CHALLENGES AND SUCCESS POTENTIALS OF PLATFORM COOPERATIVES: INSIGHTS FROM A MULTIPLE CASE STUDY

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CHALLENGES AND SUCCESS POTENTIALS OF PLATFORM COOPERATIVES: INSIGHTS FROM A MULTIPLE CASE STUDY

Research Paper

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Abstract

In recent years, an alternative concept to capitalist-oriented digital platforms has emerged: platform cooperatives. Platform cooperatives are jointly owned and democratically controlled platforms that promise a more social alternative to platform capitalism. However, platform cooperatives and their challenges and success potentials have received little attention in research. To this end, we conduct a multiple case study and shed more light on the challenges and success potentials that result from the characteristics of platform cooperatives. The results show that the greatest challenges include their complex governance and above all, their lack of funding. To leverage their success potential, platform cooperatives should extend regionality and further sharpen their cooperative identity and social profile. They should also pursue a differentiation strategy and find ways to keep democratic governance manageable. Ultimately, they would benefit from new financing instruments. Our results contribute to research on digital platforms and platform cooperatives.

Keywords: Platform economy, digital platforms, platform cooperatives, case study

1 Introduction

Large digital platform owners such as Facebook, Uber, Amazon or Airbnb have become an integral part of everyday life and dominate the market with their digital platforms in numerous sectors (Kenney and Zysman, 2015, Parker et al., 2016). This market dominance is also reflected in the market capitalization. As a result, Microsoft, Apple, Amazon and Alphabet (Google) are among the top four most valuable companies in the world given their large platform ecosystems (PwC, 2019).

However, the rapid rise of digital platforms has become a subject of increasing concern. On one side, digital platforms such as Uber exploit labour in the sense that their drivers are classified as independent contractors and thereby are not eligible to employment benefits and protections (Zhu and Marjanovic, 2021, Edelman and Geradin, 2015). On the other side, they create negative externalities (Gerwe and Silva, 2020) such as urban pollution and traffic congestion (Edelman and Geradin, 2015) or trigger
negative impacts such as the rise of rent and the displacement of long-term residents (Malhotra and Van Alstyne, 2014).

The so-called "platform economy" is mainly responsible for the digital disruption (Busch et al., 2016, Evans and Gawer, 2016, Kenney and Zysman, 2015, Weill and Woerner, 2015). The global corona crisis has further intensified this trend, allowing large online platforms to further increase their market power and to establish monopoly-like market positions. Consumer advocates are sounding the alarm and warning of the increasing dominance of large digital platforms such as Amazon, which no longer act only as a marketplace but now also as a seller themselves (dpa, 2020, Hagiu et al., 2020). Debates are taking place on the extent to which large platforms such as Uber or Airbnb with their disruptive business models threaten industries such as the taxi or hotel business (Kenney and Zysman, 2016).

Complementors build the backbone of the platform business models. They provide third-party services and thus generate the actual value of the platforms. However, many of the complementors do not benefit from the success of the platform ecosystems. The winners are usually the platform operators themselves (Kenney and Zysman, 2016, Drahokoupil and Jepsen, 2017). Srnicek (2017) called this situation "platform capitalism" and criticizes in particular the fact that the large digital platforms are mixing up professionally offered work with casual jobs in their marketplaces in order to lower the prices for professionally offered work, which Lobo (2014) compares with a "dumping hell". It is also problematic that legislative institutions are struggling to build a regulatory framework that equally mitigates the disruptive forces of platform ecosystems while at the same time not hindering competition by imposing rigid measures (Constantinides et al., 2018).

Several critics from the scientific community call for a radical shift, towards a more democratic, social and sustainable working world, in which large IT platforms are no longer managed by shareholders and aim purely at maximizing profits but become the property of all stakeholders involved. The term "Platform Cooperativism", coined by Trebor Scholz, describes the application or fusion of the cooperative principle with the concept of digital platforms and represents a more sustainable and social alternative compared to the large venture capital platforms (Scholz, 2016).

This concept represents a revolutionary new approach to address the diverse problems of the platform economy. However, "platform co-ops are yet to attract the attention of the Information Systems (IS) researchers" (Zhu and Marjanovic, 2021). In particular, the challenges and success potentials resulting from the characteristics of these novel platforms remain largely opaque. The presented paper tries to close this gap and sheds light on the concept of platform cooperatives by answering the following research question: Which challenges and success potentials result from the characteristics of platform cooperatives?

Therefore, we applied a multiple case study and in a first step conducted expert interviews with seven platform cooperatives. To structure the results, we used the Business Model Canvas framework (BMC) from Osterwalder and Pigneur (2010). In a second step, the websites of the respective companies were analysed, and any documents provided were evaluated. In the final step, we then combined the results to obtain an overall picture of the challenges and success potentials resulting from the characteristics of platform cooperatives, which we would like to present in the following sections.

2 Theoretical Background

2.1 Digital Platforms

Digital platforms can essentially be characterized as a technological framework on which different stakeholder groups (e.g. producers and consumers or sellers and buyers) interact with each other (Constantinides et al., 2018). Digital platform business models are thus based on or benefit from the principle of intermediation. The most important characteristic or the most important difference to linear business models is that digital platforms always operate in a so-called "multi-sided market". They bring together several stakeholder groups such as users and app developers or buyers and sellers (matching) and enable their interaction. Platforms therefore always operate at least in a “two-sided market” (Parker
et al., 2016). This form also represents the most common. One-sided services which are only used by end users and therefore one stakeholder group, do not meet this criterion and therefore do not represent a digital platform (Tiwana, 2014, Constantinides et al., 2018).

By far the most important role in multi-sided platform markets is played by so-called “network effects”. Network effects describe the degree of usefulness of a platform for its users depending on the stakeholder sides. Thus, each additional user on the platform changes the usefulness of the platform for all other platform participants. Network effects are responsible for their value generation and are crucial for the success of a platform (Tiwana, 2014, Parker et al., 2016).

The interaction between platform participants (e.g., producers and consumers) essentially involves the exchange of three key units: (1) information, (2) goods or services and (3) a currency. The exchange of information is the starting point for any platform interaction. The flow of information serves the platform participants so they can decide whether a further exchange of goods or services (units of value) should take place. In platform ecosystems, the value units are primarily not created by the platform operator, but by producers or complementors. While the exchange of information always takes place via the platform, the exchange of goods or services can also take place outside the platform. In the case of digital goods, however, the exchange takes place via the platform, for example. After the exchange of a unit of value has taken place, payment is usually made in some form of currency. This can but does not have to be of a monetary nature. For example, attention gained by sharing digital content can also be a form of currency. In this case, the currency exchange can also take place via the platform, but does not have to. (Parker et al., 2016)

### 2.2 Platform Cooperativism

Platform cooperativism plays an important role as countermovement to platform capitalism, especially in the sharing economy which refers to “a socioeconomic system that allows peers to grant temporary access to their underutilized physical and human assets through online platforms” (Gerwe and Silva, 2020). Commercial platforms like Uber have made high profits in the past at the expense of the drivers, also called “gig workers”. These independent contractors do not receive any social protections or employee rights and in many cases do not even earn the minimum wage (Ferrell et al., 2017, Malhotra and Van Alstyne, 2014, Edelman and Geradin, 2015). The success of many commercial platforms is thus carried on the back of a specific stakeholder group of the multi-sided platform ecosystem, which are in most cases the complementors of a platform. Platform cooperatives attempt to prevent the financial exploitation of any stakeholder groups by including them into the decision-making processes of the company (Zhu and Marjanovic, 2021). Platform cooperatives thereby emphasize social values (e.g. equality and solidarity) over instrumental values of the capitalist economy (e.g. self-interest and efficiency) (Martin et al., 2017). Under social values we understand “[...] resources, inputs, processes or policies [that] are combined to generate improvements in the lives of individuals or society as a whole” (Emerson et al., 2001). Social values comprise, equality, democracy, sustainability, fairness, solidarity, and environmental benefits (Zhu and Marjanovic, 2021, Martin et al., 2017).

Platform cooperatives combine the platform model with the cooperative form. Cooperatives are not new, they originated in the late middle ages in form of guilds and have also been employed to sidestep negative effects of the industrial revolution (Birchall, 1997). In general, they form to counteract uncertainty and guide mutual self-help. According to Watkins (1986) there are seven principles that are followed by cooperatives: (1) Association or unity – members are intentionally associated with one another, (2) Economy – cooperatives follow an economic purpose, (3) Democracy – execution of power through voting whereby the general will matters, (4) Equity – equal and fair allocation of power and wealth, (5) Liberty – freedom to join or leave, (6) Responsibility – serving the whole cooperative, and (7) Education – educating one another (Kollmann et al., 2020). An important differentiator to commercial platforms is thereby the ownership model. Regarding platform ownership, up to four different basic types or combinations can be distinguished: "Public-owned", "User-owned", "Producer- or Worker-owned" and "Produser-owned" platform cooperatives (Scholz, 2016). While "Public-owned" platform cooperatives are primarily owned by public
stakeholders like municipalities, "User-owned" platform cooperatives are only owned by their users. In the most common form of worker-owned platform cooperatives, only complementors own the cooperative, and in the case of "Produser" (word combination of user and producer) ownership, both users and complementors are members of the platform cooperative (Scholz, 2016).

Related research on platform cooperatives is scarce\(^1\) and has primarily examined size-identity tensions that arise between winner-takes-all logic and distinctiveness logic (Karanovic et al., 2020), contributions to sustainable development goals (Zhu and Marjanovic, 2020), promotions of social, environmental, and instrumental value (Martin et al., 2017), the impact on competitive advantage (Bruque-Cámara et al., 2003), and usage of blockchain technology to foster cooperative principles (Kollmann et al., 2020). However, it is not clear how the characteristics of platform cooperatives translate into challenges and success potentials.

2.3 Business Model Canvas

To structure our results, we used the "Business Model Canvas" (BMC) framework from Osterwalder and Pigneur (2010), which is a method for visualizing business models. Therefore, we would like to go into the framework briefly.

The purpose of the model is to enable or simplify the systematic development of business models. The model attempts to map business models with nine basic blocks, whereby the order of the blocks is not important (Osterwalder and Pigneur, 2010). The basic blocks are: Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partnerships and Cost Structure. As described in section 3, our research work solely focuses on the basic blocks Customer Segments, Key Activities, Value Propositions and Key (Financial) Resources, which is why only these blocks will be described briefly.

**Customer Segments.** The customer segment block describes the different target groups (individuals or other companies) that a company addresses or wants to reach. The different customer segments have a decisive influence on the value proposition that should be delivered to the different segments. (Osterwalder and Pigneur, 2010)

**Key Activities.** Key activities are essential activities that ensure the realization of the business model or operation. Other blocks of the model such as value proposition may depend heavily on the Key Activities. (Osterwalder and Pigneur, 2010)

**Value Propositions.** This block describes the customer benefit that services or products may deliver for a specific customer segment. It is one of the most important blocks from the model's point of view, since the value proposition for the customer determines the business success to a large extent, or since each value proposition serves a customer problem or need. The generated customer benefit can be qualitative (e.g. convenience of services) or quantitative (e.g. lower price). (Osterwalder and Pigneur, 2010)

**Key Resources.** Key resources are the input variables that are necessary to operate the business model. Only through these key resources a value proposition can be generated by the business model. Resources can be financial resources, physical resources, intellectual resources or personnel resources and can also be obtained from partners. (Osterwalder and Pigneur, 2010)

3 Methodology

To answer our research question, we decided to conduct qualitative research, as existing research has not addressed the challenges and success potentials of platform cooperatives. In order to gain insights

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\(^1\) The topic is almost completely absent from the IS community. A literature search within the Basket of Eight revealed no relevant results when querying the Scopus database with the keywords "platform AND cooperative*". Only two IS conference papers address the topic of platform cooperatives. We used the keyword "cooperative*" to query ICIS, ECIS, PACIS, and AMCIS conferences.
into our “why” and “how” questions, we decided to follow a case study approach (Yin, 2014) and primarily based our data collection on expert interviews (Gläser and Laudel, 2009, Mayring, 2015).

**Case selection.** The case selection is based on the so-called “#PlatformCoop Directory”. It is maintained by “The Internet of Ownership Project Council (IOPC)” and represents a collection or database of worldwide listed platform cooperatives (Internet of Ownership Project Council (IOPC), 2020). The directory already offers some filtering options, such as filtering by industry or business activity and a categorization of the listed platform cooperatives. The first described filter option has been omitted because criteria such as business activity or industry are not important for a generally valid, comprehensive characterization of platform cooperatives. For answering the research question only the mentioned “category” filter was applied. For the case selection a "selection of typical cases" according to Gläser and Laudel (2009) was applied as a selection strategy and attempts were made to find typical cases of platform cooperatives that well reflect the general characteristics of this platform type. For this purpose, the category filtering only considered the strongest or strictest category of "Platform Co-ops". For the further case selection, all industries and all geographic markets were considered. In addition, the cases were selected irrespective of whether the businesses were already in an operational status. After filtering ("Platform Co-op"), the result set contained 120 platform cooperatives, of which 28 were randomly selected as a sample. In case a company no longer operated or existed it was sorted out and replaced by another random case. Finally, seven companies were interviewed as part of the first sample iteration and are described in Table 1 in more detail. After conducting the last interview, it was decided not to further increase the sample number, as the cases analysed up to that point were sufficient to adequately answer the research question.

<table>
<thead>
<tr>
<th>ID</th>
<th>Location</th>
<th>Activity/Industry</th>
<th>Operational Status</th>
<th>Foundation</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP-01</td>
<td>Sweden</td>
<td>Cloud/Software</td>
<td>In operation</td>
<td>2019</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>IP-02</td>
<td>Spain</td>
<td>Data/Healthcare</td>
<td>Concept</td>
<td>2017</td>
<td>&lt; 20</td>
</tr>
<tr>
<td>IP-03</td>
<td>UK</td>
<td>Marketplace/Food</td>
<td>In operation</td>
<td>2016</td>
<td>-</td>
</tr>
<tr>
<td>IP-04</td>
<td>USA</td>
<td>Data/Healthcare</td>
<td>In operation</td>
<td>2016</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>IP-05</td>
<td>Germany</td>
<td>Freelancing</td>
<td>In operation</td>
<td>2016</td>
<td>&lt; 15</td>
</tr>
<tr>
<td>IP-06</td>
<td>Italy</td>
<td>Hospitality</td>
<td>Beta phase</td>
<td>2018</td>
<td>&lt; 25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>industry/Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP-07</td>
<td>Germany</td>
<td>Activism/Social</td>
<td>In operation</td>
<td>2016</td>
<td>&lt; 25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>network/Cloud</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 1. Detailed information about the interviewed companies.*

**Interview design.** The aim of the expert interviews is to derive challenges and success potentials of platform cooperatives from their specific characteristics. Particularly in the design of the interview guidelines, a strong focus was thus placed on a detailed questionnaire to gain these comprehensive insights. To address this requirement, the research and in particular the questionnaire was structured according to the nine blocks of the BMC (Business Model Canvas) model defined by Osterwalder and Pigneur (2010). The BMC or its blocks are particularly suitable for structuring this research because they ensure that the research object (platform cooperatives) is viewed from a 360-degree perspective, especially in the collection of research data in the sense of a deductive template. It should also be emphasized that in addition to the all-encompassing questions based on the BMC blocks, at the end of the interviews all interviewees were again asked to summarize what they considered to be the most critical challenges and greatest potential for success of platform cooperatives. This allows us to prioritize the results to a certain extent. In a second step, the websites of the respective companies as well as any documents provided by the interviewees were analysed in order to adapt the general interview guidelines to the circumstances of the respective interviewees (Gläser and Laudel, 2009). While the research itself
was designed in detail along all nine BMC blocks, we identified that the following blocks namely Customer Segments, Key Activities, Value Propositions and (Financial) Resources were the most suitable to answer the research question.

**Interview conduct.** All interviews were conducted over a one-month period between February and March 2020 using video conferencing tools. The use of these tools made it possible to record audio or video tracks after a declaration of consent had been given and to use them for the transcription of the interviews. Following Gläser and Laudel (2009) all interviews were transcribed (literally or nearly literally) and analysed using a CAQDAS (Computer-assisted/aided) qualitative data analysis) software. The following table shows more detailed information about the interviews conducted.

<table>
<thead>
<tr>
<th>ID</th>
<th>Role of the interview partner</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP-01</td>
<td>Co-Founder</td>
<td>1 h 15 min</td>
</tr>
<tr>
<td>IP-02</td>
<td>-</td>
<td>1 h 15 min</td>
</tr>
<tr>
<td>IP-03</td>
<td>Communications manager &amp; Global gardener</td>
<td>55 min</td>
</tr>
<tr>
<td>IP-04</td>
<td>Founder &amp; CEO</td>
<td>55 min</td>
</tr>
<tr>
<td>IP-05</td>
<td>Board of directors, Management &amp; Board of directors in a platform cooperative association</td>
<td>50 min</td>
</tr>
<tr>
<td>IP-06</td>
<td>Vice President</td>
<td>1 h</td>
</tr>
<tr>
<td>IP-07</td>
<td>Board of directors &amp; Concept specialist</td>
<td>1 h 20 min</td>
</tr>
</tbody>
</table>

Table 2. Detailed information about the interview set-ups.

**Evaluation process.** The evaluation process was based on the qualitative content analysis according to Mayring (2015). The focus of the analysis process is the construction of a category system. For the evaluation of the expert interviews, a summarizing content analysis using inductive category creation was chosen as the basic technique. This analysis technique involves the step-by-step reduction and generalization of the analysis material to the essentials by means of abstraction (Mayring, 2015). The inductive categorization (also called “open coding”) tries to derive the findings directly from the text without the help of theory. Furthermore, inductive categorization was combined with deductive or theory-based formation of the main categories (Mayring, 2015). Specifically, the developed inductive categories were sorted into the theory-based main categories of the Business Model Canvas (BMC) according to Osterwalder and Pigneur (2010). Strictly speaking, the applied evaluation technique is also a structuring, since the categories of the BMC represent so-called structuring dimensions that were defined in advance (Mayring, 2015). Thus, a combination of two analysis techniques was applied in the de-facto evaluation. Specifically, the category system was developed by successively processing and evaluating the interviews. After each interview, the category system was iteratively revisited or consolidated to ensure the quality of the category system (Mayring, 2015). The evaluation process also took into account all websites and any documents provided by the respective interviewed companies in the sense of a triangulation and integrated them into the category system (Gläser and Laudel, 2009). In the last step, the results obtained and the category system were interpreted and the findings prioritized and evaluated (Mayring, 2015).

4 Results

4.1 Customer Segments

**Differentiation and identity.** A very important aspect in terms of customer segments relates to the market positioning of platform cooperatives. Without exception, all interviewed platform cooperatives
define themselves through their differentiation and identity. One goal of many platform cooperatives is to differentiate themselves from other platform cooperatives. For example, IP-07 suggests that competition between platform cooperatives is not an option and instead advocates a strategy of partnership and mutual differentiation. IP-01 also sees a success potential in the avoidance of mutual competition or in the model of differentiation between platform cooperatives, for example by addressing different customer segments. Thus, competition among platform cooperatives can be avoided and customer needs can be satisfied even more precisely. The second point relates to the differentiation from commercial platforms, which is essential for platform cooperatives. As described in the following sections, the platform cooperatives are based primarily on social aspects such as co-shaping corporate policy through democratic governance. IP-04 notes that even the choice of the cooperative model represents a differentiation from commercial platforms: "We're also doing something very different by building a cooperative.” (Interview transcript - I-04, pos. 44). The company-specific service value plays a much smaller role than it does for commercial platforms, which want to differentiate and define themselves primarily through their service functionality or quality. IP-02 has also achieved an advantageous competitive position through a high degree of differentiation, with virtually no direct competitors: “I would say no, we don't have any competitors, because have you ever heard of something similar to [Name of the platform cooperative] in your whole life? It's something strange and very small. So, there are no competitors.” (Interview transcript - I-02, pos. 112). Many interviewees see a differentiation strategy as an important success potential for platform cooperatives and underline the importance of identity building, just like IP-04: “Obviously not everybody starts a cooperative and so we really identify with that. [...] I think they really appreciate that and that's why they work with us, because they know that we're practicing what we preach [...] we hear that our clients rather work with us than any other traditional vendor [...].” (Interview transcript - I-04, pos. 88).

4.2 Key Activities

Complexity of the democratic decision-making and digital tools as future auxiliary. The heart of cooperatively managed companies, and thus also of platform cooperatives, is the general assembly. This represents a strategic form of governance. For example, in most European countries, cooperatively managed companies are obliged to hold a general assembly and thus to hold democratic votes. With regard to the implementation process, a large part of the companies applies the "I member 1 vote" principle, which is common for cooperatives. In cases where several stakeholder groups are part of the cooperative (Produser-Owned platform cooperatives), some companies weight or limit the voting rights in such a way that certain stakeholder sides or individuals, such as supporting members, are not able to collect a critical threshold of votes for their own benefit. This is intended to prevent excessive influence of one single stakeholder or stakeholder group. IP-03 must, for example, ensure that voting rights are constantly adjusted or balanced between producers and consumers. The proper weighting is therefore also a critical success potential for governance. Another part of the interviewees also points out that decisions are not made in the traditional way or by voting, but instead by consensus. This means that all participants discuss decision-relevant topics until a unanimous solution or compromise is reached. A formal voting process would only be used in cases where a decision cannot be reached by consensus. Most companies that use the consensus-based process are very positive about it. Through the intensive discussion process, the consensus process can ensure that in the end all parties involved support a decision on a large scale. However, the voting process, and in particular the consensus-based process, also causes great challenges for most platform cooperatives. For example, IP-06 sees a problem in the fact that even members who are poorly informed or only minimally involved in the company processes often influence important company decisions with their voting. However, the vast majority of platform cooperatives see the far greater problems in the complexity or expense of the democratic decision-making and voting process. Both the classic voting process and the consensus procedure are associated with immense hurdles in handling. The consensus procedure in particular requires an enormous amount of time and communication, since aspects relevant to decision-making are usually discussed until consensus is reached. The comparatively slow decision-making process and a high level of governance and coordination effort represent a competitive hurdle for democratically managed platform
cooperatives, as IP-03 demonstrates by way of example: “The downside is that it does always take a lot of communication. So, everybody is communicating about what they are doing and what they are deciding [...]” (Interview transcript - I-03, pos. 52). A further hurdle is the growth of the company or its members. As many interviewees indicate, the governance problems mentioned tend to worsen with increasing membership. Many companies are looking for solutions to keep strategic governance manageable even with future membership growth. At the time the interview was conducted, all of the companies studied had relatively low membership numbers, which is why interview partners such as IP-02 have not yet given any thought to such governance problems: „Until now it has been pretty easy to manage it, but we are growing, and we have the feeling that the more we grow, the more complicated it will be to coordinate the members.” (Interview transcript - I-02, pos. 48). The interviewees mention various problems in connection with the increasing number of members. IP-01, for example, sees an important task in finding the right size of company to keep governance manageable. IP-07 also emphasizes that governance problems affect not only the voting process itself, but also the upstream decision-making process. He sees a big challenge in adequately informing members in advance about the topics to be voted on. IP-02, who uses a consensus-based decision-making process instead of formal voting, points out that with increasing membership, such a consensus-based process would no longer be feasible and conventional voting would then have to take its place in any case: “If we were 2,000 people we would need to vote, but this is not the case.” (Interview transcript - I-02, pos. 58). However, a majority of companies mentions that they want to use digital tools in the future. IP-02 and IP-07 also indicate that the use of digital tools to support decision making is inevitable and will be a critical success potential in the future.

4.3 Value Propositions

Customization and regionality. Many platform cooperatives highlight to put the customer needs in the forefront and try very hard to satisfy the local or regional customer needs. IP-03 sees the targeted satisfaction of customer needs as a success potential. According to IP-03, platform cooperatives are able to respond very flexibly to customer needs compared to large commercial platform companies. IP-01 also sees customized services as a strength compared to commercial platform companies, which often pursue a "one-size-fits-all" strategy. All in all, the positive statements thus outweigh the negative ones, especially with regard to satisfying regional customer needs. Especially IP-02, IP-03 or IP-06 stress that regionality plays an important role for platform cooperatives. Also, IP-05 and IP-07 state that platforms should remain local in order to better meet the needs of local customers. Many interviewees emphasize that they can exploit the advantage of regionality over commercial platforms. When asked whether regionality is a competitive advantage over commercial platforms, IP-03 comes to the clear conclusion: "Yes, definitely! Definitely, yes, yes." (Interview transcript - I-03, pos. 54). In order to better address specific regional customer needs, some of the companies surveyed, such as IP-03 and IP-06, rely on so-called “local node” networks. Local node networks are based on the principle of subsidiarity\(^2\), which means that, for example, smaller country- or even city-specific platform instances are established. All local platform instances can make independent operational decisions for their own local node. In addition, the local nodes can make democratic decisions for the next higher level, such as a supranational level. The parent node always acts at the highest level. While votes on the local node level only affect the respective local node, votes with regard to the parent node affect all subordinate local nodes. The local node principle thus implements democratic governance at all levels and allows companies to implement local or operational governance. In this way, the platform cooperatives try to better respond to local legal conditions and to better serve regional customer needs.

\(^2\) Subsidiarity: Principle of self-governance, which stipulates that individuals or groups at a lower hierarchical level should perform tasks and make decisions as far as possible in a self-determined manner and on their own responsibility. Higher hierarchical levels or institutions only intervene if the capabilities of the lower hierarchical levels are not sufficient to fulfill the tasks. Wikipedia. 2021. Subsidiarity [Online]. Available: https://en.wikipedia.org/wiki/Subsidiarity [Accessed 03.04.2021].
Cooperative model and failure safety, stability, and liability. The cooperative form itself offers an important value for the stakeholders of the platform that should not be underestimated. Starting with the example of IP-05, the corporate form serves the purpose of legal and failure safety. In the IP-05 business model, freelancers are given the opportunity to have their orders processed by the cooperative. By having their orders processed by the cooperative, the freelancers’ customers also receive a reliable and trustworthy legal form, which must be liable with their deposits in case of doubt. Another aspect is the high stability of cooperatives. The cooperative form offers the customers of platform cooperatives the security that the company cannot be sold or can only be sold with difficulty, as IP-07 emphasizes. IP-07 also points out that the non-for-profit philosophy represents a significant value proposition for the users. The platform cooperatives even integrate this philosophy in their statutes, thus guaranteeing that the company can never (except for a change in the statutes) put profit over the values of the cooperative.

Democratic governance and the lack of cooperative knowledge. A striking value proposition from the perspective of the corporate form is generated by the platform cooperatives through their principle of democratic governance or ownership. Cooperatives and thus also platform cooperatives offer members the advantage of becoming part of the company and being able to support decisions regarding the development of the company. Almost all interviewees emphasize this value proposition either in the interview or on the respective company website. Many interviewees also highlight democratic governance as a major success potential compared to commercial platform companies. However, many of those surveyed also see the fact that many people have a false image or lack of knowledge about cooperatives as an obstacle. Especially in countries where cooperatives are not a common form of enterprise, such as in the USA, people know little about cooperatives. IP-04 even sees one of the most difficult tasks in educating people about the principles and advantages of cooperatives: "Again, I think it's [...] kind of an upheld battle of teaching people what a coop is." (Interview transcript - I-04, pos. 158).

Social values. By far the most important value proposition for the platform cooperatives is their framework of social values. All of the companies interviewed attempt to benefit in some way from a social foundation. IP-07, for example, focuses strongly on promoting democratic processes by targeting the platform services primarily at movements in the field of eco-social change. Other companies also promote cultural movements and social networking, such as IP-06, which aims to promote genuine, authentic, non-for-profit tourism. Companies such as IP-01 or IP-07 promote the use of green electricity and thus increasingly focus on ecological customer segments. Ecology and sustainability generally play a strong role for many companies. With respect to transparency, many platform cooperatives refer to their open and democratic governance system. The issue of data exploitation and data protection is also an important topic for many of the companies. Many of them want to give back control over one’s own data and promise data protection at a high level. As IP-02 outlines, blockchain and data protection, for example, are not only central components of the business model, but also differentiation and success potentials. Another non-negligible role in this context is played by open-source software. Some companies, such as IP-01 or IP-07, see in the use of open-source software not only the possibility of addressing the companies’ usability problems, but above all the possibility of sharpening their social profile. Platform cooperatives, as well as the open-source community have broadly congruent intentions. In many cases, both pursue the goal of providing software and services for the benefit of a broader community. The use of open-source software highlights the objectives of the platform cooperatives. As IP-07 underlines, platform cooperatives want to differentiate themselves from commercial platforms and open source is a possibility to strengthen that differentiation. Finally, the promotion of social welfare probably plays the largest role in the social value framework of the companies. Many platform cooperatives stand for fairness and solidarity towards all platform participants. Compared to commercial platforms, not a few are supposed to make a profit at the expense of many. Rather, the aim is to create an ecosystem in which all stakeholders benefit. Some platform cooperatives also address not only the platform participants but the whole society. Companies such as IP-02 or IP-04, for example, want to promote the social welfare of society or the progress of science through their business model with a focus on the science or health sector and, in addition, want to allow all platform participants to participate by means of fair conditions. IP-02 stresses the enormous importance of social aspects for the success of
the business model: “It plays a big role. The whole aim of the cooperative is social good or social welfare.” (Interview transcript - I-02, pos. 118). In the case of IP-06, it is even part of the business model to donate part of the revenues to social projects. In addition, IP-06 sees a decisive competitive advantage in the value framework of the platform cooperatives: “So, I think what we can do better is really to empower more people and to leverage what I call the 'cooperative advantage'." (Interview transcript - I-06, pos. 128). The promotion of social welfare is therefore another important success factor for platform cooperatives. As IP-07 points out, however, one of the negative aspects is that social business model aspects are given far too little consideration, particularly in the case of state investments, thus making it more difficult for platform cooperatives to expand. IP-01 adds that many people underestimate the value of social business models and often do not understand that business models avoiding unsocial practices also have costs.

4.4 Financial Resources

Financial problems and the wish for new financing instruments. When it comes to resources, by far the greatest challenges for platform cooperatives can be found in terms of financial resources. Almost all statements lead to the same conclusion: companies see the lack of financing as the greatest problem for the survival and development of business models. IP-04 makes it clear: “I mean we're definitely under-resourced.” (Interview transcript - I-04, pos. 150). As the evaluations show, the financing problems can be attributed in particular to the cooperative model. Virtually all interview partners report that the cooperative form makes financing more difficult, especially when it comes to founding a company. The interview partners give various reasons for this. For example, IP-01 mentions that banks do not give loans to cooperatives because of the lack of creditworthiness and points out that stock corporations, for example, do not have this problem because of their large securities. IP-02 especially emphasizes the lack of interest of investors to invest in a non-for-profit enterprise. The problem is that the expectations and conditions of venture capitalists are not compatible with the social business models or value frameworks of cooperatives or platform cooperatives. Cooperatives therefore do not fit into the traditional investor model as IP-04 emphasizes: “Oh, I mean it's so tough. This is a huge issue for why coops can't get off the ground, because they just don't fit in the same model for traditional start-ups.” (Interview transcript - I-04, pos. 46). As IP-04 reports, the problem is also that venture capitalists have reservations about value-driven business models such as those of platform cooperatives. IP-07 describes the dilemma in which cooperatives or platform cooperatives find themselves even more drastically due to their corporate form: “You close quite a few doors for promotion with it. You are not non-profit, and you are not a Limited Liability Company. That means you don't actually get any donations or grants.” [Author's note: Original quote in German language] (Interview Transcript - I-07, pos. 30). As IP-07 points out, cooperatives are not non-for-profit making in terms of the legal definition, as possibly an association. Funding by e.g., state, or other stakeholders is therefore often a taboo, although many cooperatives or platform cooperatives usually represent social values. At the same time, however, cooperatives are not attractive enough for investors, as described above, because the non-for-profit philosophy of many platform cooperatives does not reward investments with a corresponding "return on investment". Surprisingly, the interview analysis also revealed that virtually all interviewees refrain from investor-independent financing approaches such as crowdfunding and have even spoken out against it in many cases. Companies such as IP-01 or IP-04, for example, point to the unattractiveness of crowdfunding, especially because of possible risks and the high effort involved. This results in one of the most important success potentials for platform cooperatives. When asked what the biggest success potentials are for platform cooperatives, almost all interview statements confirm that the cooperatively managed companies need access to better start-up financing, especially in the start-up phase. As IP-05, among others, emphasizes, the creation of new financing instruments by the legislator would be an important impulse to overcome the hurdles of existing financing options and to create financing options that also serve cooperatively managed companies: “I very much hope that, possibly through regulation or even seed capital subsidies for cooperatives, we will also find the possibility of marrying the cooperative model and the platform model with each other.” [Author's note: Original quote in German language] (Interview transcript - I-05, pos. 118).
<table>
<thead>
<tr>
<th>BMC dimension</th>
<th>Characteristic dimension</th>
<th>Characteristics</th>
<th>Challenges</th>
<th>Success potentials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Segments</td>
<td>Differentiation and identity</td>
<td>• Differentiation from other platform cooperatives (avoidance of competition) • Differentiation from commercial platforms</td>
<td></td>
<td>+ Pursuing/expanding a differentiation strategy + Sharpening the (cooperative) identity</td>
</tr>
<tr>
<td></td>
<td>General Assembly &amp; voting system</td>
<td>• General Assembly as long-term/strategic governance tool • Partly weighting/balancing or limiting of voting rights to prevent excessive influence • Mainly use of consensus process for decision making • Partly use of voting-based decision making • Currently no/little governance effort due to relatively low membership numbers</td>
<td>- Increasing complexity/high level of governance and coordination effort - Poorly informed members can influence important company decisions - Future membership growth makes (consensus-based) governance more difficult</td>
<td>+ Proper weighting/balancing of voting rights to prevent excessive influence of individual stakeholders/stakeholder groups + Usage of consensus process for small to medium-sized cooperatives + Application of voting-based processes for medium to large companies + Finding the right size of company to keep governance manageable + Use of digital tools to support the decision-making process, especially for future membership growth</td>
</tr>
<tr>
<td></td>
<td>Customization and regionality</td>
<td>• Focus on satisfying regional and local customer needs</td>
<td></td>
<td>+ Targeted satisfying of customer needs, flexibility &amp; customization + Extension of the regionality principle (e.g., via “local node” networks)</td>
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<tr>
<td></td>
<td>Cooperative model</td>
<td>• Non-for-profit philosophy/no satisfaction of investor interests • Democratic governance • High stability/hard to sell • Legal/failure safety • Trustworthiness</td>
<td>- False image or lack of knowledge about cooperatives by the public</td>
<td>+ Educating people about the principles and advantages of cooperatives</td>
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<tr>
<td></td>
<td>Social values</td>
<td>• Integration of social values (e.g., social welfare, democratic governance) • High alignment of customer segments with social values • Fairness &amp; solidarity towards all platform participants</td>
<td>- Far too little consideration for social business model aspects by the public - People underestimate the value of social business models - Low cost-benefit awareness of platform stakeholders</td>
<td>+ Promotion of social welfare + Educating people about the costs of social business aspects + Expanding the social values to attract all sides of the multi-sided market + Sharpening the social profile through open-source use</td>
</tr>
</tbody>
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Table 3. Characteristics, challenges, and success potentials of platform cooperatives.

<table>
<thead>
<tr>
<th>(Financial) Key Resources</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Most platform cooperatives are underfinanced due to their cooperative form</td>
</tr>
<tr>
<td></td>
<td>• No/hardly any financial support for the foundation</td>
</tr>
<tr>
<td></td>
<td>• Legally not a non-profit organization</td>
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<tr>
<td></td>
<td>+ Access to better start-up financing</td>
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<tr>
<td></td>
<td>+ Creation of new financing instruments by the legislator</td>
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<tr>
<td></td>
<td>- Lack of creditworthiness</td>
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<td></td>
<td>- Lack of interest of investors to invest in a non-profit/value-driven enterprise</td>
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<tr>
<td></td>
<td>- Not eligible for donations or grants</td>
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<tr>
<td></td>
<td>- Investor-independent financing alternatives (e.g., crowdfunding) not attractive</td>
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</tbody>
</table>

5 Discussion

Lack of funding as the biggest challenge for platform cooperatives and a call for institutional intervention. As described in Chapter 3, all interviewees were asked to summarize the greatest challenges and potential for success from their perspective. Regarding the challenges, all interviewees without exception were referring directly or indirectly to their lack of funding. As the interviewees pointed out investor-independent financing approaches such as crowdfunding do not work out for them and the cooperative form of enterprise makes financing even more difficult for them. As the interviewees highlighted, this is a vicious circle for them that needs to be overcome, because underfunding means that not enough qualified personnel can be acquired, platform development cannot be pushed forward significantly, and the quality of platform services cannot be improved. Ultimately, the scaling of the companies is also slowed down and as a result they do not manage to grow out of their niche existence in the long term which leads to a reduced competitiveness. As IP-03 and many other interviewees emphasize, commercial platforms usually have very large financial reserves, which is also a main reason for the high competitiveness of commercial platforms: “Yes, I say that through gritted teeth because if only we had the money that they have, we could do so much more.” [Author’s note: laughs] (Interview transcript - I-03, pos. 114). Moreover, some of the interviewees stated that it is also up to political decision-makers to find a solution for this problem and to initiate support measures that consider the cooperative characteristics of the companies and provide support, especially in the critical initial phase of competitive positioning.

Ways to reform the Platform Economy. Platform cooperatives have great potential to improve many problems of the platform economy such as exploitation or insufficient representation of the interests of other platform participants (especially complementors) and would even make regulation obsolete in many areas. Ultimately, political decision-makers have two basic options for changing the status quo of the platform economy: To tighten the “thumbscrews” further regarding regulation or to promote the establishment of platform cooperatives more strongly. A combination of the two options seems to be the most promising. As a matter of fact, the cooperative idea receives a revival and platform cooperatives can, in addition to new regulations, make a significant contribution to correcting the various problems and challenges of the Platform Economy, according to the principle of Friedrich Wilhelm Raiffeisen: “What one alone cannot achieve, many can”.

6 Conclusion

Summary. By conducting a multiple case study our research paper has analysed several challenges and success potentials of platform cooperatives that result from their characteristics. Platform cooperatives are primarily characterized by their differentiated customer segments, their cooperative model,
democratic governance and their social value propositions. Their greatest challenges include their complex democratic governance, the lack of appreciation or awareness of social value propositions by end customers and above all their lack of funding. From a success potentials point of view, platform cooperatives should pursue a differentiation strategy by further sharpening their cooperative identity and should make use of different means to keep their democratic governance manageable. Moreover, they should further expand their social values and sharpen their social profile e.g., by the use of open-source software or by educating people about social welfare or the advantages of cooperatives. There is also potential for success in extending the regionality principle, e.g., through the use of local node networks and by offering customized platform services. To gain traction, platform cooperatives could ultimately benefit from access to better start-up funding and the creation of new financing instruments by the legislator.

Theoretical implications. Research on platform cooperatives has largely explored their social values, the social impact of digital platforms, the positive effects of platform cooperatives, the challenges of platform cooperatives, and the negative effects of platform capitalism (Zhu and Marjanovic, 2021, Scholz, 2016, Zhu and Marjanovic, 2020, Kollmann et al., 2020, Martin et al., 2017). This study complements prior work by exploring how the characteristics of platform cooperatives translate into challenges and success potentials. On the one side, we confirm the work of Scholz (2016) that platform cooperatives face challenges regarding access to capital as well as governance and scalability issues. One the other side, we extend this line of research by revealing that the general assembly might translate into a challenge since poorly informed members can influence important company decisions. We have also shown that the cooperative model and the social values translate into a challenge because the broad public is not well-informed or places little value on them which hinders the adoption by complementors and consumers. Finally, we extend prior work by illuminating the success potentials that result from the characteristics of platform cooperatives. For instance, their cooperative identity translates into an improved differentiation strategy supporting platform cooperatives to compete against platform capitalists, and their dependence on funding translates into the recommendation that legislators need to create new financing instruments.

Practical implications. The findings of our presented paper can help policy makers to understand the problems and reasons why platform cooperatives are not widely established yet. Furthermore, the insights gained may also help to provide current and future company or platform founders with practical insights into an alternative platform model and thus motivate them to establish further platform cooperatives.

Limitations and future research. The goal of this research paper is to present the most important challenges and success potentials of platform cooperatives that result from their characteristics. However, it must be pointed out that the relatively small sample size or number of interviews does not allow any generalizing statements regarding platform cooperatives. Moreover, some of the platform cooperatives interviewed differ in terms of their industry and business model. Therefore, some results may not be applicable to all industry and business model configurations of platform cooperatives. It should also be mentioned that at the time the interviews were conducted, two of the platform cooperatives interviewed were still in a concept or beta phase and the insights gained can therefore only be made to a limited extent for operational platform cooperatives. Furthermore, all of the challenges and potential successes of platform cooperatives analysed in this study were strictly assigned to one BMC block for reasons of simplification. In fact, however, many of the points analysed could also be assigned to several BMC blocks. In addition, research subjects that lie outside the scope of the BMC model were possibly not addressed. To address some of these limitations, future research could therefore for example use quantitative research approaches to verify these results. Moreover, based on the presented results, future research could for example also work out which concrete promotional measures for platform cooperatives should be implemented in practice to support their foundation. In this case, a partial focus could also be placed on political and regulatory measures to promote platform cooperatives.
7 References


Hagiu, A., T.-H. Teh and J. Wright (2020). "Should Amazon be allowed to sell on its own marketplace?" *Available at SSRN 3606055*.


