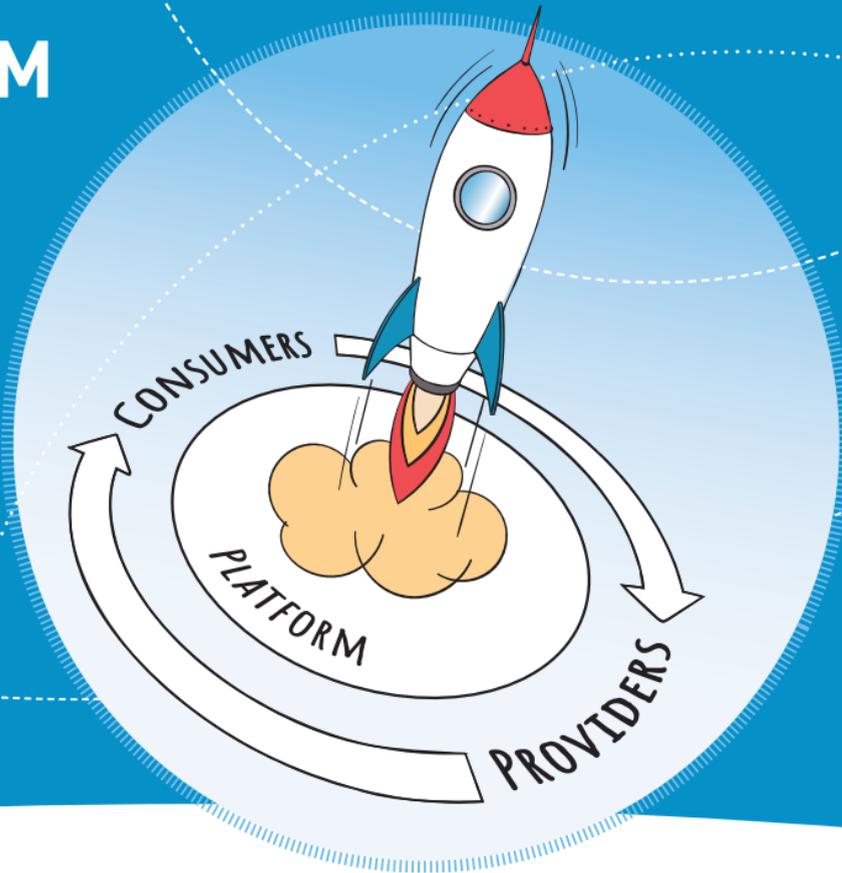


# THE PLATFORM NAVIGATOR

**88 pattern cards**  
to design and  
implement platform  
business models



## Authors

**FELIX WORTMANN** is professor, senior lecturer, and scientific director of the Bosch IoT Lab at the University of St. Gallen (HSG). The Bosch IoT Lab is a collaboration between the University of St. Gallen, ETH Zurich and the Bosch Group.

**SVEN JUNG** is a PhD candidate at the Bosch IoT Lab at the University of St. Gallen (HSG) where his research on platform business models and strategies led to 'The Platform Navigator'.

**WOLFGANG BRONNER** is managing director of the Bosch IoT Lab. With his 20+ years of experience as a manager and senior expert in different industries, he is dedicated to bringing state-of-the-art research to business practice.

**OLIVER GASSMANN** is professor of Technology Management at the University of St. Gallen (HSG) and a thought leader in the field of innovation. He is Google Scholar's most-cited professor in 'R&D Management' and his book 'The Business Model Navigator' became a global bestseller.

## The Platform Navigator

Today, platform companies like Amazon, Alibaba, Apple and Google dominate our economy. In fact, eight out of the ten most valuable companies worldwide are built upon a platform business model. It is also evident that many more platforms are on the rise. They have the potential to disrupt various industries, from agriculture and healthcare to transportation.

Platform companies have been able to outperform traditional businesses by establishing themselves as digital intermediaries. Amazon and Alibaba, for example, facilitate transactions between sellers and buyers, Apple facilitates transactions between app developers and app users, and Google facilitates transactions between ordinary web users and advertisers.

However, it is not just about digital companies that have embarked on a platform journey. Established companies are just as affected by the shift to platform business models. Many companies have tried to extend their traditional business models and launch their own platform businesses. Looking at successful examples, such as LANXESS with CheMondis (chemicals), CLAAS with 365FarmNet (agriculture) or Klöckner & Co with XOM Materials (steel and materials), building and managing a platform business might not seem to be a challenging endeavour. However, 80% of all platform initiatives fail and traditional companies in particular struggle.

## The Platform Navigator

One core reason for platform failure is that platform business models are just very different from traditional, so-called pipeline business models. Pipeline business models are characterized by a linear value chain with a well-directed value flow from suppliers to customers.

In comparison, platforms are intermediaries that bring two or more sides of a market (customer groups) together. Platforms provide the infrastructure and rules that facilitate transactions. Furthermore, they enable complementors to innovate on top of an established platform core.

The success of every platform depends on network effects, i.e., the flywheel effect that more platform users lead to a higher value for the platform. In the case of Amazon, for example, more buyers lead to more sellers (larger demand for sellers) and more sellers lead to more buyers (larger and more diverse supply). The re-enforcing dynamic of network effects is vital for all successful platform businesses.

Latest research shows that many companies, in particular established pipeline businesses, struggle with this new notion of doing business. This evidence was the starting point to develop 'The Platform Navigator'. Building upon the success of 'The Business Model Navigator', we developed a proven tool for the development and implementation of platform business models. Based on a literature review and an empirical study of more than 150 success stories, we derived 88 pattern cards across five phases. Not all patterns will be helpful for your business and the patterns are certainly not exhaustive. But we believe that every manager should be aware of them to sustain competitive advantage.

Platforms will affect many traditional businesses and leveraging network effects will be vital for each and every company. The pattern cards will help you navigate through the Platform Economy – be it as a platform owner, complementor, or ordinary user.

## How to apply the navigator? The five steps

The first three steps of the navigator are all about WHAT and the design of a platform business model. The next two steps are about HOW and the implementation of a platform business model.

### I. Ideate: What opportunities exist?

We often see that companies start to develop a platform business model but have not fully understood the platform concept – not only from a conceptual point of view but also from a practical point of view. In essence, they are not aware of the diverse nature and mechanics of existing platforms. The patterns in this section serve as an inspiration and a starting point. Browse through the 21 patterns in seven distinct categories to get inspired and identify opportunities for your own business. Looking

at the specific examples mentioned on the pattern cards, you can ask yourself: How would platform X conduct our business? Can we transfer platform X into our industry? How does platform X affect our company or business unit?

### II. Design: How do we create value?

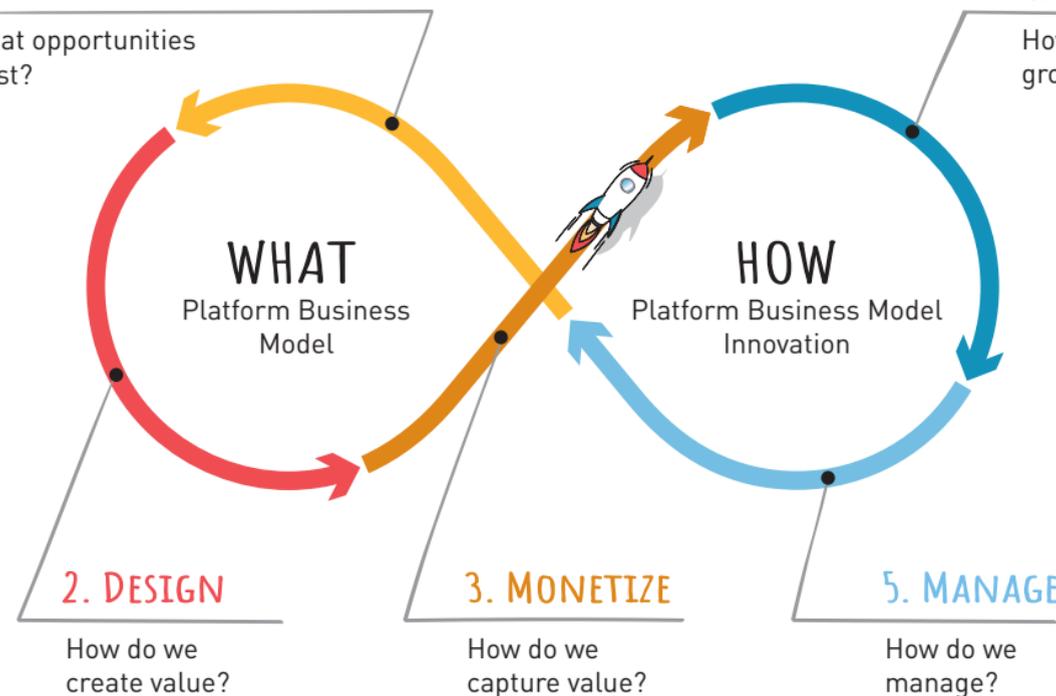
When embarking on a platform journey, you have to understand that there are two fundamentally different types of platforms. On the one side, there are transaction platforms, also known as marketplaces, where you have buyers and sellers (e.g., eBay) or providers and consumers (e.g., Airbnb). On the other side, there are innovation platforms like Amazon Web Services (AWS). AWS is a cloud platform that serves as a basis for others to innovate and develop

### 1. IDEATE

What opportunities exist?

### 4. SCALE

How do we grow?



## How to apply the navigator? The five steps

applications on top. Designing transaction and innovation platforms requires different principles and choices. Use the 26 patterns to determine (A) the core value proposition, (B) the ownership model, and (C) the operating model for your transaction or innovation platform.

### III. Monetize: How do we capture value?

In the long run, every business needs a solid monetization strategy to capture value. Platform businesses often defer monetization as it can severely harm network effects. Examples like YouTube or LinkedIn illustrate that it can even take decades until monetization. Nevertheless, most platforms have a rigid long-term strategy for monetization from the beginning. The core to monetization is developing an effective revenue model. It can rely

on direct monetization (e.g., users pay for apps) or indirect monetization (e.g., users watch videos for free but have to consume advertisements). Go through the 15 patterns including (A) direct monetization, (B) indirect monetization and (C) monetization tactics to discuss how you want to capture value. Think of advantages and disadvantages, as well as the feasibility of different monetization possibilities. You can also combine different patterns.

### IV. Scale: How do we grow?

Every platform business faces the famous chicken-and-egg problem. In the case of a new marketplace, for instance, no sellers mean no supply and hence no customer demand. No customers, on the other hand, mean no demand and hence no seller will engage in such a marketplace.

Platforms must overcome this deadlock situation. Get inspired by the 14 patterns that successful platform companies have leveraged before to overcome the chicken-and-egg problem. You can choose strategies that (A) focus on one side, (B) attract key users, (C) leverage existing assets, (D) focus on both sides, or (E) exploit opportunistic opportunities. Not all strategies will work equally well. A good starting point, therefore, is to analyse what strengths and assets you currently have available at your company. Also, think about which of the two sides will be harder to attract.

### V. Manage: How do we manage?

These patterns include best practices to (A) innovate and (B) defend the platform core as well as to (C) maintain network effects. Besides concrete strategies, this phase also includes universal guidelines on how to (D) monitor performance. Use the 12 pattern cards to understand early on what will become important in your future platform journey. However, focus on two to three patterns in the beginning and discuss these in detail to get answers to questions such as: Which key performance indicators (KPIs) should guide our platform journey? How can we defend our business and establish a sustainable competitive advantage? Do we need to engage with regulators or authorities early on to mitigate potential conflicts?

## How to bring everything together? The canvas

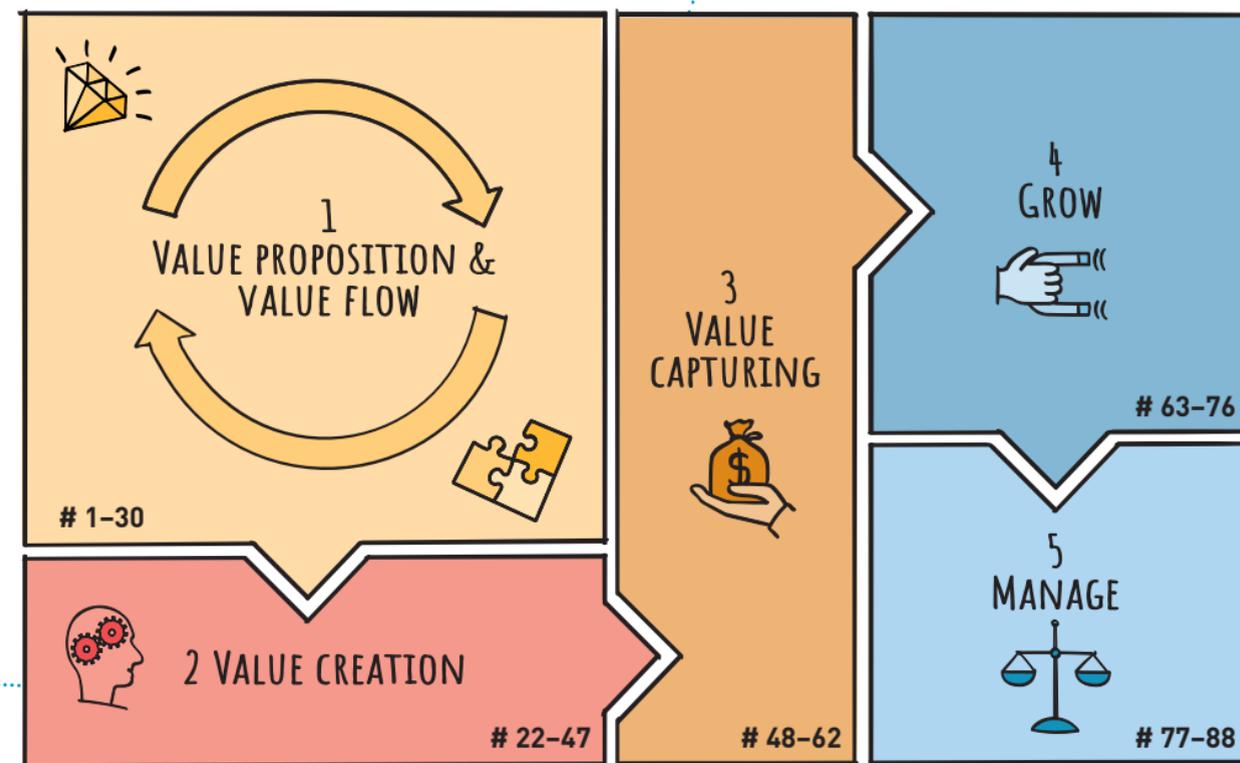
The following canvas has proven to be very helpful in starting a platform project. As a supplement to the pattern cards, it can be used to capture the platform idea in a clear and structured manner.

The canvas builds upon traditional business model building blocks, such as value proposition (What do we offer?), value creation (How do we create value?) and value capturing (Why does it generate value?), but also integrates platform-specific components such as value flow, the chicken-and-egg problem and platform management. The canvas not only supports communication with your stakeholders but also helps discussing, testing, and refining the platform idea further, for example, with your customers and partners.

### 1. Value proposition & value flow

At the heart of any platform business model is the transaction between the different market sides (customer groups). Make these interactions and value flows explicit by sketching them onto the canvas. Also, use the ideate and design patterns (# 1–30) to answer the following questions:

**Which** different market sides (platform players) does the platform bring together? **What** are the core interactions and value flows between the different platform players? **What** is the core value proposition and mission of the platform?



## How to bring everything together? The canvas

In addition, put yourself in your customers' shoes and answer the following questions (for all market sides):

**Which** different platform players exist? **What** is their motivation to join the platform ecosystem? **What** is their contribution to the platform ecosystem?

### 2. Value creation

Go through and discuss the design patterns (# 22–47) to answer the following questions:

**How** is the platform value proposition being implemented? **What** is the operating model of the platform and the extent of the platform value creation? **What** is the ownership model of the platform?

### 3. Value capturing

Use the monetize pattern cards (# 48–62) to define your revenue model and answer the following questions:

**What** direct revenue streams can be captured? **What** indirect revenue streams can be captured? **What** monetization tactics can be utilized?

### 4. Grow

Browse through the scale patterns (# 63–76) and discuss the following questions:

**How** can the chicken-and-egg problem be overcome? **What** growth strategies can be applied to foster network effects? **Should** the growth strategies be applied simultaneously or in a specific order?

### 5. Manage

The long-term perspective of managing a platform is often forgotten. Not only do you need to constantly innovate, but you also need to defend your position and maintain quality and trust. Use the manage patterns (# 77–88) to answer the following questions:

**Which** KPIs should be leveraged to manage platform performance? **How** can the platform core be innovated and defended? **What** are essential tactics to foster and maintain platform quality and trust?

## General tips

### ► Organize a creative workshop

The best way to use 'The Platform Navigator' is in a workshop setting. Divide larger groups into smaller groups. A diverse group of three to five participants is ideal. These smaller groups can then go through the phases independently with the objective to compare the results at the end (option 1). If a basic platform business model is already sketched out, smaller groups can also deal with selective phases of the navigator with the objective to integrate the results into one coherent overall picture (option 2).

### ► Create the right atmosphere

Select participants from a wide range of backgrounds to boost creativity and outside-the-box thinking. Take care that people are open-minded and creative. Write down your platform ideas immediately without judgment. Only in the end, evaluate and shortlist one to three ideas. A devil's advocate is only helpful after initial results have been derived. Ideally, every participant also familiarizes himself/herself with some platform basics beforehand.

### ► Pick your playing field

We recommend thinking through all five phases at once. However, feel free to adjust the overall process to your specific setting and requirements.

'The Platform Navigator' is designed so that you can take out only those sections that are most important for you. If you have had few touchpoints with platform business models so far, you could focus only on the ideate phase. If your platform activities are more mature, you could jump directly into the design or scale phase to refine and challenge an existing idea.

### ► Think beyond the pattern cards

You should also be aware that not all patterns are equal. While some provide a very specific strategy and example, others provide more general guidance. Therefore, some pattern cards will be more, less, or not relevant for your business or setting. However, for a holistic view on platforms,

we believe they are all important to know. You can also combine different pattern cards if you find it useful. Last but not least, implementing a platform business model is not static. It is a continuous journey that can take time and require multiple iterations through our five phases.



Scan the QR code for additional resources such as complementary videos, further reading and a printable canvas. ([www.iot-lab.ch](http://www.iot-lab.ch))

## Testimonials

- Azena wants to become the leading open platform and marketplace for smart security and safety solutions. The platform is based on a camera operating system that powers cameras from various manufacturers on the market. It connects to an Application Store where leading video analytics development companies offer cutting-edge apps.

“There is a lot of literature on platform business models, but ‘The Platform Navigator’ is one of the most comprehensive and easy-to-understand guides with a clear structure and insightful examples. A must-read for any manager interested in the essentials of platform design, growth and management.”

**Felicitas Geiss, Vice President Strategy & Venture Architecture at Azena**

- Bosch.IO is a subsidiary of the Bosch Group that bundles its IoT and digital expertise. It has used ‘The Platform Navigator’ as a fruitful tool to better understand and design platform business models.

“Platform business models are very important for us at Bosch. Many of our projects and growth initiatives depend on network effects, which is often only apparent at a second glance. The well-researched collection of 88 patterns helps us in our daily work to identify those opportunities early on and gives us actionable support in developing viable platform business models.”

**Stefan Ferber, Co-CEO & CTO at Bosch.IO**

## Further reading

Should you be interested in reading more about platform business models, we recommend the following literature which also inspired us when developing 'The Platform Navigator':

- Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power*. New York: HarperCollins.
- Dealroom.co (2020). Online marketplaces entering the next phase [market report]. <https://dealroom.co/uploaded/2020/06/Marketplaces-2020-vFINAL.pdf>
- Eisenmann, T. R., Parker, G., & Van Alstyne, M. (2008). *Opening Platforms: How, When and Why?* HBS Working Paper 09-030.
- Gassmann, O., Frankenberger, K., & Csik, M. (2014). *The Business Model Navigator: 55 Models that will revolutionise your business*. Harlow: Pearson.
- Hein, A., Schrieck, M., Riasanow, T., Setzke, D. S., Wiesche, M., Böhm, M., & Krcmar, H. (2020). Digital platform ecosystems. *Electronic Markets*, 30 (1), 87–98.
- Karhu, K., & Ritala, P. (2021). Slicing the cake without baking it: Opportunistic platform entry strategies in digital markets. *Long Range Planning*, 54 (5), 1–18.
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- Tiwana, A. (2014). *Platform Ecosystems: Aligning Architecture, Governance, and Strategy*. Amsterdam: Morgan Kaufmann.
- Trischler, M., Meier, P., & Trabucchi, D. (2021). Digital Platform Tactics: How to Implement Platform Strategy over Time. *Journal of Business Models*, 9 (1), 67–76.

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**Authors:** Felix Wortmann, Sven Jung,  
Wolfgang Bronner, Oliver Gassmann

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