# Designing Business Models for the Digital Economy

**Michael Blaschke, Marco Cigaina, Uwe V. Riss, and Itzhak Shoshan**

**Abstract** Digital technologies are increasingly shifting the boundaries between everybody's lives and information technology urging companies worldwide to address this vital topic. This requires a systematic approach to business model innovations, treating technical and business aspects in an integrated way. Currently one of the difficulties of such an approach is the lack of a common conceptualization to be used by both business and technology experts. The current chapter attempts to remedy this based on the interconnection of nine components of business model representation and five 'Digital Key Elements'. The elements of the resulting matrix are called 'Digital Value Drivers'; these describe the effect each digital key element has upon the various business model components. This matrix is transformed into a graphical representation and used in SAP Business Model Development and Implementation (BMDI) method to be then applied in Design Thinking workshops. BMDI is an iterative multi-step method aimed at designing innovative business models. Examples illustrate how the conceptualization is applied and how it enables to proceed from a digital business model design to an implementation in terms of 'Service Design'; this includes persona development, customer journey map and service blueprint. Through this procedure we have obtained an integrated methodology for the systematic development of digital business models.

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## 1 Overview

Digital transformation is a vital topic for companies worldwide. It usually involves discussions around advanced analytics, social networks, mobile telecommunication, or similar phenomena. Often the topic is associated with successful companies such as Google, Facebook, Amazon, or Uber. Digital transformation blurs the line between our lives and technology. The way technology has become part of our day-to-day lives has readjusted the role of Information Technology (IT). IT has gone from being a mere enabler of value generation that is somewhat agnostic towards the customer to becoming a universal value facilitator that involves the customer in a value (co-)creation process. In this way IT has become closely connected to the business world. Companies which intend to develop their digital capabilities, i.e., their ability to generate business value from digital technologies, have to engage in a simultaneous (re-)design of both technology and business artifacts in order to be successful (Westerman et al. 2014).

In the course of this development business models undergo changes at the same pace as technology. Digital transformation affects business architecture in all areas (e.g., strategy, business model, organization, processes, solution portfolio, technology, competencies). This makes business model (re-)design vitally important, necessitating business leaders to take a systematic approach in this direction.

To address this challenge SAP has developed Business Model Development & Implementation (BMDI)—a methodology for adapting business models to future demands brought about by accelerated changes (Doll and Eisert 2014). BMDI is the fundamental methodology for SAP Business Model Based Management approach (Eisert and Doll 2015). Viewing digital transformation we see that BMDI methodology has to integrate characteristics of digital technology in order to meet the environment particular to digital transformation. To achieve this end we provide a new conceptualization as the basis of a shared language for describing, visualizing, assessing and changing digital business as well as for explaining causes and effects. Although it does not yet provide strictly defined semantics and syntax we nevertheless use the term *language* to indicate that it enables business and technology experts to efficiently communicate on *Digital Business Design*.

This language complements the existing dimension of business model elements (Osterwalder and Pigneur 2010) with a second dimension of 'Digital Key Elements' (Cigaina and Riss 2016). It enables us to discuss, analyze and design digital capabilities together with the corresponding business model features. We also use this language to adapt the BMDI methodology to transform it into a powerful instrument for conducting digital transformation.

In the following sections, we will present this approach and its use in more detail. Section 2 explains the foundation of BMDI methodology. Section 3 introduces the concept of digital-value drivers as digital-specific complement of the business model representation. Section 4 provides an example of how the new language influences the design of new services based on the described methodology. Finally, we point out the key insights.

## 2 BMDI: SAP® Business Model Innovation Methodology

We shall begin, before elaborating the details of Digital Business Modelling, with a short introduction of the underlying BMDI methodology. BMDI is a powerful but technology-independent business model innovation methodology based on Design Thinking (Brown 2008). The current approach assumes BMDI and adapts it to the particular needs of Digital Business.

### *2.1 Importance of Business Model Innovation*

Technological innovation does not guarantee business success. Often products and services can be copied easily, whereas business model innovation can provide more sustainable market success (Kim and Mauborgne 1999). Consequently, "new product or service development efforts should be coupled with a business model defining 'go-to-market' and 'capturing value' strategies" (Teece 2010, p. 183). Moreover, business models can "reshape industries and drive spectacular growth" (Johnson et al. 2008, p. 52). The insight into these effects has caused business models to garner increasing attention in practice and research.

We consider two instruments as crucial for the enabling of successful business model innovation: an expressive business model representation and a suitable methodology. These constitute the key elements of SAP business model innovation instruments that we will describe in the next sections in more detail.

#### 2.1.1 Business Model Representations

Every business model representation should capture the key aspects of the company's business and the 'Business Network' it operates in. These key aspects should address four questions:

- What value propositions are being offered?
- Who are the customers?
- How do operations have to work?
- Why is the business model financially interesting?

Business model representations can be adapted to the specifics of a company or a situation (e.g., start-up or new market conditions). Descriptions of business models are neither right nor wrong, but they can be appropriate or inappropriate when applied to a particular purpose.

Currently, Osterwalder's Business Model Canvas (Osterwalder and Pigneur 2010) is among the most popular business model representations. SAP understands it as an 'Enterprise View' (see Fig. 1) and has complemented it by a 'Network View' (see Fig. 2) to address more complicated business settings. In fact, these two

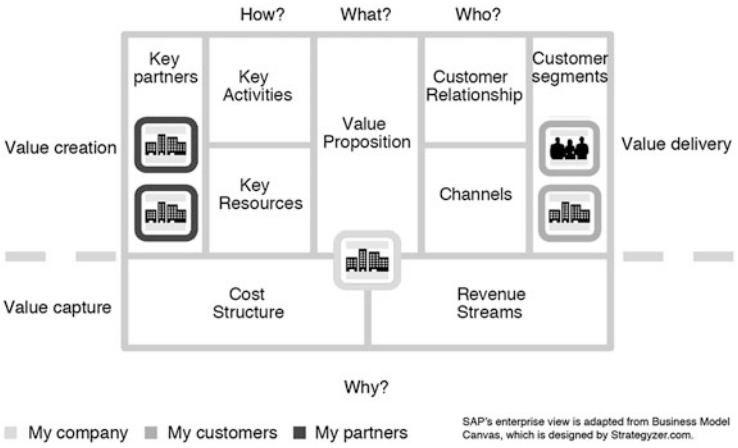


**Fig. 1** SAP enterprise view representation

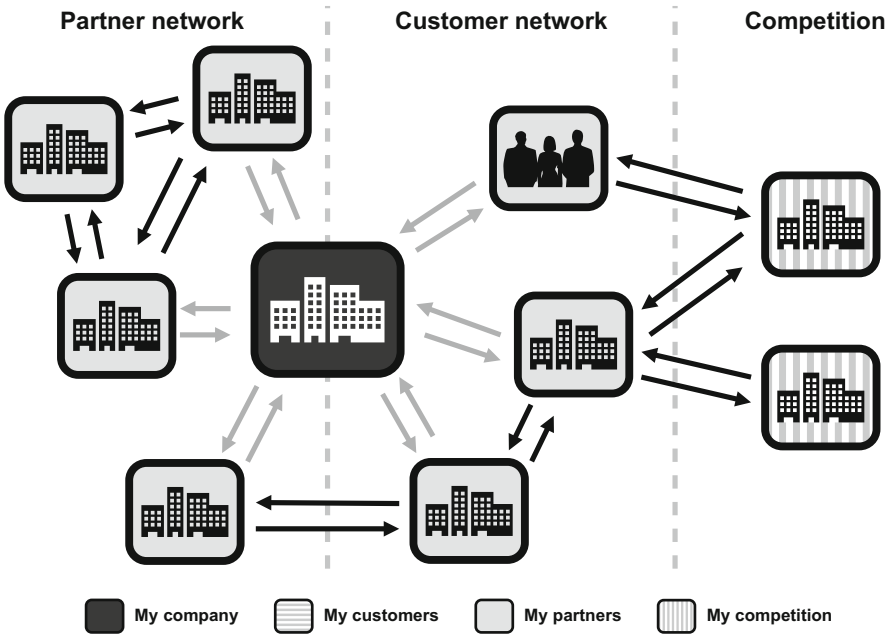


**Fig. 2** SAP network view representation

business model representations complement each other, describing two levels of granularity:

- The Network View describes the value creation of a whole business network—your company, customers, partners, and global competition. It highlights the entirety of the business network and its interrelations.

- The Enterprise View describes the value creation of a single company participating in the business network, and shows how the network's value creation relates to and is implemented by the business model elements of this company.

The two representations have been used as the basis for a systematic procedure for business model design and innovation: the BMDI methodology.

BMDI is a multi-step procedure that starts with a representation of the current business model as its baseline in order to then proceed using four major steps:

- Analyze and improve.
- Challenge and change.
- Test and verify.
- Evaluate and decide.

These steps can be gone through in any sequence and be repeated as needed. A more detailed overview of BMDI is provided in (Doll and Eisert 2014).

## 3 Structured Approach to Digital Business Model (Re-) Design

Jorge Lopez (2014) explains the transition from e-business to digital business as the 'presence and integration of things, connected and intelligent, with people and business'. An interconnection of this kind requires a network that ties everything together and a cloud infrastructure providing all services necessary for coping with every demand of today's business agility. A final element in digital business involves leveraging the potential of transactional and analytical processing, such as that used by Google's search algorithms or SAP large-scale in-memory technology. We call these ingredients digital key elements. The impact of digital key elements on the business model is described by digital value drivers, which have been derived from an analysis of about 50 different digital business models. We will systemize them in the following section and explain how they can be incorporated in the business model design methodology. A complete list of digital value drivers is provided in the SAP whitepaper on digital business modelling (Cigaina and Riss 2016).

### *3.1 Digital Key Elements*

Business and IT lack a common language managing to consistently discuss, analyze, and design opportunities from the digitalization of business. On the business side BMDI is an established approach providing a language to model the way organizations create, deliver and capture value, whereas on the side of technology we still need a similar minimalistic, yet semantically rich conceptualization so as to

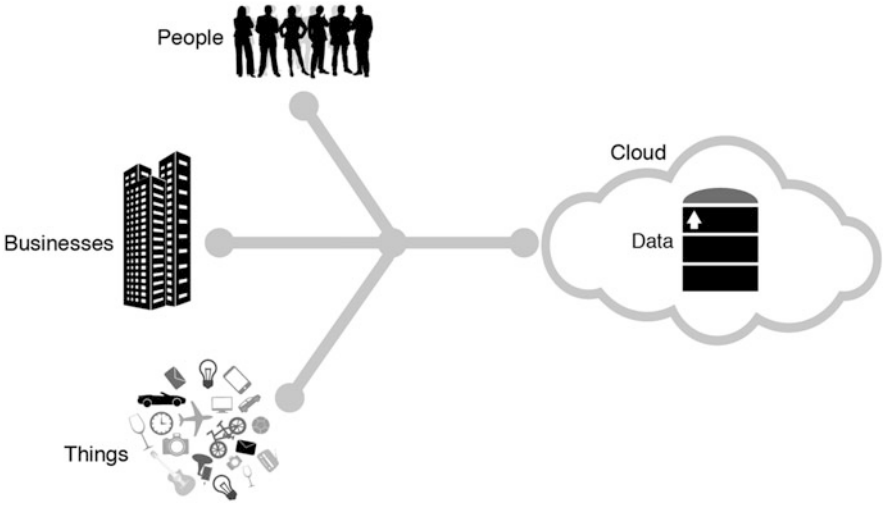


**Fig. 3** Digital key elements

model digital capabilities. This conceptualization of the technology side is represented by five digital key elements. These are taken into account in order to identify value drivers in each business model component.

The conceptualization we suggest is a synthesis of different views that IT analysts,[1] vendors, and practitioners commonly use. We propose discussing, analyzing and designing digital capabilities through a minimalistic, object-oriented, functional representation based on five key components we call digital key elements (see Fig. 3):

- People.
- Businesses.
- Things.
- Data.
- Cloud.

These digital key elements take a business perspective on digital capabilities going beyond a mere technological one (Cigaina and Riss 2016):

- *People* in the digital age are creative, informed and knowledgeable. They are at once source and foundation of the digital economy. The term 'People' is used as an *abbreviation* for 'digitally connected individuals/communities' leaving a trail (of data) in the digital world. People use digital capabilities through many types of devices (such as desktops, laptops, smartphones as well as wearable devices

[1]We refer in particular to Gartner (Nexus and digital lenses concept) and IDC (3rd platform concept).

like smart-watches and e-glasses, etc.), thereby experiencing various kinds of interactions with computers. *Mobility* is a key access point to digital capabilities. And it is through these very same devices that people digitally connect with other people. *Online communities and social networks* represent digitally enabled network-based relationships of individuals. *Digital social business* realizes value creation from human-to-human digital connections. This digital key element, for the sake of simplicity, is generically referred to as *People*.

- From a historic perspective *businesses* have generally been run as self-optimizing entities placed in a static environment, being today compelled to continually evolve their dynamics in order to regularly self-disrupt and then renew themselves within constantly changing markets. The term 'Businesses' is used as an abbreviation for 'digitally connected businesses/groups of businesses' combining their digital capabilities with the aim of creating new solutions. These businesses digitally connect to other businesses, as well as to individuals and assets, while employing different types of digital means: the web, XML standards, connectors to marketplaces, and so forth.
- *Things* are no longer static objects, rather these are increasingly becoming parts of and in the digitally connected world, interacting smartly with people, businesses, or other objects. The term 'Things' is used as an abbreviation for 'digitally connected objects' or 'smart things'. Smart things are typically equipped with sensors producing data, while possibly even having their own application logic, exchanging data and connecting to networks. Smart things are able to automatically react to contexts without customer interaction. This can involve customers' smartphones provided these serve as smart sensors (e.g., for determining their current location). The category of Things also includes robots, autonomous vehicles, drones, etc. and also, any technology for digital manufacturing (as for instance 3D printing) using digital information for producing physical objects; these, too, would be part of the 'Things' category. The *Internet-Of-Things* (IoT) connects individual physical objects to have them interact with other objects, people, and businesses—creating value from the information exchange. The term *Machine-To-Machine* describes value creation from things-to-things digital connections.
- *Data*, from the perspective of technology, usually refers to records in databases and data management processes. However, data can also represent business assets (Van't Spijker 2014) one can leverage for a business model. The term 'Data', as a digital key element, is an abbreviation for real-time, complete, detailed, consistent, transparent, and accessible information, and for any algorithms employing these data for analysis, planning, and prediction—including cognitive computing. This description includes sophisticated analytics procedures that process small or large amounts of data and generate consumable information. Data also encompasses *Big Data* and *Smart Data*.
- *Cloud*, from a technology perspective, is just an infrastructure. From a digital business point of view it is also a value-creating *service* with specific characteristics, namely:

| Business Model Components | Digital Key Elements |
|---|---|
| Value Proposition | Data |
| Customer Segmeets | Cloud |
| Revenue Streams | People |
| Channels | Business |
| Customer Relationships | Things |
| Key Partners | |
| Key Resources | |
| Key Activities | |
| Cost Structure | |

**Fig. 4** The two dimensions of digital value drivers

- A service that handles abstract resources (e.g., digital contents, or information associated to a physical resource/product, or a natively digital product).
- A service that is on-demand (i.e., available on request).
- A service that is scalable (up and down, depending on the demand).
- A service that you can pay-per-use (i.e., you can pay based on consumption).
- A ubiquitous service (i.e., accessible from anywhere).

In this way, the cloud becomes a service model and a logical shared environment to which people, businesses and things connect in order to exchange and accumulate data, as well as to offer and consume digital services.

## *3.2 'Digital Value Drivers'*

For business, it is important to understand how digital capabilities generate value. To both consider digital capabilities and value, we have introduced the concept of digital value drivers. These are value-generating effects that come from digital key elements and can be assigned to certain components of the enterprise view. If we think of the components of the enterprise view and the digital key elements as two dimensions, we arrive at the matrix scheme as shown in Fig. 4.

Analyzing a variety of digital business examples, we have derived a list of digital value drivers. Table 1 shows three examples of digital value drivers.

Digital value drivers usually do not appear in isolation, they depend on each other. These relations are often important for the application, as we will see later.

## *3.3 Digital Business Model Design Methodology*

Organizations wanting to explore the opportunities offered by digital business are to avoid leaping into the digital economy at random. There has to be a digital

**Table 1** Examples of digital value drivers

| Business model component | Digital key element | Value driver | Description | Example(s) |
|---|---|---|---|---|
| Value proposition | Cloud | On-demand services | Digitalization moves the information-related parts of physical products to abstract resources (de-materialization). Resources and services are offered on-demand, which helps balance demand and resources | Springer Science + Business Media offers more than 170,000 e-books; Netflix provides on-demand video-streaming |
| Customer segments | Data | Micro-segments | Detailed data on customers, and the aggregation of data on platforms, enables companies to target micro-segments and even individuals (segments-of-one). Based on the aggregation of customer data from various sources, a company can generate a profile that helps towards offering an individual solution. This allows companies to extend customer segments to customers with very specific demands | Amazon offers rare books to a segment of customers interested in them |
| Customer relationships | Cloud | Networked customer relationships | Due to the integration provided by the Cloud, companies can share customer profiles. In this way, companies get a more detailed picture of their customers, while customers get access to more solutions | Star Alliance airlines manage customer profiles and the 'Miles & More' loyalty program across different companies |

strategy, based on implicit or explicit 'Strategic Focus Area', a strategy that guides the required business model analysis and (re-)design. The strategic focus areas describe a well-defined direction of development in the digital economy, one specific to the conditions of the company. Following a schema by Treacy and Wiersema (1993) we can identify three groups of strategic focus areas with respect to business model innovation:

- *Operational Excellence* (focus on value creation).
- *Solution Leadership* (focus on value proposition).
- *Customer Intimacy* (focus on value delivery).

Examples include:

- For Operational Excellence:
  - Leverage digitally enabled ecosystems.
  - Set up crowd-partnering.
  - Exploit new data streams as resources.
- For Solution Leadership:
  - Expand business from product to services.
  - Generate mass customization.
- For Customer Intimacy:
  - Simplify solutions to improve customer experience.
  - Expand global reach.
  - Intensify customer involvement.

In addition to strategic focus areas there is also another concept to help structure digital value drivers: 'Business Model Patterns' that have gained wide acceptance in business model design (Gassmann et al. 2014). The business model patterns emphasize a number of specific design ideas, and they detail them using companies having successfully implemented them as examples. Workshops have shown that employing these as patterns makes the transfer of ideas to new contexts easier. While strategic focus areas aim at the consistency of a digitalization initiative, patterns support the generation of design ideas. In this sense, we can regard configurations of related digital value drivers as micro-patterns, micro patterns, which help pin such ideas to digital key elements.

Business model patterns and digital value drivers differ in one central aspect: While business model patterns address the entire business model, digital value drivers focus on particular business model components and digital key elements; digital value drivers may therefore appear in various business model patterns. From this we are able to infer that business model patterns describe how digital value drivers can be smartly combined to explain the strength of a certain business model.

In practice, we combine the different concepts in various ways. For example, we might follow this sequence:

1. Use of digital business model patterns as a first access point for coming up with some initial ideas and a selection of certain patterns for further analysis.
2. Reflection on strategic intent, creating clusters from the idea design process while streamlining this with an eye for possible synergies.
3. Use of value drivers to clarify how technology is employed in the implementation of digital business model ideas.

Any suitable order and any repetition of the steps therein is possible. For instance, if the focus lies on a certain digital capability, we might for instance select value drivers related to that specific digital key element (e.g., cloud) or

composite a digital key element (e.g., IoT). In another case, value drivers related to all digital key elements may be a consideration.

This threefold approach (strategic focus areas > business model patterns > digital value drivers) keeps the focus on the digital transformation throughout the business model design process, while providing leeway to also explore opportunities beyond digitalization.

## 4 From Business Model to Service Design

To further enhance the process from digital business model design to its implementation we then go beyond the 'Digital Business Model Design' methodology and support service design. To show that digital value drivers play a role in this respect, we shall sketch the main steps of this improved procedure and point out the connections. As an illustration for this methodology 'Quick Service Restaurants' (QSR), also known as fast-food restaurant chains are going to serve us as an example, one we have simplified for the sake of yet greater clarity.

The QSR industry segment recognizes a need to reinvent itself to fit the tastes of a younger (digital) generation, so the industry is always on the lookout for innovations of a digital nature. In this QSR example we concentrate on the customer order as a core process in this industry, while reflecting the specifics of customer interaction with respect to digitalization opportunities.

### *4.1 Deconstructing a Digital Business Model: QSR Example*

Starting with a fictitious representation of the digital business model for a QSR (with a focus on menu selection via a digital service) we are going to use the digital value drivers to show how digital technology affects the business model. The example is guided by *Solution Leadership* as the main operational strategy, aiming at an improved customer experience during the visit at the QSR. A simplified enterprise view for the example is presented in Fig. 5. For each business model element, it shows a selection of relevant digital value drivers corresponding with a description of their respective realization. The symbols in the left upper corner of each block show the matching digital key element (lower icon) and the business model components (upper icon). Cloud-based process execution as the backbone for implementing all described digital capabilities is not explicitly mentioned but mandatory.

Usually we add arrows connecting the boxes in the diagram to indicate cause–effect relations between digital value drivers. Some of these relations, such as the connection between the digital value driver 'Data Management' and a key activity, are obvious; as are the way 'Data as Resource' describes a key resource required for data management, while other relations are less obvious and more varied. For

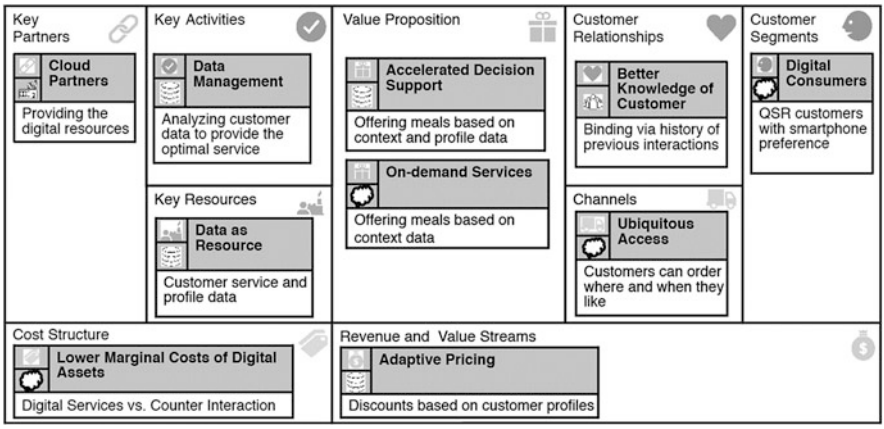


**Fig. 5** Exemplary enterprise view for the QSR case

example, data processing may be based on the company's own digital capabilities or from those of a partner service. In this example, we have omitted the relations in Fig. 5 for the sake of simplicity.

## *4.2 Service Design Principles*

The steps for designing a new offering implementing a digital business model are similar to the steps for standard service design. The major difference lies in considering relevant digital value drivers aimed at providing the customer with a digital-rich user experience. Although there are many different methodologies for service design, the most common and probably most effective one follows Design Thinking and enables to integrate digital business model and service design. After setting the design for the scope, the Design Thinking procedure goes through the following steps:

- Research—Get to know your users and their needs.
- Synthesis—Define *Personas* and baseline *Customer Journey Maps* and *Service Touch Points*.
- Ideation—Come up with new service ideas.
- Rapid Prototyping—Design a high-fidelity prototype of the new service by defining new *Customer Journey Maps* and *Service Blue Prints*.
- Validation—Validate the new service for feasibility, desirability, and viability.

The following sections present two of the Design Thinking steps in service design to illustrate the relevance of digital value drivers for service design.

## *4.3 Service Design Building Blocks for the QSR Example*

### 4.3.1 Persona Development

Service design requires a deep understanding of service users and their explicit or tacit needs. Every service addresses more than one user and probably more than one user segment, but to understand *how* a service fits the users' needs, we have to elaborate a very specific Persona that reflects the person who is going to consume this service. Good practice is defining at least one Persona per user segment.

The Persona description must be as authentic and detailed as possible; these details are to highlight the role of digital value drivers, describing their influence on the Persona. The interaction with digital technology must be perceived as natural, providing the designers with sufficient details, so they can understand the Persona's interaction with a specific digital feature.

Figure 6 describes the personas for the QSR case: a family (i.e., a couple with two young kids), who are looking for a place to have lunch during their weekend trip to a shopping mall.

The Personas help us understand how the digitally enabled value proposition fits the family's needs because the concrete setting makes the effect of a digital value driver more comprehensible. For example, with respect to the digital value driver 'On-Demand Services' we see that a mobile app could enable the Persona to make a faster food order (anytime and from anywhere, by using a cloud-based digital service). In a similar way, we realize that the digital value driver 'Tailored data-based customer solutions' of a new offering can help leverage selected user preferences (e.g., low-fat menus known from previous transactions) and promote specific offerings to the identified customer.

### 4.3.2 Customer Journey Map and Service Blueprint

Another important building block in any service design is the customer journey map, which describes the sequence of interactions the customer follows when consuming the service. It is complemented by a 'Service Blueprint' illustrating the service from the perspective of the service provider. It encompasses all subsequent tasks the infrastructure has to execute below the customer's line of visibility. A service blueprint adds supporting processes (activities) and resources enabling the service provider to provide the service to the customer. While the customer journey map (see Fig. 7) has a stronger focus on the business model elements that reflect the value aspect, the service blueprint takes digital capabilities into account. The digital value drivers appear as mediators between both.

'Cloud-based process execution', for example is a digital value driver pointing towards both the key activity 'Data Management' and the digital key element

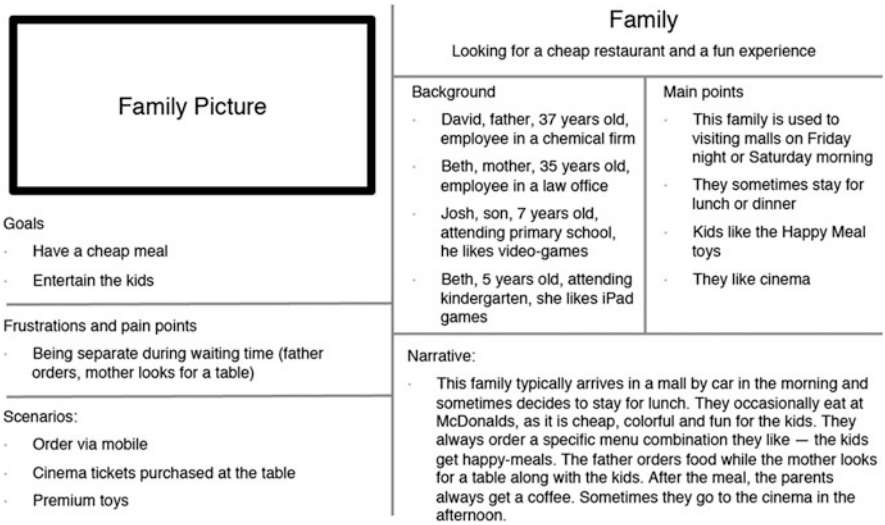


**Fig. 6** Persona for the QSR case

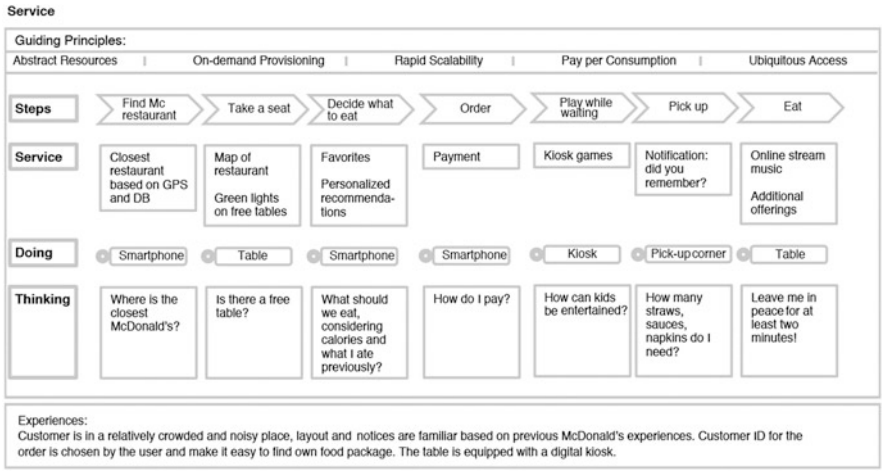


**Fig. 7** Customer journey map (partial)

'Cloud', describing the technical characteristics of the new service. In the same way, the value driver 'Data Management' describes a key activity based on the technical processing of the available data, which we can leverage to manage the user's preferences and past transactions.

## 5 Conclusion and Key Learnings

In response to the challenges of the digital economy we need more than just tools to systematically develop digital technology; what we need is a methodology for systematic Digital Business Modelling based on a language both business and technology experts equally understand. The structured approach we have presented in this chapter is a step in this direction. Additional research and practice is nonetheless needed. Considering the increasing importance of digital business models for modern enterprises and the fundamental changes they cause, we assume that the proposed concepts will also affect future corporate management. Realizing the changes that the digital transformation has already caused, we have to reconsider our thinking of how to run business in general.

**Key Learnings**

- Digital transformation requires a methodological approach that incorporates technology and business considerations in an integrated manner, and it is to be based on a common language for technical and business experts.
- The concepts of Digital Key Elements, Enterprise View, Digital Value Drivers, and Strategic Focus Areas provides such a language.
- Applying Design Thinking to the Business Model Development and Implementation methodology, extended by the concepts, fulfills the requirements of incorporating technology and business considerations.

## References

Brown T (2008) Design thinking. Harv Bus Rev 86(6):84–92

Cigaina M, Riss U (2016) Digital business modelling: a structural approach towards digital transformation. Available via SAP SE. http://go.sap.com/docs/download/2016/01/ea769b27-5a7c-0010-82c7-eda71af511fa.pdf. Accessed 15 Feb 2016

Doll J, Eisert U (2014) Business model development and innovation: a strategic approach to business transformation. 360° Bus Transform J 11:7–15

Eisert U, Doll J (2015) Business model based management: bridging the gap between strategy and daily business. 360° Bus Transform J 14:16–29

Gassmann O, Frankenberger K, Csik M (2014) Revolutionizing the business model. In: Gassmann O, Schweitzer F (eds) Management of the fuzzy front end of innovation, 1st edn. Springer International Publishing, Cham

Johnson M, Christensen C, Kagermann H (2008) Reinventing your business model. Harv Bus Rev 86(12):50–59

Kim W, Mauborgne R (1999) Strategy, value innovation, and the knowledge economy. MIT Sloan Manag Rev 40(3):41–54

Lopez J (2014) Digital business is everyone's business. Forbes. Available via Forbes. http://onforb.es/1uBkChg. Accessed 15 Feb 2016

Osterwalder A, Pigneur Y (2010) Business model generation: a handbook for visionaries, game changers, and challengers. Wiley, Hoboken, NJ

Teece D (2010) Business models, business strategy and innovation. Long Range Plann 43:172–194
Treacy M, Wiersema F (1993) Customer intimacy and other value disciplines. Harv Bus Rev, January–February 1993 Issue:84–93
Van't Spijker A (2014) The new oil: using innovative business models to turn data into profit. Technics Publications, Basking Ridge, NJ
Westerman G, Bonnet D, McAfee A (2014) Leading digital: turning technology into business transformation. Harvard Business Review Press, Boston, MA

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