

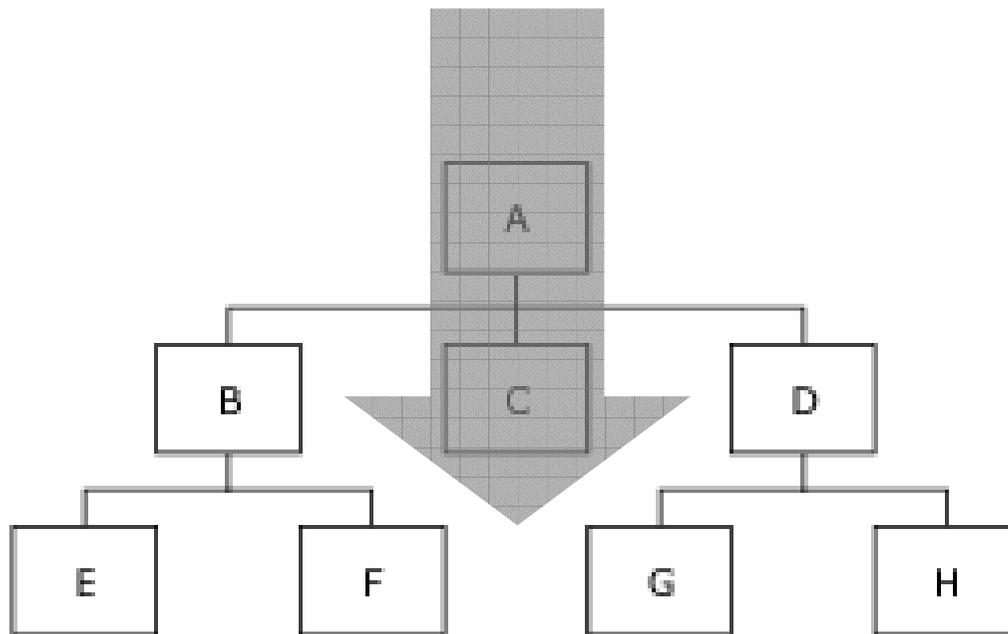
# Mental Model

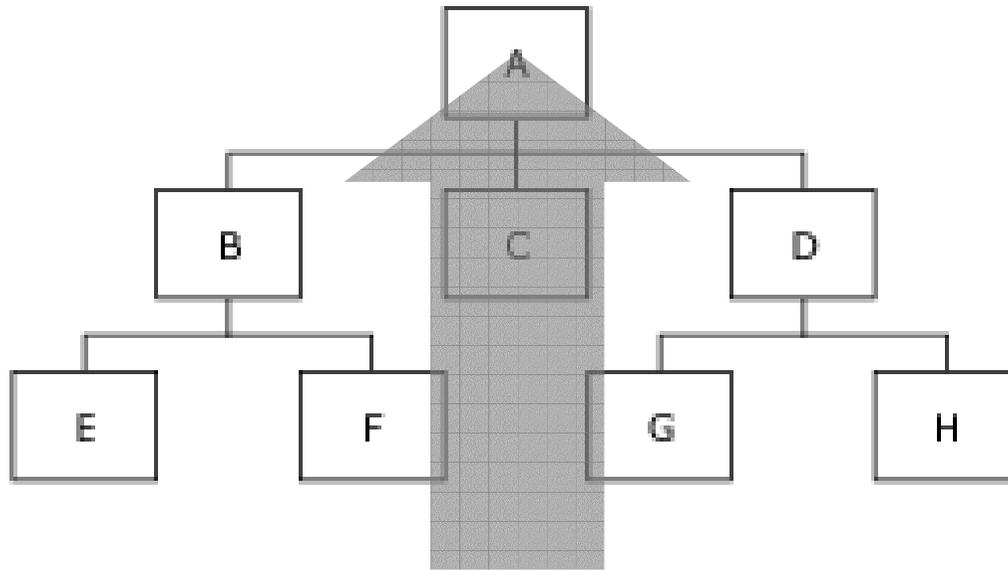
Basis für eine nachhaltige  
Informationsarchitektur

NetFlow - Karen Lindemann

**Wie meistens vorgegangen  
wird...**

# Top-down

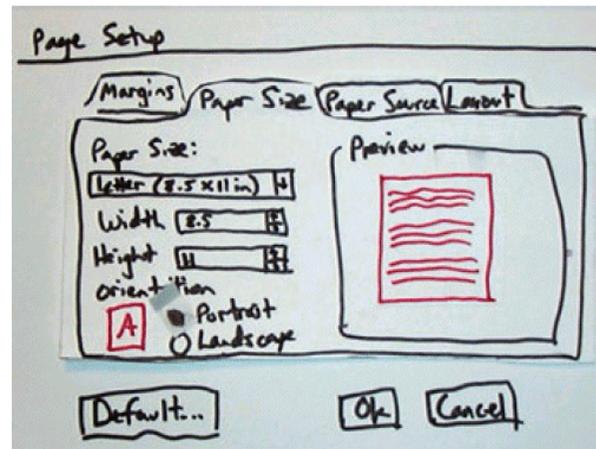
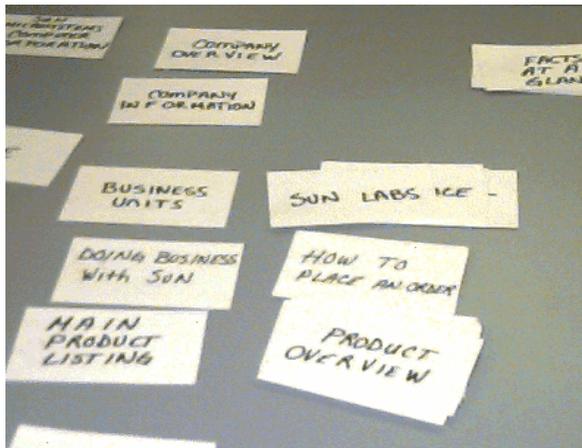


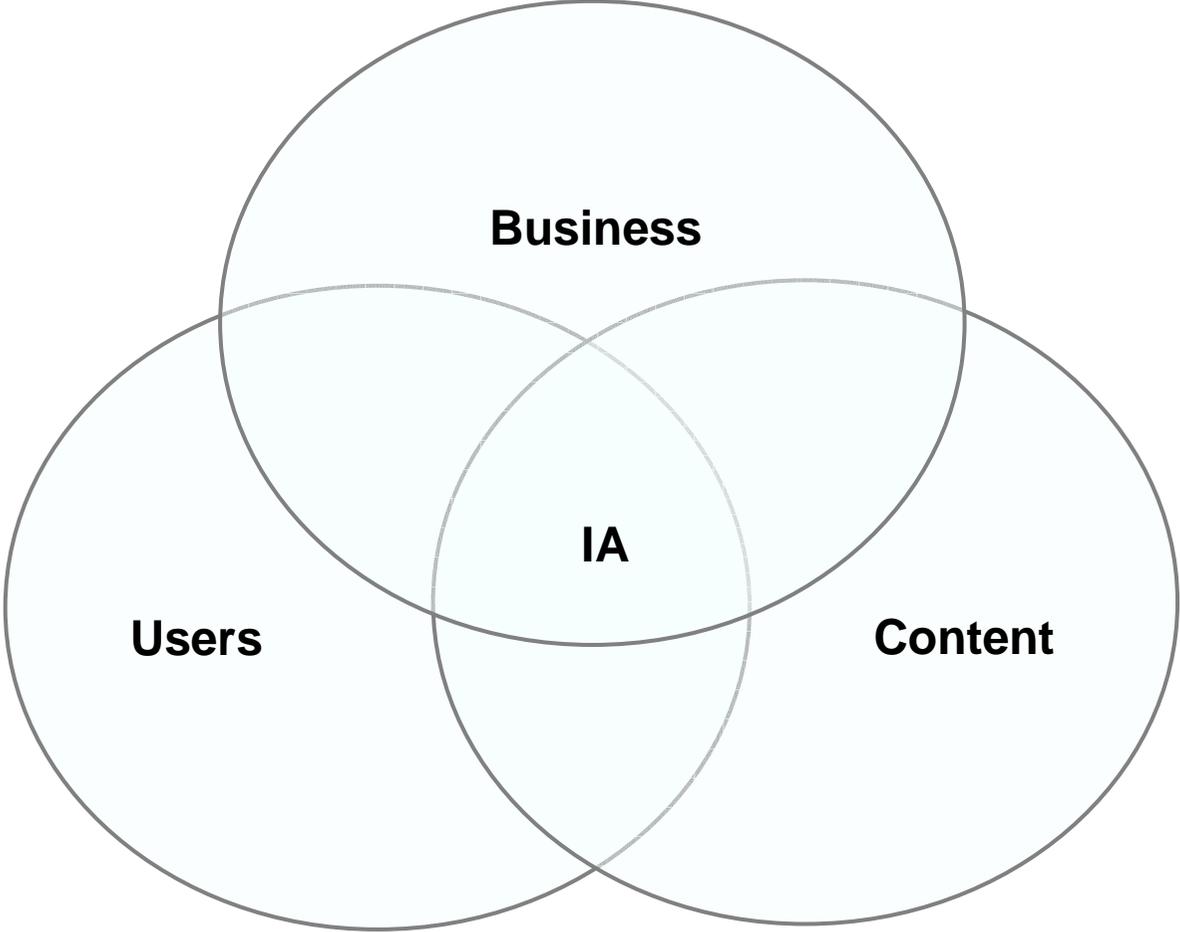


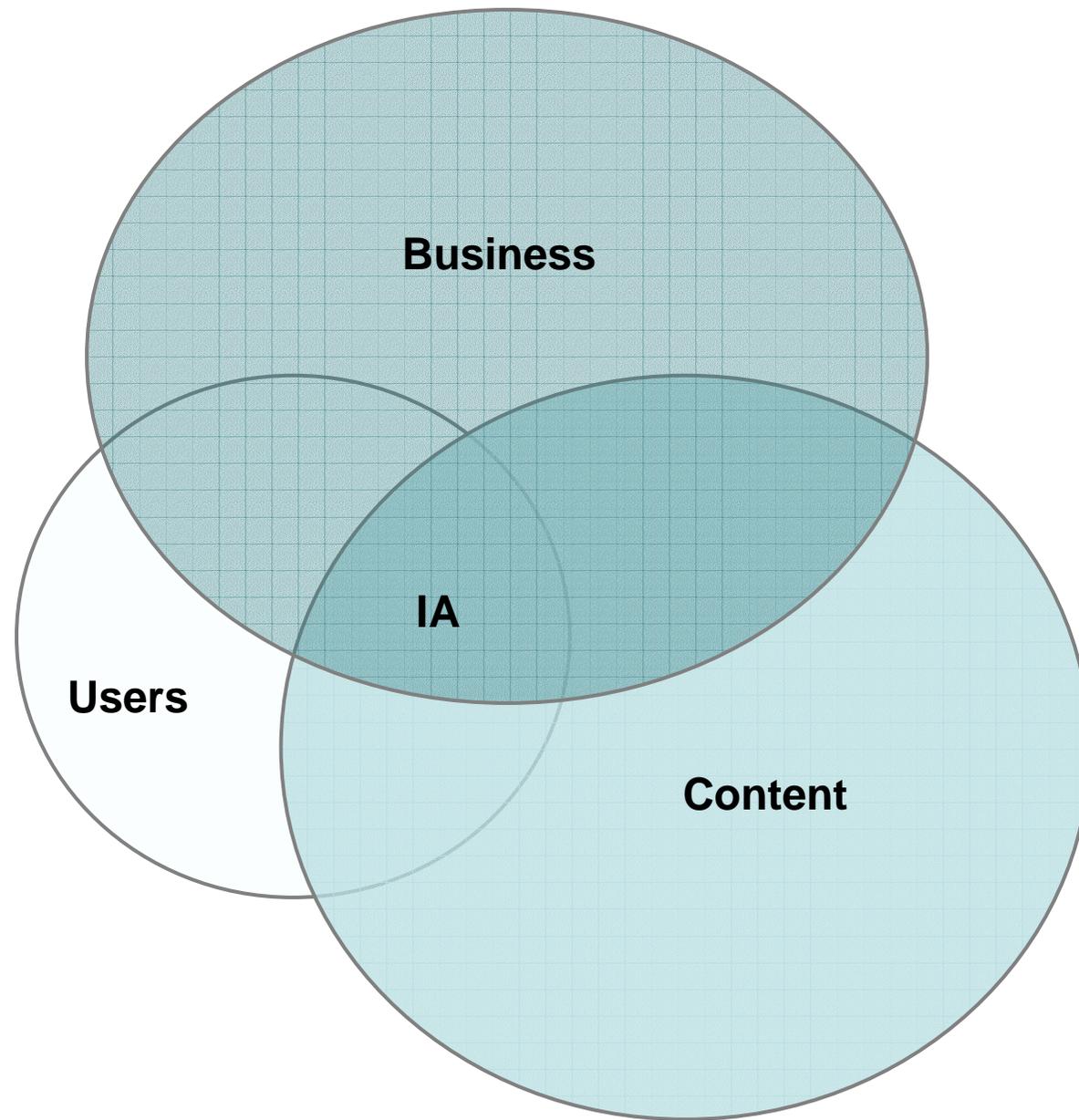
# Bottom-up

# Evaluation

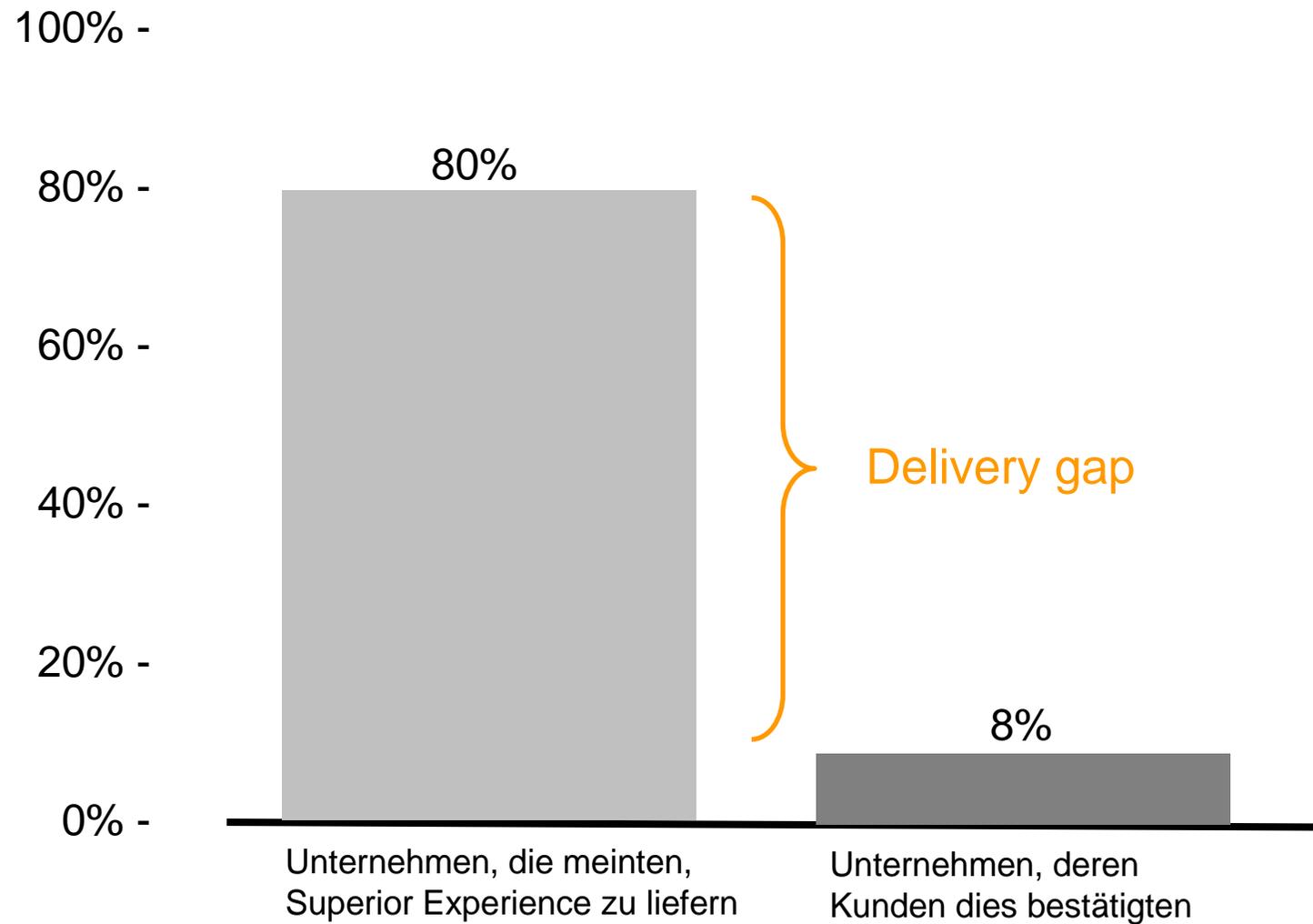
- Card-Sorting
- Rapid Prototyping
- Usability-Test







# „The problem is that everybody thinks they're customer focused.“ (James Allen)



Quelle: Bain Customer-Led Growth diagnostic questionnaire, 2005

	Methoden	Anwendung
<b>Generativ</b> Mentales Modell, Gefühle, Motivationen	Tiefeninterviews Ethnographische Studien Contextual Inquiry Mental Model Tagebuch Studie	Innovation Designstrategie Gap-Analyse Konzeption Informationsarchitektur
<b>Evaluativ</b> Verhalten und Erwartungen	Rapid Prototyping Usability-Test Cardsorting Webanalytic A/B Testing	Testung und Optimierung von: - Interaktionsdesign - Prozessen - Informationsarchitektur - Content
<b>Präferenz</b> Meinungen, Vorlieben, Wünsche	Fragebogen Fokusgruppe Moodboard Voice of the Customer	Testung von: - Marketingmaßnahmen - Produktdesign - Marktanalyse

Dies ist nur ein Ausschnitt der möglichen Methoden sowie Anwendungsfälle.

# Mental Model

# Mental Model

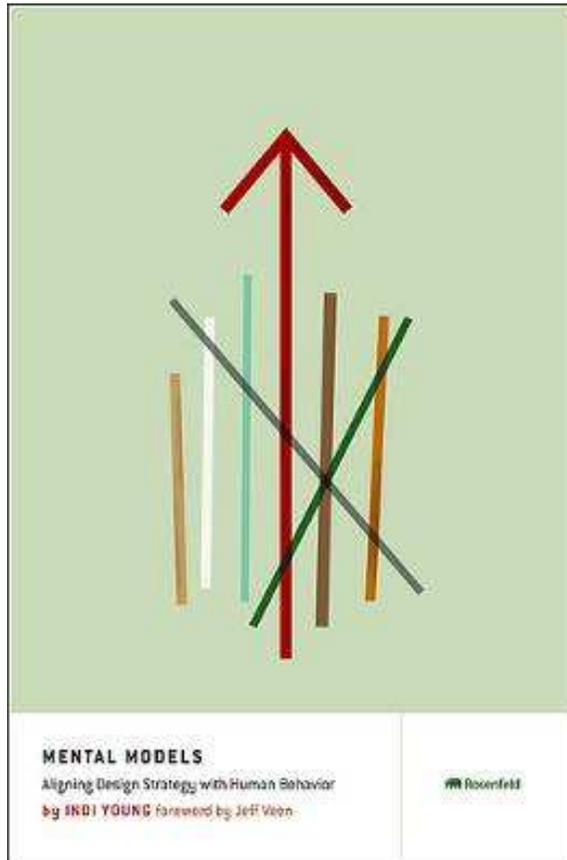
„If the organism carries a **‘small-scale model’ of external reality and of its own possible actions within its head**, it is able to try out various alternatives, conclude which is the best of them, react to future situations before they arise, utilize the knowledge of the past events in dealing with the present and the future, and in every day to react in a much fuller, safer, and more competent manner to the emergencies which face it.“



Kenneth Craik

(Craik, *The Nature of Explanation*, 1943, p. 61)

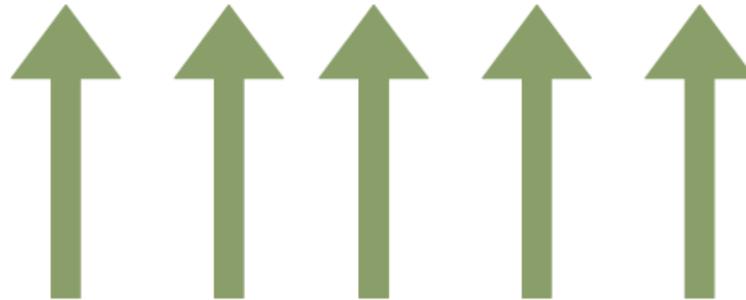
# „Mental Models – Aligning Design Strategy with Human Behavior“ von Indi Young (2008, Rosenfeld Media)



[http://www.amazon.com/Indi-Young/e/B001JP01C2/ref=ntt\\_athr\\_dp\\_pel\\_pop\\_1](http://www.amazon.com/Indi-Young/e/B001JP01C2/ref=ntt_athr_dp_pel_pop_1)

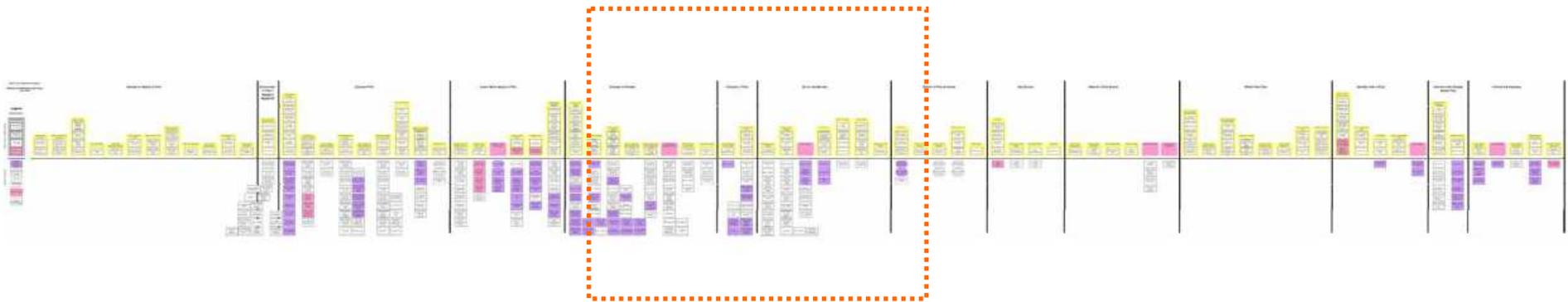
# Mental Model

Underlying reasons that drive people's behavior



Ways you support people with your product

# Mental Model „Movie goer“





# **1. Stakeholder-Interviews und Rekrutierung**

# 1. Step

- Stakeholder Interviews
- Festlegung des Scopes
- Segmentierung der Zielgruppe, hypothetische Personas
- Screener
- Rekrutierung

## Original Moviegoer Segments

- Social Moviegoer (loves company at theater)
- Movie Buff (make sacrifice to get good seats)
- Big Fan (gets the models and action figures)
- Film Purist (wants pure experience of the film)
- Make Believe Artist (wants to be in the story)
- Facilitator (takes someone else to movie of their choice)

## **2. User Interviews**

## 6 Regeln fürs Interview

1. Verhalten, Philosophien, Emotionen – keine Präferenzen
2. Nur offene Fragen
3. Keine „eigenen“ Begriffe vorgeben
4. Dem Gesprächsfluss folgen
5. Nicht über Produkte, Tools
6. Spezifische Erlebnisse

# 3. Combing

## Transcript ID# 104

[Tell me about the movies you see.] I'll go see anything. That's not totally true. I won't go see anything. I have preferences, but they're all over the map. I like independent movies and the cheesy teen movies, and I always wanted to write a screen play. It would be a teen movie based on Moby Dick. I'm very excited about it. That would be hilarious. I'll go see summer blockbusters. Going to see movies is very much about setting expectations ahead of time before you see it. [How?] Going into a movie, you set the bar for what you think it will be. It puts me in contrast to Peter who decides whether the movie lives up to the high bar he set. As a result he never sees cheesy teen cheerleader movies. I will go see them and not expect anything, and some of them are brilliantly structured or well written. I don't enjoy being constantly disappointed. [What do you mean by structure?] I was a film student in college and studied screen writing. There is a standard way to do roll out a Hollywood movie. It's a baseline for what a movie can be. A summer blockbuster is like paint by numbers. You know what's going to happen in the first 30 minutes and the next 60 minutes. You know how the movie is going to be. To me, it is creative when they turn it on its head and have unexpected moments, good writing, good character development, things that aren't obvious. Summer blockbusters are obvious. There is an old joke by William Goldman (who was a famous screenwriter in early 80's) was, the problem with Hollywood was that they always want to explain everything. He'd be sitting in a meeting after seeing the dailies and it would be a western with all these buffalo going over this big cliff, with big noise and thundering feet and some manager will say, "Hey can we add a voice-over that says, 'Here come the buffalo?'" I prefer when they don't do that, but it's okay. I get ideas out of a bad experience. [What do you get?] Ideas about what not to do. Part of the fun of watching movies is thinking about construction, creative process, how

# Atomic Tasks

1. Verhalten, Philosophien, Gefühle
2. Verb (1. Pers. Sing.) + Nomen
3. Granularität – The Hallway Test



[http://commons.wikimedia.org/wiki/File:Hallway,\\_Palacio\\_Real,\\_Madrid\\_2.jpg](http://commons.wikimedia.org/wiki/File:Hallway,_Palacio_Real,_Madrid_2.jpg)

Atomic Task	ID	Quote
Buy Tickets in Advance to Ensure I Get In	105	We will buy in advance (over the internet ... for movies we expect big crowds for, like a new release
Choose Later Screening to Get Good Seats	105	We prefer not to go because it's too crowded. You can't choose your seat or you have to get there early to choose your seat.
Avoid Waiting in Line to Get in the Theater	105	It's extra hassle standing around waiting for them to let you into the movie theater.
Watch a Film to Relax	105	we want it to be as easy an experience as possible ... don't have to think about any part of the experience ... just go and relax.

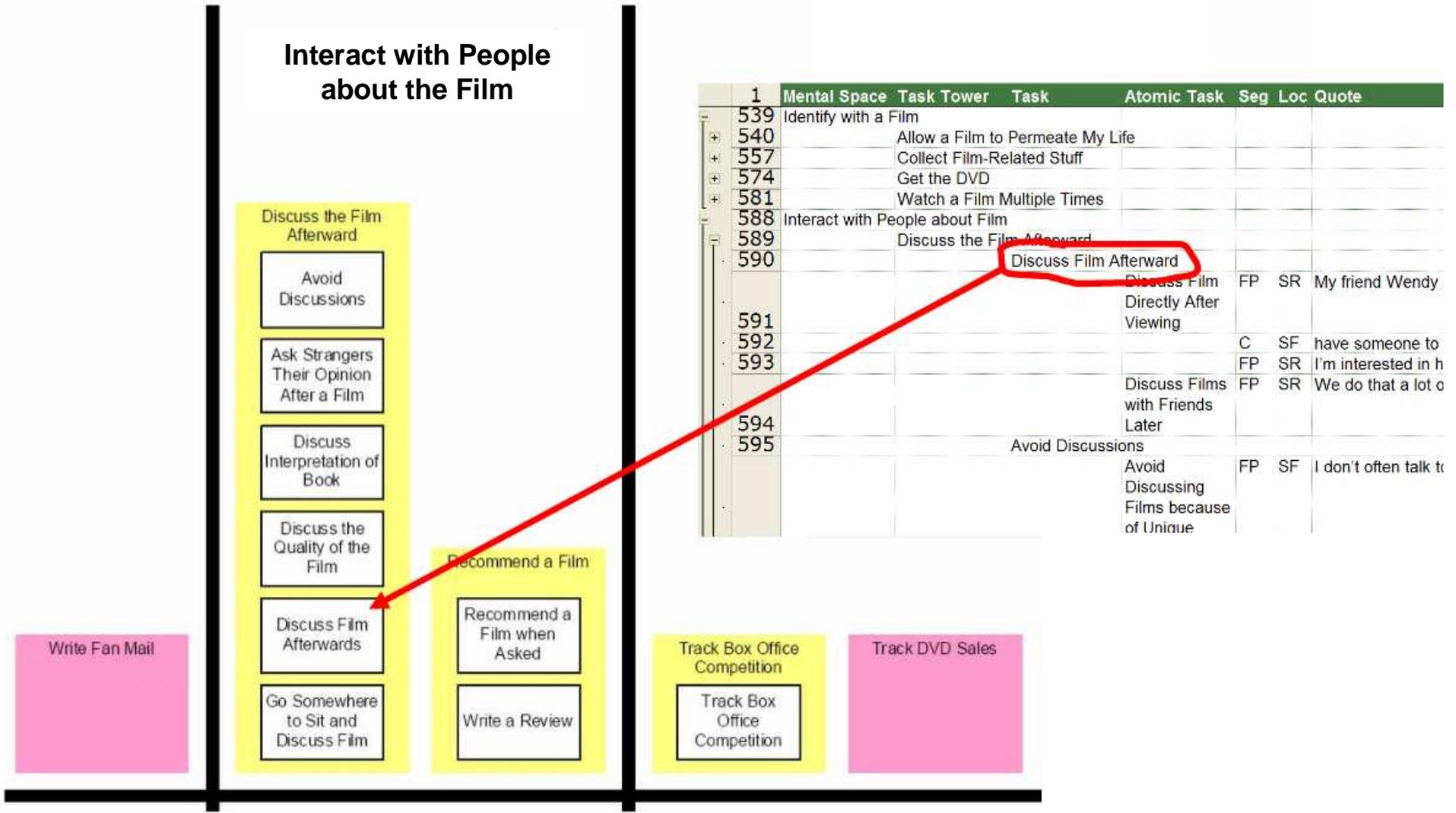
# 4. Analyse und Pattern

## Discuss Film Afterward

Atomic Task	ID	Quote
Discuss Film Right After Seeing It	105	My friend really likes talking about the movie, so we'll end up talking.
	110	I like to have someone to talk with afterwards. What we like or dislike, whether it was good or not.
	113	They'll have a comment. I'm interested in hearing it after.
Discuss Film with Friends Later	103	We do that a lot over lunch. We'll talk about movies we have seen over the weekend.

1	Mental Space	Task Tower	Task	Atomic Task	Seg	Loc	Quote
-	539		Identify with a Film				
+	540		Allow a Film to Permeate My Life				
+	557		Collect Film-Related Stuff				
+	574		Get the DVD				
+	581		Watch a Film Multiple Times				
-	588		Interact with People about Film				
-	589		Discuss the Film Afterward				
.	590		Discuss Film Afterward				
.	591			Discuss Film Directly After Viewing	FP	SR	My friend Wendy really like
.	592				C	SF	have someone to talk with ;
.	593				FP	SR	I'm interested in hearing it a
.	594			Discuss Films with Friends Later	FP	SR	We do that a lot over lunch
.	595		Avoid Discussions				
.				Avoid Discussing Films because of Unique	FP	SF	I don't often talk to other pe

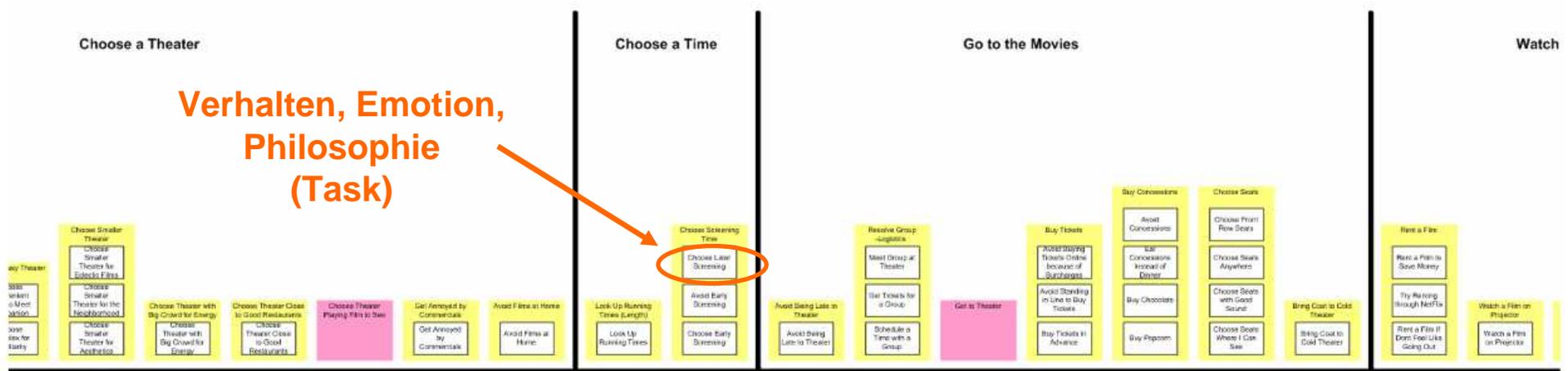
## Interact with People about the Film



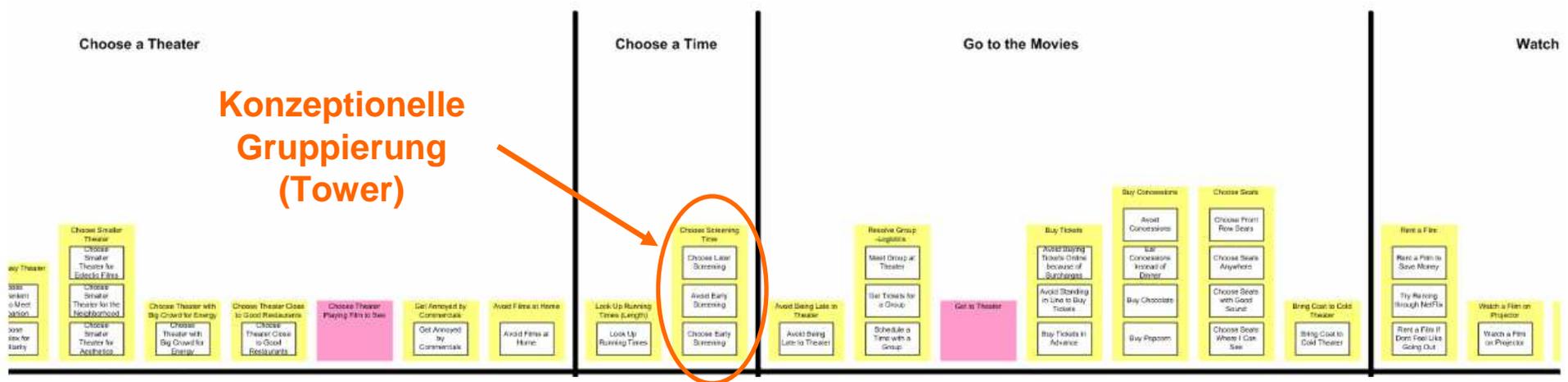


# **5. Content-Model und Fertigstellung des Diagramms**

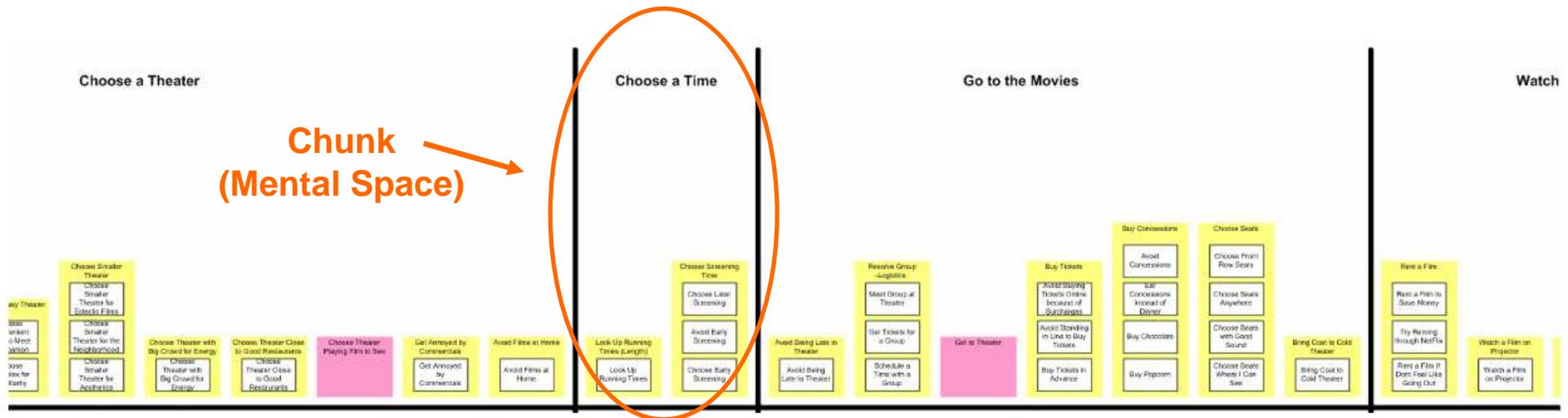
# Obere Hälfte des Mental Models



# Obere Hälfte des Mental Models

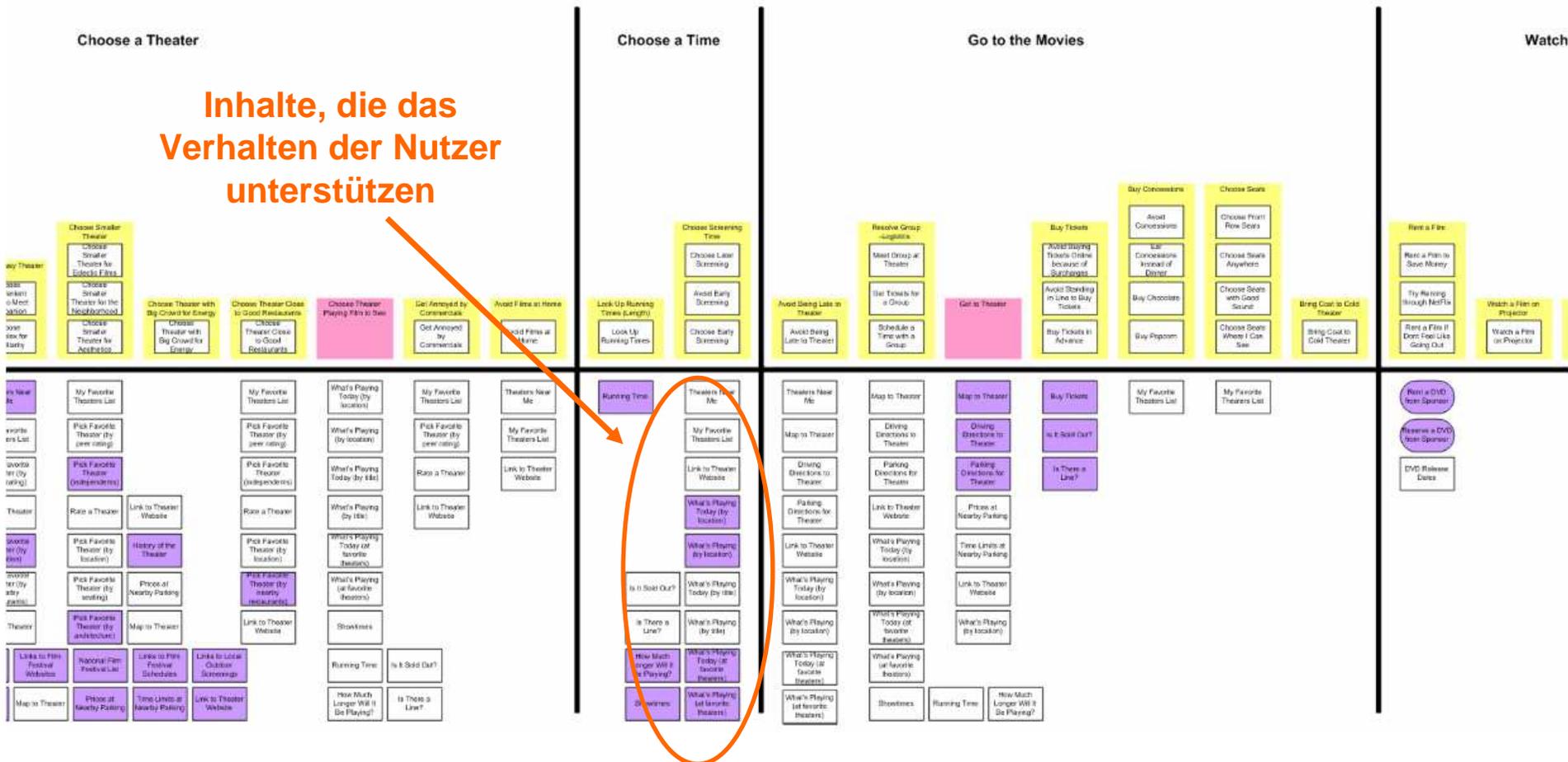


# Obere Hälfte des Mental Models

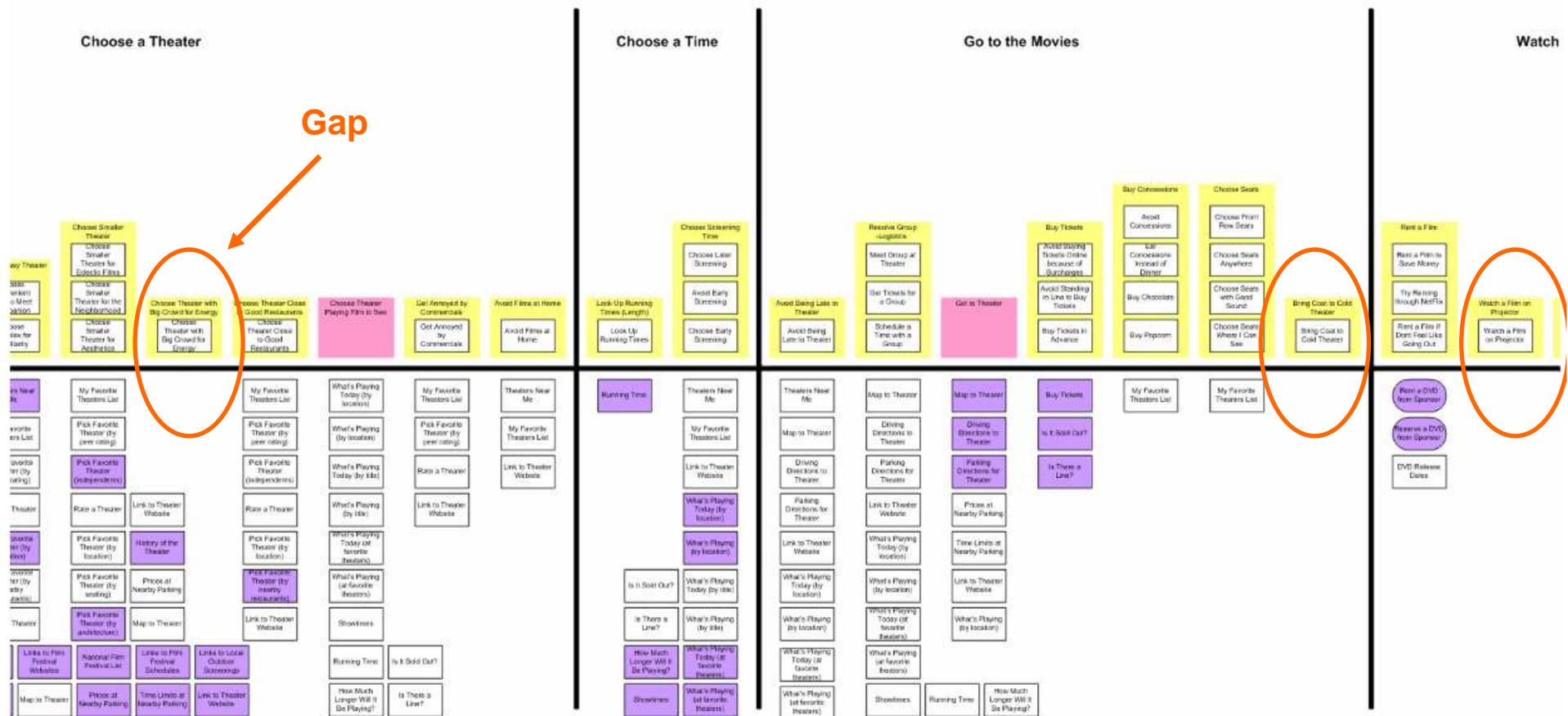




# Vollständiges Model



# Analyse des Mental Models



<http://www.slideshare.net/indi/innovation-with-mental-models>



# 5. Informationsarchitektur

Kategorie 1

Kategorie 2

Kategorie 3

Mental  
Space 1

Mental  
Space 2

Mental  
Space 3

Mental  
Space n

Tower 1

Tower 2

Tower 3

Tower 4

Tower n

Task 2

Task 4

Task 6

Task 8

Task 10

Task 1

Task 3

Task 5

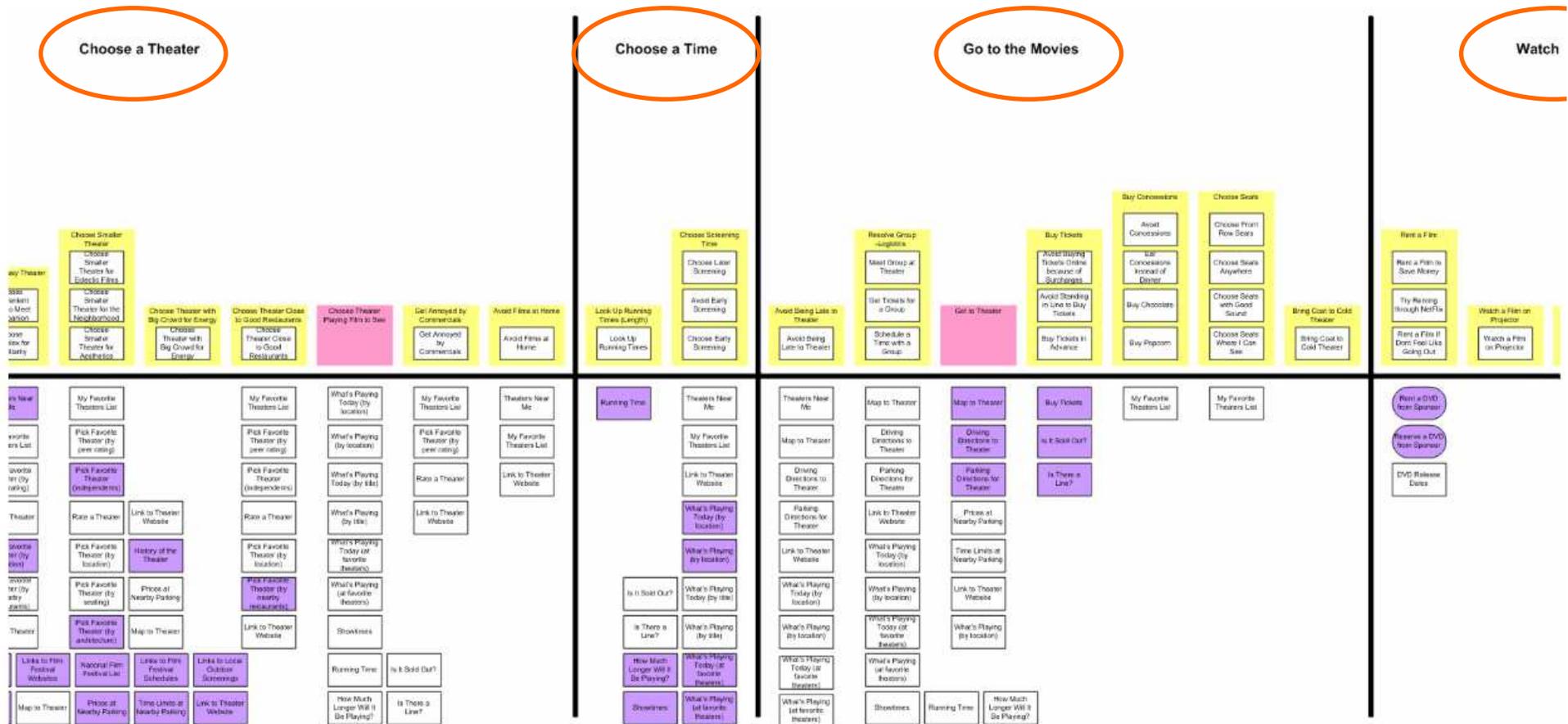
Task 7

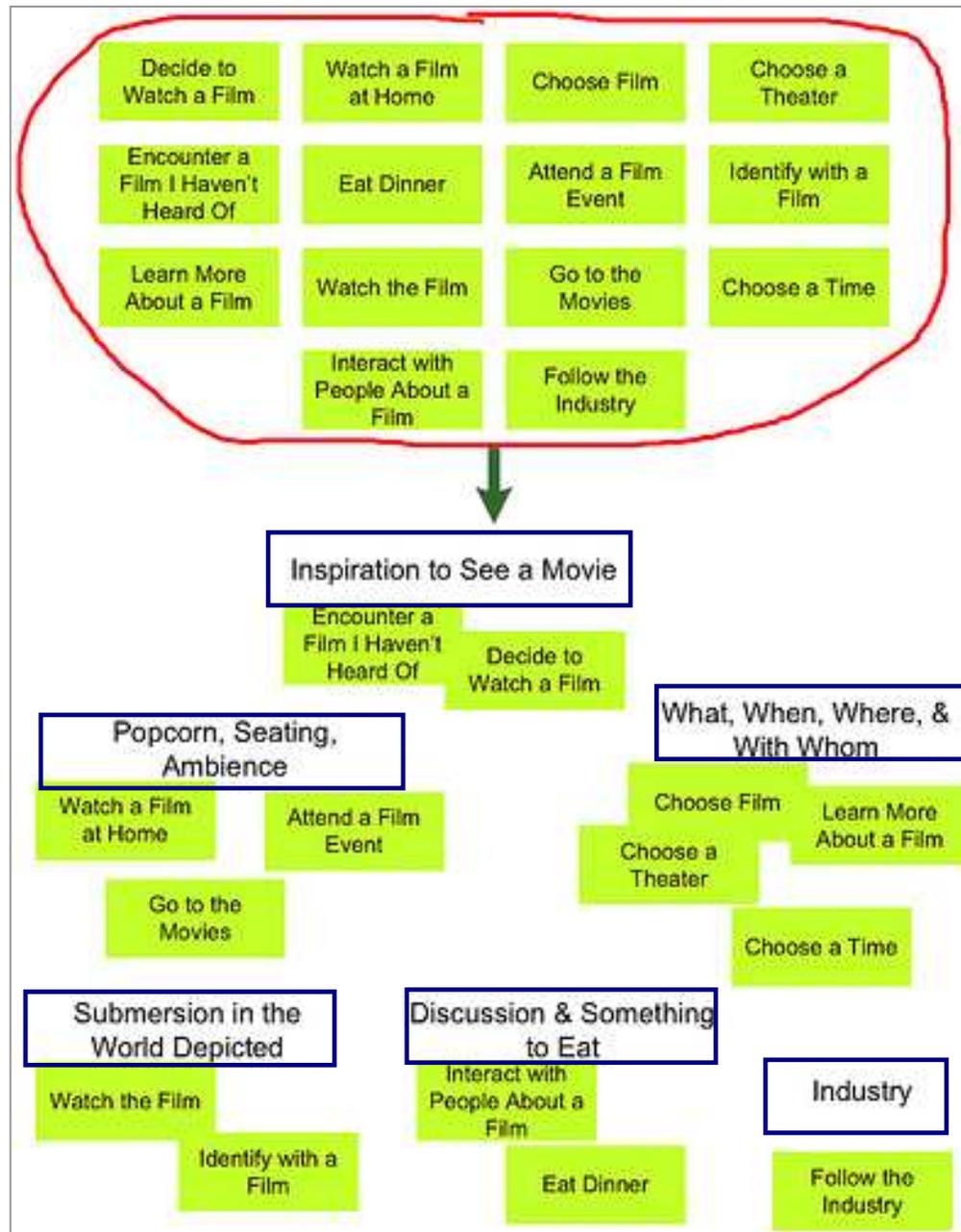
Task 9

Task n

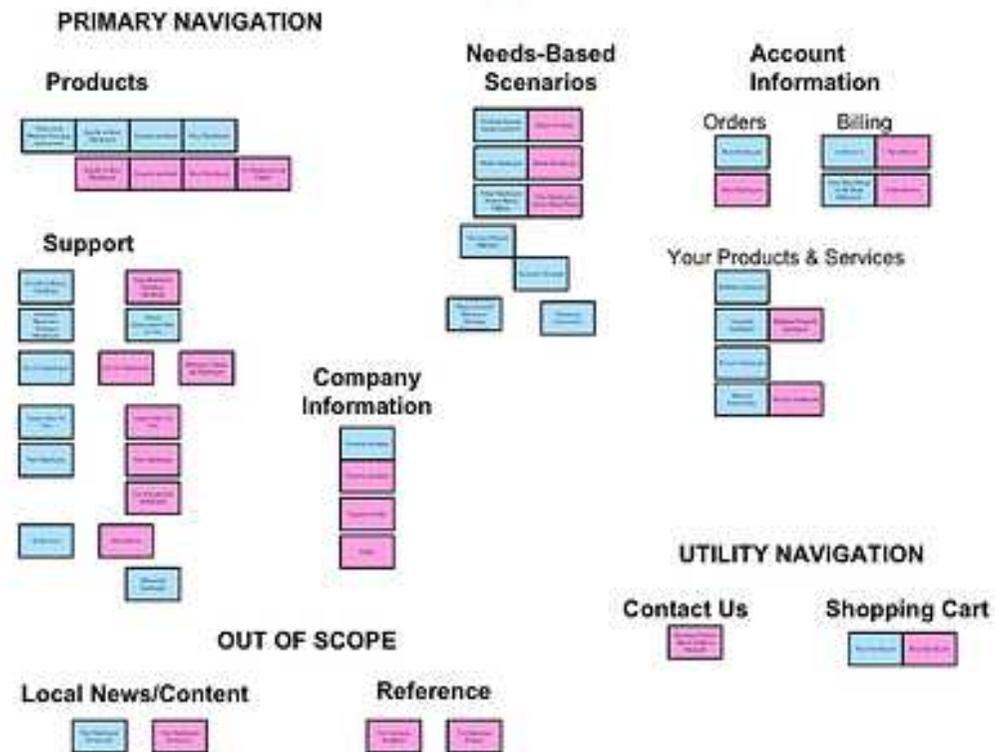
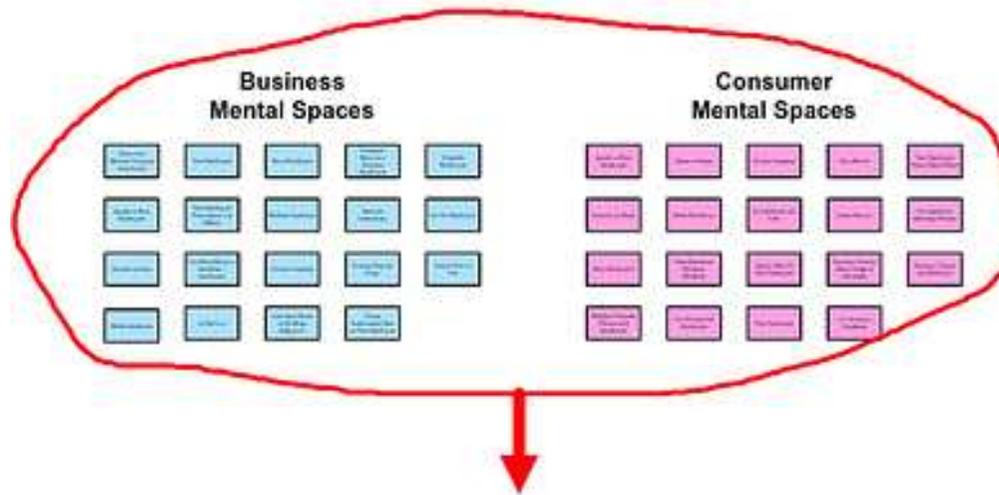


# Mental Spaces





<http://www.flickr.com/photos/rosenfeldmedia/2125025549/in/photostream/>



<http://www.flickr.com/photos/rosenfeldmedia/2125025681/in/photostream/>



Planning A Cruise?

**Quick  
Cruise Search**

**Find Cruises** »

Already Booked?

**Cruise Personalizer** 

Take the Next Steps in  
Preparing For Your Cruise

Quick Links

- ▶ Destinations
- ▶ Ships
- ▶ Ports of Call
- ▶ Shore Excursions
- ▶ Onboard Experience
- ▶ Travel Agent Locator
- ▶ Princess Captain's Circle
- ▶ 2009 Destinations DVD
- ▶ Register
- ▶ FAQs

News & Announcements

- ▶ Fuel Supplement Update
- ▶ All News & Announcements

Already Booked?

 **Cruise Personalizer**  
*Take the Next Steps in Preparing For Your Cruise*  
Conveniently fill out voyage information,  
pre-reserve Shore Excursions and Spa  
Appointments, and print your Boarding Pass.

 **Princess Captain's Circle**  
Where loyalty means rewards & recognition.

 **My Princess**  
Your one-stop source for all your cruise planning needs.




What I like best about my professors is that they have experience outside of the classroom.

*Colleen Rice, 2012, Major: Political Science: Pre-Law*  
Read Colleen's Blog

Choose another student!



more →

Apply Online →

Request Info →



Hayward + Concord +  
Oakland +

**Visit Us**

- + Campus Tour
- + Upcoming Events
- + Virtual Tour

**Affordability**

- + Tuition and Fees
- + Financial Aid
- + Scholarships

### Undergraduate

I'm interested in becoming:

- + A Freshman
- + A Transfer Student
- + An International Student



- + Application Timeline
- + Admission Requirements

### Graduate

I want to pursue:

- + A Master's Degree
- + A Doctoral Degree
- + Teacher Credentials



- + Graduate Admission
- + International Admission
- + Pathway to Graduate School

### After You're Accepted

- + New Student Checklist
- + Getting Started with Classes
- + Activate Your NetID
- + Orientation
- + Submit Your Intent to Register



### Announcements

**Cal State East Bay is still accepting applications for Fall 2009**

- + Transfer students can apply until August 1, 2009.
- + Review the admission requirements and make a pre-admission advising appointment by calling:  
Hayward Campus: (510) 885-2556  
Concord Campus: (925) 602-6700

**Sie sind interessiert...**

# ...Sie möchten wissen, wie wir Ihr Business unterstützen können:

- Mental Model
- Ethnographische Studien
- Emotionale Tiefeninterviews
- Contextual Inquiries
- Personas
- Card-Sorting
- Rapid-Prototyping Tests
- Usability-Tests
- Usability-Reviews
- Strategie und Konzeption
- Innovations-Workshops
- Coaching
- Workshops mit internationalen Referenten

Für **Referenzen** sehen Sie bitte auf [www.netflow-lindemann.de](http://www.netflow-lindemann.de)

# Vielen Dank!

Karen Lindemann  
NetFlow – Analyse und Optimierung  
von Websites & Software

[www.netflow-lindemann.de](http://www.netflow-lindemann.de)