



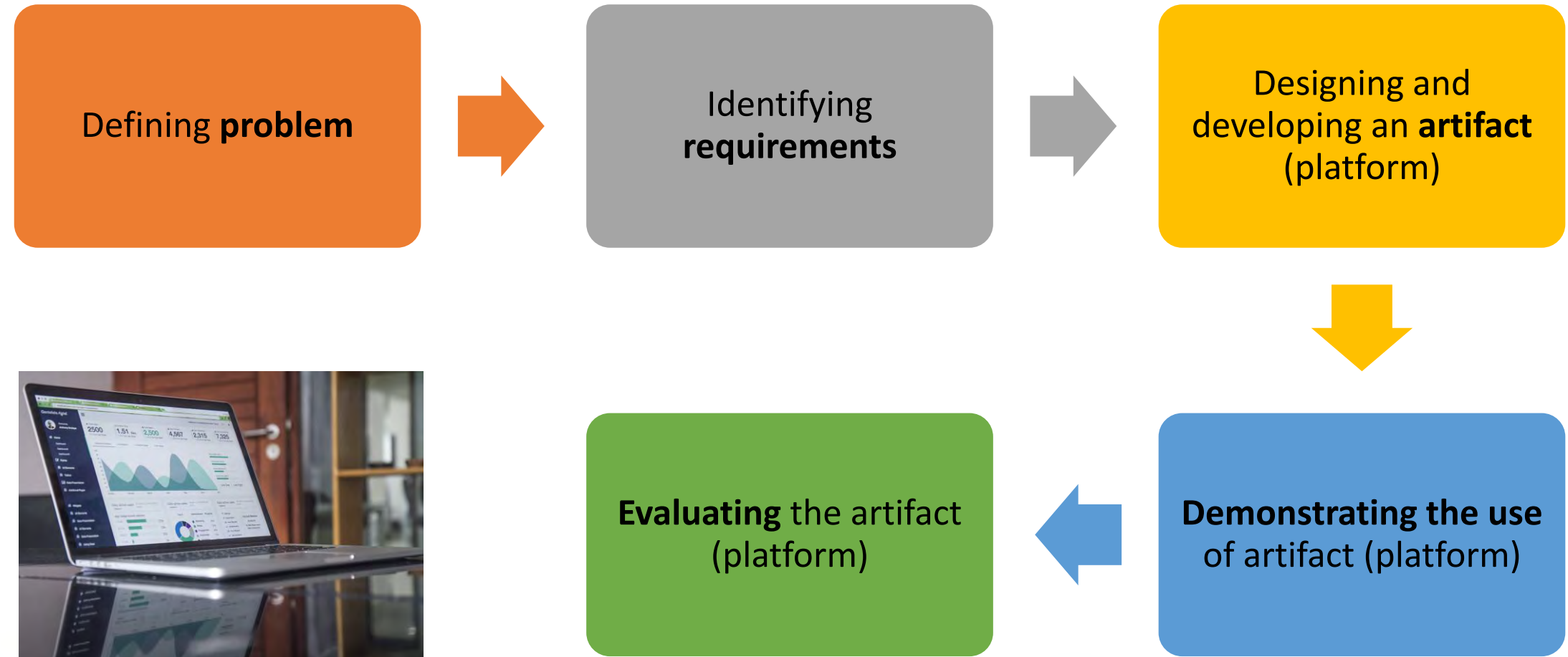
Methodology for Digital Platform Development

Larisa Hrustek, M.Econ.
Teaching Assistant
University of Zagreb,
Faculty of Organization and Informatics



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Methodology for Developing Digital Platforms



Methodology for Developing Digital Platforms

Defining problem

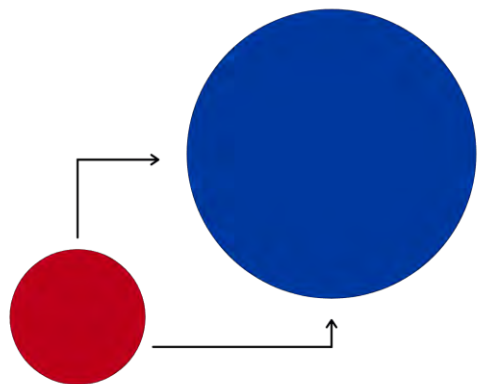
- define the specific domain/research problem
- DATA GAME! Dive into the context of a problem!
- collect and analyze data (qualitative or quantitative)
- this could be hard facts, maps, drawings, graphs, images, facts, numbers, stories, people/groups/stakeholders, etc.



What is the problem and why?

Deliverables: Main insights on the problem

Possible methods: Desk Research, Blue Ocean Strategy, Interviewing, Stakeholder Analysis...



Blue Ocean Strategy

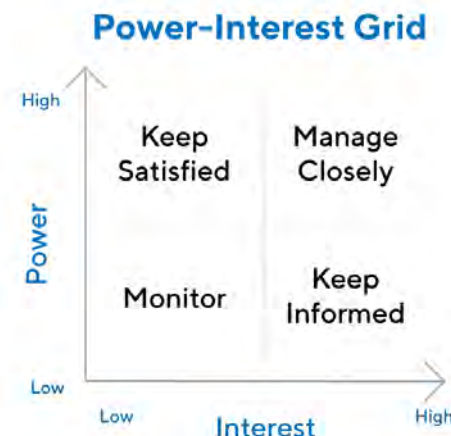
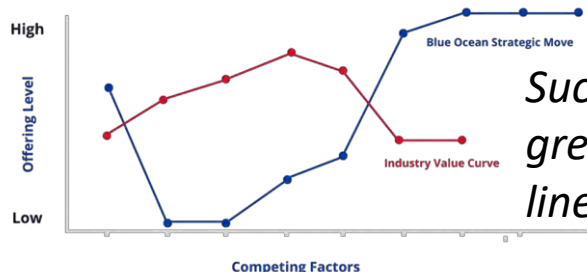


Interviewing

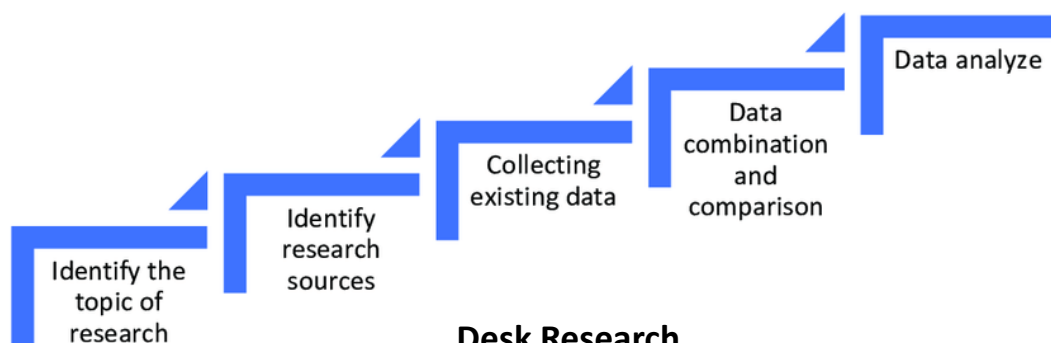
DEMO

Top strategic technology trends related to platforms are Industry Cloud Platforms, Platform Engineering, AI Platform, etc.

Such technologies present greater risks for deployment, but potentially greater benefits for early adopters who can assess and exploit them in line with their organization's ability to handle unproven technologies.



Stakeholder Analysis



Desk Research



Five Steps to Blue Ocean Shift



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Defining problem



- justify the value of a platform
- digital platform owners must deal with several design decisions → to balance the interests of all stakeholders → generativity and stability of platforms

***Why is a platform needed
and what are the platform goals?***

Deliverables: Visualization of the problem

Possible methods: Brainstorming,
Discussion...



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Identifying requirements



- defining objectives of a platform and knowledge of what is possible and feasible
- the requirements for the design principles are specified based on the insights

What user requirements must the platform meet?


Deliverables: User Requirements

Possible methods: Persona, Customer Journey, Value Proposition Canvas, Business Model Canvas, Empathy Map...



Customer Persona

Customer Profile



Olivia, 27

Archetype	The Innocent
Gender	Female
Income	\$85,000.00
Education	MBA in Graphic Design
Occupation	Illustrator and Designer
Location	London

Customer Personality Slider

Introvert	○ — ● — ○ — ○ — ○ — ○ — ○	Extrovert
Creative	● — ○ — ○ — ○ — ○ — ○ — ○	Analytical
Messy	○ — ○ — ○ — ○ — ○ — ○ — ○	Organised
Emotional	○ — ○ — ○ — ● — ○ — ○ — ○	Rational
Active	○ — ○ — ● — ○ — ○ — ○ — ○	Passive
Plays safe	○ — ○ — ○ — ○ — ○ — ○ — ○	Takes risk

Persona



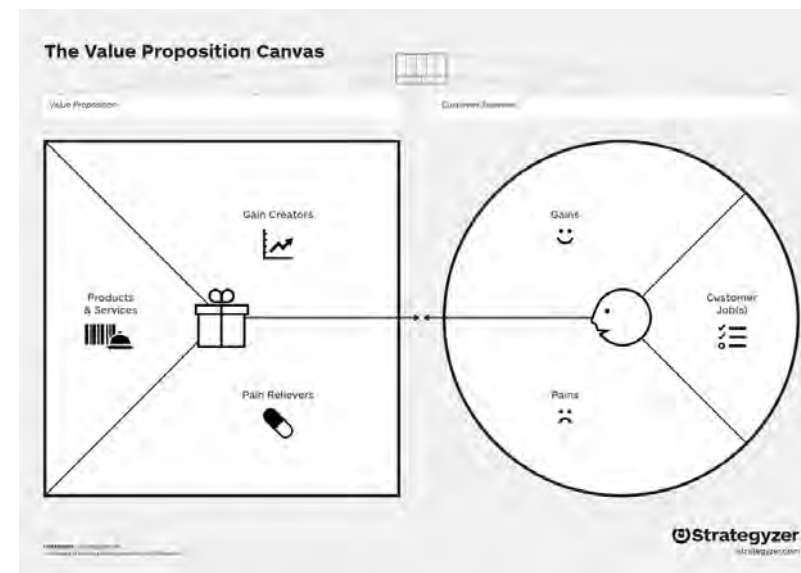
Empathy Map

The Business Model Canvas

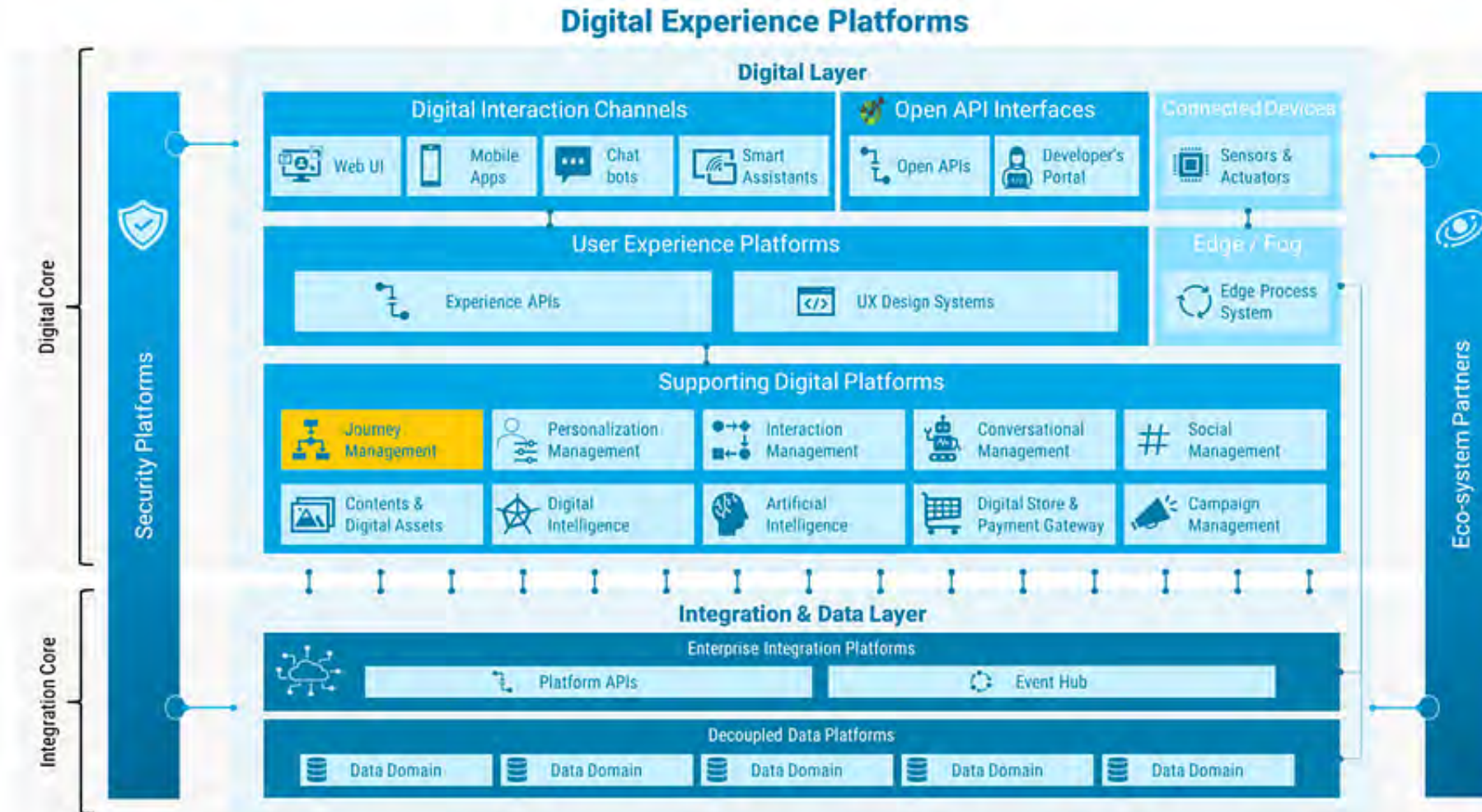
Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments	Key Resources	Channels
Cost Structure			Revenue Streams			

Strategyzer

Business Model Canvas



Value Proposition Canvas



https://medium.com/@razi_chaudhry/journey-management-platform-in-digital-transformation-explained-2dcb10171357

Methodology for Developing Digital Platforms

Designing and developing an **artifact**



- development of the digital platform concept
- defining layers and modules (infrastructure layers, service layer, system layer, device layer, data layer...)
- conceptualizing design principles in terms of materiality, action, and boundary conditions

What is the platform (artifact) being developed and what does it look like?

Deliverables: Concept Development and Artifact Prototype

Possible methods: Prototyping, Data Storage Logic, Data Access Logic, Application Logic, Programming...

Open API Tools

Research Lab,
Development Lab

Interaction Channels

Smart Assistant, Chatbots,
Mobile Apps...

Stakeholders Layer

Experience APIs, UX
Design Systems, Customer
Journeys, Special Offers
and Functionalities

Ecosystem Partners

Similar and Different
Industries

Connected Devices

Sensors, Actuators, Machine
Learning, Data Analytics

Support

Journey Management, Interaction Management,
Digital Store and Payment Gateway, Artificial
Intelligence, Social Management, Campaign
Management, Conversational Management,
Personalization Management...

Event Hub

Streaming Data, Customer
Sentiment Data, Logs, Files,
Media...

Data Domain

Sharing Data,
Open Data, Data
Development...

Platform APIs

Microservices, Runtime,
Services, Streams,
Public/Private Cloud





<https://www.iese.fraunhofer.de/en/services/digital-ecosystems.html>

Methodology for Developing Digital Platforms



Demonstrating the use of platform



- demonstrate how to apply the platform (artifact) from different stakeholder perspectives
- demonstrate the use of the platform to solve one or more instances of the problem

How do users use the platform and what benefits does it bring?

Deliverables: User documentation, Recommendations and Opportunities for Users

Possible methods: Use Case Diagrams, Case Study



Methodology for Developing Digital Platforms



Evaluating the artifact



- observe and measure how well the platform supports a solution to the problem and user requirements
- evaluating the design principles

To what extent does the platform (artifact) satisfy the user's requirements?

Deliverables: Insight into user experience,
Satisfaction of user requirements, ROI

Possible methods: Innovation for Profitability,
Innovation for Boosting Core Business,
Innovation for Long-Term Success...



Innovation For Profitability

Direct Cost Saving, Direct Revenue, ROI...



Innovation for Long-Term Success

Technology Expertise, Risk Mitigation, Leveraging of Alliances, Strategic Long Shot, Branding...



DEMO



Innovation for Boosting Core Business

Customer Satisfaction, Core Business Sale, Asset and Infrastructure Utilization, Process Speed and Quality, Enhanced Promotion, Employee Efficacy...



References

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