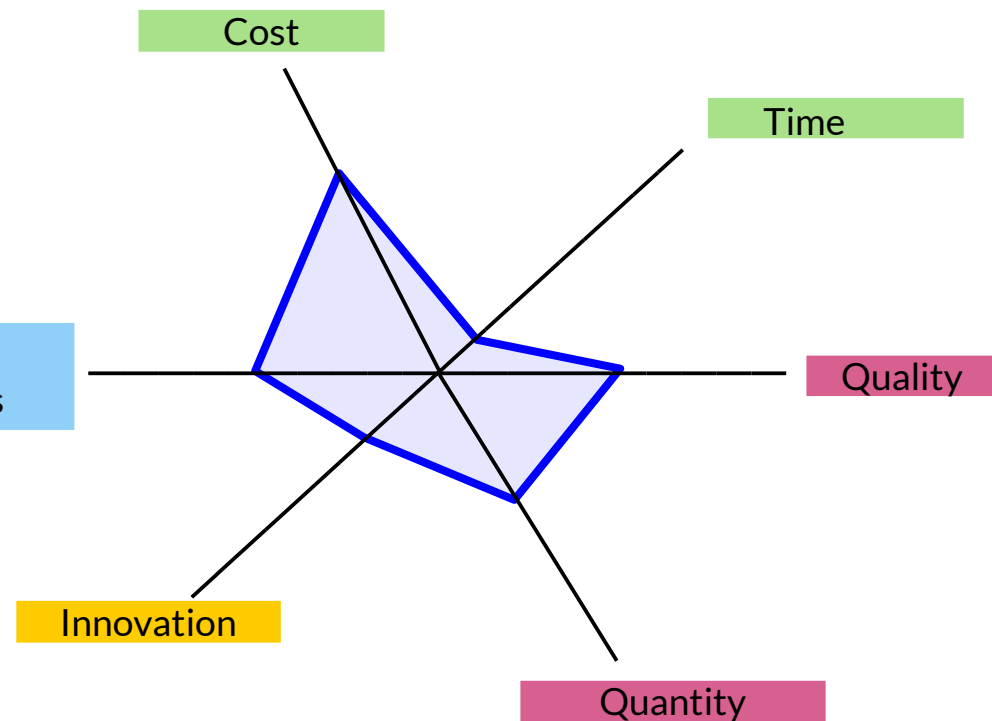
Ex.: Faltin's "Kopf schlägt Kapital"

▶ Faltin founded in 1997 the company "Teekampagne". Its **ultimate competitive advantage** is to reduce the product of price * quality (an efficiency product)

- Importing entire containers of fresh, high-quality Darjeeling (*one sort*) from India by ship

- Distributing very cheap by internet and mail in Germany in large packets of kilograms
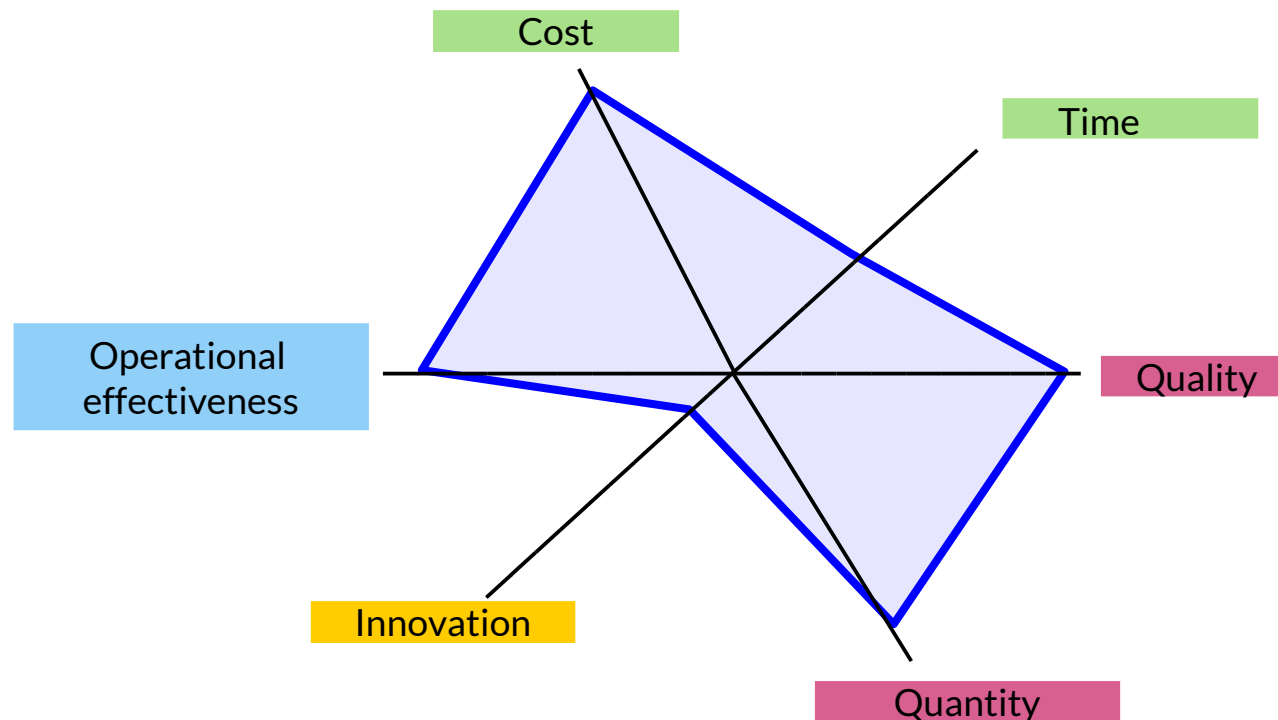
Competitive Advantage of a Feature

▶ http://en.wikipedia.org/wiki/Competitive_advantage

▶ In a market your company is not al one. Competition is strong. Therefore, you need to find a *competitive advantage* along one of the following *olympic* dimensions:

- Cost leadership
    - Time to delivery
- Feature Differenciation (uniqueness of feature)
    - Quality of product
    - Quantity of product
- Innovation
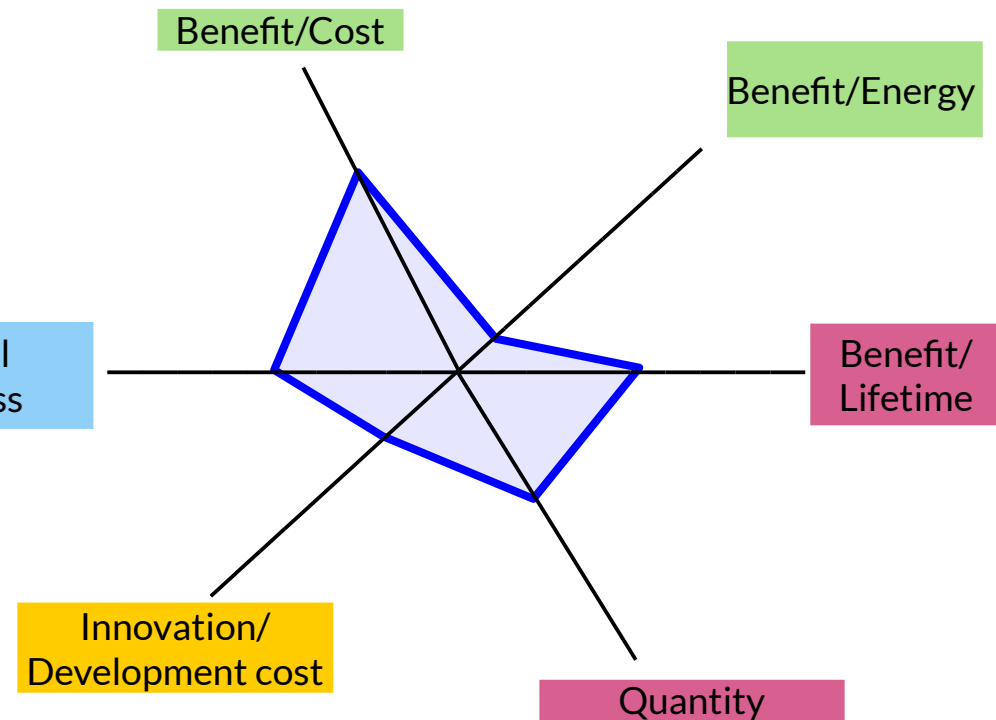- Operational effectiveness

Olympic advantage measures „higher, farer, faster" (cost *or* utility function).

Spider Diagrams (Kiviat Graphs) measure Olmpic advantages in Different Dimensions

▶ Spider diagrams visualize n-dimensional attribute analysis

Efficiency advantage measures „higher, farer, faster" over "cost" (cost–utility function / relation).

Ultimate Competitive Advantage (UCA) is about Beating the Competition by Factor 10

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

- ▶ A **moonshot (UCA)** is a feature that is 10 times better than that of the cojmpetitor

For **sales**, produce a pain killer, gain deliverer, and UCA.

Carlson-Wilmot NABC

Hook | Need | Approach/Solution | Benefit for Cost | Competition | Conclusion

Carlson-Wilmot Elevator Pitch

Domain Porting: Olive Oil

- http://www.artefakten.net/
- Founder: Conrad Bölicke
- Focussing on olive oil, with the same business model as Teekampagne

- http://www.zait.de
- Founder: Thomas Fuhlrott
- Olive oil products

What is a Good Pitch?

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

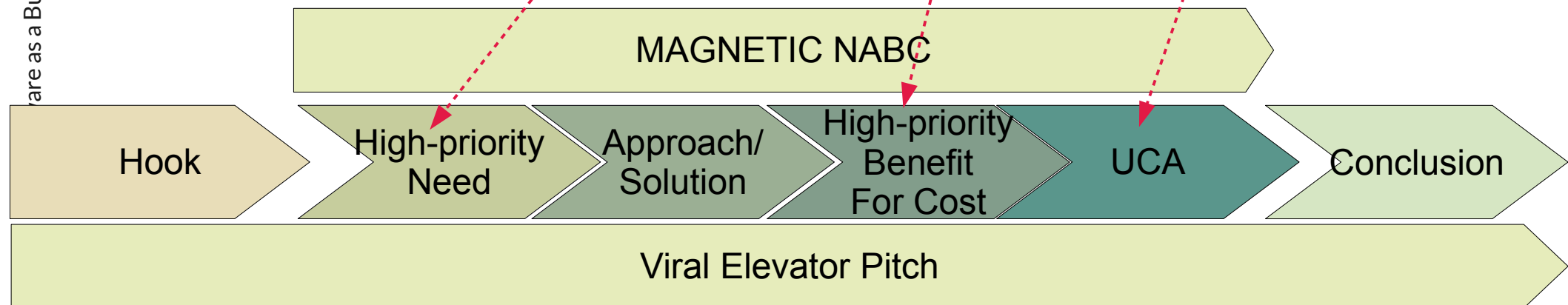▶ A **moonshot (UCA)** is a feature that is 10 times better than that of the cojmpetitor
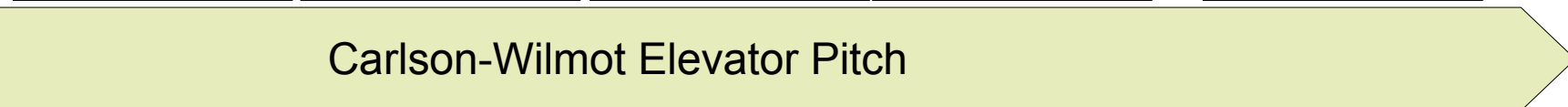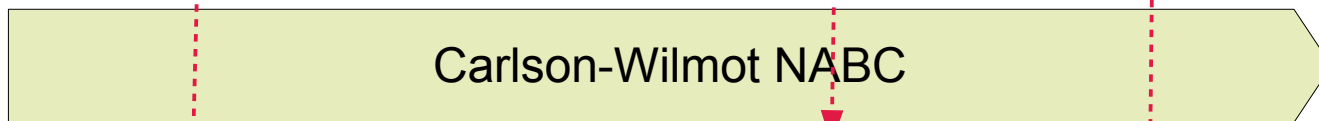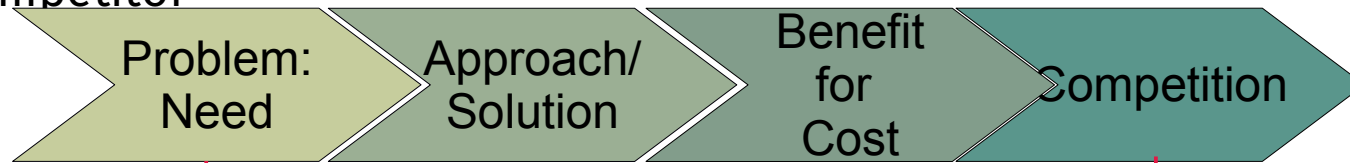
13.5.2. Stickiness and Virality of a Feature – The Influence of the Ultimate Competitive Advantage (UCA)

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

Virality with *magnetic-NABC*

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

For **virality**, increase the pain priority, gain priority, and UCA.

MAGNETIC NABC

Hook | High-priority Need | Approach/ Solution | High-priority Benefit For Cost | UCA | Conclusion

Viral Elevator Pitch

Pain-Gain-Stickiness as Pain/Gain Product

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

Pain priority

E-call in Car

e-Cigarette

Lipstick

Navigator

iPad

iPod

New tooth paste

Gain priority

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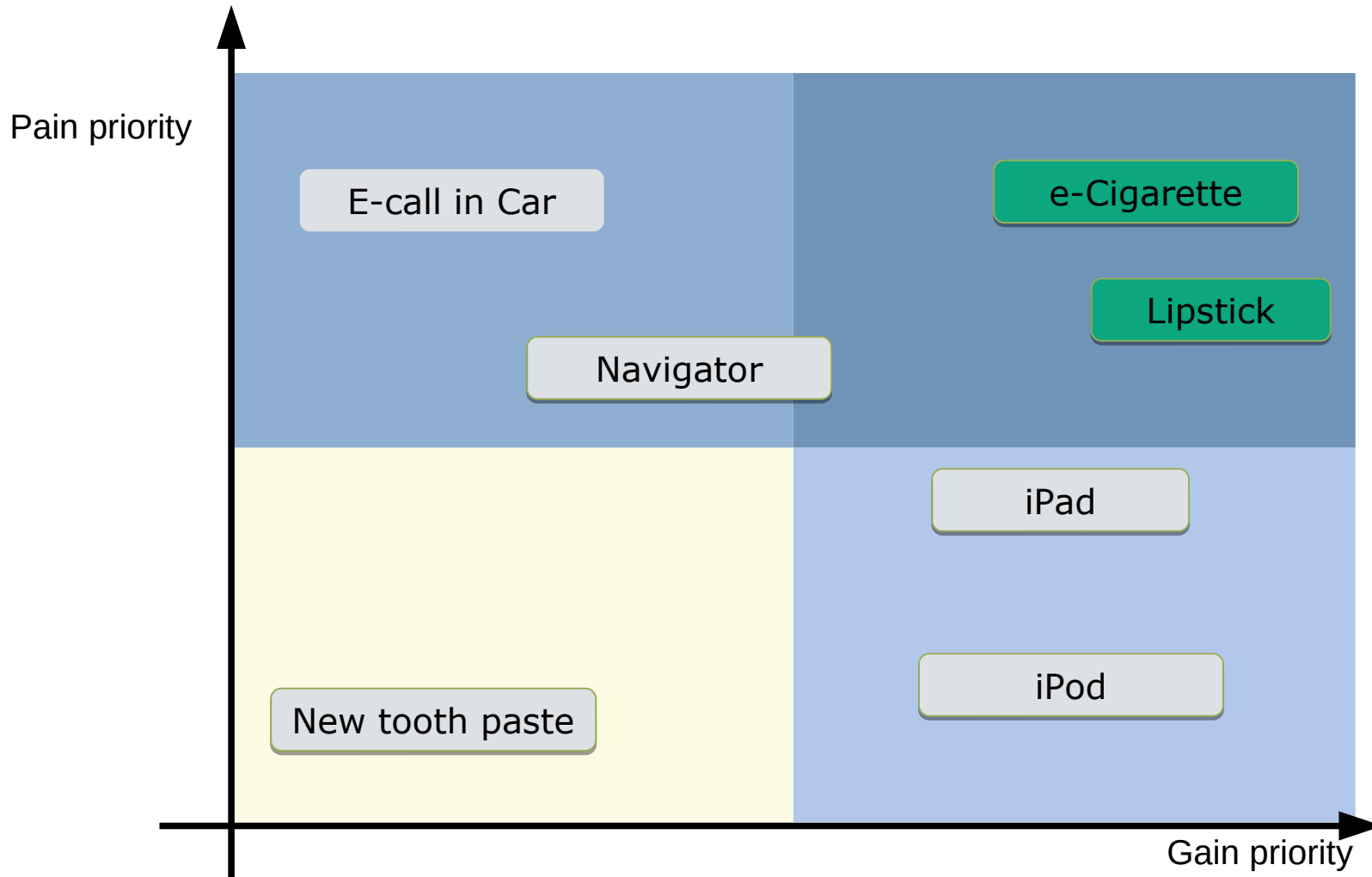
Pain-Gain-UCA-Virality

A *viral* product/service has high pain, high gain priority,
and high (ultimate) competitive advantage.
(visualized here with the size of green boxes)
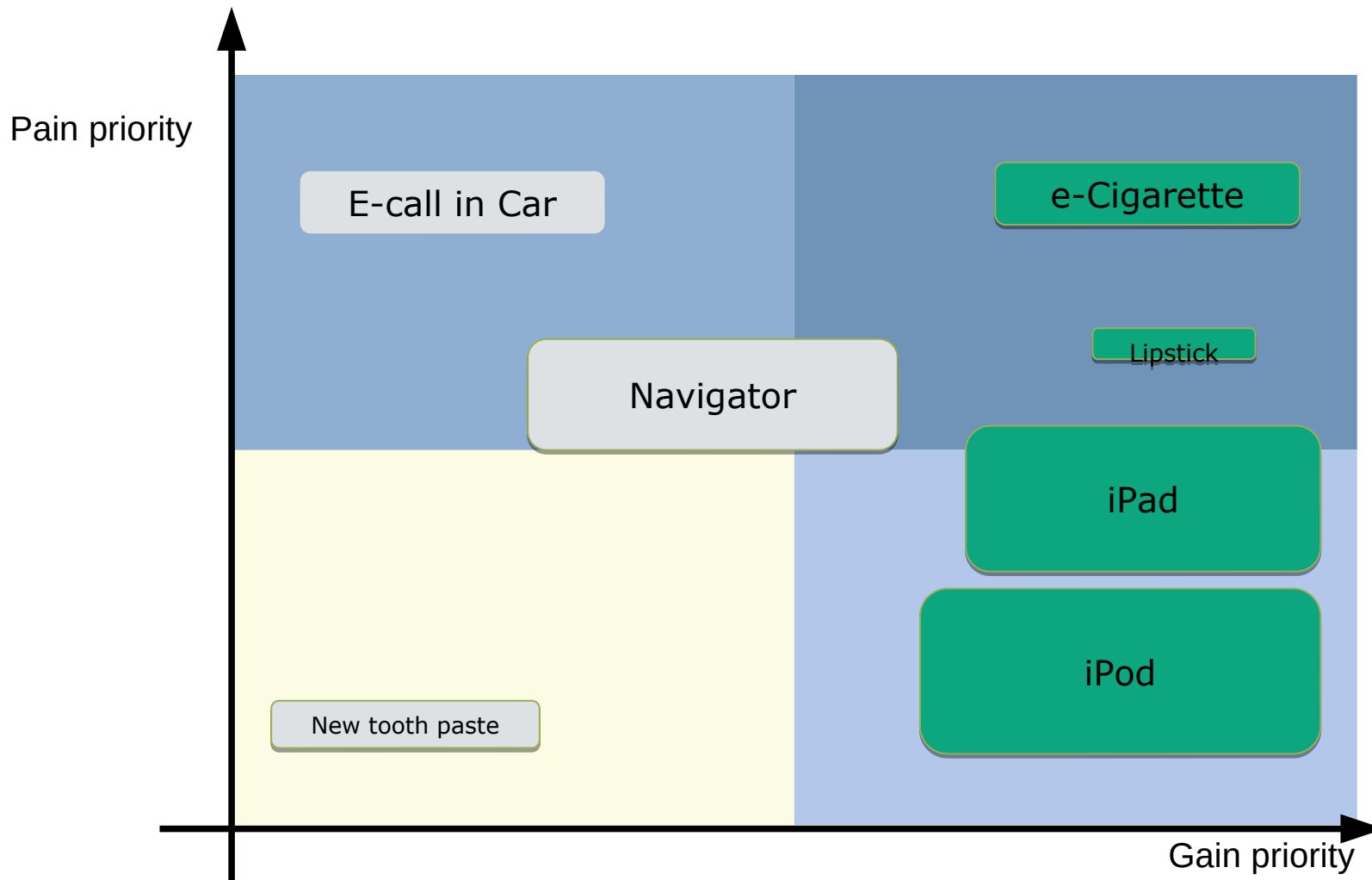
The "Lean Analytics" Stages and Their Metrics

- ▸ The Lean Analytics Stages are a simple stage system for product/service product-market fit.

- ▸ [LeanAnalytics] contains metrics for every stage
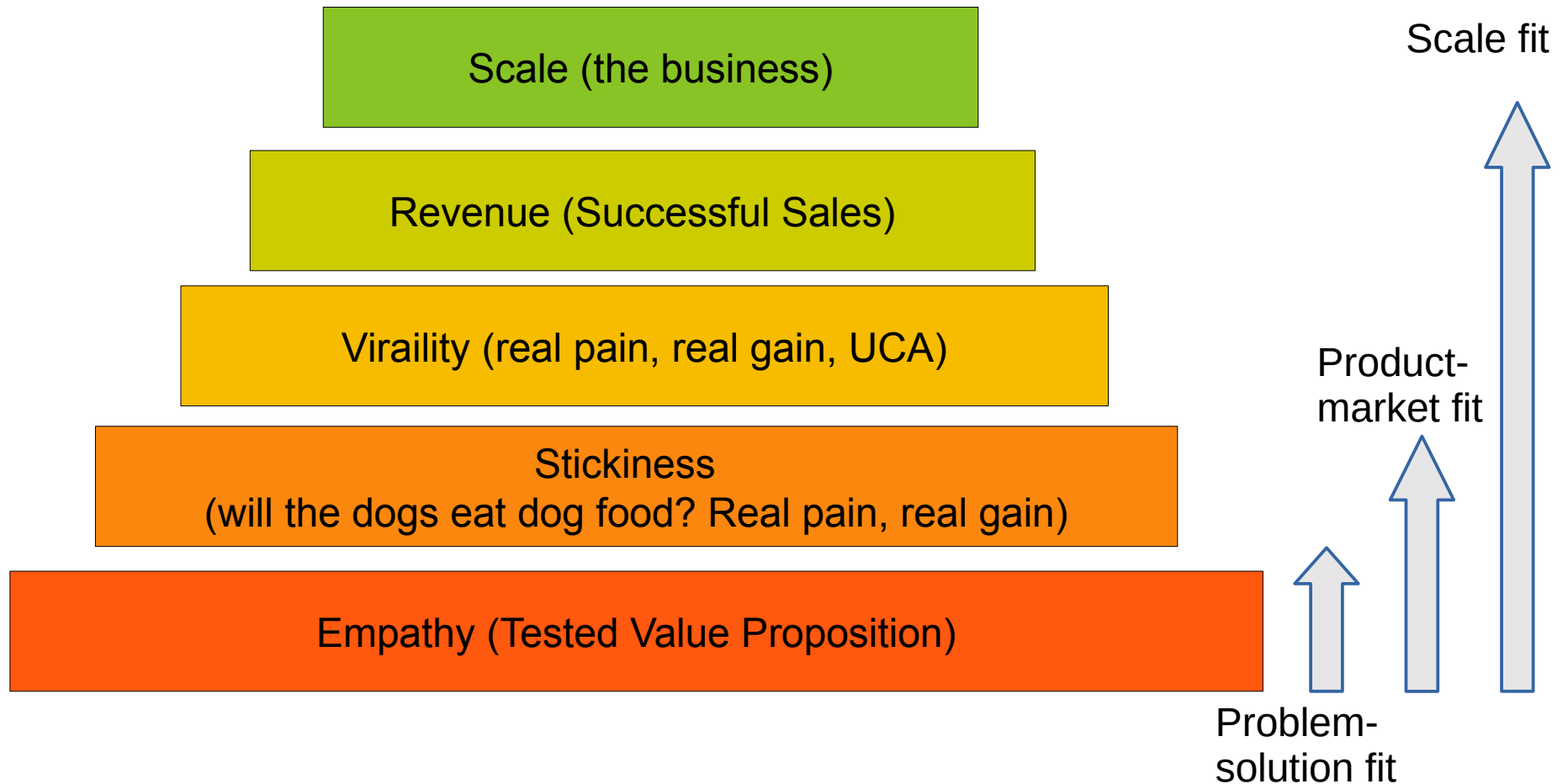
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Scale (the business)	Scale fit
Revenue (Successful Sales)	
Viraility (real pain, real gain, UCA)	Product-market fit
Stickiness (will the dogs eat dog food? Real pain, real gain)	
Empathy (Tested Value Proposition)	Problem-solution fit

The Pirate Metrics AARRR for Web Site Visits

Software as a Business, © Prof. Uwe Aßmann

- ▶ "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/

Referral
(does a visitor recommend your website)

Revenue
(does a visitor pay?)

Retention (stickiness)
(does a one-time visitor return?)

Activation
(which activities do they start on your website)

Acquisition
(how do customers know from you?

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

13.6. Competitive Positioning Canvas

COMPETITIVE POSITIONING CANVAS

Customer jobs-to-be-done	Rational decision factors		Emotional decision factors
Customers / Job(s) to be done	**Value**	**Costs**	
Needs and desires derived from customer jobs-to-be-done	**Must have & nice to have traits** • Features • Ease of use/ sophistication • Offerings quality • Configurability • Support service • Availability • Uniqueness • Customization	**Price & cost of access** • Cheapest • Value for money • Competitive price • Premium price • Perceived free goodies • Price transparency • Finding costs • Cost of access • Due diligence costs • Reputation/Brand value	• Personalization • Choice • Uniqueness • Fair price • Trust • Status • Popularity • Reputation

Value proposition / Offering

	Value	Costs	Emotional
Unique	• Capabilities • Technologies • Know-how and experience • Access to natural resources • Patents and intellectual property • Features • Novelty	• Pricing model • Bundling • Distribution network	• Perceived innovativeness • Access to customers • Distributors • Perceived offering status • Opinion leaders/influences
Superior	• Quality of offering • After-sales support • Skills of labor • Quality and quantity of natural resources • Quantity of features	• Price level • Search costs to find offerings • Due diligence costs	• Reputation/Brand value • User reviews • Trust factors • Offerings shelf size
Indifferent	• Easily replicable traits • Traits with a competitive disadvantage • Functions required to get the job done but not explicitly valued by customers	• Easily replicable traits • Traits with a competitive disadvantage • Functions required to get the job done without explicit customer price sensitivity	• Easily replicable trains • Traits with a competitive disadvantage • Must have functional requirements without any emotional importance/relevance

innovate.d
Shaping the future

Emotional vs. Rational Aspects

▶   https://www.innovate-d.com/insight-101/

▶   Emotional aspects play an important role for differenciation

▶   How do you increase the emotional aspect?

▶   CPC can be filled to support an NABC canvas (detailing the fields Benefit4Cost and Competition)

  ▪   Use it for your MVV pitch!

The End

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- ▶ 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?