Business Modelling / Enterprise Modelling Minutestry of Applied Sciences Business Modelling

- Organization
- Customer
- Value Exchange





Prof. Dr. Ralf Laue Westsächsische Hochschule Zwickau Ralf.Laue@fh-zwickau.de

Westsächsische Hochschule Zwickau Business Modelling / Enterprise Modelling

Modelling



Organization

Westsächsische Hochschule Zwickau University of Applied Sciences



Organization

Customer

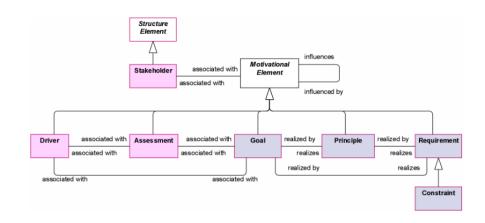
Value Exchange

Columns in the Zachman Framework:

Inventory Sets -What **Process Flows -How** Distribution Networks -Where Responsibility Assignments - Who Timing Cycles -When **Motivation Intentions -Why**

| | What | How | Where | Who | When | Why |
|-------------|-------|-----|-------------------|-------|----------|-----|
| Contextual | | | | | | |
| Conceptual | -\phi | -ф- | 200 | £ . | 1 July 1 | * |
| Logical | ₽¶. | -ф- | ලංලි | 99 | J. | *** |
| Physical | 11 | A | <u>a</u> <u>a</u> | 6-6-6 | J. | |
| As Built | | | | | | |
| Functioning | 4 | 4 | 4 | 4 | 4 | 4 |

Business Application Technology Passive structure Behavior Active structure



source: ArchiMate 2.0 Specification, Copyright by The Open Group

Organization

Westsächsische Hochschule Zwickau
University of Applied Sciences





Westsächsische Hochschule Zwickau
University of Applied Sciences



Inventory Sets -What

Process Flows -How

Distribution Networks -Where Responsibility Assignments -Who Timing Cycles -When Motivation Intentions -Why





 $SBVR^{\mathsf{TM}}$



7

Process Flows -How
Distribution Networks -Where
Responsibility Assignments -V

source: ArchiMate 2.0 Specification, Copyright by The Open Group

Responsibility Assignments -Who

Timing Cycles -When

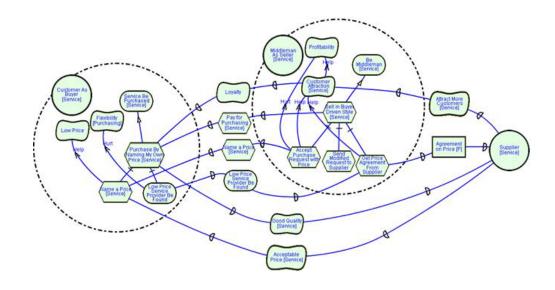
Inventory Sets -What

Motivation Intentions -Why

BMM

Business Modelling

- Organization
- Customer
- Value Exchange



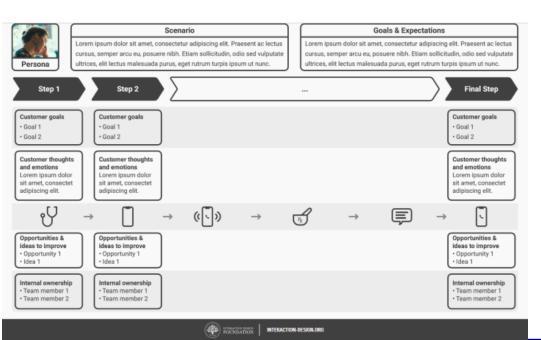
Westsächsische Hochschule Zwickau **Customer - Customer Journey Map** University of Applied Sciences

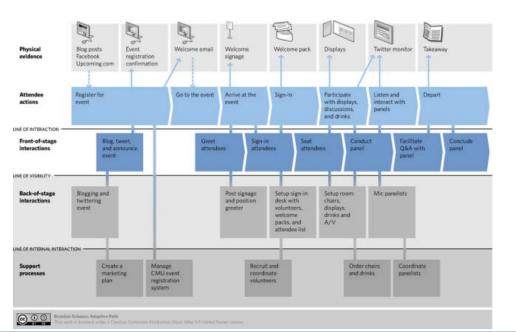


source: http://istar.rwth-aachen.de/tiki-index.php?page=iStarQuickGuide, Copyright by its authors

Customer Goal Model (i*)

Westsächsische Hochschule Zwickau University of Applied Sciences

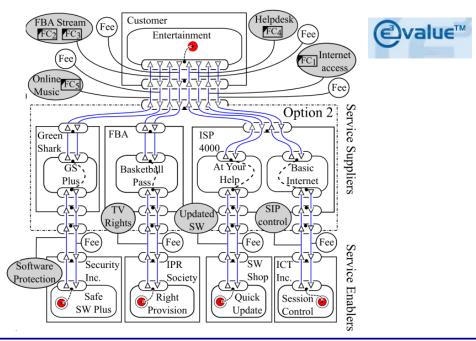




Business Modelling

- Organization
- Customer
- Value Exchange

Value Exchange



source: Razo-Zapata et al: e 3 service: A Critical Reflection and Future Research, DOI: 10.1007/s12599-014-0360-2, Copyright by its authors 14

Value Delivery Modeling Language

Westsächsische Hochschule Zwickau

University of Applied Sciences

u es

Activity Diagram

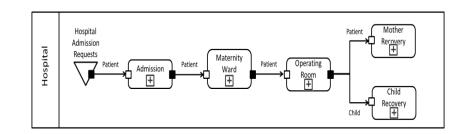
Westsächsische Hochschule Zwickau
University of Applied Sciences



VDML Value Delivery

Modeling Language

"The purpose of VDML is to provide a standard modeling language for analysis and design of the operation of an enterprise with particular focus on the creation and exchange of value."

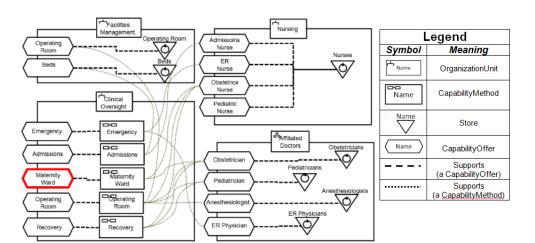


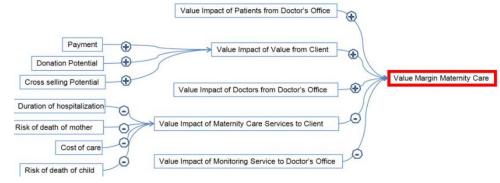
Westsächsische Hochschule Zwickau **Capability Management Diagram**



Measurement Dependency Diagram

source: Value Delivery Modeling Language 1.1 Specification, Copyright by ist authors





source: Value Delivery Modeling Language 1.1 Specification, Copyright by ist authors

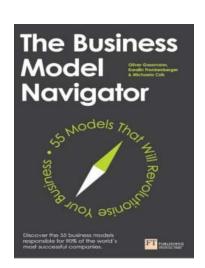
Westsächsische Hochschule Zwickau University of Applied Sciences

19

Westsächsische Hochschule Zwickau University of Applied Sciences







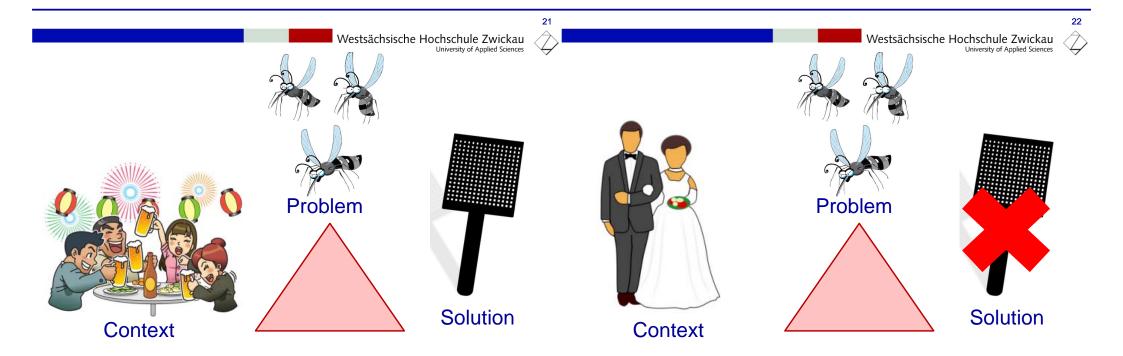
"A pattern language is nothing more than a precise way of describing someone's experience"

Christopher Alexander

Definition by Alexander

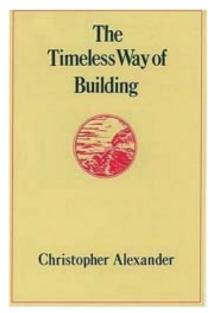
Each pattern is a three-part rule, which expresses a relation between a certain context, a problem, and a solution.

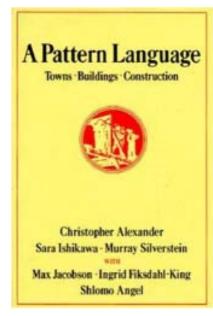
- in short: a solution for recurrent problems
- abstract, i.e. suitable for a class of specific problems



Benefits of Patterns

- Conservation of Knowledge: Solutions can be re-used again and again.
- Experience can be shared with inexperienced persons.
- Shared Vocabulary





25

Westsächsische Hochschule Zwickau
University of Applied Sciences





Now PATHS AND GOALS (120): Usually, this pattern deals with large paths in a neighborhood, and comes much earlier in a language. But I used it in a special way. It says that the paths which naturally get formed by people's walking, on the land, should be preserved and intensified. Since the path to our front door cut right across the corner of the place where I had planned to put the platform, I cut the corner of the platform off.





The actual path.



People liked our book very much. We were surprised though, when we found out computer programmers liked it, because it was about building not programming. But the programmers said, "this is great, it helps think about patterns in programming and how to write reusable code that we can call upon when we need it."





source: http://www.patternlanguage.com, Copyright by its authors

Pattern Template

Westsächsische Hochschule Zwickau
University of Applied Sciences



31

Westsächsische Hochschule Zwickau
University of Applied Sciences



Pattern Name

Context

Problem

Forces

Solution

Consequences

Known Uses

Related Patterns

Christopher Alexander

Pattern Name and Classification

Intent

Also Known As

Motivation

Applicablity

Structure

Participants

Collaborations

Consequences

Implementation

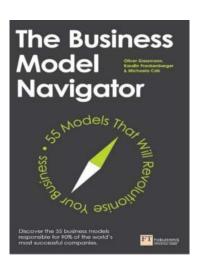
Sample Code

Known Uses

Related Patterns

Gang of Four





A business model describes the rationale of how an organization creates, delivers, and captures value.

Osterwalder, A./Pigneur, Y.: Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers, 2010

- **Business Model Patterns**
 - Quality Selling, Manufacturer, Layer Player, Flatrate
 - Low-Price Shopping
- **Business Model Improvement Patterns**
 - Today's topic
- **Business Process Modelling Patterns**
 - · See bpmpatterns.org

Westsächsische Hochschule Zwickau



International Journal of Innovation Management Vol. 21, No. 1 (January 2017) 1750004 (61 pages) © World Scientific Publishing Europe Ltd.

DOI: 10.1142/S1363919617500049

Business Model



THE BUSINESS MODEL PATTERN DATABASE — A TOOL FOR SYSTEMATIC BUSINESS MODEL INNOVATION

GERRIT REMANE*, ANDRE HANELT[†], JAN F. TESCH[‡] and LUTZ M. KOLBE§

University of Göttingen, Chair of Information Management, Platz der Göttingen Sieben 5, 37073 Göttingen, Germany *gremane@uni-goettingen.de †ahanelt@uni-goettingen.de †jtesch@uni-goettingen.de §lkolbe@uni-goettingen.de

Published 16 June 2016

182 business model patterns

| Westsächsische Hochschule Zwickau University of Applied Sciences | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-------------------------|----------------------|------------------|----------------|---|----------|-----------|-------|-----------------------|---------------|----------------------------|---------|---------------|-----------------------------------|---------|-----------------|------------------------------|-------------------------------|----------------------------|-----------------------|-------------------------------|---------------------|---------------|-------------|----------------------------------|-------------------------------|---------|------------------------------|
| | | | Prototypical pattern | Solution pattern | Purely digital | Digitally enabled Not necessarily digital | Physical | Financial | Human | Intellectual property | Hybrid | Product type not specified | Quality | Customization | Combination Access/convenience | Price | Network effects | No impact on differentiation | Specific new customer segment | Lock-in existing customers | Other companies (B2B) | No impact on target customers | Brand and marketing | Sales channel | Sales model | Customer relationship management | No impact on delivery process | Make | Buy No impact on sourcing |
| ٦F | | Solution provider | X | | | Σ | | | | | X | \Box | П | 1 | X | Π | | | | | | Х | | | | | Х | \Box | X |
| Ш | | Razors/blades | | Χ | | Σ | | Ш | | | _ | Х | _ | \perp | \perp | X | ┖ | | | | | Χ | | | | \perp | Χ | \perp | X |
| Ш | | Disintermediation | | Х | | Σ | | Ш | | | \rightarrow | Х | \perp | \perp | \perp | \perp | | Х | | | \Box | Х | | | Х | \Box | _ | \perp | X |
| ⅃Ĺ | | From push-to-pull | L | Х | | Σ | | | | | | Х | | | | | | Х | | | | Х | | | | | Х | X | \perp |
| l W | eill et al. | [Physical] manufacturer | X | | | λ | X | | | | Т | П | Т | Т | Т | Т | П | X | | | | Х | | | | П | X | X | Т |
| (20 | (2005) | Contractor | X | | | λ | | П | Х | | \neg | \exists | \neg | \neg | \top | \top | Т | Х | | | \Box | Х | | | | \neg | X | \neg | X |
| Ш | | Entrepreneur | X | | | λ | | Х | П | П | \neg | \exists | ┪ | \neg | \top | Τ | Т | Х | П | | | Х | | | | \neg | Х | X | Т |
| Ш | | Financial broker | X | | | Σ | | Х | П | | \neg | \exists | \neg | \neg | \top | Т | Х | П | | | | Χ | | | | \Box | X | \neg | Х |
| Ш | | Financial landlord | X | | | Σ | | Х | П | | \neg | ╗ | \neg | \neg | \top | Т | Г | Х | | | | Χ | | | | \Box | X | \neg | Х |
| Ш | | Financial trader | X | | | λ | | X | | | | T | | | | Т | | Х | | | | Х | | | | | X | 2 | ζ. |
| II | HR broker | X | | | λ | | | X | | | П | | | | П | X | | | | | Х | | | | | X | | X | |
| Ш | | Infomediary | X | | X | | Т | | | Χ | | П | \neg | \neg | | Т | Х | | | | | Χ | | | | | X | | Х |
| Ш | | Inventor | X | | | X | Т | | | X | \Box | П | \neg | \top | | П | | X | | | | Х | | | | | X | X | Т |
| Ш | | IP trader | X | | X | | Τ | | | X | | | | | | Τ | | Х | | | | Χ | | | | | X | 2 | ζ. |
| Ш | | Licensing | X | | , | X | | | | X | | | | | | Τ | | X | | | | Χ | | | | | X | | Х |
| Ш | | Physical broker | X | | | λ | X | | | | | I | | | | L | X | | | | | Х | | | | | Х | | Х |
| Ш | | Physical landlord | X | | | Σ | X | | | | | | | | | I^- | | Х | | | | Χ | | | | | X | | Х |
| П | | [Physical] wholesaler | X | | | Σ | X | | | | Т | T | Т | Т | Т | | | Х | | | | Χ | | | | П | X | - 2 | < |



Business model configurations: a five-V framework to map out potential innovation routes

492

Received 13 October 2015 Revised 13 January 2016 Accepted 5 July 2016

Yariv Taran

Department of Business and Management, Aalborg University, Aalborg, Denmark

Christian Nielsen

Department of Business and Management, Business Model Design Center, Aalborg University, Aalborg, Denmark

Marco Montemari

Department of Management, School of Economics "G. Fuà", Università Politecnica delle Marche, Ancona, Italy

Peter Thomsen

Department of Business and Management, Business Model Design Center, Aalborg University, Aalborg, Denmark, and

Francesco Paolone
Department of Law, Parthenope University of Naples, Naples, Italy

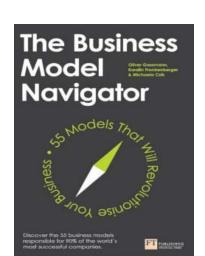
Business Model Patterns

- Quality Selling, Manufacturer, Layer Player, Flatrate
- Low-Price Shopping
- Business Model Improvement Patterns
 - Today's topic
- Business Process Modelling Patterns
 - See bpmpatterns.org

71 business model configurations, categorization

Westsächsische Hochschule Zwickau

University of Applied Sciences



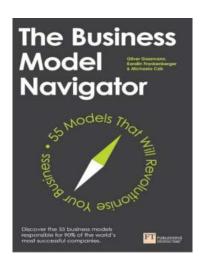
Mestsächsische Hochschule Zwicken What do you offer to the customer? What? Value proposition Who? Value Profit mechanism chain Why does the How is the value Why? How? proposition business model generate profit? created? Who is your target customer (segment)?

"Innovating a business model means changing at least two of those dimensions."



- \Diamond
- Challenge No. 1: Thinking outside of one's own dominant industry logic
- Challenge No. 2: Difficulty of thinking in terms of business models rather than of technologies and products
- Challenge No. 3: The lack of systematic tools





Navigation

Westsächsische Hochschule Zwickau
University of Applied Sciences



Navigation

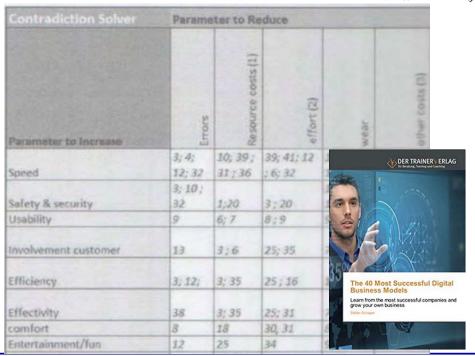


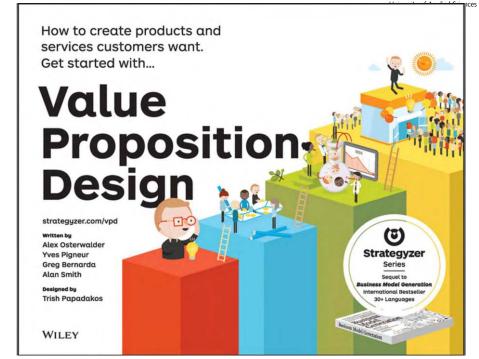


- The similarity principle starts inside and moves outside; that is to say you begin with pattern cards for business models in related industries and progress to more dissimilar patterns, which you then adapt to your own business model.
- Unlike the similarity principle, which involves a careful search for new business models in related fields, the confrontation principle specifically wants to face off with extremes, that is to say you compare your current business model with scenarios in completely unrelated industries, and study the extremes in respect of their potential impact on your own current business model.







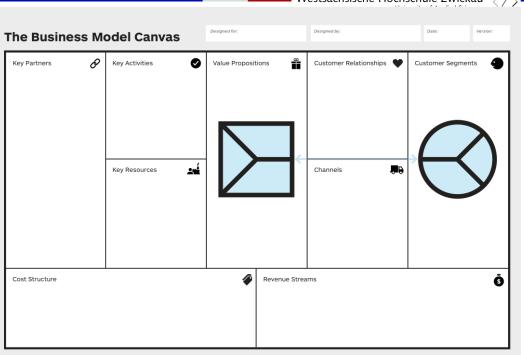


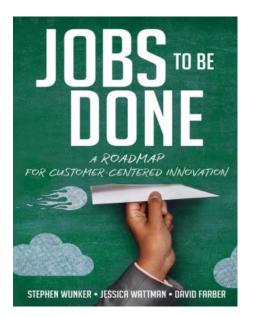
source: Schaper-The 40 Most Successful Digital Business Models, Copyright by its author

Westsächsische Hochschule Zwickau

Westsächsische Hochschule Zwickau







The Customer (Segment) Profile describes

and detailed way. It breaks the customer

a specific customer segment in your

business model in α more structured

down into its jobs, pains, and gains.

what customers are truing

to get done in their work and

in their lives, as expressed in their own words.

You achieve Fit when your value map meets your customer profile—when your products and services produce pain relievers and gain creators that match one or more of the jobs, pains, and gains that are

important to your customer





source: Osterwalder et al: Value Proposition Design, Copyright by its authors

risks, and obstacles related to customer jobs.

Gains describe the outcomes

customers want to achieve or

the concrete benefits they are

Westsächsische Hochschule Zwickau

University of Applied Sciences

49

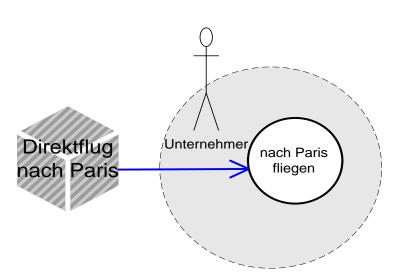
51

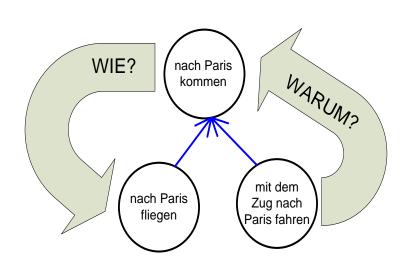
source: Osterwalder et al: Value Proposition Design, Copyright by its authors

Westsächsische Hochschule Zwickau

University of Applied Sciences

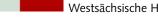




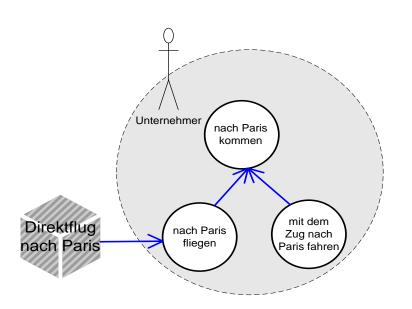


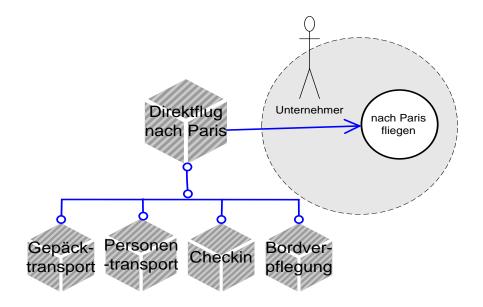
Westsächsische Hochschule Zwickau

University of Applied Sciences









Westsächsische Hochschule Zwickau University of Applied Sciences Messe besuchen Unternehmei in Paris zum Messe nach Paris Unterkunft gelände Unterkunft kommen gelangen gelangen mit dem Direktflug nach Paris Zug nach nach Paris fliegen Paris fahren

Guided Questions

53

55

Customer: Typical additional requirements

Product: Who needs the same function?

Process: Who needs the same abilities?

 Information: Who can benefit from what we know? Who knows (first) what we are interested in?

Until noted otherwise (by a Copyright remark in the footer), the slides in this presentation are licensed under a <u>Creative</u> Commons-Attribution-Share Alike License 4.0.

- You are free to Share (copy and redistribute the material in any medium or format), Adapt (remix, transform, and build upon the material for any purpose, even commercially)
- You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- Share Alike (If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.)