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CONFIRMING BPM THEORY IN CREATIVE INDUSTRY CONTEXT – A CASE STUDY IN THE GERMAN TV INDUSTRY

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Abstract

Creativity is an important predecessor of any innovation. In the creative industries, innovation is part of the daily business. However, only little is known about the management of business processes that involve creativity. A pioneer contribution in the field of IS is the theory of managing creativity-intensive processes (TMCP) (Seidel 2009). It provides an analytical perspective for the understanding and management of this special kind of business processes. However the theory was developed in a very specific context – the movie post production. With our contribution, we focus on the confirmation and possibly extension of the theory's core concept of the creativity-intensive process (CIP) and its specifying properties. We conducted a multi-case study in the German TV industry guided by TMCP. The analyzed data resides from the context of the visual production process and the TV format (e.g. TV movie, quiz show, daily soap etc.) as its creative product. Our data supports the TMCP's core concept and its properties. Moreover we identified the "degree of industrialization" of CIPs as a new emergent property class. The property of the creative potential was refined to product related, as well as process related creativity and the creative impulse. We contribute to the qualitative empirical validation of TMCP and thus broaden its relevance as an analytical device for Business Process Management (BPM) in other creative contexts. Moreover a better understanding for the management challenges in the industry under research is provided.

Keywords: BPM, Theory, Creativity, Case Study

1. Introduction

What is creativity? “Creativity means not being confined by what has already been done or believed.” M. Lynne Markus’ definition of creativity, stated at the AMCIS 2010 LEO Lecture Series, emphasizes the importance of originality of what is been done in creative work. This understanding is widely confirmed in literature, also with respect to the outcome of creative work, namely the creative product. Lubart and Sternberg define the creative product to be characterized by both novelty and usefulness (Sternberg & Lubart 1996). According to Rhodes 4-P-Model, four perspectives on creativity can be distinguished: the creative person, product, process and press (Rhodes 1961). In more recent creativity research, a shift from the individual or person to the group and organizational perspective can be observed (Amabile 1996, Csikszentmihalyi 2006, Sacramento & West 2006). Creativity is of great importance to many organizations and can be seen as a competitive factor (Florida 2002) in several domains such as VFX production, TV and film production, advertising or computer game development. In an organizational setting, the important question is how to manage the organization without diminishing creativity. Business process management (BPM) is one widely accepted approach that could help answering this question since its primary concern is analyzing and improving business processes to improve the organizational output and to stay competitive (Davenport 1993, Hung 2006). This area of conflict between unpredictable creativity-intensive processes (CIPs) and BPM, which is an approach to analyze and structure business processes, is attended by the theory of managing creativity-intensive processes (TMCP) (Seidel 2009). With this paper we aim to follow up TMCP’s underlying research question *how creativity influences business processes and the management of these*. We conducted qualitative research in the form of a multi-case study (Yin 2002) in the German TV industry with the aim to possibly confirm and extend the theory with a specific focus on its core concept, namely the CIP (Benbasat, Goldstein & Mead 1987). Against this background we strive to answer the following ostensible research question: *Can the theory of managing creativity-intensive processes be applied in diverse creative contexts?*

With the research question we also imply to possibly reveal aspects which have to be extended. Our contribution is twofold: For the IS body of knowledge, we broaden the empirical basis of TMCP by applying it in an industry akin but yet distinct to the one it has been developed in. For managers in the TV industries we refine TMCP in order to improve its applicability as a structuring device, which helps to gain insights in film development and production processes and projects. The paper is structured as follows: chapter 2 gives an overview of the relevant literature. Furthermore, TMCP is introduced. Chapter 3 provides insight in the multi-case study conducted in the German TV industry, with regard to the research methodology and our research findings. In chapter 4 we reassume our findings and indicate limitations of our study as well as possible future research.

2. Related work

The difficulties of managing creativity in organization were already stated by several authors, e.g. Amabile (1998), who states six basic management challenges for managing creativity in organizations, or Davenport (2005), who develops recommendations for managing knowledge workers. Others focus on the aspect of the management of creativity in organizations on the basis of holistic (Lobert et al. 1995, Tan 1998, Xu & Rickards 2007) or function-specific views (Bassett-Jones 2005). Those approaches shed light on how to foster creativity in organizations but the recommended practices are not sufficient with regard to the underlying business processes. To gain insight into these creativity-intensive processes we focused on the TV industry, since, as part of the creative industries, the management of creativity is part of its daily business. The TV industry in Germany consists of a handful major players (Zabel 2009). Private and public broadcasting networks take the role of clients for TV format productions. They are in the function of a proxy to the audience, having the ingrate task to anticipate what program will work at what time. They commission production companies for the development of new or adaption of existing formats. There exist numerous, partly very specialized

small production companies and a few big players in the market. The latter are often organizationally associated with broadcasting networks. What is common to all production companies is their reliance on a vast network of freelancers, which are producers, actors, directors, directors of photography and much more. TV projects are managed by producers, who take the responsibility for both the content as well as the commercial side of the production. According to different kinds of TV formats the management of the production process within the project takes different forms. They range from very unstructured, unique endeavors (e.g. TV movie) to very structured, industrialized and repetitively occurring processes (e.g. daily soap). The capabilities of the producer, in both creative and organizational respect, determine the success or failure of a project. A lot of research in media management has been done concerning the project management perspective of the management of creative processes (Manning 2005, Lundin & Norbäck 2009, Caves 2003, Hartman 1998) or the risk management of these (Sieber 2009, Rimscha 2009). However, what is missing so far is a distinct look on the underlying business processes and how creativity influences those processes. Previous theories in creativity research mainly focus on where in an organization creativity, creative behavior or creative products occur or how the creative outcome of an organization can be enhanced (Williams & Yang 1999, Guilford 1967, Rubenson & Runco 1997, Amabile 1990). Those theories see creativity as an outcome rather than a process. Accordingly, TMCP examines creativity from a new angle since it tries to find the influencing factors of creativity on business processes and how these processes have to be managed (Seidel 2009). TMCP (Seidel 2009) takes a holistic view on creativity in organizations. Different roles (*person*) are identified that involve in a creativity-intensive *process* to achieve the common goal of the creative *product* fulfilling the requirements of customers. The core concept is the *process*, which is subject to constraints set by the organizational environment (*press*). TMCP builds-upon data collected in an explorative study in the Australian Visual effect (VFX) production (Seidel 2009). It is analytic and descriptive in nature (Gregor 2006) and provides a theoretical lens on business processes in creative industries. The categories and their properties of TMCP are the results of open coding and axial coding (Glaser & Strauss 1967, Fernández, Lehmann & Underwood 2002, Strauss & Corbin 1990). The theory reveals involved stakeholders, resources and strategies of how organizations effectively deal with CIPs. It is suggested that CIPs are carried out as interplay between artists, creative supervisors, clients and organizational resources. The process typically starts with clients (category *client*) who bring in their understanding of the requirements with regard to a particular creative product. Clients can be end consumers, i.e. television viewers, or creative organizations, i.e. broadcasting networks. Artists (category *artist*) may be members of a creative group. They bring in their process expertise and creative skills – in short, their creativity. Creative supervisors (category *creative supervisor*) manage CIPs by applying various strategies in communicating with clients and in internally managing the process. Most of the communication between clients and the creative organization is done through creative supervisors who act as process intermediaries. As supervisors are responsible for both process and product, they consider both operational and creative process performance. The described categories (*client*, *artist* and *creative supervisor*) form a working group in that they are all involved in the core category of the theory, namely the *creativity-intensive process*. CIPs have creative products as an outcome and are associated with process performance (creative and operational) and with risk (creative and operational). In order to fully understand and manage the process, one has to have a good understanding of its properties that vary on a dimensional range. The properties of the CIP can be divided into three classes: (1) the properties regarding unpredictability of the process reflected by *uncertainty* with regard to *outcome* (P.1.1), *process structure* (P.1.2) and *required resources* (P.1.3), as well as *varying levels of structure* (P.1.4), *varying client touch points* (P.1.5) and *varying internal review points* (P.1.6). Moreover CIPs are of *iterative nature* (P.1.7) since the number of iterations may not be known in advance. (2) The process is also of high interaction intensity in three aspects: *collaboration* (P.2.1), *communication* (P.2.2) and *knowledge* (P.2.3). (3) Finally CIPs bear high potential and risk, which are refined as *creative risk* (P.3.1), *operational risk* (P.3.2) and *creative potential* (P.3.3). Table 1 subsumes the processes' properties.

Unpredictability (Property Class)	
P.1.1	Uncertainty with regard to outcome
P.1.2	Uncertainty with regard to process structure
P.1.3	Uncertainty with regard to required resources
P.1.4	Varying levels of structure

P.1.5	Varying client touch points
P.1.6	Varying internal review points
P.1.7	Iterative nature
Interaction Intensity (Property Class)	
P.2.1	Collaboration-intensity
P.2.2	Communication-intensity
P.2.3	Knowledge-intensity
Potential and Risk (Property Class)	
P.3.1	Creative risk
P.3.2	Operational risk
P.3.3	Creative potential

Table 1. *Property Classes and properties of the core category creativity-intensive process*

The CIP properties will subsequently be presented in more detail: Different subjective opinions, ill-defined requirement specifications, and individual characteristics of involved stakeholders lead to uncertainties with regard to outcome, process structure and required resources. Furthermore, CIPs comprise of well-structured (non-creative) parts and often unpredictable (creative) parts, i.e. a creativity-intensive process varies in its structure. This realization, that even supposedly creative processes have non-creative parts, led to the notion of *creativity-intensive process* instead of *creative process*. Another insight regarding the properties of the core category is that the processes have an iterative nature, i.e. they constantly iterate between the artist, the creative supervisor and the client. Varying client touch points refer to the communication of the creative organization with the client. The dimensional range for this property can also be low or high, depending on the client, his abilities and the required product. Varying internal review points are points in time when artists and creative supervisors review the creative product. The creative supervisor has to decide, when and how often within the process, the creative product needs to be reviewed. The second section of the properties of the creativity-intensive process roughly comprises the communication and collaboration aspect. CIPs are characterized by various levels of collaboration-intensity ranging from isolated working painters to motley crews working on a movie) and require intensive communication in order to assure a mutual understanding of the product requirements between the client and the creative organization. In the study of Seidel there was strong evidence that knowledge transfer and dissemination are one of the organization's main concerns since being creative often involves building upon things that have been done before (Seidel 2009). Therefore CIPs are of high knowledge-intensity. Finally, CIPs are also characterized by creative risk as well as operational risk. Creative risk is closely connected to uncertainty with regard to outcome and different subjective perceptions of this outcome, i.e. the occurrence of unwanted consequences (e.g. the client does not like the final creative product). Operational risk denotes the probability of the occurrence of process-related errors, i.e. the capabilities of the creative organization do not match with the requirements of the creative product (e.g. the creative organization does not have the skills or resources to fulfill the client's wishes). The creative potential of a CIP denotes the capacity of generating products that are truly novel and original. As with all properties, the dimensional range of this property can vary from low to high. In the following chapter, the just described thirteen properties of the CIP are compared against findings in the German TV industry.

3. Multi-case study in the German TV Industry

3.1 Research Methodology

In the course of this research, we aim to answer the question whether the concepts and properties of TMCP account for the context of the German TV industry and which elements possibly have to be extended. By this, we follow the approach of qualitative theory confirmation and extension respectively modification (Benbasat, Goldstein & Mead 1987, Yin 2002). Our research is about analyzing a phenomenon in its natural environment where the boundaries of the phenomenon are not clearly evident at the beginning of the research project. Moreover, we have multiple contexts of investigation. Therefore, the multi-case study methodology is deemed appropriate for the purpose at

hand (Yin 2002). The German TV industry was chosen for the following reasons: First, the TV industry is different from the VFX production but it is still a creative domain. Second, the VFX production is a single phase in an overall visual production process (i.e., the production of visual formats such as a daily soap but also a big-screen movie) and we aimed to disclose, whether differences in CIPs can be observed analyzing the entire value chain of a creative industry branch. Thirdly, we could draw on established, trustful relationships to industry partners residing from a currently conducted research project. Last but not least, the German TV market is Europe's biggest free TV market. It is therefore a good basis to broaden the empirical validity of TMCP.

The units of analysis are three generic groups of actors prevalent in the German TV industry, each constituting a different context and case to inquiry (Yin 2002): (1) broadcasting networks, (2) production companies and (3) freelancers such as job producer, script writer or directors (cf. Table 2). Within each context, we conducted interviews with experts in various job positions, covering predominantly creative tasks, managerial tasks or a mixed of both. In each case study, we aimed at predicting similar results (literal replication), in that TMCP was the underlying theory applied in every context (Yin 2002). The necessary knowledge of industry structure for the site selection was acquired through preliminary literature review and expert interviews. The primary mode of data collection was topical, semi-structured, open-ended, face-to-face interviews. Over a period of three months in summer 2009 we interviewed eighteen experts in total.

#	Group of actors	Number of interviews	Job position
1	Television-Broadcasting Network	3	Commissioning editor
2	Television production company	8	CEO, Head of Development, Creative Director, Producer, Production Manager
3	Freelancer	7	Producer, Script Writer, Director, Director of Photography, Costume Director, Set designer

Table 2. Description of cases

Data exploration was handled by the same researchers in charge of data collection. At this, the processes of collection and exploration did not occur in a purely sequential order. The findings of this preliminary analysis influenced the following interviews since they amended our understanding of the case's context and pinpointed first results that were subject matter of more specific inquiry during consecutive interviews. After all interviews had been transcribed the data was analyzed regarding the core category CIP and its properties. The mode of data analysis applied in this research study reveals several advantages. Since the researchers that took part in the project had only basic knowledge of the domain and the context under investigation beforehand, there was only a slight amount of bias originating from the researchers' expectations (Benbasat, Goldstein & Mead 1987). Moreover, in our multi-case study evidence was obtained from different data sources: the interviews and detailed process documentations about different production lines provided by the sector experts prior to the interview phase. The application of various sources allows for triangulation, which provides greater support to the researchers' conclusions (Dubé & Paré 2003). The association of several researchers analyzing the data also furthers the quality of the research's results. Multiple researchers have the advantage of enhancing the creative potential in the research process, and the convergence of observations from multiple investigators enhances confidence in the findings. We applied an adapted grounded theory approach, i.e. we coded the transcripts of the interviews and came up with nodes, which we then merged to categories and properties (Seidel 2009).

3.2 Research Findings

From the data collected in the first interviews, an overarching visual production process model emerged (cf. Figure 1) in subsequent data analysis. It was reused as a structuring device for later interviews. Idea generation is the initial phase, in which ideas for future visual formats are generated

mostly by producers, script writers or directors. Sometimes commissioning broadcasters induce new format development by explicitly asking production companies to develop new concepts for visual formats, such as game shows or serials. Output of this phase is generally an exposé describing the rough cut of the idea in few sentences. After broadcast networks accept the exposé, more detailed concepts in terms of a script and screen cast are developed by producers and script writers. This phase also includes preliminary budget planning for the format production. After a second approval from the broadcasting network, this time for the script and calculation, a production team is established conducting the visual production. It is a phase that has to be strictly organized in order to have the right staff and cast with the right equipment at the right place to the right time. This is planned in pre-production, whilst the actual shooting of footage takes place in the production phase. In post-production, footage is modified to the directors and producers expectations. After finishing the visual production, the format is distributed by the broadcasting network. This includes market research, TV program planning, marketing activities and the actual broadcasting of the format. In the subsequent data analysis results, we refer to these distinct process phases.

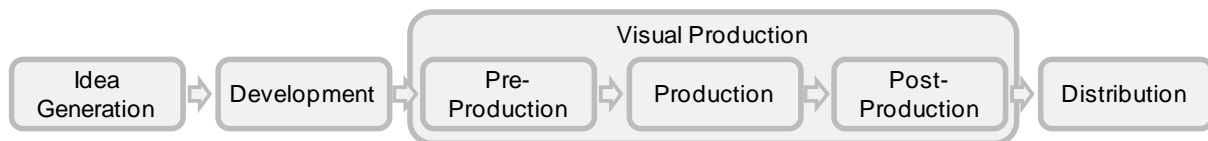


Figure 1: The format production process

In our interview data we identified details supporting the uncertainty with respect to the process outcome (P.1.1). One interview stated the situation, in which he was the originator of the product. “[...] every take, every shooting day, every project is unique.” Similarly, outcome uncertainty also occurred, if the creation process was outsource to third parties. “But if you order something, that is always exciting, ‘cause you don’t know what you will get.” Uncertainty with regard to the structure of CIPs (P.1.2) is what one interviewee confirmed to be a constitutional aspect of this kind of processes. The (semi-) formalization of processes of high intensity of creativity is therefore highly challenging. “[...] the charm of creative processes is that they do not evolve in such a formalized way, otherwise they would per definition not be creative processes.” There are several evidences for the validity of uncertainty of resources (P.1.3). In film production projects, in spite of complex calculation processes, the necessary financial resources are of high uncertainty throughout the course of the production process. “Stage equipment is always a risk for us. [...] in the worst case we get to know three or four weeks after the end of the production that we exceeded by 20%.” The same accounts for the resource of time and the according time scheduling in the creative phase of development of a visual product. “[...] in a creational phase you can’t tell in advance how long the process will take.” Visual production often involves huge production teams. However, also human resources and their availability of staff prove to be a factor of high uncertainty. “[...] we think about [...] which guys fit and also confirm the availability in the planned time frame of shooting.”

CIPs are not exclusively unstructured sets of tasks being highly creative in nature (P.1.4). They also comprise process parts with non-creative tasks, subject to control-flow oriented process structuring and modeling. This observation holds true for the format production process (c.f. Figure 1). The early phases of idea generation and development involve highly creative activities, such as script writing, and are therefore of unstructured nature. This is supported by an artist’s statement, mainly operating the early process stages. “Our process is not clearly defined [...]. You need this freedom that we still have, thank God.” Once reached the phase of visual production, both creative shooting processes as well as highly structured management processes occur. The aim is to transform the story in motion pictures, which is a creatively challenging task. At the same time production management has to care for the right persons to be at the right place at the right time with necessary equipment under the constraint of resource efficiency. Given the high abstraction of the format production process, a production company’s CEO describes it as being well-structured with pre-defined outputs at its several stages. “This is structured very clearly. A hundred years ago there was the term of milestones [...], and single steps that have to be held on in order to arrive at a final product.”

In close relation to the property of varying levels of structure, we observed a varying degree of industrialization in CIPs in format production. In numerous interviews we identified a continuum of

production processes, ranging from arthouse movie productions to highly standardized productions oriented on the mass-market, such as daily soaps. This led to the deduction of another property class subsequently portrayed:

One aspect of industrialization is the degree of standardization and automation (P.4.1) of CIPs. Here again, a continuum of process types can be distinguished. A production manager depicts one extreme of this continuum: “[...] because all these processes are non-automatable. That is, every take is unique, maybe realizable in different genres and experiences, but you have to produce it manually.” One obvious criterion for process standardization is the volume of production. “[...] the higher the production volume, the more apparent is the structure. Because it’s not on the individual anymore but you have to have a sequel of 45 minutes every evening [...]. This is why no author would be allowed to write a second treatment for a Soap Opera [...].” More industrialized productions are also characterized by a higher degree of specialization and parallelization of tasks (P.4.2). “Within a Soap the activities of the process are very much specialized, there is the plotter that invents the story, story editors that review the stories, dialog authors that write dialog scripts and script editors that in turn review dialog scripts [...].” Directly affected by the degree of industrialization is the creative freedom to conduct creative work (P.4.3). However, we have contradictive data, on the one hand arguing for structure to be a predecessor for creativity. “[...] tight nets of a serial, clear definition of a running serial, do therefore not kill creativity, not at all. Instead it canalizes creativity exactly to the requirements of my serial.” On the other hand a CEO of a production company argues for reduced creative freedom in industrialized, structured processes. “[...] the more industrially we constrict this process here, the tighter the framing conditions get especially for the creative people.” Subsuming we introduce a class of properties of CIPs, namely the degree of “industrialization”, which is further detailed in standardization and automation, task specialization and parallelization of tasks and creative freedom.

According to TMCP, CIPs are characterized by varying touch points with the client (P.1.5). These are the points where the creative organization communicates with the client. The variation can be observed in two extreme exemplary counterparts in the format production process. The CEO of a production company describes its interaction strategy with producers as follows. “This depends very much on the single production. We have producers that tell after the first pitch, I deliver and then you can give feedback.” In contrast, a commissioning editor of a broadcasting network indicates the necessity of more intensive communication with the production company. “[...] so, what you do in between the visual production process, you at least approve the main set, i.e. the place of shooting, where the studio is, if you need one, take a glimpse at the studio and contribute your opinion.” Within the format production process you also have varying internal review points (P.1.6), as indicated by the theory of CIPs. A lower number of review points within the process can be foreseen intentionally by the processes’ responsible in order not to put at risk its success. “And it can still happen that an author mutters and says ‘I don’t like that too much. My storyboard character is totally different.’ You have to possibly always ward this off. Surely, you take the actor for granted. But we are at a point in the process, where changes can get dangerous.” In contrast, the Head of Development states that the artists arrange things with each other on a regular basis. “[We have] weekly meetings, where everybody come together und updates are communicated.” CIPs are further characterized by their highly iterative nature (P.1.7). We found the script editing process and its review cycles to be an example to prove this claim. “The script editors work that over again, and then it goes to the commissioning editor which in turn has its comments later integrated by the script editors. Then it goes to the team or fist to the director. [...] There the comments of the director are integrated – again by the script editors”.

“Visual production is people business” was a recurring statement in our interviews. In TMCP this implies the property of collaboration-intensity of CIPs (P.2.1). A commissioning editor of a broadcasting network confirms this by stating the following: “Creativity in our industry is not the outcome of a single person, it is always [...] in the ideal case a positive Ping-Pong game with the producer, script editor, also the director [...], it is a mutual gain.” Another confirmation arises from the influence on the production process from the client’s side in the visual production process, i.e. the broadcasting network. “Basically, the production has three meetings with the broadcasting network, [...] once for the storylines, once for the scripts and once for the approved sequel.” Collaboration-intensity relates closely to communication-intensity (P.2.2). It is a process involving the creative organization and the client, aiming to gain a mutual understanding of the clients’ requirements (Seidel

2009). In the multi-case-study we found evidence for this claim in the script writing process. “[...] *actually this is the hardest process, until you have the script at a stage that everyone is satisfied.*” But also within the later visual production process, a high intensity of communication can be observed in the relation of the director to its crafts. “[...] *in the moment of shooting the director has to coordinate manifold crafts, communicate with them, care for adjustment, guide them [...].*” The last property of the interaction intensity property class is knowledge-intensity of CIPs (P 2.3). Knowledge workers, i.e. people, who are not paid for labor of manual abilities but for the application of their acquired knowledge, can be found in the German TV industry as well. They are the key factors for the success of the creative product. One CEO stated: “[*It is all about the*] *package. Find the right people who fit together for the right project so that it can be successfully realized.*”

Value creation processes involve high degrees of creativity but, at the same time, are risky with respect to the process outcome. In TMCP this is addressed by the properties of creative and operational risk of CIPs. Our literature pre-studies showed, that risk management is of high interest in media research (Rimscha 2009, Sieber 2009). This could also be confirmed with our interview data. The risk of unknown audience acceptance of visual productions plays a paramount role in the TV industry. This can be considered as creative risk (P.3.1) in the sense of TMCP. It is a multi-facet problem since audience acceptance is influenced by many factors: by personal gusto, morale, or even weather conditions. “[*These are kind of strange factors. [There are] uncertainty factors like timeslots, which you cannot control yourself, alternative television program in your time slot, that you cannot control as well in the phase of production.*” Regularly, the realization of the creative product fails in that the final product characteristics do not meet the client’s expectation. “[*The whole realization is a creative process, we very often have scripts where we say cool stuff, but then the director had different imagination of the product, despite all meetings, and then it gets grey-brown, even though we said in advance, let us do it in a cute way [...].*” Operational risks (P.3.2) of potential financial losses frequently occur in the development phase of the format production process. Production companies commonly do advance payments for format development by freelancer artists. In case of miscalculation, losses are inevitable. “[*It shows up in negotiations that you don’t get as much for your project as you thought in development, as originally was announced by the commissioning author and all at a sudden you end up with some hundred thousand [EUR] loss.*” There are also several other operational risks in the production process going beyond financial aspects. Amongst them are technical, organizational or staff problems. “[*There are*] ‘*Known Unknowns*’ and ‘*Unknown Unknowns*’. *Known Unknowns in a casting show would be: Will there be anybody following your casting call? Unknown Unknowns are those things that happen [...]* because there is something that you haven’t considered and you find out that you have a gap somewhere.” Opposed to creative risk, CIPs expose a high creative potential (P.3.3) in generating products that are truly creative.

Our data showed several evidences for a further differentiation of this potential, which does not solely aim at the product related creativity (P.5.1). Creative potential is also apparent for process design. “[*For me creativity is combining and modifying things in a way that something new is created. And that can surely be done in working processes and activities as well.*” We refer to this potential as process related creativity (P.5.2). Moreover the initiation of a creative process, which we refer to as creative impulse (P.5.3), is a property often existent in the relation between executive artist and executing artist staff. “[...] *I always differentiate: Who gives the creative impulse and who is actually creating. [...]* *The director passes its creative impulse, its creative vision to the set designer [...], further to the make-up artist, further to the chief of photography, further to the costume director, further to the actor.*” We argue that this differentiation allows for profounder insight in the characteristic of the creative potential of a CIP. Our findings of the confirmation and extension of the core category *creativity-intensive process* and its properties are subsumed in table 3. Major changes are the new property class “industrialization”, which we deduced from our data, and the refinement of the property “creative potential”:

Property classes and properties		Results from Case data
Unpredictability (property class)		Confirmed
Interaction Intensity (property class)		Confirmed
Risk (property class)		Confirmed
Industrialization (new property class)		
P.4.1	Process standardization and automation	Extended

P.4.2	Tasks specialization and parallelization	Extended
P.4.3	Creative freedom	Extended
Creative potential (refined property)		
P.5.1	Product related creativity	Refined
P.5.2	Process related creativity	Refined
P.5.3	Creative Impulse	Refined

Table 3. *Overview on Findings on TMCP confirmation and extension*

4. Conclusion, Limitations and Outlook

The data analysis of our multi-case study exposes striking congruence with the core concept of the creativity-intensive process. All thirteen properties of the core category CIP could be confirmed. However, the property “creative potential” has been modified and refined to more precise characteristics. With the degree of “industrialization” a new property class was added, which could also hold for other contexts of creativity-intensive processes (e.g. computer game industry). From a theoretical perspective we broadened the empirical basis of TMCP. From a management perspective one can say that the explication of these properties of CIPs leads to a better understanding of these processes, which in turn leads to a better understanding of the management challenges in the TV production. With the knowledge of these properties and a proper BPM creative organizations e.g. in the TV industry can avoid the distinctive risks, inherent to CIPs, and thus the failure of a whole creative project. A limitation of our contribution could be seen from a qualitative research critic’s view. We have contributed to confirm and extend the theory with comprehensive data from a multi-case study. Nevertheless, as inherent to qualitative research, the interpretation of the data is subject to the researcher’s individual interpretation.

We argue that TMCP is an appropriate structuring device for the analysis of creativity-intensive processes. A logical next step is to identify strategies on how to cope with their peculiarities. Secondly, we aim to concentrate on further aspects of the theory and develop a quantitatively testable model to confirm properties of the modified theory and propositions of the comprehensive theory. Within the property class of the degree of industrialization, we found contradictions with respect to the creative freedom for creative work. One position was that creativity has to be streamlined to unfold. The counterpart insisted on slacking the framing conditions for creative work. The right balance of both positions could be the optimal solution. This issue should be addressed in further research in BPM. Future work shall also include further case studies in other creativity-intensive domains such as computer game development or the advertising sector to further confirm and probably extend the theory of managing creativity-intensive processes. Creativity is an important factor to generate an organization’s competitive advantage. The paradigm of business processes as an approach for organizational management yet is reality. However, further research has to be conducted to extend BPM practices to processes that involve unstructured parts and require for high flexibility. We consider TMCP to be a sound theoretical foundation for future steps in the management of creativity-intensive processes.

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