
RISKS AND OPPORTUNITIES OF DIGITAL PLATFORMS FOR SCALING BUSINESS MODELS

Pablo Valentin Weiss¹ and Benjamin Grab²

¹⁾²⁾ *The Bucharest University of Economic Studies, Romania*
E-mail: pablo.weiss@gmx.de; E-mail: benny_grab@hotmail.com

Please cite this paper as:

Weiss, P.V. and Grab, B., 2020. Risks and Opportunities of Digital Platforms for Scaling Business Models. In: R. Pamfilie, V. Dinu, L. Tăchiciu, D. Pleșea, C. Vasiliu eds. *6th BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Messina, Italy, 4-6 June 2020. Bucharest: ASE, pp. 829-834

Abstract

Digital platforms are constantly changing and revolutionizing the business landscape in numerous aspects. The economic characteristics of digital platforms are the systematic capture and analysis of data and as a consequence the network effect. Digital platforms are flexible concepts which are constantly developing and adapting to the dynamics of markets with exponential growth. Compared to companies who have their roots in the old economy, those digital platforms can be regarded in two aspects. On the one hand, it can be seen as a risk, where the digital platforms are taking over market shares and generate monopolistic conditions. Furthermore, they are more often still perceived as a complete disruption of the traditional way of business. On the other hand, it can be seen as an opportunity to scale their existing business or even generate new business models. The challenges for companies implementing a digital platform as a business case are investigated upon highlighting on the opportunities and risks that accompany corporations in the conversion. In a desk research the roles of digital platforms and the market entry strategies build the theoretical framework. The paper elaborates the most significant risks and opportunities maintaining digital platforms. The research results are part of a comprehensive research project on business management and digital platforms developed as part of doctoral research at the Bucharest University of Economic Studies.

Keywords

digital platforms, digital transformation, scaling business, business model innovation, disruption

JEL Classification

L12, L14, M13, M16, O14

Introduction

Companies have possibilities to scale their business in various ways and in four different segments such as people, strategy, business operations finance. The range of possibilities

starts with an increase in personnel or to improve or disrupt the business strategy. Another possibility is to optimize processes, invest in mergers, or to grow organically. Last but not least, the change or enhancement of the existing business model allows companies to scale their ventures. In this paper, the focus is on the potential scaling of businesses by implementing or maintaining digital platforms. The digital platforms are changing the business landscape and have enormous effects on the markets and the might of those platforms are demonstrated by the GAFAs (Google, Amazon, Facebook and Apple) monopoly. The economic specificity of digital platforms is the systematic collection and evaluation of data and its associated network effects. Still, there is no generally accepted and recognized definition given by their great diversity. There are different perspectives on digital platforms, such as the impact of digital platforms on society (Chan and Ghose, 2014), the governance of digital platforms (Boudreau, K., 2010), platform-based ecosystems (Jha, S. K. et al., 2016) and the adoption of platform strategies (Hagiu and Wright, 2015). The demarcation in this presented paper is the focus towards the opportunities and risks accompanied using digital platforms to scale business.

In practice, digital platforms are characterized by their enormous diversity, ranging from social networks, comparison and evaluation portals, search engines, sharing platforms, to online marketplaces (BMW, 2016). In this listing, the wide range of possibilities using digital platforms to generate business opportunities is demonstrated. By that diversity and range of business options one could state that there are a lot of opportunities with digital platforms to scale businesses. Contrary to that, implementing and maintaining a digital platform can also lead to risks. In times where discussions about digital transformation of businesses as a necessary strategy to respond to the future challenges in global business for enterprises are omnipresent, still there is action required in many corporations.

Research Methodology

The authors processed a descriptive research method in order to summarize their research objective. Information was gathered from numerous sources of secondary literature, mainly specialist books and articles from the domain of information technology, management and digital transformation. Furthermore, an inductive approach was applied with the aim to draw a conclusion on the opportunities and risks in implementing digital platforms in order to scale business. Furthermore, the results of the desk study contain important findings on the influence and effects of digital platforms to be considered when fundamentally disrupting and scaling business.

Theoretical Framework

Digital platforms contain a bunch of attributes which induce companies to implement these in their business model in order enable corporations to scale their businesses. The advantages of digital platforms are found in contributions to reduce transaction costs, facilitate an easier distribution of products and services, reduce complexity for customers' search as they integrate information of multiple sources by integration of intermediary agents and lower the monitoring costs for the corporations (Pagani, 2013 and Kankanhalli et al., 2018). Also, digital platforms are a tool to organize and coordinate the development of supplemental products by using modular and governance structures (Tiwana et al., 2010 and Boudreau, K., 2010).

Changing from traditional companies with linear chains of economic value added to highly networked digital platform eco-systems precedes to complex correlations of producers, users, and eco-system partners within digital platforms (Jaekel, 2017). Other than in traditional businesses Porters Five Forces of competition (Porter, 1980) are still valid in digital platforms but the forces are applying differently and add new factors to it. For example, digital platforms

generate added value for their users with resources that do not belong to them and which they are not capable of to control – for example AirBnB (Jaekel, 2017; Grab et al., 2018).

The roles of digital platforms

Digital platforms have the potential to scale businesses exponentially in terms of innovation, value creation and productivity. Economically, digital platforms are an enormous growth engine when applied in correct manner. The roles of digital platforms are summarized in the following table.

Table no. 1 roles of digital platforms

Innovation driver	Generation of customer benefits	Reduction of transaction costs	Market developer	Guarantee of welfare effects
Business model innovation	Convenience	Reduction of information, communication, negotiation and logistics costs	Supply/demand aggregation	Overcoming market frictions
Tailor-made products and services	Broader range	risk mitigation	Improved market entry of SMEs	Increased allocative efficiency
Novel product combinations / bundles	Greater market and price transparency	Making production more flexible	Global export opportunities	exploitation of technology
Flexible organization models	Sharing of resources/assets	-	Sales optimization	standardization

Source: own illustration based upon Berger, R. & Internet Economy Foundation 2016. Fair Play in der digitalen Welt, available at: https://www.ie.foundation/content/4publications/rb_cop_16_011_ief_plattformstudie_de_online.pdf

In summary, the weighting and effect of the five roles and its properties differentiates itself in every unique digital platform. The contribution to a possible scaling of business is very dependent on the business model and the appeal to the market. Nevertheless, digital platforms enable the corporations to channel the market in more perspectives than other business approaches.

Market entry strategies

In order to establish successfully on the market, digital platforms have to solve the supply and demand market. According to Parker, G. et al. 2016 there exist eight proven market entry strategies for digital platforms which are referenced and described on basis of Parker, et al. 2016 and Berger & Internet Economy Foundation 2016:

- Follow the rabbit: The functionality of business model has to be proven on a one-sided market first
 - Piggybacking: User base adaption of another platform
 - Seeding: Creation of relevant value units in advance which convince the users and stimulate the market
 - Marquee: Incentivation of the participation of particularly important users
 - Single-side: initially concentrate the acquisition on one market side or user group
 - Producer evangelism: Enabling of the supply side to bring in its own customer base
 - Big bang: Generate maximum attention for the launch day or ramp-up through push marketing

- Micromarket: Establishment in an existing community

The market entry strategy of digital platform has to be chosen carefully as every single of these eight approaches can have a limiting factor on the business models.

Research Contribution

Risks and opportunities of digital platforms

During the desk research a thorough investigation on the risks and opportunities the main findings are demonstrated in the following table and will be explained afterwards.

Table no. 2 Risks and opportunities of digital platforms

Risks	opportunities
Loss of customer access	Increase in turnover
Reaching the critical mass (Hoffmann, R., 2016) (Walter, M., 2016)	Market access / Access to new market segments (Evans, P. & Gawner, A., 2016)
Monopolisation	New market services
Internal resistors (Van Alstyne, M.W., 2016) (Baums, A. et al., 2015) (Evans, P. & Gawner, A., 2016)	Focus on the core business
Disruption	Collect customer data
Interchangeability (Van Alstyne, M.W., 2016)	Exploiting network effects (Baums, A. et al., 2015)
Margin Loss	Reduction of transaction costs
Data sovereignty loss (Baums, A. et al., 2015)	Increasing innovative capacity (Baums, A. et al., 2015)
Non-uniform interfaces (Sarkar, P., 2015)	Diminish insecurity (Van Alstyne, M.W., 2016)

Source: own illustration based upon Drewel, M., et al. 2017. Erfolgsgarant digitale Plattform – Vorreiter Landwirtschaft, [online], available at https://www.researchgate.net/publication/329626636_Erfolgsgarant_digitale_Plattform_-_Vorreiter_Landwirtschaft,

Analyzing the risks of digital platforms in order to scale business, there were mainly nine findings. The loss of customer access has its reason justified in the fact that suppliers from outside the industry appear as intermediaries between provider and the customer and build new value creation structures and as a result loosen the bond and the direct exchange with the customer (Baums et al., 2015). In case the digital platform reaches a critical mass by an increase in demand caused by more consumers, it could occur that the platform will attract further producers leading to a pull of more consumers and as a consequence generate growth. (Hoffmann, 2016, Walter, 2016) The risk emerges in case the critical mass is not reached and the growth spiral is not leading to the desired effects. The monopolization as seen e.g. with the GAF A-monopol demonstrates clearly the scaling effects concerning growth rates. But, for smaller enterprises where the core business model is not originally designed for a platform

business, the intermediaries could displace them. Furthermore, internal resisters against platform activities, such as maximizing the value of the ecosystem causing the withdrawal of customer groups in order to win substitute customers, are potential risks when the change is not accepted by the workforces (Van Alstyne, 2016, Baums, A. et al., 2015, Evans and Gawner, 2016). In addition, a disruption of the former markets leads towards risks in the event if the intermediaries succeed in targeting end users through their sovereignty over data to replace the producers. This causes interchangeability for the producers and also the danger that performances are more transparent and easier to compare (Van Alstyne, 2016). A further risk is the loss of margins due to the fact that the operator is participating monetary on the transaction. Moreover, the producer or seller of a product learns about a data sovereignty loss as the data is in the possession of the digital platform owner (Baums et al., 2015). Last but not least, non-uniform interfaces can lead to a complete failure of or faulty data exchange and in the end cost money. (Sarkar, 2015). In summary the main findings in the risk evaluation is, that platforms can slide between the classical actors in the markets, mainly between the producers or sellers and the customers and regulate the rules. This either puts a lot of pressure on existing business models of the corporations resulting in being exchangeable or worse, they are ruled out.

Contrary to the risks, also opportunities must be reflected and identified upon in the handling of digital platforms. It is clear, that in the application of digital platforms, certain services can be scaled up and lead to a rapid growth with the effect of sales growth. Also, market entries are simplified for companies equipping with a gain in access to new markets and market segments they were not present before. Corporations can also use digital platforms to offer new market services for existing products, for example predictive maintenance. Another opportunity for enterprises is to use a digital platform to sell their products and to add value for customers in case business partners enhance their own products so they can focus on their core competencies. The collection of data on platforms provides and enable their owners to analyze customer data in real time allows many conclusions to be drawn about customer needs and thereby improve the offer. Another opportunity is the exploitation of network effects which generate rapid growth on short notice and established as a standard. In addition to that, digital platforms are easy to operate and accessible as a place of exchange with the effect to reduce the transaction costs.

Finally, digital platforms can be used to diminish insecurities as all the actors can be evaluated transparently (Van Alstyne, 2016). The companies can use this for marketing purposes as well as for customer retention.

Conclusions

As part of a digital transformation in companies, the consideration of implementing a digital platform and thus, the benefit of the scaling effects in business can be outlined a smart choice. Nevertheless, the corporations must expose themselves with the risks and opportunities accompanied by platforms. The intermediary character of platforms which have excessive market power could circumvented by an own platform. Here the decisive success factor is the resonance in the market. Generally, the research in the field joining forces in the standardization and legal aspects concerning the usage of digital platforms is still unsettled and needs further research.

References

- Baums, A., Schlösser, M., Scott, B., 2015. Industrie 4.0: Wie digitale Plattformen unsere Wirtschaft verändern – und wie die Politik gestalten kann. In: Baums, A.; Schlössler, M.; Scott, B. (Hrsg.): *Kompendium Digitale Standortpolitik*, Band 2. Berlin: APCO Worldwide.

- Berger, R. and Internet Economy Foundation, 2016. *Fair Play in der digitalen Welt*. [pdf] Available at: <https://www.ie.foundation/content/4publications/rb_cop_16_011_ief_plattformstudie_de_online.pdf> [Accessed 5 April 2020].
- BMWi, 2016. *Bundesministerium für Wirtschaft und Energie, Grünbuch digitale Plattformen*, [pdf] Available at: <https://www.bmwi.de/Redaktion/DE/Publikationen/Digitale-Welt/gruenbuch-digitale-plattformen.pdf?__blob=publicationFile&v=32> [Accessed 29 March 2020].
- Boudreau, K. 2010. Open Platform Strategies and Innovation: Granting Access vs. Devolving Control. *Management Science*, 56(10), pp.1849–1872.
- Chan, J. and Ghose, A. 2014. Internet’s Dirty Secret: Assessing the Impact of Online Intermediaries on HIV Transmission. *MIS Quarterly*, 38(4), pp.955–975.
- Drewel, M., Kluge, A. and Pierenkemper, C. 2017. *Erfolgsgarant digitale Plattform – Vorreiter Landwirtschaft*, [online] Available at: <https://www.researchgate.net/publication/329626636_Erfolgsgarant_digitale_Plattform_-_Vorreiter_Landwirtschaft> [Accessed 15 April 2020]
- Grab, B., Bumbac, R., Gavril, R.M. and Ilie, C., 2018. The winner takes it all - business model innovation in the tourism industry. In *The 4th BASIQ International Conference*. Heidelberg, Germany. Bucharest: ASE, pp.251-258.
- Jaekel, M., 2017. *Die Macht der digitalen Plattformen*. Wiesbaden: Springer Vieweg
- Jha, S. K., Pinsonneault, A. and Dubé, L. 2016. The Evolution of an ICT Platform-Enabled Ecosystem for Poverty Alleviation: The Case of eKutir. *MIS Quarterly*, 40(2), pp.431–445.
- Kankanhalli, A., Faik, I. and Asadullah, A., 2018. *Digital Platforms: A Review and Future Directions*, Conference Paper: Twenty-Second Pacific Asia Conference on Information Systems, Japan 2018, [online] Available at: <https://www.researchgate.net/publication/327971665_Digital_Platforms_A_Review_and_Future_Directions/download> [Accessed 21 March 2020].
- Pagani, M., 2013. Digital Business Strategy and Value Creation: Framing the Dynamic Cycle of Control Points. *MIS Quarterly*, 37(2), pp.617–632.
- Parker, G., van Alstyne, M. and Choudary, S., 2016. *Platform Revolution - How Networked Markets Are Transforming the Economy-and How to Make Them Work for You*. New York: Norton & Company.
- Porter, M., 1980. *Competitive strategy: techniques for analyzing industries and competitors, with a new introduction*. New York: Free Press.
- Tiwana, A., Konsynski, B., and Bush, A.A., 2010. Platform evolution: Coevolution of platform architecture, governance, and environmental dynamics. *Information Systems Research*, 21(4), pp.675–687.