Business as Usual? On the Nature of Relationships in Enterprise Software Platform Ecosystems

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Abstract. To obtain measurable benefit from an ecosystem, partners need to overcome the challenges they face when they join. This research aims to provide insight into whether partners are influenced by the keystone through power forms and how the partners perceive these influences. Subsequently, this research identifies possible perceived software ecosystem benefits and disadvantages that these partners experience after joining. Semi-structured interviews were conducted with both a keystone company and multiple partners within a single ecosystem. The most frequently observed power forms are reward and legitimate power. Finally, various SECO benefits and disadvantages have been identified for each partner. Thus, this research contributes to an improved understanding of partner-keystone dynamics within a single software ecosystem and provides insights beneficial to the industry.

Keywords: software ecosystems, case study, power forms, SECO benefits, disadvantages, relationships

1   Introduction

In this day and age, software developers and vendors have to consider their strategic role in a software ecosystem (SECO) to survive [15]. Organizations operating while being part of a larger SECO reap multiple benefits that they would otherwise miss out on [2, 14]. While literature regarding SECOs and their benefits are already established in current literature, explicit dynamics between the keystone and their partners are underexposed. Jansen, Brinkkemper, and Finkelstein call for case studies to be conducted in order to analyze the characteristics of individual SECOs and their effects on software vendors [11]. Moreover, Van Angeren et al. recognize the need for insight into a participant's perspective in a SECO. Questions such as what risks participants face and what benefits and drawbacks they experience within an associate model remain unanswered as of yet [1]. These dynamics between the keystone and its partners, and the benefits and drawbacks that a SECO could bring, might be more implicative for young, small, organizations. These are assumed to be more subject to change, as

they are expected to rapidly adapt and evolve to become successfully established organizations.

By conducting an exploratory case study, this research provides insight into a single SECO regarding the dynamics between the keystone and its partners, mainly from a partner perspective. An advantage of using a real-world SECO as the object of study, which may not only result in industry findings as opposed to solely scientific results, is that it can help improve the industry [18]. These dynamics are analyzed by looking at multiple aspects of the relationship between the keystone and its partners. These aspects are focused on potential challenges that may arise when an organization wants to join a SECO, such as governance, as different areas of governance entail the best strategies for survival for a firm [22]. Subsequently, power forms are included to establish the origin of influences and to further illustrate the relationships [7].

By taking a closer look at the dynamics between the keystone and partners on the aforementioned aspects, the specific characteristics of the particular SECO are identified. The identification of these characteristics sheds light on possible SECO benefits or disadvantages that could be experienced. Subsequently, it grants a more complete image of the dynamics within a SECO. This contributes to the process of creating a foundation regarding the optimization of the process for future candidates that apply to join a SECO. The following main research question was formulated:

How are organizations influenced by the keystone when they join their SECO?

Subsequently, the following three sub questions have been formulated:

1. Does the keystone use power forms to influence its partners?
2. Do partners benefit from being part of the SECO?
3. Do partners experience any disadvantages from being part of the SECO?

The data required to answer these research questions was gathered through the means of semi-structured interviews.

We continue our work with a description of the literature on SECOs and power forms. Section 3 describes the research method, the data collection procedure and illustrates the SECO that was selected for this research. This section also includes our data analysis together with the organizations that participated in this research. Section 4 analyzes the results based on the research questions. The paper ends with a discussion including future research directions and a conclusion.

2   Literature Study

The literature study by Manikas was used as a starting point [17]. Further literature was added through snowballing, using both forward and backward searching.

2.1 Software Ecosystems

As stated by Jansen, a SECO is "*a set of actors functioning as a unit and interacting with a shared market for software and services, together with the relationships among them*" [15]. Partners in a SECO could be any party, on the condition that they contribute to the SECO in any meaningful and in a software related way [13]. The role of a keystone will be defined according to the description provided by Jansen, Brinkkemper and Finkelstein: "*providing a standard or platform technology that provides a fundament for (part of) the ecosystem*" [11]. Additionally, a specific type of keystone player was identified, namely the technology provider [12]. This type of keystone deploys a partnership model and desirable partners include partners that add value to the SECO, help co-innovate, help expand the SECO and promote the SECO to the "outside world" [14]. Geringer and Michael state that the culture of the partners' organization, experience, organization structure and financial position, among other factors, are taken into account by the keystone [8]. In addition, other selection criteria that could be considered include: management capabilities, established customer base, in-house knowledge (including employee skill set) and product quality [6, 23].

When the selection criteria are met, a SECO can yield benefits for partners in the SECO. For example, the involvement of partners allows organizations to focus on one specific aspect of the market, while simultaneously delegating other supportive services to smaller partners, which can result in an increase of sales for individual partners [3]. Rickmann, Wenzel and Fischbach also mention this, stating that niche players often join a SECO to gain access to customers [19]. Also, partaking in a SECO allows partners to extract value from each other, which would mean higher revenue for individual partners [14]. Barbosa and Alves state that SECOs generally decrease costs for the participants, that they support architectural decision making, allow the sharing of knowledge and that they stimulate the communication of requirements between participants [2]. These factors could also be seen as benefits from participating in a SECO and gives incentive for an organization to join an existing SECO. In order for new participating organizations to benefit optimally and thrive in a SECO, it is possible that they have to adapt to the overall climate of the entire SECO upon entry.

2.2 Power Forms

To provide more insight into partner-keystone dynamics, power forms were used to observe how they cooperate and behave in the SECO and how the keystone manages its partners [21]. French and Raven describe five forms of power in a relationship: coercive, expert, legitimate, referent and reward [7]. While French and Raven defined these bases of power in relation to a person and a social agent, Leonidou et al. [16] have adapted these to be suitable to buyer/seller relationships and define an additional form of power. In the case of the latter, these power forms are described as follows:

– **Coercive:** Threats by one firm to punish the other if it fails to cooperate and comply with its requests;
– **Expert:** The specialized and unique expertise and/or knowledge possessed by one, which is needed by the other party;
– **Legitimate:** The belief by one party that the other has a legitimate right to affect his/her behavior;
– **Referent:** The identification of one party with another, which makes one party comply with the other party's requests;
– **Reward:** The belief by one firm that another firm has the ability to mediate rewards and that it will provide these rewards if the firm complies;
– **Information:** The belief of one party that another possesses critical information, which is not available to the former.

Whenever power is exercised by one organization this can lead to compliant behavior by others [16]. While the exercised power as stated by Leonidou et al. is a work in progress and is tailored specifically to buyer/seller relationships, it is applied to keystones and partners in SECOs in this case. It is important to note, however, that such power relationships and dependencies are versatile, as they can depend on circumstance [10]. Throughout this research the power forms have been used to define the relationships and potential dependencies between the keystone and its partners, predominantly from a partner perspective.

3 Research Method

The grounded theory research method was applied, in which the data determine the theory and therefore mitigate the risk of introducing bias during the interpretation of the results. In addition, this research method allows for a wide range of different data to be used, since no particular effort was made to prove or disprove a specific hypothesis or expectation. So, the method permitted a degree of sensitivity, which allowed for the gathering of general information as well as picking up on details [20]. Ultimately, the grounded theory research method allows this research to focus on understanding the phenomena covered by the research questions, rather than explaining them [4]. In this research, the method has been applied to a case study. In the context of this research this meant that, for example, the effect the SECO has had on the partners can be observed. The data that have been gathered were used to identify the advantages and disadvantages of joining a SECO. Also, power forms utilized by the keystone within the SECO were identified. While the existence of possible power forms was known to the researchers before conducting the interviews, the effect on the grounded theory approach was mitigated by not referring to any of these power forms or their characteristics directly during the interviews. While this approach is slightly in contrast with the principles of the grounded theory method, it was required to determine the initial scope of this research. To support this approach, no hypotheses were formulated beforehand.

3.1 Data Collection

The data for this research was collected through semi-structured interviews. The questions were kept as open as possible to enable the interviewee to speak freely and add extra information when relevant. Interviews were conducted with four partners and the keystone. In case of the partners, the CEOs of the companies were interviewed. The representative of the keystone was the chief of ecosystems. The average duration of the interviews was one hour and took place at the respective organizations' headquarters. All participants received the same questions according to the interview protocol, although follow-up questions varied based on the context and the interview itself. For each interview, at least two of the researchers were present. During the partner interviews the following types of questions were asked:

– General questions (information about the organization), such as: how long has your company already been active and what is, to your knowledge, the role of your company in the SECO?
– Questions regarding the partnership with the keystone, such as the motivation to join.
– Advantages and disadvantages of being part of the SECO.
– Challenges and innovation.
– Market perspective and knowledge sharing.

Regarding the interview with the keystone, similar questions have been asked.

3.2 Data Analysis

The interviews that have been conducted have been transcribed and entered into NVIVO. Using this qualitative analysis program, potential uses of power were observed. Secondly, SECO benefits and disadvantages mentioned by partners were identified and compared. Figure 1 shows the coding nodes used in NVIVO. Some of these nodes are supported by existing literature (as described above), while others are more general. To remain open to other possibilities (outside of the literature) the "other" nodes were used to capture additional information. In case of the "sales increase" node, an increase in customers or wider reach are both included. Since no specific disadvantages were found in the literature, no examples of disadvantages were used as coding nodes. See figure 1 for an overview of the nodes.
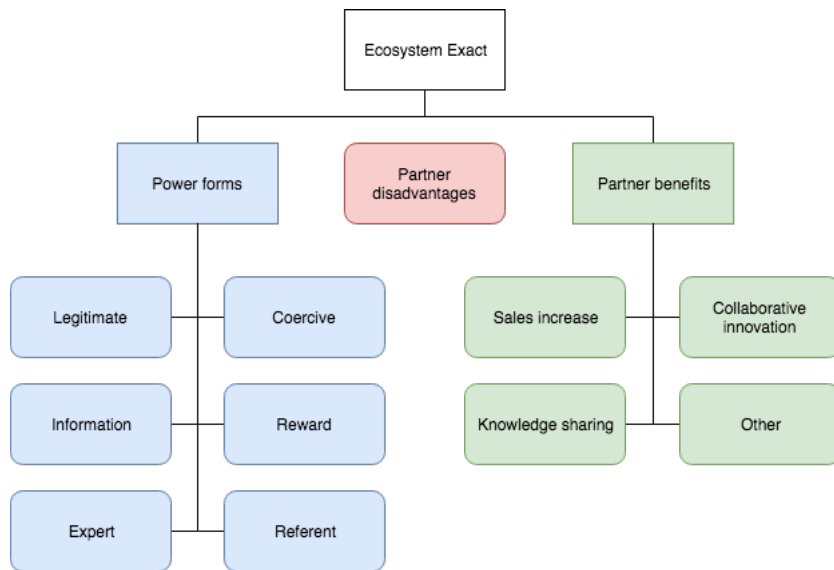
Fig. 1. Coding nodes in NVIVO.

3.3   Exact

The SECO that was investigated was that of Exact Online (simply referred to as Exact from now on). Exact has been selected, as it is the keystone of one of the biggest SECOs in the Netherlands. Exact is a Dutch software application platform provider that offers cloud business software to organizations. During the interview with a representative of Exact, the following statistics were presented (as of January 2018): they serve over 375,000 small and medium-sized enterprises worldwide and handle 2,4 billion financial transactions per month. In the Netherlands, they have 200 partners and 90,000 customers are linked. This size is important, as a product becomes more attractive when more customers use it and more suppliers provide complementary products and/or services [9]. Since the case study focuses on depth, a scope has been defined using characteristics of the SECO [17]. Firstly, the SECO boundary can be defined by the organization, more specifically, Exact Online's app center [15]. Secondly, Exact currently deploys a membership and partnership model, since some partners are required to pay a fee in order to be part of the SECO, while others have entered free of charge. Finally, the accessibility of the SECO of Exact can be described as screened, while partners are free to contribute software (such as online plug-ins), contributions need to be approved by the keystone [14].

Candidate participants that optimally suited this research adhered to the following prerequisites: participants recently joined the Exact SECO, so that the joining of the SECO was fresh in their mind and they could provide an

illustration of what joining the SECO is like now, as opposed to some years ago. Secondly, they themselves, do not fulfill the role of keystone in a different SECO (as of yet). Furthermore, only small enterprises in terms of number of employees have been included. Finally, the partners in the SECO have been selected based on recommendations by Exact, to ensure that they provide an accurate representation of the SECO. Organizations of similar size, in case of the partners, have been selected, to ensure they have matching perspectives on joining a SECO and allowing for comparison of their experiences. The four partners that have been selected are part of a larger set of partners that are representatives of the criteria mentioned previously. Table 1 provides an overview of general information of the organizations that participated in this research. For one participant the information shown in table 1 and the quotes used in the results section were anonymized.

| Organization	Exact	TriFact365	Invantive	vPlan	Partner Z
Year founded	1984	2011	1992	2016	2013
Product/service	Accountancy	Invoice processing	Accountancy	Planning	Data Analysis
Number of employees	1400	6	10	7	5
Year of entrance	2012 (founded)	2013	2015	2017	2014
SECO role	Keystone	Niche	Bridge	Niche	Niche

Table 1. Overview of general information of Exact and its partners.

4   Results

The findings presented in the upcoming section contribute towards the building of a theory that answers the main research question [5]. Direct quotes from the interviews were used to support all findings. These quotes, provided by the representatives of each organization, have been interpreted as the voice of their entire organization. Quotes have been translated from Dutch to English. An overview of the findings is presented in table 2 at the end of this section.

4.1   Identified Power Forms

Figure 2 depicts the power forms that could be observed within the SECO. The direction of the arrow shows where the influence is coming from (bidirectional arrows are also possible) and the color represents either a positive or negative connotation (green and red respectively), according to the party that is influenced.
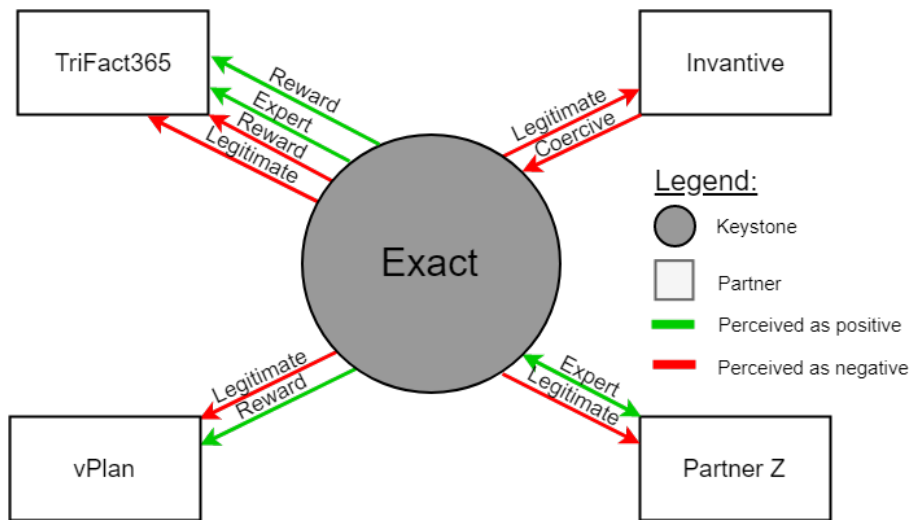
Fig. 2. Overview of the observed power forms in the Exact SECO, showing that reward and legitimate power were most frequently observed.

The most frequently observed power forms were legitimate and reward power. However, in the case of the former, the keystone met resistance even though partners felt that the keystone had a right to influence. While the partners mostly complied, the conflicts that arose negatively influenced the relationship between partner and keystone, for example a decrease in satisfaction on the partner's side as discussed by Leonidou et al. [16]. One change that the partners mentioned is that the keystone started to charge fees for being part of the SECO, while being given insufficient notice beforehand. According to the keystone, the reasoning behind the fees was that they incur costs in order to keep both the SECO and, specifically, the app center running. TriFact365 confirms this and states: "*The motivation is that they make costs for the app center and that they want compensation in return to be able to continue to innovate.*" Based on this, it seems to be a use of legitimate power. However, TriFact365 then continues saying that "*They indicated this could be discussed, we talked a little, but in the end it became clear that negotiation was not possible*". Which can be interpreted as coercive power, although no threats or consequences were expressed, whilst usually punishments are stated [16]. vPlan, however, stated that Exact was more open for negotiations: "*…we were able to make a deal in the beginning, they actually were quite approachable especially compared to others.*" Most partners deemed the current pricing dynamic to be fine, as long as they asked a fair price. Invantive, however, exerted its own coercive power in return by threatening to leave the SECO, clearly indicating a punishment for non-compliance [16]: "*At a certain point in time we said we will put it on hold, for half a year it was put on hold. We do not do [keystone's product] anymore, done.*" So, while these fees are acceptable at this point in time, an increase would likely not be tolerated or at

least be deemed controversial by smaller partners. While the actual prices asked by Exact for each partner remains unclear and partner specific, the different perspectives and the highly varying reactions highlight that this is at least a sensitive subject. In the near future, Exact is planning on charging partners based on their API calls. This could lead to various consequences for the partners, the most important being additional costs, which can lead to problems. If Exact does not communicate this properly and does not notify the partners of this change ahead of time, reactions such as the one of Invantive could be expected. Moreover, this could affect different partners in different ways. While some rely on a few API calls to run their business, others need a plethora of calls to keep their product running and to meet customer demands. Another example of the use of legitimate power was that Exact asked vPlan to lower their price, otherwise the two products would cost nearly the same amount, which was not considered marketable. Notably, vPlan complied because they expected this to yield more profits than costs. Due to this increased profit, the price change was not seen as a disadvantage.

Furthermore, Exact has a vision for the future in respect to reward structures for organizations regarding the sharing of data, as these organizations help to improve the data. TriFact365 coined the idea that Exact should include successful partners in their proposition and that they, in return, are willing to share part of their revenue. During hackathons Exact also puts organizations in the spotlight, if they provided useful contributions during the event. Likewise, Exact also awards prizes via the app center, such as the "app of the month" prize, which vPlan received. According to Leonidou et al., reward power can be used to improve collaboration and productivity [16]. The aforementioned hackathons can be seen as an example of such use. Finally, TriFact365 explained that Exact imposes requirements, such as security procedures, and that they screen APIs before allowing them in the app center, which can be seen as an example of expert power. One partner also seems to exert expert power, that is to say that Partner Z aids Exact in using their data well. All in all, Exact does not seem to apply all of the aforementioned power forms. Instead, the participants mentioned reciprocity as a more prevalent factor, they are willing to share their knowledge or offer a helping hand if they can expect the same in return. TriFact365 calls it "*give and take*" and stated that both parties ask how the other is doing and provide insight on a noncommittal basis. Invantive confirmed this by saying that "*We mainly require market information and Exact requires technical information, that works well*". Additionally, vPlan also stated that their dynamic is a two way street: "*...just because it comes from both sides. Exact needs us because we provide an essential part.*"

When looking at the aforementioned power forms, especially coercive and reward, and their influence on the keystone-partner relationship, the following can be deducted: when the keystone applies its coercive power, this could presumably lead to a relationship based on "fear", as described by Leonidou et al. [16]. When this is the case, this can spread to the other partners and candidate partners, who might refrain from joining the SECO, which in turn will

have a negative influence on the growth and well-being of the SECO. On the other hand, reward power, the actualization and not just the promise, has the potential to increase the attraction of partners to the keystone, as this may increase the satisfaction of partners [16]. This will benefit their relationship and have a positive influence on the SECO, because the partner is likely to share with their partners or other partners that they have a positive experience. This, in turn, can reach candidate partners that can be persuaded to join the SECO when hearing about the positive relationship between partner and keystone, as was also identified by Jansen, Cusumano and Brinkkemper [14].

4.2 Perceived Benefits of the SECO

Figure 3, similar to figure 2, shows an overview of the SECO benefits and disadvantages as stated by the partners during the interviews.
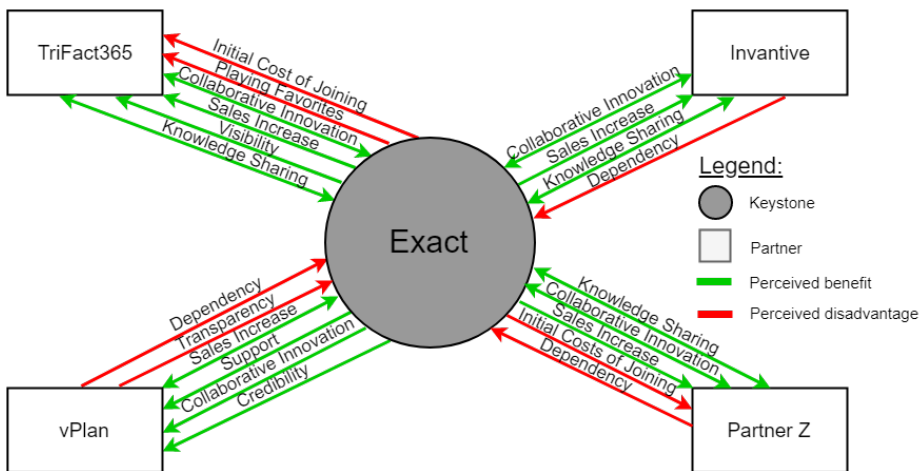
Fig. 3. Overview of the observed partner SECO benefits and disadvantages, showing that the perceived effects of partner-keystone dynamics are mostly beneficial for either party.

The three main advantages of being part of a SECO that were identified beforehand in the literature study were also encountered in the case study. One of which was an increase in sales as mentioned by Ceccagnoli et al. [3], however, not all participants mentioned they had experienced an actual increase. Invantive shared that some customers they serve via the keystone actually cost them money when looking at profit per customer: "*We also have contracts that cause a loss.*" On the other hand, all participants confirmed that, thanks to the SECO, they have a wider reach and have had the possibility to gain new customers, as was stated by Rickmann, Wenzel and Fischbach [19]. Even when partners

did not personally encounter the effects of this SECO benefit (yet), they still acknowledged the potential as an important SECO benefit of being a partner.

Secondly, all participants mentioned that they share knowledge with the keystone and that they receive valuable and useful information in return, which confirms the findings of Barbosa and Alves [2]. The technology-focused organization Invantive especially appreciated the marketing knowledge the keystone possesses. When asked whether Exact is a useful source of knowledge their answer was "*it is for knowledge of the market.*" The keystone itself also mentioned that they are aware of this SECO benefit for their partners. Nevertheless, when it comes to sharing knowledge such as source code the partners remain cautious. Invantive stated that Exact "*can look at it if they want to, but cannot take it with them.*" In the case of TriFact365 the code was not at all available to Exact. However, Exact stated that they do not expect the same degree of openness from their partners. In the continuation of knowledge sharing, every participant said that they actively collaborate with the keystone in terms of innovation and that hackathons are organized frequently. This co-innovation is in line with the observations provided by Jansen, Cusumano and Brinkkemper [14]. The topics of innovations mainly include integrated services, new technologies and the renewal of APIs.

In addition to the SECO benefits that were expected due to findings in the literature study, two additional advantages could be identified during this research. Firstly, the participants mentioned that their credibility improved thanks to being part of the SECO. Customers see the keystone as a trustworthy organization and, by association, the partner organization as well. This was acknowledged by vPlan: "*What you do have, is the logo of Exact on your website which apparently means something, as it offers something recognizable for organizations.*" For smaller, relatively young organizations it felt as a big advantage to be able to express the fact that they were backed by a bigger organization that is known to public. In other words, the reputation of Exact resulted in a higher level of trustworthiness that reflects on the associated partners. Partners mentioned that this trustworthiness comes from the fact that Exact acts as a guardian regarding product quality, which guarantees a certain degree of quality of members in the SECO. This was specifically acknowledged by TriFact365: "*…they all have to score a 9 or a 10 in order to collaborate, otherwise you have to say goodbye to them (…) quality is the most important to Exact…*" Subsequently, partners mentioned that being part of the SECO can lead to increased visibility, for example due to the partner organization being named on the website of the keystone. In other words, partners acknowledged that they benefit from the marketing channel of the keystone, which by definition is larger than the individual marketing channel of a small partner. Respectively, in certain cases partners get an even bigger spotlight when Exact sees a certain potential in their product. vPlan was a great example of this phenomenon as they stated that "*As app of the month, you will get presented on the website of the app center. Potential clients see this and are easily able to make a deal at the same time with us and Exact. For us this results in a way bigger reach.*"

4.3   Perceived Disadvantages of the SECO

In addition to the identified SECO benefits, possible disadvantages also became apparent during this research. These disadvantages do not necessarily affect the individual organization specifically, but can also include aspects which the partners think should be improved. An example of such an aspect was the preferred partnerships as mentioned by TriFact365: "*I do not think the ecosystem is completely transparent.*" They think the app center should be open and that "*they should not have contracts with third parties that could cause conflicts.*" Essentially, a level playing field should be created. According to them, and Exact, they have a tendency to favor partners that have been a part of the SECO for a long time or even from the beginning. This so-called "playing favorites" is not appreciated by "regular" partners but, surely, those favorites enjoy this special treatment. In this context, the preferred partners' products are sold alongside Exact Online and, unlike the other partners, they are not required to pay a fee to be included in the app center. Also, they are more often pushed and recommended to customers than other products. Additionally, the previously mentioned spotlight of "app of the month" could also be observed as drawing away the focus from other partners. These two factors combined could potentially result in drawing attention away from other, new partners that could be of importance for innovation, growth or general longevity of the SECO.

Secondly, joining the SECO compelled the new partners to spend resources, such as time, effort and money, into linking and developing their product. After obtaining partner status, these costs also included continued management and support. This is not in line with the general decrease in costs Barbosa and Alves identified [2]. However, this also included the initial cost of joining. In addition, partners mentioned that partner managers can be of influence. Invantive said that their situation improved after they received a different partner manager: "*whom at least had more experience with complex cases.*" The same organization also stated that they think Exact has too few partners abroad. They were also required to accept medium to small organizations as customers, which they found hard to get used to saying that this period "*was a difficult time.*" Moreover, partners were concerned with what decisions Exact might make or not make, (these differed from partner to partner) and how these changes would impact them. These changes also included the transparency of the SECO. This mainly manifested itself in the fact that partners mentioned that they receive short notice, or none at all, when changes to policies (among others) are made. A specific example of this was Exact's decision to start charging fees for being included in the app center. For smaller organizations, the dependency on Exact was acknowledged to be either a disadvantage, or at the very least a risk. Organizations that have relatively little sales for other sources, such as Partner Z have little alternatives: "*...there is not really an alternative. If I want to approach Exact customers (on my own), I have to pull my app from the app center. Theoretically, I could do that, which would mean no dependency, but no business as well.*" Invantive also stated that if Exact goes bankrupt, is obtained by a third party or changes their terms and conditions "*they will have a problem*

as well." Thus, organizations that do not have enough customers by themselves or are not part of another SECO, share the fate of Exact and its SECO. In table 2, the main findings of this research are presented, they are relevant for both the keystone, partners as well as potential partners who want to join a SECO.

Power forms
Most frequently observed power forms are legitimate and coercive
The most striking form of legitimate power is that the keystone is planning on charging partners for the use of their API
The most stated expression of coercive power is that the keystone enforces fees for being part of the SECO
The actualization of reward power has the power to increase the attractiveness of the SECO
The principle of reciprocity is applied within the SECO, partners are willing to share their knowledge or a helping hand if they can expect the same in return
When the keystone places partners in the spotlight, this can result in exposure for partners
The keystone has a vision for the future regarding reward structures so that partners benefit from sharing with the keystone
When the keystone enforces coercive power this can lead to a relationship of fear
Perceived benefits of SECO
Increase in sales and visibility
Wider reach and possibility to gain new customers
Access to marketing knowledge of the keystone/benefit from marketing channel of keystone
The credibility and trustworthiness of partners improved due to being part of the SECO
Sharing knowledge with the keystone lead to partners receiving valuable information in return
Opportunity for collaborative innovation
Perceived disadvantages of SECO
Non-equal playing field/playing favorites
Dependency on the keystone
Lack of transparency and communication

Table 2. Main findings of this research.

5   Discussion

Due to the exploratory nature of this research, it can be used to identify research directions and provide better insight into partner and keystone dynamics. However, since the research consisted of a case study, it is difficult to generalize the results and more research into this SECO and others is desired. On the other hand, this research and its methods can easily be applied or adapted to look into other SECOs. In addition, since the characteristics of the SECO and its boundary were identified, this research can be conducted using similar scopes to confirm the findings [17]. Alternatively, it can be used to analyze the partner-keystone dynamics of this SECO, using different partners. Therefore, the research is quite scalable and can be used in other contexts. Finally, one of the strengths of this research is its use of a real-world SECO and, with that, useful insight for the industry [18].

The research was also limited by the fact that only a small subset of Exact's partners participated, while more partners would have been preferable. This was due to the limitations introduced by a narrow time window for conducting the research. More qualitative research should be performed to be able to truly confirm the findings mentioned in this research. Another limitation is the fact that all the partners that participated were suggested by the keystone of the SECO. This could have influenced the results, because the selected partners may have been more positive than without the participation of the keystone, although not all participants were equally enthusiastic about the SECO. However, this can also been seen as a advantage, because the partners have been selected in such a way that they properly represent the SECO in its entirety. Additionally, since the keystone requested them to participate they were willing to invest time and effort into the research.

As already mentioned this research can be seen as an exploratory case study. Based on the aforementioned findings we can extract the following hypotheses that can serve as a basis for our and other future research:

1. A non-equal playing field can result in potential partners not wanting to join the SECO and losing partners that are of importance.
2. Applying reward power by the keystone will increase the attractiveness of the SECO, resulting in growth and new partners.
3. Applying coercive power by the keystone will decrease the attractiveness of the SECO since it leads to a relationship of fear, scaring potential new partners away.
4. For partners, joining a SECO will result in an increase in credibility and visibility.

This research has focused on the relationship between partners and keystone, seen from the partner's perspective. However, other relationships do exist within a SECO, for example, between the keystone and the technology providers. Future research should be conducted to analyze if other relationships exist, how these can be described and what the effect is of these relationships on the SECO and

keystone. Moreover, additional research aimed at discovering the intensity of the identified power forms in this study could also lead to further insights.

6   Conclusion

The main objective of this research was to gain a better understanding of the influence of the interactions between organizations and the keystone of a SECO. This research provides multiple insights into partner and keystone dynamics within an SECO, its main contribution to the field of SECO being the partner perspective. More specifically, the conducted interviews illustrated how small organizations are influenced by the keystone when they join their SECO. Three main factors have been discussed: power forms, SECO benefits and disadvantages. Based on the results presented in the previous section it became apparent that partners are required to ensure their product(s) meet the keystone's requirements and are required to pay a fee in order to be part of the SECO. However, chances are that the partners are rewarded for their contributions to the SECO. Secondly, the SECO benefits as stated by the literature have been confirmed by the partners. In addition, two new advantages were identified: visibility and credibility. Finally, disadvantages could be observed as well, although these could more accurately be called risks and can differ per partner. All in all, after joining the SECO three of the factors described affected the organizations.

This research encompassed four partners that were active in the Exact SECO. In the future, however, more partners can be included with different backgrounds, to not only better illustrate the partner-keystone dynamics of the SECO, but also to confirm the findings presented in this research. In line with this, the research could also be applied to other SECOs inside or outside the Netherlands. Besides the new insights, improved understanding and future research directions, this research can also be of use to the organizations that participated. The keystone can use the observations and remarks made by its partners to try to improve the SECO. It also provides knowledge on what the partners struggle with or what they would like to see or do differently. The SECO benefits that were observed can be used as a means to persuade organizations to join the SECO. Finally, the organizations that are considering to join a SECO, or this one specifically, will know what to expect, what challenges they will need to overcome and what risks they are taking.

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