IDENTIFYING ORGANIZATIONAL CAPABILITIES FOR THE ENTERPRISE-WIDE USAGE OF CLOUD COMPUTING

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IDENTIFYING ORGANIZATIONAL CAPABILITIES FOR THE ENTERPRISE-WIDE USAGE OF CLOUD COMPUTING

Research in Progress

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Abstract

Cloud computing (CC) is a computing paradigm which currently receives a lot of attention. Especially the public cloud model promises several business related benefits such as cost-reduction, enhanced flexibility and increasing agility. However, there are several issues that challenge the enterprise-wide usage of public clouds leaving the potential gains virtually untapped. It is assumed that realizing the business potential while simultaneously mitigating the inherent risks of cloud computing demands cloud-specific IT capabilities (CC capabilities).

This research is set up to identify these critical capabilities. For this purpose, a conceptual model is developed that encompasses CC capabilities along the technological, human, and organizational dimensions. The model proposes that the degree to which a firm holds these capabilities is related to the degree to which a firm deploys and uses public CC resources in terms of IaaS, PaaS, and SaaS. As a further research, the conceptual model will be validated and refined via expert discussions. Next, the model will be applied in a quantitative study in order to reveal patterns on the relationship between CC capabilities and CC usage. We expect novel insights on how firms can exploit the benefits of CC.

Keywords: Cloud Computing, Resource Based View, Capabilities, Usage.
1 INTRODUCTION

Cloud computing (CC) is often regarded as a paradigm shift where information technology (IT) capacities are outsourced to third-party providers and paid on demand. IT resources become transformed into commodities and made available as a ‘public utility’ like water or electricity (Yang and Tate 2012). Hence, CC is an IT deployment model for utilization of IT resources as services over the internet from an external provider that can be provisioned dynamically on-demand (Armbrust et al. 2010; Leimeister et al. 2010; Mell and Grance 2011). CC is a result of two major trends in IT: efficient utilization of IT resources and the use of IT as a competitive tool to enhance business agility (Marston et al. 2011). Besides cost-reduction, CC promises several business related benefits such as faster time to market, avoidance of up-front investments, handling of unsteady demand through resource scalability, and lowered IT barriers to innovation (Iyer and Henderson 2012; Marston et al. 2011; Zhang et al. 2010). For example, The New York Times processed 4 TB raw image data into 11 million PDF documents within 24 hours at a cost of about $240 using Amazon's cloud services (Marston et al. 2011). Netflix Inc. moved from a DVD rental service to a streaming-only service by utilizing Amazon's cloud environment for experimentation and a fast global roll-out, resulting in innovating their business model (Teece 2010; Webb 2011). Using CC, companies can create advanced IT-architectures by orchestrating internal and external resources in order to get the best of both worlds (Iyer and Henderson 2012). However, most firms hesitate to deploy and use CC resources from a public cloud. Primarily concerned with potential risks such as IT-security, performance and reliability risks, regulatory problems, lack of control, and vendor lock-in (Marston et al. 2011), many firms leave the potentials of CC virtually untapped.

However, there are also several examples of firms which successfully deployed CC and demonstrated the business benefits. To date, little is known how these firms were able to bridge the gap between these risks and the exploitation of benefits of CC. Current research predominately addresses the outlined challenges and benefits for the adoption of CC. Nevertheless, it has been argued that the efficient deployment of CC in firms demands distinctive IT capabilities (Garrison et al. 2012; Iyer and Henderson 2012; Khajeh-Hosseini et al. 2010), which refer to a firm’s ability to deploy and use IT resources in combination with other organizational resources (Bharadwaj 2000). This leads to the research question: Which IT capabilities are critical for deployment and usage of CC resources (infrastructure, platforms, software) of public cloud models?

The paper is organized as follows: in the following chapter, the literature on CC and IT capabilities is reviewed. Based on these findings, a conceptual model to examine the effect of CC capabilities on CC deployment and usage is presented. As this research is currently in-progress, the conceptual model is discussed, an outlook to the planned research is given and the expected outcome is presented.

2 REVIEW OF THE LITERATURE

Analysis of the basket of eight of the Association for Information Systems (AIS) and an exploratory search in the Web of Knowledge using the keywords “Cloud Computing” was conducted. Furthermore, we reviewed the literature stream regarding IT capabilities. The first section of this review outlines the concept of CC, the relationship to IT outsourcing and state-of-the-art research topics on CC. Next, the concept of general IT capabilities and distinctive IT outsourcing capabilities, as possible facilitators for the deployment and usage of CC are discussed.

2.1 Cloud Computing

CC has been defined in several ways and from different perspectives (Leimeister et al. 2010). As outlined in the introduction, CC is defined as an IT deployment model for utilizing IT resources (i.e. infrastructure, platforms, software) as services over the internet from an external provider, that can be provisioned dynamically on-demand (Armbrust et al. 2010; Leimeister et al. 2010; Mell and Grance 2011).
According to literature, CC resources can be distinguished between (1) Infrastructure-as-a-Service (IaaS) provides fundamental computing resources such as processing, storage and other components in a virtual manner (Mell and Grance 2011; Wang et al. 2012). The consumer has distinctive control over operating systems, storage, and deployed applications (Wang et al. 2012). (2) Platform-as-a-Service (PaaS) serves a deployment environment for self-created or acquired applications through programming libraries, APIs, and other tools supported by the PaaS provider (Mell and Grance 2011; Yang and Tate 2012). In contrast to IaaS, the consumer has only control over the applications (Wang et al. 2012). (3) Software-as-a-Service (SaaS) provides the customer with applications/services that can be accessed from various devices (Mell and Grance 2011). SaaS provides often only limited customization options and control with respect to functionality (Mell and Grance 2011; Wang et al. 2012). Cloud providers can serve their products through various combinations of these service layers (Mahmood 2011). Salesforce.com for example offers its product as SaaS and simultaneously as PaaS, thereby allowing customers to extend and build new functionalities (Yang and Tate 2012).

These services can be accessed through different deployment models (Mell and Grance 2011). This research adopts the perspective of Armbrust et al. (2010), by limiting the scope to a public cloud model. Public cloud refers to cloud resources (IaaS, PaaS, SaaS), which are available and managed from third-party cloud vendor via the Internet (off-premise) and provisioned in a pay-as-you-go manner (Armbrust et al. 2010; Marston et al. 2011; Mell and Grance 2011). Internally managed datacentres of an organization (private cloud), and deployment variants (community and hybrid clouds) (Mell and Grance 2011) are excluded (Armbrust et al. 2010).

Using CC resources from public cloud represents a form of IT outsourcing (ITO) (Matros 2012; Willcocks and Kern 1998). However, it differs from traditional ITO especially in terms of standardization, automation, and flexibility of the providers’ offerings (Matros 2012): (1) standardization encompasses the offered service, contract, and access via the Internet; (2) automation refers to the providers’ activities to render the services, self-management and -selection of services by customers; (3) flexibility refers to the resource elasticity, billing, set-up time, contract duration and volume. Essential characteristics of CC are automated and on-demand self-provisioning of resources, ubiquitous access, resource pooling/utilization, rapid elasticity, and measured service (Armbrust et al. 2010; Marston et al. 2011; Mell and Grance 2011).

Current research on CC focuses predominantly on CC adoption by individuals. Research on the organisational level mainly addresses the aforementioned challenges and issues for adopting CC in general (e.g. Leimeister et al. 2010; Marston et al. 2011; Zhang et al. 2010) or specific CC services (e.g. Cho and Chan 2013). Others argue (Armbrust et al. 2010; Marston et al. 2011) or demonstrate (Iyer and Henderson 2012) benefits of CC as shown above. However, little is known which IT capabilities are needed in organizations to successfully deploy and use CC. In that respect, Garrison et al. (2012) made a first contribution revealing that technical, managerial, and relational capabilities contribute to deployment success of CC. Their research lacks of clear definitions for these capabilities and is not strictly related to public cloud services. Since their research builds upon the IT capability research, this stream is briefly discussed below.

2.2 IT Capabilities

IT capability research is grounded in the resource-based view, which argues that a firm’s competitive advantage emerges from the application of unique combinations of resources that are heterogeneously distributed across firms, economically valuable, scarce, difficult to imitate and non-substitutable (Barney 1991). In this regard, capabilities are defined as “a firm’s capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end” (Amit and Schoemaker 1993, p. 35), whereby an IT capability is defined as a firm’s “ability to mobilize and deploy IT-based resources in combination or copresent with other resources and capabilities” (Bharadwaj 2000, p. 171). IT capabilities and their underlying resources can be classified into technological (e.g. equipment), human (e.g. individual skills or knowledge), and organizational dimensions (e.g. structures, relationships, and culture) (Kim et al. 2011; Schäfferling 2013). It is further argued that these capabilities mutually reinforce each other (Ravichandran et al. 2005; Ross et al. 1996). The three dimensions of IT capabilities and their proposed effects are concisely discussed.
below. Since public CC is regarded as a form of ITO, literature on ITO-related IT capabilities is also briefly discussed.

2.2.1 Three Dimensions of IT Capabilities

The **technological dimension** mostly refers to the *IT infrastructure* of a firm (e.g. Bharadwaj 2000; Bhatt and Grover 2005; Ross et al. 1996), which is defined as “the composition of all IT assets (e.g., software, hardware, and data), systems and their components, network and telecommunication facilities, and applications” (Kim et al. 2011, p. 493). Prior research highlights flexibility as vital characteristic of IT infrastructure (Bhatt and Grover 2005; Ravichandran et al. 2005; Ross et al. 1996). A flexible IT infrastructure allows easy integration of new technologies (e.g. CC resources) with existing platforms (Kim et al. 2011; Ravichandran et al. 2005). Accordingly, Duncan (1995) defines flexibility as “the ability of a resource to be used for more than one end product” (p. 42) and consequently IT infrastructure flexibility as “the degree to which its resources [the elements of the IT infrastructure] are sharable and reusable” (p. 42). Duncan (1995) proposes that IT infrastructure flexibility is reflected by the degree of connectivity, compatibility, and, modularity IT infrastructure provides. *Connectivity* refers to the number and variety of platforms, to which a firm can connect in an intra- and inter-organizational environment. *Compatibility* is the ability to exchange information across any systems or technology components. *Modularity* is the ability to easily add, modify, and remove any system and software components in forms of modules.

The **human dimension** refers to the knowledge and skills of the staff within the IT department (e.g. Mata et al. 1995; Melville et al. 2004; Ravichandran et al. 2005; Ross et al. 1996). Previous research has conceptualized capabilities related to the human dimension through various constructs such as technical IT knowledge/skills (Bharadwaj 2000; Mata et al. 1995; Melville et al. 2004; Ross et al. 1996), managerial IT skills (Bharadwaj 2000; Mata et al. 1995; Melville et al. 2004), business understanding and business-problem solving orientation (Ross et al. 1996), or IT business experience (Bhatt and Grover 2005). Even though previous research approached the human dimension slightly differently, there is a common agreement on the importance of the human dimension. For instance, Ross et al. (1996) argue that using IT efficiently depends on the “ability to build and leverage inimitable IT management assets” (p. 41).

IT capability research has identified various constructs for the **organizational dimension** such as access to capital (Mata et al. 1995), internal IT/Business partnerships (Bharadwaj et al. 1999; Bhatt and Grover 2005; Ravichandran et al. 2005; Ross et al. 1996), external IT partnerships (Bharadwaj et al. 1999; Ravichandran et al. 2005) and intangible IT-enabled resources (Bharadwaj 2000). Furthermore, Powell and Dent-Micallef (1997) proposed organizational characteristics such as open organization, open communications, organizational consensus, CEO commitment, organizational flexibility, and IT-strategy integration as potential complementary organizational resources. In a similar manner, Wade and Hulland (2004) propose top management commitment and organizational culture as potential organizational capabilities, which contribute to efficient deployment and usage of IT in general.

2.2.2 IT Capabilities for Outsourcing Arrangements

Research on ITO (see e.g. Dibbern et al. 2004; Lacity et al. 2009) emphasizes contract negotiation skills and certain informal relationship factors (e.g. trust, open communication, cooperation) as key success factors in ITO arrangements. However, these are not suitable in the CC context due to standardized and automated CC offerings that result in rather ‘anonymous’ client-vendor relationships. Nevertheless, the ITO literature offers insights on how providers can be sourced and monitored. Furthermore, certain ITO risk mitigation practices remain applicable in the CC context (Clemons and Yuanyuan 2011), since CC risks are similar to ITO risks, such as security, privacy and contract breeches by the vendor, loss of control, supplier business-discontinuity, or vendor lock-in (Kern et al. 2002; Lacity et al. 2009). Clemons and Yuanyuan (2011, p. 9) argue that a “good outsourcing contract is probably even more important in the [CC] environment than it is for traditional outsourcing”. Therefore, it is assumed that CC deployment and usage requires more formal procedures.
Literature on ITO indicates that informed buying and contract monitoring skills are also relevant for deployment and usage of CC. Informed buying involves market analysis, sourcing strategy (one or multiple suppliers), supplier selection criteria and supplier selection (Dibbern et al. 2004; Feeny and Willcocks 1998). Contract monitoring refers to controlling the supplier’s performance based on the formal contract (Dibbern et al. 2004; Feeny and Willcocks 1998).

3 CONCEPTUAL MODEL DEVELOPMENT

Building on the research streams presented above, the conceptual research model depicted in Figure 1 has been developed. It is proposed that exploiting CC benefits requires a special set of IT capabilities. Hereto, CC capability is defined as a firm’s ability to deploy CC resources in combination with other organizational capacities. According to the proposed dimensions of IT capability, CC capability is structured along the technological, human and organizational dimension. The model proposes that the degree to which a firm holds these capabilities is related to the degree to which a firm deploys and uses CC resources (H1). The dimensions and constructs are discussed in detail below.

![Conceptual model of organizational capabilities for public cloud computing usage](image)

3.1 Usage of CC

Technology assimilation theory (Gallivan 2001; Saga and Zmud 1994) describes how extensively an adopted innovation is used and how deeply that innovation penetrates the firm as a result of certain staggered adoption and implementation processes (Gallivan 2001). The literature argues that attaining IT implementation success in an organization depends on the post-adoption stages in form of acceptance, routinization, and infusion of IT (Saga and Zmud 1994). Focussing on the latter stage, infusion (also termed depth) refers to the deep implementation and integration of deployed IT artefacts in the organization’s work systems and processes (Gallivan 2001; Saga and Zmud 1994). Infusion is positively associated with the extent of technology’s diffusion, the spread (also termed breadth) of the technology across the organisation, that increases the number of users and uses (Zmud and Apple 1992). In similar manner, previous research utilized depth and breadth to measure the extent of various IT artefacts, such as EDI usage (Massetti and Zmud 1996), reach and range of IT infrastructure (Keen 1991), or extent of ERP implementation (Karimi et al. 2007; Liang et al. 2007).

Building on these insights, CC usage refers to the breadth and depth of CC deployment. More precisely, breadth is hereto defined as the extent to which CC resources are part of the firms IT environment. Depth refers to integration of CC resources in systems and processes is, hence, defined as a) the extent to which CC resources are intertwined with existing IT systems and b) as the extent to which CC resources are utilized among core and non-core business operations, as studied by Cho and Chan (2013) in the context of SaaS adoption.
3.2 Technological Dimension

IT Infrastructure flexibility is defined as the degree to which the existing infrastructure’s resources are sharable and reusable (Duncan 1995). It has been argued that a flexible IT infrastructure, that follows a service-oriented architecture and is built around standardised and reusable components, serves as a solid basis for leveraging and integrating cloud resources into the enterprise (Ross and Westerman 2004; Xin and Levina 2008). Nevertheless, some infrastructure components, applications and services might not be suitable to be transferred to the cloud, but still “need to interact with other cloud-based applications” (Marston et al. 2011, p. 180). If the existing infrastructure is highly flexible, this inter-connectivity might be realised more easily and, hence, favours CC deployment and usage.

3.3 Human Dimension

Building and transforming a CC compatible IT infrastructure requires competent IT staff (Duncan 1995). Moreover, competent IT staff is able to align IT and business strategies by “developing reliable and cost-efficient systems, and anticipating IT needs for business services” (Kim et al. 2011, p. 493). Even though CC promises various business benefits, it comes with several risks and issues. Exploiting CC resources demands new skills and management tasks (Rimal et al. 2011). Hereto, Kim et al. (2011) proposed four critical knowledge/skill categories: technology knowledge, technology management skills, business knowledge and management skills. Based on this classification, following critical human CC capabilities were identified: technical CC knowledge, technical CC integration skills, enterprise architecture management, cloud management and cloud innovation management.

As exploitation of CC resources requires deep knowledge about CC technology and integration of external CC resources and existing internal resources, technical skills are in particular important. Therefore, we separate technical skills into technical knowledge about CC and integration skills.

Technical CC Knowledge is defined as deep understanding of CC technology, such as virtualization, distributed computing, service oriented architecture, web and software services, deployment environment and cloud management tools (Marston et al. 2011; Vouk 2008). As CC builds particularly upon these technologies, having of profound knowledge of these is required to deploy and use CC resources.

Technical CC Integration Skills is defined as the ability to integrate various CC services into the existing IT infrastructure and to migrate legacy systems to a cloud environment. As noted earlier, the technical integration and interaction of CC and the existing infrastructure, as well as the migration of legacy software to CC is a challenge for organizations (Marston et al. 2011). Companies face several CC providers serving their offerings through proprietary standards (Rimal et al. 2011). Thus, companies are required to develop according middleware for the integration of external CC services into the firm’s IT infrastructure through APIs and PaaS. Moreover, these integration skills are also required to connect various cloud services for business purposes (e.g. for the creation of mash-ups).

In addition to the technical skills, companies have to gain certain managerial skills for CC. This refers to technology management knowledge/skills as to the ability to plan, deploy, and operate CC in the most effective possible manner in support of the business strategies (adapted from Byrd and Turner 2000; Kim et al. 2011; Lee et al. 1995). Moreover, technology management encompasses planning, investment decision-making, coordination, and control (Kim et al. 2011). Thus, technology management for CC is concerned with the questions where and how to source and deploy CC effectively and profitably for meeting strategic business objectives and, moreover, to create new business opportunities (adapted from Byrd et al. 2000, Lee et al. 1995). This refers to three areas:

Enterprise Architecture (EA) Management is defined as the ability to design, plan, and implement the enterprise’s organisational structure, business processes, information systems, and infrastructure (Jonkers et al. 2006). Based on a set of principles, policies, and standards information systems and IT infrastructure is aligned to a firm’s current or future business directions (Mahmood 2011; Zachman 1987). In respect to CC usage, EA Management combined with technical CC integration skills...
enables migration of existing IT components to public clouds and integration of new CC resources into the existing enterprise architecture by providing a ‘blueprint’ (see e.g. Loebbecke et al. 2012 for guidance). Since cloud-based resources are more complex to control and to align with existing services and resources, EAM processes are of particular importance (Rimal et al. 2011).

**Cloud Management** is defined as the ability to manage cloud providers and to handle cloud risks. These relate to the identified capabilities and practices identified in the ITO literature. Hence, cloud management encompasses the ability to identify regulatory conditions (e.g. data privacy and residency), to develop internal vendor requirements (e.g. protection against ‘vendor lock-in’), vendor selection and monitoring (e.g. SLA violations), and the handling of system outages, data-loss or vendor discontinuity (e.g. through data replication among several cloud service providers).

**Cloud Innovation Management** is defined as the ability to proactively search for ways to leverage CC innovations to create business opportunities (Lu and Ramamurthy 2011). As the cloud computing landscape is rapidly evolving, innovative CC services might emerge that could deliver new value for the company (Marston et al. 2011). However, this requires a ‘sensing-and-responding’ ability of the IT unit and, hence, a profound in-depth business knowledge (Kim et al. 2011). Moreover, the IT staff need also continuously adapt their knowledge and skills, through learning and training. This capability could be developed and refined by continuous experimentation with new CC resources.

### 3.4 Organizational Dimension

As illustrated in the literature review, the organizational dimension depends on the scope of research and has often an overlap to the human dimension. However, Melville et al. (2004, p. 294) argue that “successful application of IT is often accompanied by significant organizational change”. As often cited, Carr (2005, p. 71) noted that the “biggest impediment to utility [resp. cloud] computing will not be technological but attitudinal”. Thus, leveraging the enterprise-wide usage of CC requires top management commitment and organizational flexibility in terms of its innovation-friendly culture.

**Top management commitment** refers to the top-down injected organizational adherence to CC initiatives (Powell and Dent-Micallef 1997). In this regard, Wade and Hulland (2004) state that top management support for IT initiatives positively impacts efficient usage of IT. For example, it has been confirmed that top management participation positively affects the degree of ERP usage (Liang et al. 2007) and the success of IT outsourcing initiatives (Lacity et al. 2009). Subsequently, it is proposed that top management commitment for CC facilitates CC deployment and usage.

**Organizational culture** plays a key role in the assimilation of information technology (see e.g. Leidner and Kayworth 2006). Ruppel and Harrington (2001) concluded that intranet adoption is much more likely to succeed in cultures with emphasized flexibility and innovation values. Thus, the definition of Powell and Dent-Micallef (1997, p. 384) is adopted who define organizational flexibility as a “culture that embraces and encourages change and experimentation, minimizes fear of failure, and welcomes opportunities to apply new IT developments”. Subsequently, we propose that a climate that is supportive of using CC resources and services fosters experimentation with CC resources and, hence, contributes to diffusion and infusion of CC.

### 4 NEXT RESEARCH STEPS

Based on a review of existing literature on CC and IT capabilities, a conceptual model was developed to explain corporate CC deployment and usage as a function of distinctive CC capabilities. On the basis of technological, human and organizational capability dimensions, the previously discussed characteristics of CC and critical deployment issues for realizing benefits of CC are covered. CC usage is expressed by the breadth and integration depth of CC resources within the firm’s IT systems and operations. However, there might be some factors, which are not yet identified by current literature. The subsequent steps for the empirical valuation of the model are described below.
4.1 Planned Research Layout

Initially, the CC capability constructs will be further operationalized and a measurement instrument developed. Hereto, some measurement items can be adapted from existing literature, whereas other measurements have yet to be identified and developed. In the latter case, the proposed guideline of MacKenzie et al. (2011) for construct development and validation procedures will be applied. For the validation of the proposed constructs and corresponding measurement items, for revealing further CC capabilities, as well as for pre-testing the resulting measurement instrument, discussions with experts from the IT industry and academics from the field of information management will be conducted. If necessary, the conceptual model will be refined during this process.

Once the measurement instrument is developed, a quantitative study among CIOs of medium-sized firms in the information and technology (ITC) industry in Germany with focus on IT and information services (about 1,000 firms) will be conducted. The study is limited to only one industry in order to mitigate the effect of contingency factors and limit heterogeneity. The ITC sector is chosen as recent studies indicate that adoption rate of public CC services in Germany is highest in this sector (BITKOM and KPMG AG 2013; 2014).

The data will be analysed with appropriate techniques to reveal relationships and patterns between CC capabilities and CC usage. It is aimed to apply structure equation modelling to examine if there is a general effect of IT capabilities on CC deployment and usage. Furthermore, this study intends to apply qualitative comparative analysis (QCA). QCA was originally introduced by Ragin (1987) and does not assume that the influence of variables is of additive, linear, and symmetric nature. Rather, QCA transforms the data into specific combinations of conditions (i.e. CC capabilities) and examines these configurations regarding the outcome (i.e. CC deployment and usage). This approach is in particular relevant for this research question, as it is likely that different stages of CC deployment and usage requires distinctive sets of conditions.

5 EXPECTED OUTCOME AND CONTRIBUTION

We expect to identify different patterns between CC capabilities and CC usage. For example, using only CC resources for non-core operations and isolated from the existing IT systems might not require superior CC capabilities. Using CC resources for core operations might require a deep integration of these CC services into the IT systems, which, in turn, might require IT infrastructure flexibility, CC technical knowledge and CC integration skills. To the more extreme, a company that uses an extensive amount of CC resources for non-core and core operations might require superior CC capabilities among all three dimensions, including organizational commitment. As suggested by the literature on IT capabilities, the effect of these CC capabilities might be mutually reinforcing. The expected patterns are intended to serve as a foundation for the development of a theoretically grounded and empirically tested CC maturity model.

As a further contribution to IS theory, this research serves as a major refinement and extension of the study by Garrison et al. (2012). The study will provide novel insights on how CC can be fully leveraged and consequently transformed into business value. From a practical viewpoint, the findings are expected to help firms to assess their current CC capability and areas of improvement to fully exploit public CC resources, as well as to guide decision makers to govern their investments in CC.

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1 According to the European Commission (2003), medium-sized enterprises are defined as firms which employ between 50 and 250 persons and which have an annual turnover between EUR 10 million and EUR 50 million, and/or an annual balance sheet total between EUR 10 million and EUR 43 million.
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