

# Becoming a Platform Organization: How Incumbent Companies Stay Competitive

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Using emerging digital technologies and data advancements, insurtechs are disrupting the market and transforming culture and code into value for their customers. Platforms, in particular, have evolved as a pivotal element in connecting actors and enabling them to integrate resources that can create value. With state-of-the-art technology, platforms enable insurtechs to take advantage of myriad key benefits, including value orientation, speed, data-based customer understanding, continuous improvement, and openness.

Incumbent companies, on the flip side of all this disruption, need to develop and empower their organizations to compensate for their disadvantages and remain competitive. Platforms allow incumbents to not only gain characteristics such as speed and openness but also help them establish new, innovative business models and embark on transformation journeys.

Connecting a platform with an existing company to a platform organization is beneficial for both established companies and insurtechs. Without pursuing that avenue, the insurtechs face the risk that their competitiveness may decline if others can copy their digital skills at low cost. Thus, connecting their platforms with the incumbent organizations that possess hard-to-copy capabilities guarantees the uniqueness and sustainability of their own business model. This article describes the basic action mechanisms of platforms and platform organizations and the associated opportunities for organizational and workforce development.

### **Insurtechs**

### Co-Creating Value-Added Services

As observed in examples such as Lemonade Insurance Company for home insurance and German health insurance company ottonova, insurtechs establish innovative, customer-focused solutions based on emerging digital technologies. Without having to worry about legacy systems characterized by outdated software, closed infrastructures, and slow applications, insurtechs use emerging technology to generate competitive advantages such as real-time capabilities as well as openness to connect with other solution providers. These advantages enable insurtechs to focus on customer needs and solve their customers' immediate problems. Digital technologies are integral in ensuring unique customer experiences as major differentiators from competitors' offerings. In most cases, insurtechs focus their communication and interaction with customers exclusively on digital channels.

Major competitors for insurtechs (the incumbent insurers) must deal with existing, stable, but not agile legacy systems (monolithic systems) and the cultural barriers their silo-like structures create, all while keeping their offers up to date and convenient across many channels. The latter challenge should not be underestimated. As a result of these differences, insurtechs have advantages in five areas: (1) value orientation, (2) speed, (3) data-based customer understanding, (4) continuous improvement, and (5) openness.

ottonova illustrates all these advantages. Its consistent focus is on *value orientation* and value creation for customers, a focus that also shapes the company's brand and Internet presence. Its approach is to make life easier for its customers, with health insurance that is more geared to people's needs and with processes that are simpler and faster than traditional offerings.

The company integrates and bundles all relevant resources, such as actors or functionalities, on its platform (e.g., actors such as customers, employees, or doctors; functionalities such as a personal concierge). As all resources are integrated and connected via the platform, ottonova can orchestrate them and offer all services via its app. Its Concierge service, for example, serves as a helmsman for all questions and issues that customers have, whether they need to obtain a second opinion, talk to specialists, obtain help abroad, arrange appointments, and so on (see Figure 1).<sup>1</sup>

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Real-time interactions with customers at a fast *speed* (within a framework of data protection regulations) are used to build a data-based customer understanding in order to offer valuable data-based services. Examples are the Digital Doctor's Visit (as shown in Figure 1) and Documents, a service that brings together all documents in the app so that the customer is spared tiresome paperwork.

New services and features await ottonova customers all the time. A co-creative process with policyholders, any interested party who gives ottonova feedback, and ottonova itself determine these new services and features. Some new services coming to ottonova and its customers include:2

- **Direct billing.** The doctor and ottonova take care of the billing; policyholders have less administrative work and no longer must pay in advance.
- Appointments. Policyholders can make appointments directly through the ottonova app.
- Health impulses. By providing the latest research from medicine and psychology, ottonova inspires policyholders to make wiser decisions every day.
- Preventive planner. This service recommends sensible preventive medical check-ups based on gender and age.
- Self-tests. Policyholders can take their health into their own hands. Test kits (e.g., for vitamin D levels) and questionnaires (e.g., on stress) make it easier for policyholders to take better care of themselves.

The delivery of new value-added services, co-created between ottonova and its users, enables continuous improvement. By connecting all stakeholders and integrating the required skills, the platform enables customers to interact with the company in real time and integrate external solutions to their advantage.

Co-creating value-added services requires new technical capabilities, mostly enabled by new digital technologies. Thus, interconnectivity, scalability, modularity, and interoperability are key building blocks of platforms and, consequently, need to be viewed as new design imperatives aiming at the effective reuse and integration of technical functions (e.g., authorization or display functionalities). Reuse and integration especially require new capabilities. In this context, the inside-out and outside-in openness of platforms play a key role and become a strategic mandate.

### The Role of Platforms for Continuous "Empowerment"

Digital disruptors use platform approaches to build and bundle relevant resources and capabilities. All capabilities are then made available to the customer via one channel, the app, as illustrated by ottonova's Concierge service. To continuously develop professional and technical services, it is important to ensure that the reusability and orchestration of resources and capabilities on the platform are possible.

Modern architectures, used to implement these platforms, are based on technical principles that go hand in hand with the company's culture. Therefore, cultural development is a major issue. Instead of silo-like behavioral patterns aimed at differentiation, all talents in the company must be recognized and deployed where their benefit is greatest. Technical principles like reusability, scalability, openness, independence, transferability, agility, and evolution can neither be realized in a technically applicable way without a suitable culture, nor can they develop value for the company. These principles are expressed in open source technologies and OpenStack initiatives that minimize vendor dependency and maximize service interoperability across different environments.

Following the maxim of modularity, functions are realized as collections of loosely coupled services (microservices), and the critical role of reusable APIs is key for an insurtech's system architecture. In this

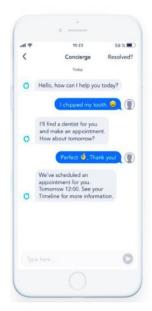




Figure 1 — ottonova services: Concierge and Digital Doctor's Visit.

way, insurtechs ensure that they are constantly growing a modular system of valuable services for customers and are continuously developing and reusing the technical capabilities of the platform (e.g., the connection of external solutions and platforms or the provision of functions the insurtech has developed).

This continuous process of improving the capability to integrate resources that generate value for customers marks the difference between insurtechs and incumbent companies. Through rapid improvement and a continuous delivery of value to customers, insurtechs can transform their open culture and digital code significantly faster into business value.

# **Incumbent Companies**

### Less Competitive in the Long Run?

Established insurance companies have usually grown over decades and are characterized by a completely different strength and weakness profile than insurtechs. Using the ability for continuous improvement as a benchmark, incumbent companies have significant disadvantages. These concern the integration and application of the internal and external workforce (workforce management) as well as the technical debt that limits the possibilities to integrate and apply valuable resources. Instead of focusing on value for the customer, established companies focus mostly on their products and their product-driven process flows. Their technical support is based primarily on legacy systems of the 1970s and 1980s. In contrast to modern OpenStack infrastructures, incumbent companies' technical infrastructures are characterized as closed, transaction-oriented, inflexible, and slow.

The heritage of industrial production processes has also defined the way in which established companies handle cooperation and workforce management. Hierarchical, silo-like structures, inherited from industrial production processes, can be advantageous for independent manufacturing and delivery processes. However, by following this old-school working process, the associated workforce management and the corresponding culture prove to be very disadvantageous in the information age with the requirements of integration and reuse of all services.

Characteristics in established companies including product orientation, slowness, and a closed and hierarchical culture are clearly disadvantageous for continuous improvement. If the incumbent companies do not recognize and respond to the value orientation, speed, and openness of insurtechs, they increasingly will find themselves losing in the league of intelligent, empowering, and value-based customer solutions.

Despite their disadvantages, however, incumbents do have several advantages over insurtechs. They can usually build on large customer bases characterized by long-standing relationships. Moreover, established insurance companies continue to enjoy stable corporate earnings, possess a wealth of information about their clients, and benefit from the capabilities and services they have built up over the years. In particular, their employees' skills, products, and established solutions lead to major advantages. Unlike digital services, which may be replicated without too much difficulty, these skills and capabilities are not easy or quick to copy.

### The Role of Platforms for Digital Transformation

The disadvantages of established companies, in comparison to insurtechs, are the reason why traditional companies need platforms. Platforms require changing the culture and business logic in a company from product to service dominance, making processes in relevant areas real-time capable, opening the company to the reuse and integration of solutions and services from other actors, and replacing a hierarchical culture with modern, agile, team-oriented approaches that make optimal use of the internal and external workforce.

While making these changes, incumbent companies need to retain their existing unique, competitive capabilities; their value propositions; and their existing competitive advantages. However, these unique capabilities are "buried" in siloed integration approaches and monolithic systems of record. As a result, paying down technical debt and modernizing IT infrastructure are major challenges. Established companies need modular, interoperable, and flexible systems. They must build platforms as agile *systems of engagement* to pay down their technical debt, and they must modularize their monolithic application landscapes and infrastructures.

Figure 2 illustrates the two strands of action for becoming a platform organization. The upper part of the figure shows the assembly and disassembly of the platform. Companies must develop the platform first, and then, for interactions with customers, next develop the connection of external abilities and the integration of the abilities of the existing *system of records*. The lower part of Figure 2 shows the requirement to modularize the existing system of records parallel to the development of the platform.

In the platform organization, the services of the existing organization (system of records) and the platform (system of engagement) are controlled and orchestrated uniformly and comprehensively.

# Why Become a Platform Organization?

### Platforms, Organizational Development, and Platform Organizations

Companies like ottonova exploit opportunities for digitization and introduce innovative service business models that have the potential to disrupt the existing customer interaction and value propositions of incumbent insurance companies. They use platforms that facilitate value creation and innovation by engaging customer interaction, integrating external capabilities, and building innovative value propositions.

Although incumbent companies can develop and design digital strategies, they struggle with their implementation and execution. Most incumbent companies are too technology-focused and do not recognize the need to take a holistic approach that goes beyond the implementation of new IT assets and infrastructures. They need a long-term strategy and architectural vision that disrupts established structures and processes.

Companies also need to switch their product-dominant mindset to a service-dominant one to develop digital strategies.3 Digital transformation requires "view[ing] service as [the] transcending model for all types and forms of innovation (tangible or intangible)"4 and, hence, a transformation from a goods-dominant logic to a service-dominant logic. Thus, service innovation is an opportune strategy for companies to compete in the digital era. Service platforms are characterized by capabilities that nurture innovation and digital business models. As in our ottonova example, organizations can build capabilities that help integrate different services and facilitate interaction with their customers.

We believe that incumbent companies must see service platforms as a strategic mandate. Service platforms serve as the "venue for innovation," allowing for the co-creation with customers of experiences that are the basis of value creation.6 In this way, service platforms transform business models by facilitating resource integration and interaction. The aim is to reconceptualize current value offerings to compete with insurtechs.

The main target of service platforms is to "liquefy" resources and enhance resource density (liquefy refers to the unbundling of information from its associated physical entity or device; resource density describes the amount of resources that are integrated and made accessible on the service platform to create and deliver innovative services).7

Focusing on their facilitating role, we characterize service platforms as follows: a service platform is an actor and resource integrating and orchestrating a

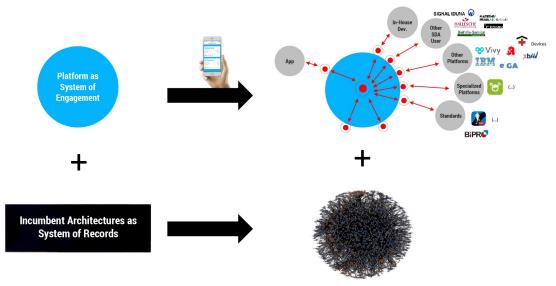


Figure 2 — Becoming a platform organization.

service system that facilitates interactions between different systems to enable value propositions. In particular, we prefer the following simplified definition:

Platforms bundle resources that by their usage enable new transactions between actors.8

The challenge, especially for incumbent companies, is to analyze the existing possibilities from the resource side, not from the product side,9 and to find strategies that best exploit the company's resources and capabilities relative to external opportunities.<sup>10</sup>

In his work, Professor Robert Grant has emphasized the central meaning of a company's resources as the foundation for its strategy and, thus, organizational development.<sup>11</sup> The challenge for insurtechs and incumbent companies alike is to identify the resources and capabilities that constitute their unique and sustainable market position. To build on that market position, a company must define the resources, capability, and workforce gaps that it needs to fill and then invest in upgrading its resource base. Grant's analysis of the rent-generating potential of resources concluded that companies' most important resources are those that are durable, difficult to identify and understand, imperfectly transferable, not easy to replicate, and over which a company possesses clear ownership and control — aka the "crown jewels." <sup>12</sup> In the case of ottonova, this potential is in the company's unique capabilities with entirely digitalized processes and its ability to build up an innovative ecosystem.

Even if digital transformation puts into question the characterization of a company's most important resources by emphasizing digital capabilities, we believe the essence of Grant's theory remains true. A company must design a strategy that makes the most effective use of its core resources and capabilities. Indeed, our understanding of organizational and business development is resource-based:

Organizational development is a concrete improvement of functional capabilities understood as improving the ability to adjust, integrate, and apply resources.<sup>13</sup>

The integration of platforms and existing organizations into platform organizations can be useful for insurtechs as well as for existing companies. Insurtechs can build the crown jewels (i.e., skills that are difficult to copy and transfer) and existing companies can, by combining their companies with platforms, compensate for their disadvantages in value orientation, speed, data-based

customer understanding, continuous improvement, and openness, without losing their existing unique skills.

#### Architecture Makes the Difference

To make use of platforms to solve the challenges mentioned, companies first need to realize that business and IT need to be co-designed as a whole.14 Viewing an enterprise as an assembly of various architectures and building blocks allows the development of a coherent vision of how an organization can build the required capabilities to meet anticipated changes in its environment.<sup>15</sup> Enterprise architecture, in particular, helps provide guidance and communicates how the company needs to change to survive. Importantly, operational and transformational capabilities need to be combined in a balanced way in an architectural effort.<sup>16</sup> Enterprise architecture brings a shift in focus from technical systems to designing coherent sociotechnical systems that meet strategic requirements and organizational needs, such as those around workforce development, culture, structure, and processes.

Next, companies must introduce the operational and transformational capabilities with the aim of evolving into a platform organization. But, as the ottonova example shows, it is not only real-time interaction with the customer that one must consider, but the respective context of the customer must be kept in mind to ensure a company offers a valuable service. This consistent orientation toward value for the customer — value in use and value in context — explains the high importance of data-based customer understanding. Every interaction with the customer can further develop the data-based customer understanding and help companies better understand customers and their unique situations.

The Service Dominant Architecture (SDA) can overcome some of the challenges faced when evolving into a platform organization.<sup>17</sup> SDA draws primarily from service-dominant logic and "translates" its axioms and foundational premises into adequate concepts and components.<sup>18</sup> The SDA constitutes an environment for integrating and orchestrating internal and external resources. In this way, the SDA supports the digitization of companies by structuring actors and their resources and reducing overall complexity. Servicedominant logic acts as the foundation of a science of service systems.19

The SDA responds primarily to the need to react quickly and flexibly to customer preferences and changing conditions. Thus, it is vital to understand how customers determine and calculate value in their given context.<sup>20</sup> The customer's process must be the focus. To ensure this customer focus, the SDA comprises three service systems and a data lake (see Figure 3):

- The system of interaction supports real-time customer interactions and value co-creation activities through their respective structures and mechanisms "to access resources in a coordinated and purposeful manner."21
- The system of participation integrates external resources and provides access to resources of other platforms or systems. Thus, it provides access to the actor-to-actor network and the stakeholders forming the service ecosystem.
- The system of operant resources implements the capabilities to integrate and orchestrate resources from the established organization.
- The data lake exchanges data with other systems; for example, from interactions with the customer (system of interaction) or from the existing customer relationship (system of operant resources).

Next, we examine the basic suitability of the SDA based on the objectives and challenges of both insurtechs and established insurers.

### Uniqueness and Sustainability for Insurtechs

In addition to the continuous development of its health insurtech platform, ottonova is focusing on two additional goals to secure its business model in the long term: (1) to be a provider of digital services for other companies, and (2) to be a core player in the health ecosystem.

The company aims to provide its existing services such as Concierge, Document, and Timeline via the system of participation — to other companies as "software as a service" and to develop them on an ongoing basis. As shown in Figure 4, ottonova could provide these services through the system of interaction. Now, to become a core player in the health ecosystem, ottonova ideally would have to connect the existing silos in the health system. It could then offer services to other companies, in the system of participation (the right side of Figure 4).<sup>22</sup> In this way, the insurtech positions itself as an open platform and integrator in the middle of the silos of the German health ecosystem. By following this path, the insurtech is permanently looking for new cooperation possibilities and ensures a fast and open connection to already existing systems (middleware, APIs).

#### Speed and Openness for Incumbent Companies

For established companies, developing platforms and connecting with existing organizations result in several opportunities. Initially, platforms can compensate for the disadvantages of the existing IT application landscape and infrastructure. The design space of the SDA enables the incorporation of all resources (i.e., data, functions) required for customer-centered, valuable solutions.

In this way, the existing insurer can create solution after solution for customers. A first step may be, for example, a lightning-fast contract view or a real-time change option for contact information. These solutions could be provided to the customer via an app and implemented via the system of interaction and data lake of the SDA. Services like ottonova's Concierge or IBM's billing app

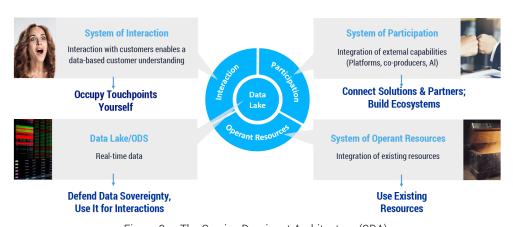


Figure 3 — The Service Dominant Architecture (SDA).

could then be integrated into the app without losing the contact point to the customer.

In parallel, the established insurer can individually design and build its ecosystem via the system of participation of the SDA. For this purpose, institutionalized standards such as the payment method PayPal, specialized platforms such as mySugr for diabetes management, and others can be integrated, along with individually developed solutions.

Finally, the capabilities of the established company can also be meaningfully integrated. This integration must be done in conformity with data protection regulations and with customer consent when required (e.g., digital medical records).

The central advantage of an architecture such as the SDA results from the interaction of the systems. If, for example, a customer submits an invoice for medication via an app (system of interaction), then a connected medication check (system of participation) and the digital medical record check (system of operant resources) can be done to ensure the customer does not have an existing allergy or intolerance to the prescribed medication and, if necessary, provide the customer with a message — in real time.

With each resource integrated into the SDA through solutions and services delivered to customers, resource density and data-based customer understanding increase. Established insurers thus gain the characteristics they are missing, such as speed and openness for cooperation and partnerships with solution providers and other platforms. In this way, they can compensate

for their disadvantages compared to insurtechs and integrate their unique capabilities to their competitive advantage.

# Findings and Outlook

This article has explored how the integration of platforms and existing organizations into platform organizations can generate competitive advantage. Insurtechs can further develop their continuous rapid empowerment advantage and reduce their vulnerability to being quickly copied by competitors by building ecosystems and links with established organizations, thus creating unique, hard-to-copy resources. Likewise, incumbent companies can compensate for their disadvantages in the areas of customer-centric solutions, speed, openness, and data-based customer understanding by transferring their unique capabilities and resources to the platform.

Architectures can be very valuable for all actors. As our example of a medication check under the SDA shows, the interaction of the three service systems and the data lake results in dynamic opportunities that grow with increasing resource density.

Thus far, the potential of platforms has concentrated almost exclusively on technological service capabilities. The development of organizational culture and the reshaping of cooperation through the rapidly growing possibilities of integrating external capacities (i.e., the workforce design of the future) have hardly been considered. This field promises exciting developments.



Figure 4 – Providing services with SDA.

#### **Endnotes**

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<sup>2</sup>ottonova (see 1).

<sup>3</sup>Ross, Jeanne W., et al. "Designing and Executing Digital Strategies." Proceedings of the 37th International Conference on Information Systems, Dublin, Ireland, 11-14 December 2016 (https://pdfs.semanticscholar.org/9845/ 053c4cd6e2a9ce61988fc060517c933341ff.pdf).

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<sup>6</sup>Prahalad, C.K., and Venkat Ramaswamy. *The Future* of Competition: Co-Creating Unique Value with Customers. Harvard Business School Press, 2004.

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<sup>15</sup>Proper and Lankhorst (see 14).

<sup>16</sup>Proper and Lankhorst (see 14).

<sup>17</sup>Warg, Markus, and Ronald Engel. "Let's Get Digital: Digitizing the Insurance Business with Service Platforms." Cutter Business Technology Journal, Vol. 30, No. 9, 2017 (https://www.cutter. com/article/let%E2%80%99s-get-digital-digitizing-insurancebusiness-service-platforms-497356).

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<sup>20</sup>Spohrer and Maglio (see 19).

<sup>21</sup>Spohrer and Maglio (see 19).

<sup>22</sup>From author correspondence with ottonova CEO Dr. Roman Rittweger, 2018.

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