

Dear Readers,

As we reported in our last newsletter, the team of the ICV Dream Factory is currently investigating **“Digital Business Model Innovations and the Role of the Controller”**. The focus of our work on this topic is the question of how controllers can become involved in the development and implementation of digital business model innovations and which challenges they face.

We would like to start this newsletter by addressing digital platforms, a decisive competitive factor in the age of digitization. We first look at the structure and characteristics of such platforms. Then, we consider the fact that data is increasingly becoming an important resource for companies and highlight the approaches to monetarizing data evaluation. Finally, we take a closer look at the typical phases companies experience on their road to a digital business model.

We hope you enjoy reading this issue of the Dream Factory Quarterly and wish you a Merry Christmas and a Happy New Year.

Best regards,

Siegfried Gänßlen
Chairman of the ICV board

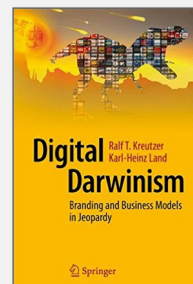
Prof. Dr. Heimo Losbichler
Deputy Chairman of the ICV board

Prof. Dr. Ronald Gleich
Head of the ICV Dream Factory

Stefan Tobias
Head of the ICV Dream Factory

Suggested Reading

In their book **“Digital Darwinism”** Ralf Kreutzer and Karl-Heinz Land take a comprehensive look at the potentials and challenges associated with digitization, focusing in particular on the increasing digitization of products and services. The book also considers why digitization negates existing business models and jeopardizes the future viability of established brands. Overall, the book provides important impulses for initiating the change process towards a digital business model.



The book **„Digitale Transformation von Geschäftsmodellen“ (Digital Transformation of Business Models)**

by Daniel Schallmo et al. shows how to successfully execute the digital transformation of business models across the entire value chain. 700 pages long, the book presents different approaches, instruments, study findings and best practices from different industry sectors in the context of digital transformation. In doing so, the book provides important orientation for companies in the digital age.



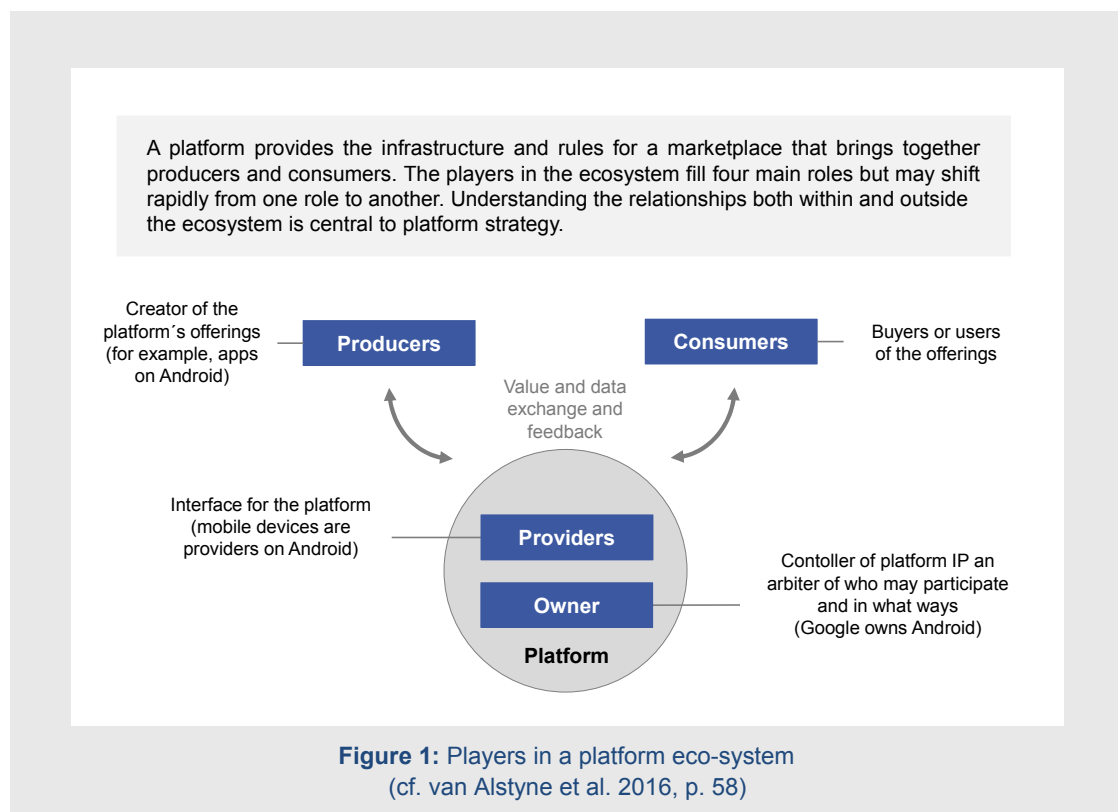
Platforms | Success factor in the age of digitization

Over the last few years digitization has been a factor in the fundamental changes which have taken place in the structures of existing industries. A good example of this is the business model of the photo development company CEWE. Their core business is the development and printing of digital pictures, with the customers placing orders via the internet. In the age of digitization, so-called platform strategies are increasingly becoming a success factor (examples: Airbnb (accommodation service) or Uber (taxi service)). Here, platforms are not only relevant for companies from the IT world but also for firms from “classical” industry sectors. Proof of this can be found at Daimler AG with its spin-off car2go, which offers a new form of car sharing with the help of an internet platform. In order for controllers to be able to act as a business partner in the development and implementation of such digital business model innovations, they must know the fundamental principles of how platform eco-systems are structured and work.

Regardless of which industry we look at, platforms always have the same basic structure with four major players (see Figure 1): The platform **owner** manages it and controls the intellectual property. The interface to the users of the platform is created by the **provider**. The goods and services which can be purchased on the platform are offered by the **producers**. Finally, the goods and services are used by the **consumers**. The main added value of platforms is that producers and consumers are brought together. These interactions and the data exchanged constitute the most valuable asset of the platform owners, who can use them to create a decisive competitive advantage.

If we compare the industry structure of a conventional product manufacturer, we see there are three fundamentally different rules for operating a platform: (1) In the context of a resource-based competitive approach, conventional product

manufacturers create a competitive advantage through the possession of inimitable resources (e.g. real estate or intangible assets). For platforms the community and the resources provided by the community (e.g. information, rooms or cars) are the most important resources. (2) While conventional product manufacturers focus their optimization endeavors on internal processes (from purchasing through production to sales), platforms have an external focus. In concrete terms, this means optimizing the processes of interaction between producers and consumers. (3) Additionally, conventional product manufacturers look above all at the value of individual customers and how to maximize it. In contrast, for platforms the most important aspect is to maximize the total value of the platform itself (see van Alstyne et al. 2016).



Monetizing Data | An overview of relevant evaluation approaches

A look at platform strategies emphasizes how data can become an important company resource in the context of digital business model innovations. Nevertheless, often companies do not know how they can actually monetize data. In the automotive industry, for example, there is a current discussion that data about driving behavior could be sold to insurance companies to enable them to offer personalized insurance policies (although questions about data protection and privacy must still be answered here). However, how can the value of such data be measured in monetary terms? This is a question which should primarily concern controllers. In this context, we can look three evaluation approaches from literature on how to measure the value intangible immaterial assets (see Figure 2).

Market value-oriented approach

Under the market value-oriented approach, the value of assets is measured based on the market prices of comparable assets. In the special case of measuring the value of data, the prices of information service providers are used as the yardstick. Additionally, value multipliers are often calculated and used in order to measure the value of the data stock of other comparable companies. Despite the validity of this approach, it can only be used in extremely limited cases due to the lack of active markets and the lack of comparability of data as an evaluation object.

Cost-oriented approach

The cost-oriented approach regards the costs incurred to reproduce a specific asset as relevant. In the context of data evaluation, the important costs would be those associated with data collection, data generation and data maintenance. Due to its comparatively acceptable level of complexity, this approach is widespread in business practice. One criticism which must be mentioned, however, is that this type of data evaluation is heavily backward-looking and as such completely ignores the future benefit or value of the data.

Benefit-oriented approach

The benefit-oriented approach is based on the assumption that the value of an asset can be measured based on the returns arising from the future use of the asset. The causal method is used in particular to measure the value of data in order to identify the correlation between data quality and its resulting direct effect. Subsequently, the business value method is used in an attempt to quantify this direct effect in monetary terms. A criticism of this approach is that it depends on uncertain assumptions and estimations (see Zechmann/Möller 2016).

	Market value-oriented approach	Cost-oriented approach	Benefit-oriented approach
Method	Use of market prices to calculate value of data	Use of historical data to calculate cost of data	Use of future benefit or returns from using data to calculate value
Example	<ul style="list-style-type: none"> Market prices Multiplier method 	<ul style="list-style-type: none"> Cost of reproduction method Cost of replacement method Cost of maintenance method 	<ul style="list-style-type: none"> Causal method Business value method
Resulting value	Monetary value	Monetary value	Mainly qualitative value
Criticism	Markets for data frequently not available	No consideration of benefit of data	Dependency on assumptions and estimations
Summary	Valid, but application limited to few cases	Valid, but lack of benefit orientation	Comparatively complex

Figure 2: Overview of approaches to evaluating data
(cf. Zechmann/Möller 2016, p. 559)

On the Road to a Digital Business Model | The four main development phases

The implementation of digital business models creates a range of different challenges for controlling. Companies must, for example, undertake very high-risk investments in acquisitions or carry out function-based or process-based adjustments to controlling instruments to ensure they conform with digital targets and objectives. Companies typically pass through four development phases on their way to a digital business model and controllers need to become involved in those phases (see Figure 3). In order to create a competitive advantage, companies should endeavor to complete these phases faster than the competitors.

Digital experiments

The first phase consists of initial, isolated digital pilot projects which require relatively few resources in terms of staffing and finances. The aim of these pilot projects is to bump start the topic of “digital business model innovations” in the company and to draw attention to the changes necessary in the context of digitization.

Digital stand-alone models

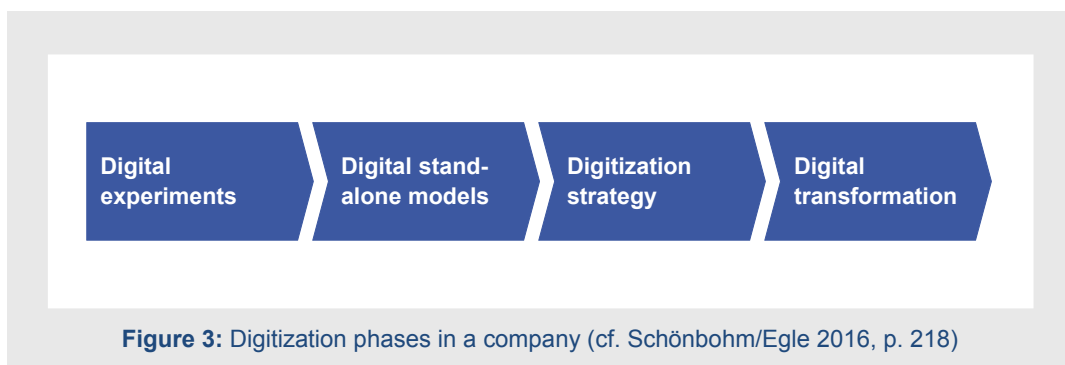
In the second phase, individual stand-alone digital solutions are created which develop, for example, through the integration of company acquisitions. These stand-alone solutions usually have a smaller budget and generate first sales. However, there are seldom any synergy effects between the stand-alone solutions because they are often not yet coordinated in any way.

Digitization strategy

Based on positive experiences, an interdisciplinary team develops a digitization strategy in the third phase. At this stage, the budget for digital projects is expanded in order to tap the potentials associated with digitization. Additionally, investments in start-ups are approved in order to purchase specific know-how, growth potentials and talent.

Digital transformation

The fourth phase is a comprehensive digital transformation of the business model. The objective here is to digitize the entire value chain based on the specific needs of the company. This transformation often also means that parts of the old business model are discontinued and scrapped. This step usually requires a fundamental shift in corporate culture and mindset within the company.



References

- Schönbohm, A./Egle, U., Controlling der digitalen Transformation, in: Schallmo, D./Rusnjak, A./Anzengruber, J./Werani, T./Jünger, M., Digitale Transformation von Geschäftsmodellen, p. 213-234, Wiesbaden 2016.
- Van Alstyne, M./Parker, G./Choudary, S., Pipelines, Platforms and the New Rules of Strategy, in: Harvard Business Review, Vol. 94, 2016, No. 4, p. 54-62.
- Zechmann, A./Möller, K., Finanzielle Bewertung von Daten als Vermögenswerte, in: Controlling – Zeitschrift für erfolgsorientierte Unternehmenssteuerung, Vol. 28, 2016, No. 10, p. 558-566.

Imprint

Publisher and Copyrights

International Controller Association
Dream Factory
Siegfried Gänßlen
Prof. Dr. Heimo Losbichler
Prof. Dr. Ronald Gleich
Stefan Tobias

Editing

IPRI gGmbH
Goran Sejdic
Königstr. 5
70173 Stuttgart, Germany
Phone: +49 (711) 620 32 68-8022
Fax: +49 (711) 620 32 68-1045
GSejdic@ipri-institute.com

Core Team of the Dream Factory

Prof. Dr. Ronald Gleich
Stefan Tobias
Siegfried Gänßlen
Prof. Dr. Heimo Losbichler
Prof. Dr. Dr. h.c. mult. Péter Horváth
Manfred Blachfellner
Dr. Lars Grünert
Prof. Dr. Mischa Seiter
Karl-Heinz Steinke
Prof. Dr. Dr. h.c. Jürgen Weber
Goran Sejdic

International Controller Association

Main Office
Münchner Str. 8
82237 Wörthsee, Germany
Phone: +49 (0) 8153 88 974 - 20
Fax: +49 (0) 8153 88 974 - 31
www.icv-controlling.com
verein@icv-controlling.com