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Support Me Once or Every Month - A Taxonomy of Traditional and Subscription-Based Crowdfunding

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Abstract. Subscription-based crowdfunding represents a novel crowdfunding approach, which can reduce the harmful ad- and algorithmic dependency that online creators are experiencing. By utilizing recurring payments and continuously running campaigns, subscription-based crowdfunding platforms enable creators to fund a stable income and democratize their content creation process. Subscription-based crowdfunding platforms are financially successful (e.g., Patreon, OnlyFans), offer tremendous potential for online value creation, and exhibit characteristics that significantly differ from traditional crowdfunding approaches. To better understand these platforms, we develop a theoretically and empirically grounded taxonomy of crowdfunding platforms, which specifically addresses the novel characteristics of subscription-based approaches. Thereby, we contribute to IS research by offering a standardized framework to organize previously disordered knowledge about crowdfunding platforms and enable the creation of hypotheses about the relationship between crowdfunding platforms' characteristics. Additionally, we provide an overview of the current crowdfunding landscape and outline the beneficial characteristics of subscription-based crowdfunding for scholars and practitioners.

Keywords: crowdfunding, subscription-based, taxonomy, platforms

1 Introduction

Online platforms have become a ubiquitous phenomenon in recent years by disintermediating traditional value creation chains and bringing together providing and acquiring parties of services or products [1]. By disintermediating traditional financial intermediaries, crowdfunding represents a manifestation of the online platform phenomenon [2]. Crowdfunding platforms enable individuals or organizations to broadcast an open call towards a network of actors to request support to reach a commercial or social goal [3]. Subscription-based crowdfunding is a new type of crowdfunding that offers novel and unique characteristics compared to traditional crowdfunding approaches while also being economically relevant. For example, the popular subscription-based crowdfunding platform Patreon has already reallocated 2

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While there exist various naming schemes for crowdfunding stakeholders, we will refer to the funding-seeking party as "creator" and the funding-providing party as "supporter" throughout this article.

billion dollars since its launch in 2013 [4]. In September 2020, the platform was valued at 1.2 billion dollars after raising 90 million dollars in funding [5]. Similarly, the popular platform OnlyFans, forecasted in December 2020 that it would generate more than 2 billion dollars in sales in 2020 [6]. These examples underline subscription-based crowdfunding platforms' financial success and potential for creators. Moreover, subscription-based crowdfunding presents an appealing solution to the ad- and algorithmic dependency that many creators on video platforms experience [7]. This dependency's problematic nature was observable during the so-called "adpocalypse" on the video platform YouTube, where many videos got demonetized due to algorithmic decisions and changes in YouTube's policies [8]. By enabling creators to be financially supported by their fans on a recurring basis, subscription-based crowdfunding provides a more stable and predictable income stream for creators and reduces the risk of pursuing content creation as a profession. Additionally, it is common for subscriptionbased crowdfunding creators to promote their campaigns through multiple channels (e.g., Twitter, Facebook, or YouTube), which reduces the dependency on a single platform for revenue creation. Subscription-based crowdfunding can thus be seen as a democratization of online creation, as creators' earnings are less dependent on catering to video platforms' policies and algorithms. Instead, fans can now vote for the content and the creators they like by directly supporting them through a recurring financial contribution. In times of crisis, the power of subscription-based crowdfunding became especially apparent, as Patreon and Onlyfans recorded a rapid increase of creators during the Covid-19 pandemic [9, 10].

Compared to traditional crowdfunding, subscription-based crowdfunding offers the following novel characteristics: Firstly, subscription-based crowdfunding platforms offer recurring payment options, often on a monthly or per-work basis. Traditional crowdfunding approaches mostly work with one-time payments. Secondly, traditional crowdfunding platforms use fixed deadlines to which a potential supporter has to decide to contribute [11]. Subscription-based crowdfunding campaigns, on the other hand, may run indefinitely or until the campaign creator decides to stop the campaign [7]. Thirdly, due to the recurring payments, supporters may choose to stop their support at any time; this possibility acts as a feedback mechanism for supporters [7]. In traditional crowdfunding platforms, supporters can only withdraw their pledges before the processing at the campaigns' fixed deadline, thus offering no such feedback mechanism. Additionally, subscription-based crowdfunding campaigns distinguishable by their lack of strict campaign goals. The processing of supporters' pledges is thus independent of whether the goals of the campaign are met. In case a certain monthly funding goal is reached, the creator, for example, might be able to afford higher content output or better equipment [12], but the campaign does not fail if this level of funding is not met. Traditional crowdfunding goals, however, are intertwined in the processing of the pledges. In the traditional "all-or-nothing" funding model (e.g., Kickstarter), the creator may only receive the accumulated funding when the campaign goal is met [13]. If the crowdfunding platform utilizes an "all-or-more" model (e.g., Indiegogo), the creator may keep the funding even when the funding goal is not met [13]. Due to the continuous campaigns and the lack of strict campaign goals on subscription-based crowdfunding platforms, the "all-or-nothing" and "all-or-more"

approaches are not suitable to describe these platforms. Lastly, subscription-based crowdfunding has a higher focus on a campaigns' creator. Rather than seeking funding for a particular product or a single project like traditional crowdfunding, in subscription-based crowdfunding, a creator's funding detaches from a specific product or one-time project. This distinction might allow creators to build a stronger community around themselves by using subscription-based crowdfunding.

This paper utilizes Nickerson et al.'s [14] systematic taxonomy development method to create a theoretically and empirically grounded taxonomy and expands upon Haas et al.'s [15] taxonomy of crowdfunding intermediaries. We built upon existing research of traditional crowdfunding [13, 15–18] and payment options [19, 20] to update existing knowledge about crowdfunding platforms by specifically considering subscriptionbased crowdfunding in the design process of our taxonomy. This study contributes to the research of crowdfunding and IS by comprehensively and systematically documenting the characteristics and features of current crowdfunding platforms. Most notably, we highlight the unique characteristics of subscription-based crowdfunding that distinguish them from traditional approaches. We organize these characteristics and features to create a comprehensive taxonomy that allows for the classification of current and future crowdfunding platforms and is thus highly relevant for scholars and practitioners alike. This is a necessary step, especially considering the rising economic relevance of subscription-based crowdfunding platforms. After this introduction, we will outline the theoretical background needed for this taxonomy development and explain the differences between existing taxonomies and the presented approach. In Section 3, we built the taxonomy based on Nickerson et al.'s [14] systematic process of taxonomy development and highlight the changes to Haas et al.'s [15] taxonomy on which we expand upon. In Section 4, we evaluate and validate the resulting taxonomy. In Section 5, we discuss the taxonomy and put it in context with existing literature about crowdfunding and present its limitations. Lastly, in Section 6, we present the study's theoretical and practical contributions.

2 Theoretical Background of Crowdfunding

Crowdfunding enables funding-seeking entities (i.e., individuals or organizations) to make an open call to a group of other entities and request a monetary contribution towards its social business or commercial goal [3]. This contribution can be provided in the form of a donation or in exchange for a reward [21]. Traditionally, crowdfunding platforms let creators specify a fixed deadline to which the funding goals of the campaign have to be reached [11]. In case the funding goal is not met, the creator can refund the pledges to the supporters or keep the accumulated funding depending on the used funding model on the platform [13]. In the "all-or-nothing" funding model, the creator may only keep the funding if the funding goal is met (e.g., Kickstarter). The "all-or-more" funding model allows creators to keep the funding even when the funding goal is not met (e.g., Indiegogo). Earlier research classified crowdfunding based on the return for supporters into two main types: reward-based and charity-based crowdfunding [22]. This classification is commonly extended with the two types of

lending-based and equity-based crowdfunding, which further specify the compensation for supporters [2, 23, 24]. The motivation behind creators' and supporters' engagement in crowdfunding endeavors was the focus of research by Gerber and Hui [13] and Ryu and Kim [16, 17]. Gerber and Hui [13] propose that creators are motivated because they want to spread awareness of their business endeavors and receive approval, network with people, generate funding, learn new skills, and maintain control over their creations by being independent of large investors. On the other hand, supporters on crowdfunding platforms are motivated by their inclination to accumulate rewards, because they want to back a cause, due to their desire to aid others and because they want to become a member of a community [13]. Ryu and Kim [16] utilized six funding motivations as a basis to classify crowdfunding supporters into the four types: "avid fan", "angelic backer", "reward hunter", and "tasteful hermit" [16, p.43]. Creators can be classified as "fund seeker", "indie producer", "daring dreamer", and "social entrepreneur" these classes are built on four motivations for creators to participate in crowdfunding [17, p.350]. The classification of crowdfunding platforms has only sparsely been researched thus far and existing approaches do not sufficiently address the characteristics unique to subscription-based crowdfunding. Notably, Haas et al. [15] propose a taxonomy of crowdfunding intermediaries. They utilized a cluster analysis to generate three generic archetypes of crowdfunding intermediaries: "for profit", "altruism", and "hedonism". Our taxonomy builds upon the findings of Haas et al. [15] and offers an up-to-date taxonomy of crowdfunding platforms' characteristics and features that considers the novel phenomenon of subscription-based crowdfunding and is theoretically and empirically grounded.

2.1 Subscription-Based Crowdfunding

Patreon and OnlyFans represent prime examples of subscription-based crowdfunding platforms by enabling creators to be financially supported by their fans on a recurring basis. While subscription-based crowdfunding is still based on the premise of crowdfunding that a group of entities funds another entity by donation or in exchange for a reward [3, 21], there are some characteristics, which differ significantly from traditional crowdfunding approaches. Unlike traditional crowdfunding, subscriptionbased crowdfunding has been described as acting like "...a recurring payment tip jar with some blog and paywall hosting." [12, p.3]. Paid channel memberships on user generated content platforms like YouTube ("Channel Membership") or Twitch ("Subscription") share similarities to subscription-based crowdfunding. However, paid channel memberships are inherently linked to the creators' YouTube or Twitch channel, while subscription-based crowdfunding platforms offer a payment option independent from the content creation platform. This distinction is crucial, as it enables creators to act independently and be paid for other activities. The recurring payment in subscription-based crowdfunding shares similarities to interest-free installment payments by offering supporters the option to contribute to a cause in multiple smaller increments rather than one large payment, thus lowering the barrier to entry. Installment payments can significantly increase customers' willingness to pay [19]. Furthermore, offering interest-free installment payment services was shown to improve retailers'

profits [20]. In subscription-based crowdfunding, these benefits of recurring payments might also be present. For example, when a creator decides to use a subscription-based crowdfunding platform instead of a traditional crowdfunding platform, the campaign might yield higher profits due to the offered recurring payment option. Besides utilizing recurring payments (often on a monthly or per-work basis) compared to the one-time payments in traditional crowdfunding, subscription-based crowdfunding platforms also differ in other dimensions from traditional crowdfunding approaches. While traditional crowdfunding approaches use fixed deadlines [11], subscriptionbased crowdfunding campaigns may run indefinitely with no fixed deadline or until the creator decides to cancel the campaign [7]. Because of the recurring payment in subscription-based crowdfunding, supporters may stop their pledges towards the creator at any time, which acts as a direct feedback mechanism as supporters can express their dissatisfaction by stopping their monetary support [7]. On the other hand, the creator can observe this change in monetary inflow and react accordingly. Additionally, subscription-based crowdfunding does not use strict campaign goals, unlike traditional crowdfunding platforms in which processing of the accumulated funding depends on whether a funding goal is reached. In subscription-based crowdfunding, the processing of funding is independent of reached goals. An example of subscription-based crowdfunding goals is that if a certain monthly income is reached, the creator can afford a higher content output or afford better equipment [12]. However, if a campaign does not reach its monthly goal, it does not fail. Finally, compared to traditional crowdfunding, subscription-based crowdfunding platforms have a higher focus on the campaigns' creators. In traditional crowdfunding, a product or project is the object that is to be funded. In subscription-based crowdfunding, the creator itself takes the focus and asks to be funded. This might, in turn, allow creators to build a stronger community around themselves by using subscription-based crowdfunding.

Due to its novelty, subscription-based crowdfunding only recently gained the attention of scholars [7, 12, 27-29]. Fan-Osuala [27] and Wilson and Wu [12] used a set of sailing YouTube channels to research the effects of subscription-based crowdfunding on channel performance. Fan-Osuala [27] finds that subscription-based crowdfunding can significantly increase the YouTube channels' performance based on views and registered subscribers. Wilson and Wu [12] show that crowdfunding creators' channels upload videos more frequently, are more likely to link Facebook pages and on average have more views per video. Crosby and McKenzie [29] analyzed how hiding a campaigns' earnings on Patreon affected its performance and find that campaigns which hide their earnings got more subscribers. Regner [7] and Jöntgen [28] provide an overview of the popular subscription-based crowdfunding platform Patreon and analyze what factors drive campaign success. Jöntgen [28] finds that offering long campaign descriptions, having multiple reward tiers, community engagement, high media richness and utilizing ones social media following positively affect a campaign's success. Regner [7] proposes that the communication quality of a campaign can determine project success and suggests that the possibility to cancel the support towards a creator at any time serves as a feedback mechanism. However, Regner [7] also notes that the income distribution on Patreon seems to be skewed, and most campaigns do not get any monetary contribution at all or only small amounts, while a small number of people earn a considerable income. This highlights that there is also a high possibility for creators of not receiving any payments. However, usage fees on platforms like Patreon are based on a percentage of the creators' earnings on the platform [30]. Since no upfront costs are required, this reduces the risk for creators to use the platform.

3 Taxonomy Development

Taxonomies play a crucial role in IS research by building a structure in which the knowledge about a research field can be organized, thereby enabling the analysis of dependencies between disordered concepts and the creation of hypotheses about their relationships [14, 31, 32]. For a novel phenomenon such as subscription-based crowdfunding, a taxonomy may provide the necessary boundary conditions for future evaluations and analyses of the phenomenon. We developed the taxonomy based on the systematic taxonomy development method of Nickerson et al. [14]. This iterative method is widely accepted in the IS community and was used in various research contexts [e.g., 33-35], including the research of crowdfunding intermediaries [15]. Therefore, this approach is well suited for the development of this taxonomy of crowdfunding platforms, including subscription-based crowdfunding. First, we specify a meta-characteristic, which guides which characteristics are part of the scope of the taxonomy at hand [14]. The meta-characteristic is chosen based on the taxonomy's purpose [14]. The purpose of our taxonomy is to provide scholars and practitioners with a straightforward tool to analyze and classify the current and future landscape of crowdfunding platforms. Therefore, it is crucial to create a comprehensive overview of the characteristics and features of crowdfunding platforms, including subscriptionbased approaches. Hence, the meta-characteristic of this taxonomy is as follows: "Characteristics and features that distinguish crowdfunding platforms, including subscription-based crowdfunding."

Nickerson et al.'s [14] method is used iteratively. In each iteration of this method, the crowdfunding platforms' characteristics are derived either by using an "empiricalto-conceptual" approach or a "conceptual-to-empirical" approach. The "conceptual-toempirical" approach uses a theoretically grounded set of dimensions that are then empirically verified. The "empirical-to-conceptual" approach utilizes a set of objects of interest (such as crowdfunding platforms) whose characteristics are identified, similar characteristics are then grouped manually into dimensions [14], and named using a "conceptual label" [36]. We used the Delphi method as proposed by Nickerson et al. [14] to improve the robustness and validity of our taxonomy. Thus, the decision processes in the taxonomy development were first conducted independently and simultaneously by three different researchers. After each iteration of the development process, the project leader analyzed and summarized the independent decisions to build a representative result. Dimensions and characteristics were added or modified if the majority of the researchers proposed them during the iteration. This process was repeated for all iterations of the taxonomy development. After each iteration, we check whether a set of ending conditions is met. If the conditions are not met, the next iteration is conducted; otherwise, the taxonomy development process ends. We use the set of objective and subjective ending conditions proposed by Nickerson et al. [14] (for an overview of the ending conditions, please refer to Nickerson et al. [14]). The resulting taxonomy is then documented in the following formula [14]:

$$T = \{D_i, i = 1, ..., n | D_i = \{C_{ij}, j = 1, ..., k_i \ge 2\}\}$$
 (1)

The taxonomy T consists of a set of n Dimensions D_i (i=1,...,n) each is built from k_i ($k_i \ge 2$) collectively exhaustive and mutually exclusive characteristics C_{ij} ($j=1,...,k_i$), every considered object should then possess only one C_{ij} for each D_i [14]. To empirically form and verify the taxonomy dimensions, we used a sample of 217 crowdfunding platforms, which was built using popular crowdfunding platforms (Kickstarter, Indiegogo, GoFundMe, Startnext) and subscription-based crowdfunding platforms (Patreon, OnlyFans, Flattr, Liberapay, Steady). Additionally, we used third-party websites [37–39] that provide an overview of German and International crowdfunding websites, which were included in the sample.

First iteration - conceptual-to-empirical: We expand upon Haas et al.'s [15] taxonomy of crowdfunding intermediaries, therefore, we included the dimensions and characteristics provided by them in the first taxonomy iteration and verify them over the course of the following iterations. Haas et al. [15] include the dimension of return for supporters in their taxonomy. These return types ("reward", "interest", "profit share", "no return") are necessary to classify crowdfunding platforms in reward-based, lending-based, equity-based, and donation-based crowdfunding [2]. Supporters' and creators' relationships vary depending on the funding context and the type of funding effort [15, 21]. Therefore, we capture these distinguishing characteristics in the dimension "Return Type". The target group a crowdfunding platform addresses as creators and supporters may be individuals, organizations, or both [15]. Crowdfunding platforms' target groups also reflect part of the context of crowdfunding endeavors and should thus be considered to enable scholars and practitioners to properly analyze the platforms at hand. Since the creator and supporter focus of a platform behaves independently, we added two dimensions to represent the targeting in our taxonomy. Additionally, Haas et al. [15] include pledge levels and all-or-nothing funding as dichotomous dimensions (Yes/No). Pledge levels are able to affect the performance of crowdfunding campaigns [40] and are relevant according to the purpose of our taxonomy and will thus be included in this iteration. In all-or-nothing funding, creators only receive the payout of their campaign when a certain funding goal is reached, and vice versa, supporters only have to pay their pledge if the goal was reached [13]. This dynamic is likely to affect funding behavior as it influences the risks associated with supporting a project, as payments and payouts only occur for successful campaigns. Thus, all-or-nothing funding will also be included in our taxonomy. Haas et al. [15] propose including a minimum pledge amount dimension in their taxonomy. A minimum pledge amount offers a high level of face validity as it directly affects funding behavior; it thus will be included in the taxonomy. Haas et al. [15] consider specializations of crowdfunding platforms in their taxonomy. Besides a social/environmental focus, they propose a focus on startups & new businesses and creative projects & products. Accounting for such specializations is crucial since they are part of the platforms' value proposition [15] and were thus included in the taxonomy. Similar to Haas et al. [15] we included the three specializations as three binary dimensions. Since this iteration included new dimensions in the taxonomy, another iteration is needed.

Second iteration – empirical-to-conceptual: We randomly selected 45 crowdfunding platforms from our sample of 217. We examined each of the 45 platforms and extracted common characteristics and features which fit the meta-characteristic. In the subsample, we identified the following characteristics across the crowdfunding platforms, which are not yet represented in the previous taxonomy iteration: one-time payment, recurring payment, fixed deadline, continuous endeavor, all-or-more funding, all-or-nothing/all-or-more not applicable. We grouped the characteristics manually in three dimensions [14]. The first dimension "Payment Option" presents a major distinguishing factor between traditional crowdfunding and subscription-based crowdfunding platforms [27]. While traditional crowdfunding relies solely on one-time payments, subscription-based crowdfunding can also use recurring payments and some platforms may offer both (e.g., Flattr). Recurring payments work similarly to interestfree installment payments since instead of paying a large one-time payment, supporters may choose a smaller recurring payment to support their desired cause. Retailers' profits can increase when retailers offer customers interest-free installment payments compared to one-time payment options [20]. Additionally, installment payments significantly increase customers' willingness to pay [19]. Similarly, offering a subscription-based payment option may improve crowdfunding campaigns' profits by lowering the barrier to entry for supporters. Thus, being an essential factor in the creator's and supporters' choice of platform or payment option (i.e., practitioners) and a crucial distinguishing factor for scholars when analyzing crowdfunding platforms. The campaign durations on different crowdfunding platforms also vary. While on subscription-based crowdfunding platforms like Patreon or Flattr, campaigns can run indefinitely [7], a project on traditional-crowdfunding platforms like Kickstarter only runs for a predefined timeframe. Hence, the dimension "Campaign Duration" was included. The dimension "Funding Type" describes whether a campaign creator receives the collected funding even if the funding goal is not met ("all-or-more" approach) or only if the funding goal is met ("all-or-nothing" approach) [13]. Here we included the previously dichotomous dimension all-or-nothing funding from Haas et al. [15] as one characteristic. Some platforms may offer both options (e.g., Indiegogo). However, subscription-based crowdfunding platforms do not use fixed deadlines and strict funding goals; thus, the previous three characteristics do not sufficiently represent subscription-based platforms. Therefore, to properly classify subscription-based crowdfunding platforms, we added a "not applicable" characteristic to the "Funding Type" dimension. Since new dimensions were formed in this iteration, the objective ending conditions are not met, and another iteration is needed. Additionally, the subjective ending condition of the taxonomy being concise is currently not met.

Third iteration - empirical-to-conceptual: The next 45 randomly selected platforms of the sample of 172 remaining were observed. 14 of the 45 crowdfunding platforms had a regional focus. Therefore, this dimension needed to be considered in the taxonomy as a crucial part of the platform's value proposition [15]. In this context, regional means that the platform specifically targets a particular geographical region or province to start and support crowdfunding campaigns. For example, the platform N-ERGIE Crowd is specifically branded to allow clubs, schools, foundations, or individuals set in the region around Nuremberg, Germany, to start crowdfunding

campaigns. Additionally, since the taxonomy included multiple focus/specialization dimensions with binary manifestations (Yes/No), we decided to group these specializations in one dimension. This reduces the taxonomy's complexity, which is desirable [14], and provides similar functionality – especially since having multiple specializations is counterintuitive. The objective ending conditions are not yet met since a new characteristic was added, and there are still objects left in the sample.

Fourth iteration - conceptual-to-empirical: Previous research on crowdfunding classified crowdfunding campaign creators and supporters based on their motivation to participate in crowdfunding [13, 16, 17, 25, 26]. Ryu and Kim [16] classify crowdfunding supporters in the four groups of "avid fans", "reward hunter", "angelic backer", and "tasteful hermit" [16, p.43], depending on their manifested funding motivations. Similarly, crowdfunding creators are classified into the groups "indie producer", "daring dreamer", "social entrepreneur", and "fund seeker" [17, p.350]. The focus of crowdfunding platforms to cater to those archetypes of creators and supporters can be included in a taxonomy of crowdfunding platforms by modifying the "Creator Focus" and the "Supporter Focus" dimensions. However, this taxonomy aims to capture the characteristics and features that are present in crowdfunding platforms. Because these archetypes are particular and not readily observable, they are not part of this study's scope. Therefore, the two dimensions "Creator Focus" and "Supporter Focus" were not altered in this iteration of our taxonomy. However, this presents this taxonomy's extendibility, which is a desirable trade for taxonomies [14]. The success of fundraising through a crowd is partly determined by the social media activity around a crowdfunding campaign [18]. Additionally, creators on subscription-based crowdfunding platforms commonly promote their campaigns on multiple platforms at the same time. Therefore, including features on a crowdfunding platform that allow supporters to distribute a campaign via social media is a crucial differentiating factor in deciding which platform to use as well as for scholars to examine the underlying network effects at hand. Thus, we added the binary dimension "Social Media Integration" to capture these platform features in our taxonomy. Since a new dimension was added to the taxonomy, another iteration is needed.

Fifth iteration - empirical-to-conceptual: To examine whether the existing taxonomy is sufficient to capture crowdfunding platforms' characteristics and features, the next 45 platforms were selected randomly of the remaining sample of 127. After observing the majority of crowdfunding platforms in our sample, it became appeared that some platforms offer multiple return types (mostly reward and no return/donation). To account for those platforms, we added a "multiple" option to the "Return Type" dimension. After this change, the taxonomy's current dimensions sufficiently represented all platforms in this subsample; therefore, no new dimensions were added to the taxonomy. Another iteration of the taxonomy is needed since there are still 82 platforms left in the sample and the objective ending conditions are thus not met. Because in the fifth iteration, only a minor change in the taxonomy was observable, it is likely that the next iteration will not yield major changes. Therefore, the sixth iteration includes the remaining 82 platforms to reduce redundant iterations.

Sixth iteration - empirical-to-conceptual: We included the remaining 82 platforms of the sample in this iteration. The current taxonomy was used to verify whether the characteristics of the observed platforms are sufficiently represented. We observed no new characteristics based on the meta-characteristic and the scope of this study. All

objective and subjective ending conditions are now met, and thus no further iteration is needed [14]. We will discuss the ending conditions and evaluate the resulting taxonomy in the following section. Here we present the resulting taxonomy *T*:

T = {Return Type (Reward Only, Interest Only, Profit Shares Only, No Return Only, Multiple), Creator Focus (Individual Only, Organizational Only, Both), Supporter Focus (Individual Only, Organizational Only, Both), Pledge Levels (Yes, No), Minimum Pledge Amount (Yes, No), Funding Type (All-or-Nothing Only, All-or-More Only, Both, Not Applicable), Specialization (Social/Environmental, Startups & New Businesses, Creative Projects & Products, Regional), Payment Option (One-Time Only, Recurring Only, Both), Campaign Duration (Fixed Deadline, Continuous), Social Media Integration (Yes, No)}

4 Taxonomy Evaluation and Validation

All objects of the sample of 217 crowdfunding platforms were examined, and no object, dimensions, or characteristics were merged or split in the last iteration. Every characteristic of every dimension is represented by at least one object in the sample. In the last iteration, no new dimensions or characteristics were added, and all dimensions, characteristics per dimension, and cells are unique and not repeated. The taxonomy is manageable to use and has sufficient dimensions and characteristics to distinguish crowdfunding platforms of interest, including subscription-based platforms. Therefore, the subjective ending conditions that the taxonomy is *concise* and *robust* are met. Since all objects in the sample of 217 are classifiable with the presented taxonomy and all dimensions were built on theoretically and empirically grounded taxonomy iterations, we believe the taxonomy to be sufficiently comprehensive and explanatory. The extendibility of the taxonomy is given. For example, the dimensions "Creator Focus" and "Supporter Focus" can be further specified based on the proposed classifications of Ryu and Kim [16, 17]. However, in the currently presented taxonomy, these classifications were out of the scope of interest. Therefore, we argue that all objective and subjective ending conditions proposed by Nickerson et al. [14] are met, and the taxonomy design is finished. Lastly, the final step in evaluating the resulting taxonomy is to assess whether it is useful for its intended purpose [14]. The purpose of this taxonomy was to offer scholars and practitioners a tool to understand crowdfunding platforms' current and future landscape thoroughly. We, therefore, created a comprehensive overview of the characteristics and features of crowdfunding platforms while accounting for subscription-based crowdfunding approaches. By including the dimensions "Payment Option" and "Campaign Duration" in our taxonomy, we capture distinguishing features and characteristics of subscription-based platforms. These dimensions enable a straightforward classification of subscription-based crowdfunding platforms. Furthermore, our taxonomy includes the dimension "social media integration" which is crucial to consider when analyzing crowdfunding platforms and its underlying network effects. We thereby demonstrate our taxonomy's usefulness in accordance with Nickerson et al. [14]. Thus, we assume our taxonomy to be valid. We present the final taxonomy with all changes throughout the iterations in the development process in Figure 1.

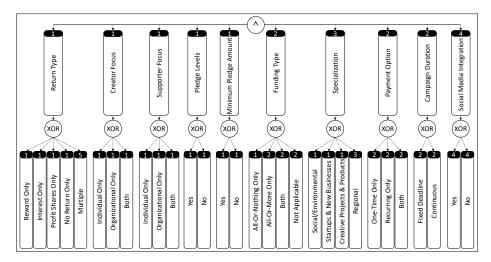


Figure 1. Crowdfunding taxonomy (1-5: iteration in which dimension/characteristic was added)

5 Discussion

This paper uses Nickerson et al.'s [14] systematic taxonomy development approach, to derive 30 distinct characteristics of crowdfunding platforms and group them into ten theoretically and empirically grounded dimensions. Since our dimensions are based on a sample of 217 crowdfunding platforms, they adequately represent the current landscape of crowdfunding platforms, including novel approaches like subscriptionbased crowdfunding. We built upon Haas et al.'s [15] taxonomy of crowdfunding intermediaries and update their existing findings to also account for subscription-based crowdfunding approaches. In our development process, we consider research about the motivation of crowdfunding creators and supporters [13, 16, 17] to specify the target group of crowdfunding platforms. Furthermore, we acknowledge the relationship between social media and crowdfunding [18] in our taxonomy. When analyzing crowdfunding platforms' underlying networks effects, Social Media Integration should be included as it might affect which users are attracted to the platform. Lastly, we utilize research about payment options [19, 20] to classify crowdfunding platforms' payment mechanisms and postulate the beneficial nature of subscription-based approaches. The most important contribution of our taxonomy is enabling scholars and practitioners to classify crowdfunding and subscription-based crowdfunding platforms by including the dimensions "Payment Option" (One-Time Only, Recurring Only, Both), "Campaign Duration" (Fixed Deadline, Continuous) and "Social Media Integration" (Yes, No) in our taxonomy. Creators can use this taxonomy to make informed decisions about which platform best suits their needs e.g., one-time payment for a one-time fundraising event or recurring payments when funding a continuously running YouTube channel. Enabling the classification of crowdfunding platforms is a necessary step for IS research, as the novel characteristics of subscription-based crowdfunding might lead to distinct stakeholder behaviors. For example, subscription-based crowdfunding's recurring payments might result in a higher willingness to pay for supporters. Likewise, the creator focus in subscription-based crowdfunding might lead to higher altruistic motivation to support. By evaluating our taxonomy according to criteria proposed by Nickerson et al. [14], the presented taxonomy is valid and offers scholars and practitioners a standardized framework to classify characteristics of crowdfunding platforms. While we believe our taxonomy to sufficiently classify future crowdfunding platforms due to its empirically and theoretically tested design, our taxonomy follows the premise of extendibility and can thus easily be adapted by researchers to capture novel crowdfunding phenomena accordingly. The subjective nature of the taxonomy development process presents a limitation of this study. To mitigate this issue, we utilize the Delphi method as proposed by Nickerson et al. [14] and let three researchers independently develop the taxonomy dimensions. After each taxonomy iteration, the independently developed dimensions are then analyzed and aggregated to create a representative set. Dimensions and characteristics were added or modified if the majority of the researchers proposed them. Therefore, we assume our taxonomy to be sufficiently objective.

6 Conclusion

Subscription-based crowdfunding is an emerging type of crowdfunding, which provides tremendous potential to enable creatives to work independently of constraints like ad revenue and algorithmic dependency. Individuals and organizations can crowdfund a stable income by utilizing recurring payment options and continuously running campaigns. This paper is one of the first to dissect this novel phenomenon by building an up-to-date taxonomy of crowdfunding platforms and explicitly addressing the distinguishing characteristics of subscription-based crowdfunding. Most notably, we develop the dimensions "Payment Option" (One-Time Only, Recurring Only, Both) and "Campaign Duration" (Fixed Deadline, Continuous) that are necessary to capture unique characteristics of subscription-based approaches when assessing crowdfunding platforms. Further, we added the dimension "Social Media Integration" which is a crucial variable for scholars to consider when examining underlying network effects on crowdfunding platforms. We contribute to the body of knowledge about IS by offering a standardized tool to classify traditional and subscription-based crowdfunding platforms, thereby laying the basis for analyzing the dependencies between previously disordered characteristics and features of crowdfunding platforms and forming hypotheses about their relationships. While we are confident that our taxonomy can classify future crowdfunding platforms, it is built on the premise of extendibility. It can thus be adjusted to fit the novel characteristics and dimensions of future crowdfunding platforms. Additionally, by providing an overview of the current crowdfunding landscape, we simplify market analyses and the development of future crowdfunding platforms. Further, our findings facilitate creators' and supporters' decisions on which platform to use for their crowdfunding endeavors and outline the beneficial attributes of subscription-based crowdfunding platforms for scholars and practitioners alike.

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