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Exploiting the Digitization of Leisure Time: Casual Work and Additional Earnings for Individuals on Crowdfunding Platforms

Research-in-progress

Volkmar Mrass

University of Kassel
Information Systems
Pfannkuchstraße 1, 34121 Kassel, Germany
volkmar.mrass@uni-kassel.de

Christoph Peters

University of St.Gallen/University of Kassel
Institute of Information Management/Information Systems
Müller-Friedberg-Strasse 8, 9000 St.Gallen, Switzerland/Pfannkuchstraße 1,
34121 Kassel, Germany
christoph.peters@unisg.ch/christoph.peters@uni.kassel.de

Jan Marco Leimeister

University of St.Gallen/University of Kassel
Institute of Information Management/Information Systems
Müller-Friedberg-Strasse 8, 9000 St.Gallen, Switzerland/Pfannkuchstraße 1,
34121 Kassel, Germany
janmarco.leimeister@unisg.ch/leimeister@uni.kassel.de

Abstract

Besides seminal effects and implications on individual's lives and their social interactions, the increasing digitization also offers individuals new opportunities for casual work and additional earnings. One 'instrument' to exploit such opportunities are crowdfunding platforms – electronic platforms that act as intermediaries between organizations who offer work and individuals who process it. These platforms include a paradigmatic change – work is not assigned to individuals anymore, they instead choose themselves what kind of work and when they proceed it. Such work is often done to 'make some money on the side', using mobile devices such as smartphones or tablets and exploiting idle time such as waiting time respectively leisure time. This paper examines current working opportunities for individuals via such crowdfunding platforms. We show which kind of platforms are especially suitable for such individual casual work and derive possible future implications.

Keywords: Crowd Work, Crowdfunding Platforms, Digitization, Individuals, New Opportunities

Introduction

The digitization is currently changing not only individual's private lives and social interactions, but also their professional life. Digital technologies are important drivers of the transformation of the working world, as well as of productivity and growth (Brynjolfsson and McAfee 2011). A large number of innovative new business models of recent years are based on the platform principle, often referred to as "platform economy" (Schmidt 2016). One example are crowdfunding platforms: Internet-based platforms where paid work is advertised through an open call to a larger number of potential workers; these platforms act as intermediaries and steer, coordinate and control the execution of this work. This involves a paradigm shift: work is no longer assigned, individuals rather choose their work themselves (Mrass et al. 2016).

Currently, most of these crowdfunding platforms manage rather simple work such as image tagging, testing of mobile apps, taking pictures at the point of sale or writing short texts (Mrass and Peters 2017). This is work that allows individuals to complete it in a short amount of time and with a decent amount of effort. It therefore offers individuals new opportunities for casual work and additional earnings. Such work is often done to 'make some money on the side', using mobile devices such as smartphones or tablets and exploiting idle time such as waiting time. Nevertheless, it has also the potential to alter how we will work in the future since digital trends from the private realm often also "spill over" to the professional world in the long run.

Although their economical importance has risen, many aspects regarding crowdfunding platforms have not been investigated by the IS community intensively so far. With our research-in-progress, we aim at examining current working opportunities for individuals via such crowdfunding platforms and investigate the future impact on economy and society. We show which kind of platforms are especially appropriate for such individual casual work and derive possible future implications. Furthermore, we offer a short outlook on the development of such crowdfunding platforms into the area of more complex work. With this paper, we pursue the following research question:

RQ: How can individuals exploit the digitization by using crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time?

After this introduction, this paper proceeds as follow: First, we provide a foundational theoretical background. Second, we describe the research methodology for the conduction of our research. Third, we communicate preliminary findings. Finally, we close with a short discussion and a preliminary conclusion.

Theoretical Background

An accurate definition of main concepts used in this paper is key to its better understanding. Therefore, we first introduce some key terms and elaborate on them: Since the term „crowdsourcing“ was coined by Howe (2006), a wide range of companies and organizations have used the "wisdom of crowds" (Surowiecki 2004) to pursue their businesses and goals. The fundamental idea of **crowdsourcing** is that a *crowdsourcer* (which could be a company, an institution or a non-profit organization) proposes to an undefined number of contributors or *crowdsorcees* (individuals, formal or informal teams, other companies) the voluntary undertaking of a task presented in an open call (Blohm et al. 2013). In general, crowdsourcing can be seen as a new form of value creation settled between "markets and hierarchies" (Zogaj 2016, see also Williamson 1975). Crowdsourcing is also sometimes regarded as "human cloud" (Tran-Gia 2013), as a counterpart to the machine cloud. *Crowdsourcing platforms* can be seen as brokers, intermediaries, market places, and in general the point where the controlling and management of the crowd and of all activities within the crowd take place (Leimeister and Zogaj 2013). If these platforms focus on the performance of *paid* work (in contrast for example to platforms for fundraising or voting), it is reasonable to use the term **crowdfunding platforms** (Mrass et al. 2017b) as a subset of crowdsourcing platforms.

In organizational environments, **work** is "the application of human, informational, physical, and other resources to produce products/services" (Alter 2013, p. 75). Sometimes, the terms work and task are used synonymously. In our research, we use the term "task" for a rather limited and narrow "to do" that is more likely (even though not necessarily) to be done by an individual without too much interaction with others. We use the term "work" as something that has a more holistic character/nature and is more likely to require collaboration, coordination and interaction with others. The World Bank uses in a study (Kuek et al. 2015) skills and education or training required as a proxy to determine work complexity. It assigns *low complexity* to microwork where mostly no specialized skills or training are required and basic computer and Internet

literacy (and the associated language) skills are usually sufficient. It attributes *high complexity* (Kuek et al. 2015, p. 13) to work from areas such as engineering, software development or human resources.

Research Method

For our research question of this paper, we rely on both a quantitative and a qualitative method. Firstly, we build on our survey of the 32 crowdfunding platforms (Mrass and Peters 2017) in Europe's largest economy, Germany. This survey showed among others that the majority of these crowdfunding platforms focuses on rather simple work or work of medium complexity such as collecting data from the point of sale (POS), designing t-shirts, microtasking, testing devices and software, writing short texts, or the like. We furthermore used case studies to get more in-depth information about the work these platforms offer that might be relevant for individuals to exploit the digitization by using crowdfunding platforms for casual work and additional earnings during their idle/leisure time. The use of the case study method is especially appropriate for "how"-questions (Yin 2014). The unit of analysis of our research is the crowdfunding platform which can be seen as a work system (Alter 2013) that manages processes and activities, participants, information and technologies to produce products and services for its customers. We put a special focus on the individuals as the main participants of this work system. For our research question, we used insights from case studies with 14 crowdfunding platforms (including interviews of about 1 to 1 ½ hours from May 2016 until July 2017) (see table 2). To evaluate the crowdfunding platforms regarding their suitability for providing casual work and additional earnings for individuals, we used the following criteria: These platforms should predominantly offer work of low or medium complexity that can be accomplished using mobile devices such as smartphones or tablets and require comparatively small efforts respectively time. Crowdfunding platforms that offer work of high complexity (such as for example platforms that deal with engineering services) also offer additional earnings using leisure time, but this work is not likely to be accomplished "on the fly" via mobile devices and during short time spans such as idle/waiting times. We derived these criteria inductively in an iterative process after investigating the first half dozen of platforms and conducting several interviews with their representatives (mostly with their CEOs).

Since they constitute the most important method for our research, we will now elaborate in more detail how we conducted our case studies. Within the case studies in turn, in depths, semi-structured interviews have been the most important sources (even though we in addition also used several other sources such as publicly available data, e.g. from websites, documents provided by the platforms, and more). All interviews have been recorded and subsequently transcribed. We followed the recommendations of Yin (2014):

Component	Approach/strategy
Case study question	Our research question is a "how" question as according to Yin one of the two sorts of questions which are especially appropriate for case studies.
Proposition	According to (Yin 2014), exploratory research does by nature usually not have any propositions, but should instead nevertheless state the purpose of the exploration. We aim at exploring how individuals can exploit the digitization by using crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time.
Unit of analysis	We determine the work system (Alter 2013) (including processes and activities, participants, information and technologies) as our unit of analysis, with a special focus on the individuals as the main participants. Boundaries are set by focussing on platforms with headquarters or at least a (physical) location in Germany since a worldwide view seems infeasible.
Logic linking the data to the propositions	The linking of data to the purpose (not proposition/see above) of this case study is done by the techniques of cross-case synthesis/pattern matching.
Criteria for interpreting the findings	We use the strategy to identify, address, investigate and (if appropriate) reject rival explanations for our findings

Table 1. Five components of case study design and how we tackle them (based on Yin 2014)

With regard to the case study design, Yin (2014) emphasizes five components as especially important. Table 1 above depicts these components and shows how we answer them by our research design. According to him, this research method is in general especially useful when (1) the main research questions are “how” or “why” questions, (2) a researcher has little or no control over behavioral events and (3) the focus of study is a contemporary (not entirely historical) phenomenon. This is true in our case: With our research question, we strive to investigate how individuals can exploit the digitization by using crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time. We have no influence on behavioral events since we do not interfere in the interactions between organizations, crowdfunding platforms and individuals and the focus of our study, crowdfunding platforms, are a current phenomenon and not something from the past. Furthermore, Yin (2014) states that case studies – like other research methods – can be used for exploratory, descriptive or explanatory purposes. Our multiple case study focusses on the exploratory aspect since there is only little research about the topic of crowdfunding platforms as “opportunity providers” for individuals so far and our aim is to shed more light on this issue.

We used data from case studies we conducted with 14 different crowdfunding platforms. These case studies that aimed at exploring these platforms and their work organization in general provided rich data and allowed valuable insights for this research question. The reason for using such a multiple case study design is that evidence from multiple case studies is often considered more compelling (Yin 2014). For the selection of the cases, we used the following criteria to be able to generate the desired insights corresponding to the research question communicated above: We selected 14 crowdfunding platforms that include different archetypes and characteristics and provide different kinds of services. This allows us to investigate which of these platforms are especially suitable for using them for casual work and additional earnings during their idle respectively leisure time. Even though the platforms are from a specific region (headquarters or at least a location in Germany), they nevertheless have to be positioned on an international basis (i.e., also have international customers/crowd workers) to ease comparability and the application of the findings.

Platform	Headq./Location	Services	Main interview partner	Interview Date
 across	Karlsbad/Germany	Marketplace	Christian Weih (CSO)	June 7 th , 2016
 crowdcube	Berlin/Germany	Microtasking	Hans Speidel (CEO)	July 6 th , 2016
 jovoto	Berlin/Germany	Design/Inno.	Bastian Unterberg (CEO)	July 19 th , 2016
 testbirds	Munich/Germany	Testing	Markus Steinhauser (COO)	July 21 st , 2016
 passbrains	Rapperswil/Switz.	Testing	Dieter Speidel (CEO)	August 9 th , 2016
 clickworker	Essen/Germany	Microtasking	Ines Maione (PR Manager)	September 26 th , 2016
 contentor	Herford/Germany	Content/Text	Dr. Arne-Chr. Sigge (CEO)	September 27 th , 2016
 innosabi crowdsourced innovation	Munich/Germany	Innovation	Jan Fischer/Managing D.	September 28 th , 2016
 twago	Berlin/Germany	Marketplace	Thomas Jajeh/CEO	September 28 th , 2016
 test IO	Berlin/Germany	Testing	Philipp Soffer/CEO	September 30 th , 2016
 mila	Zurich/Switzerland	Sales Service	Christian Viatte/CEO	January 27 th , 2017
 PHANTOMINDS	Hamburg/Germany	Innovation	Dr. Mirko Bendig/Director	February 21 st , 2017
 HYVE	Munich/Germany	Innovation	Markus Rieger/MD	May 31 st , 2017
 Local Motors	Berlin/Germany	Engineering	Samuel Buschorn/Manager	July 11 th , 2017

Table 2. The fourteen selected crowdfunding platforms (source: own depiction)

Findings

In this section, we depict our first findings regarding our research question how individuals can exploit the digitization by using crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time so far. With our research (see also Mrass and Peters 2017), we initially identified seven archetypes of crowdfunding platforms in the field (see figure 1):

1. Microtask Platforms
2. Text Platforms
3. Marketplace Platforms
4. Design Platforms
5. Testing Platforms
6. Innovation Platforms
7. Sales Platforms

Later in the process, we realized that there is another distinctive archetype that is still rather small regarding platforms prevalent in the field (we had originally classified such a platform into one of the categories above), but that after closer examination proved to differ significantly from the other ones:

8. Engineering Platforms

Based on our survey and the case study interviews, we identified four types of crowdfunding platforms that seem to be especially suitable to provide individuals with opportunities for casual work and additional earnings during their idle respectively leisure time: The types 1 (microtask), 2 (text), 5 (testing) and 7 (market research/sales). These platforms have in common that the work they offer can usually be done in a short amount of time, with rarely the need for collaboration with others and no specialized education or skills beyond basic language mastery. They also do not require a special work environment and can therefore also easily be exploited during idle time (for example while traveling with public transportation vehicles or waiting for them) or leisure time (for example during ads on TV, breaks of a sport match, in a restaurant, at airports, while lying on the beach at vacations, etc.). We illustrate this with one example of work form each platform type respectively:

Microtask

These platforms provide individuals usually rather simple tasks such as for example tagging of images. One typical task could be to mark images that contain a certain item such as a shirt or a jacket. Such tasks ("human intelligence tasks"/HITs) are easy for individuals and can often be done by them within seconds, but still difficult for machines. Even though the paying is accordingly also rather small (often only in the realm of several cents), individuals can do these tasks almost from every location and at every time using their electronic devices such as smartphones or tablets. Exemplary platforms of this type that we investigated with our research (including visits at their headquarters in Essen respectively Berlin) are Clickworker and Crowd Guru.

Text

Crowdfunding platforms are also often used to get short texts written by individuals. A typical example are four or five lines of product description for an online shop (even though there is also of course some work that includes more complex texts that require way more effort and skills). This work already at the basic level requires more concentration and skills than mikrotasks, but it can still often be easily done by individuals during a short amount of time and with reasonable effort. Sometimes crowdfunding platforms also require to evaluate such texts that have been written by other individuals to check text quality, which therefore brings further opportunities for additional earnings for individuals. An exemplary platform of this type that we investigated with our research (including a visit at its headquarters in Herford) is Content.de.

Testing

Companies often cannot grasp the very heterogeneous landscape of hardware and software configuration that is present in the field. For example, having all kinds of smartphones with all kinds of software on it inhouse to allow to test a mobile application like in a “real-life setting” within a company would be extremely arduous. Having a huge number of individuals to test that mobile app on their own devices is a faster and more efficient way to proceed. Even though testing also requires more concentration and effort than most microtasks, many people enjoy doing this and searching for bugs like other people enjoy doing crossword puzzles in their leisure time. Since many of these testing platforms target the test of mobile applications, this work is also very suitable to be conducted “on the way” using mobile devices. Exemplary platforms of this type that we investigated with our research (including visits at their headquarters in Munich respectively Rapperswil/Switzerland) are Testbirds and Passbrains.

Market research/sales

A good placement of products at the point of sale (POS) is important for the success of many brands given the fierce competition in a lot of sales areas. Another work that is provided by crowdfunding platforms is to take pictures of products, for example in supermarkets, to show how these products are placed compared to the products of their competitors. This can also easily be done by individuals during their leisure time, for example when passing a supermarket on the way to the cinema, the theatre, the visit of a soccer match or the like. They can afterwards upload these pictures to the crowdfunding platform and subsequently receive their payment. Another work of the platforms of this archetype that can be done using leisure time is providing a kind of technical “neighbourly help” such as installing TV sets, configuring routers, or the like. People who are technically affine can do this for example on their way home from their workplace, using apps of the crowdfunding platform that show them potential customers in their region. An exemplary platform of this type that we investigated with our research (including a visit at the location of its main customer and 51-percent owner Swisscom in Bern/Switzerland) is Mila.

All these four examples of work provided to individuals via crowdfunding platforms show how the increasing digitization of the individual not only impacts their private and social life, but also offers them new opportunities to exploit crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time. These are only four representative examples we found during our research, there are plenty of similar examples how individuals can exploit crowdfunding platforms as a new and innovative business model of the last decade. They nevertheless all have in common that without digital work tools such as smartphones and tablets, individuals would not have the same opportunities to do so.

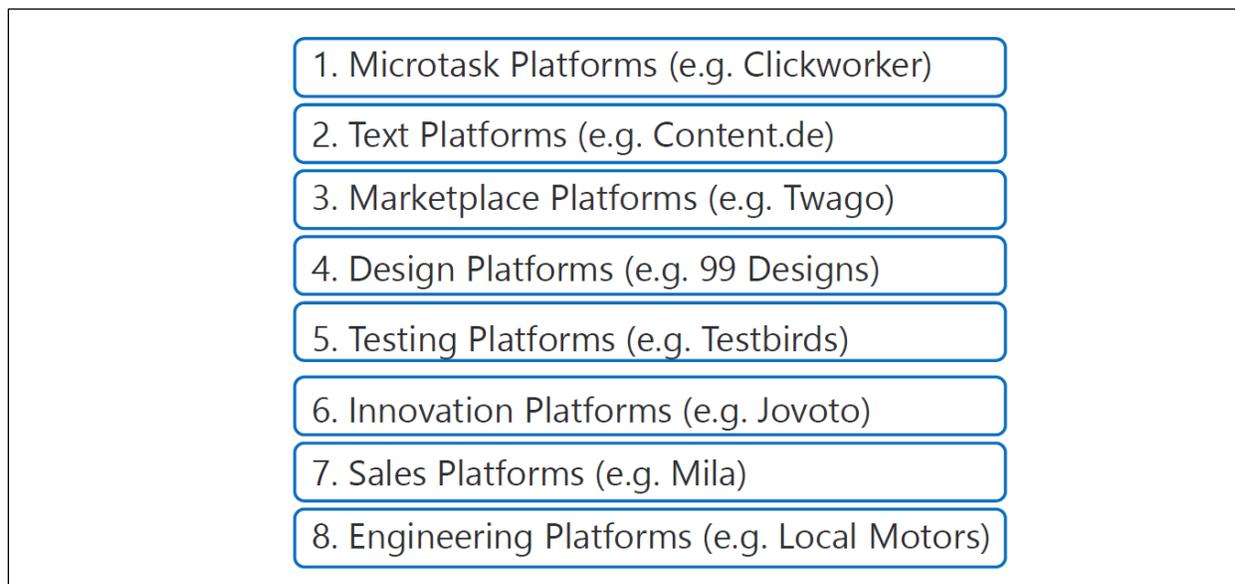


Figure 1. Eight archetypes of crowdfunding platforms (initially based on Mrass and Peters 2017, later supplemented by the eighth archetype)

Discussion and Conclusion

The digitization of work has gained momentum and has a large effect on the competitiveness of whole economies and societies (Mrass et al. 2017a). Besides the professional “world of work”, this development also increasingly affects individual’s behavior regarding new opportunities for casual work and additional earnings during idle respectively leisure time. Using insights from a written survey and especially from case studies, we investigate how individuals can exploit this digitization by using crowdfunding platforms for casual work and additional earnings during their idle respectively leisure time. Our preliminary findings show that work provided by microtask, text, testing and market research/sales crowdfunding platforms is especially suitable in this regard since it can be done within a short amount of time and with reasonable effort. These findings have implications for both individuals and platforms: The former gain information about possible new opportunities of work that allow additional earnings exploiting their idle or leisure time. The latter gain insights that can help to tailor their work offer specifically to the needs of individuals that do not want to invest too much time and effort for work provided via crowdfunding platforms (as it would be the case when it comes to complex work offered by some platforms of the other archetypes), but who are nevertheless extrinsically (e.g. making some extra money) or intrinsically (e.g. helping others with technical issues or testing new interesting apps) motivated to do such work that can be accomplished “on the fly”.

Having more and more individuals using such opportunities can also have further implications for economy and society in the future: The number of individuals who rely on such work to gain a significant portion of their income from such sources is likely to increase, with all impacts on the social security system of a society (since individuals usually do not receive social security payments from this work). If more and more companies use crowdfunding platforms for such work, they could also enlarge their business models to more complex work. This assumption is also expressed by a quote during one of our interviews with representatives of crowdfunding platforms:

„One major prerequisite for the processing of complex work is the trust of your customers. You have to imagine: A company uses a crowdfunding platform for the first time. If that works, the company gets more confident and outsources more complex work. If this works, too, they outsource even more complex work to the crowd, and so on.” Dieter Speidel, CEO of Passbrains

Using the potential of crowdfunding also for the management of more complex work would be a natural further development of the business model of crowdfunding platforms (Mrass et al. 2017c) and would make them even more attractive to companies. Currently, we are also investigating cases of crowdfunding platforms that offer such complex work (e.g. from the realms of engineering and finance). The digitization of the individual and the use of crowdfunding platforms for additional earnings during idle respectively leisure time can therefore also pave the way for the more intense use of the business model of crowdfunding platforms itself. We will further investigate this theme with our ongoing and future research.

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