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Talent Value Creation during Digital Transformation: A Inductive Model of HR Reengineering

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ABSTRACT

In this study, we are to explore (1) features of HR reengineering, (2) the impact of business digitalization strategies on digital transformation and HR engineering, (3) the impact of business digitalization strategies and HR reengineering on talent value creation, and present the results of a qualitative study that offers insight into 42 “thought units”, which were “categorizing” into four dimensions corresponding to our research questions: (1) plan, (2) do, (3) check, and (4) action. The “check” dimension corresponds to the four key features of HR reengineering related to business digitalization strategy, and how to create talent value when a company successfully implements business-led digital transformation, HR reengineering, and talent value creation, including (1) talent planning, (2) talent introduction, (3) talent adjustment, and (4) talent development.

1. Introduction

Digital transformation affects a wide range of industries [1,2]. It provides organizational change, technological innovation, process redesign, new business model shaping, and talent value creation [1,2]. Many companies use process redesign and new business model shaping to increase organizational revenue opportunities through successful digital transformation [2-4]. Digital transformation is not only process transformation, but an important method to solve management problems such as human resource (HR) reengineering, business efficiency and process redesign [3]. Therefore, digital transformation has become a top priority on the leadership agenda of many organizations.

Since each company has a different digital transformation model, it is difficult to determine the meaning of digital transformation that applies to all companies with one definition [3]. However, we define digital transformation as the integration of digital technology into all areas
of a company, leading to fundamental changes in the way business operate and provide customer value. In addition, it is a change of organizational culture that requires organizations to constantly challenge the status quo, frequently experiment and adapt to failures, and support new practices of organizational change [2].

Past studies have shown that the implementation of business digital strategy, employee digitization capabilities, and high-performing organizational capabilities are the key requirements for effective and efficient business digital transformation, in order to create excellent customer-centric e-commerce services in the digital age [2,5-7]. And the existing literature has shown the impact of technical factors such as technology use, data integration, digital technology types, and non-technical factors such as digital leadership, human resource management, and business process management on the digital transformation of organizations [8-10]. However, few studies have been done on the impact of digital transformation and HR reengineering on talent value creation. In addition, in view of the insufficient understanding of the nature and dynamics of digital transformation and HR reengineering, it is necessary to clarify the relevant concepts and hope to deconstruct the research problem into a clear research model (see the Figure 1).

![Figure 1. Research Model](image)

The purpose of this research is to explore the importance of business digitalization strategy [6] and what is the talent priority of HR reengineering in the successful digital transformation of an organization [6]. In other words, the research will explore the interlocking process between digital transformation and business digitalization strategy, which will further lead to the emergence of the conceptual framework of HR reengineering, including talent planning, talent acquisition, talent adjustment, and talent development. It explains and demonstrates how the necessary and unique set of dimensions of business digitalization strategy and HR reengineering will drive the organization’s digital transformation. However, this research hopes to provide a broader and substantive practical contribution to the digital transformation literature, and to enrich the literature by providing a chain relationship framework for digital transformation and HR reengineering.

2. Literature Review

2.1 Change of Business Environment on the Impact of Business Digitalization

Changes in the business environment are becoming more and more disruptive [1]. Globalization, new innovative technologies, new products and services are disrupting the business model of every industry [1,2,7,11]. Business is fast-paced, consumer demand is constantly changing, and uncertainty and volatility are increasing in a day-to-day sequence [1,7]. These changes have had a significant impact on human resource management. Therefore, in this extremely destructive business competitive environment, companies are responsible for predicting and managerial needs and providing employees with the correct competency to deal with these destructive forces [1].

The business environment is changing rapidly, and most of this change is driven by digital transformation and globalization [1,2,6,11]. Digital transformation and globalization have reduced new market entry costs, and changed the dynamics of competition and traditional business models [2,7,11]. In other words, the competition between enterprises is becoming more and more intense, and the loyalty of customers is no longer fixed. They are always looking for good products and fast services that can best meet their expectations. The cost of switching goods and services is much lower than before; if consumers are dissatisfied with the company’s products or service offerings, those companies will easily and quickly withdraw from the commercial market. Changes in the business environment are driving the company’s digital transformation in order to deliver high-quality products and fast-satisfying services that will satisfy customers.

Digital transformation has drastically changed work patterns, collaboration, and methods of adding value to business operations [1]. Leading companies are already applying new applications to transform external consumer...
demand planning and internal organizational management functions. For example, if consumer needs are not met, companies may lose revenue and inventory overruns, price cuts, cancellations, and poor service delivery. By using advanced predictive analytics, companies can fully understand customers, understand consumer demand signals, and only produce and store inventory at the correct level, instead of predicting manufactured products based solely on historical data.

2.2 Talent Priority on Digital Transformation

As mentioned earlier, innovative technology is a driving force for digital transformation. As more and more unstructured customer data becomes complex, companies need to ensure that they have the right talents and the right competency to successfully use these functions to drive digital transformation. In today’s highly disruptive environment, agility and speed are critical. Organizations that are slow to respond to this new digital world and adjust their business and talent models are at risk of extinction. The three competency that stand out in the digital environment of today and tomorrow are:

1. Customer Relationship Management: Learn more about your customers, who they are, what products and services they bought from you, and how often they buy. You can achieve this by combining detailed customer classification and product classification. This is also essential for understanding the variability of demand in consumer data and for establishing a data framework before constructing demand forecasts. Not all customers are the same, and not all customers are profitable. Analyze profitable and unprofitable, valuable and unvalued customers, so that you can focus on high-revenue operating forecasts.

2. Ability to Apply New Technologies to the Business: Accurate and clean data is an indispensable part of predicting the high revenue of an organization. The company’s technical infrastructure must be strong enough to allow the immediate sharing and exchange of current demand and inventory data throughout the supply chain so that the organization can quickly adjust operational forecasts. Processing speed and computing power can significantly improve the fast, data-intensive processes behind the supply chain. Demand forecasters need to be able to establish data monetization methods for the benefit of the organization.

3. Exceptional Long-Term Scenario Planning Abilities: To organize the digital transformation process, professionals must have extensive foresight. They need to be able to plan for the future and help their companies navigate today’s turbulent and uncertain world. Market demand is unstable, and no matter how good a plan is, it will never achieve 100% prediction accuracy. Since no one can predict the future with 100% accuracy, it is important to be able to consider different future scenarios, evaluate the impact of each scenario on market demand and the final bottom line, and then develop a comprehensive action plan for each scenario. In order to improve their competency, demand professionals will cooperate with other functional departments of the company and be responsible for the results. Cultivate a positive learning attitude to ensure that demand professionals can always fully understand and provide correct predictions for their organizations.

2.3 Why is HR Reengineering?

HR reengineering is a powerful organizational change strategy that enables organizations to abandon outdated systems and old ways of looking at business, improve core business processes, and create and deliver value for customers. Reengineering practice involves a systematic, team-based approach to rethinking how to get work done. It is a process of change led by senior management that allows organizations to achieve extraordinary business results by redesigning core processes. Until recently, HR executives began to realize the benefits of reengineering as an organizational change tool, which can strengthen the required talent practice and correctly position HR as a customer-oriented service function.

HR reengineering provides a framework for reviewing which areas should be eliminated and shifting, and making difficult strategic decisions for production line operations, outsourcing, or improvement. It can help HR executives develop strategies to minimize management tasks and spend more time negotiating with work teams. These efforts have led to the implementation of new talent practices, thereby enhancing the company’s competitive advantage. The tools provided by HR reengineering can ensure that companies are provided with human resource support in a cost-effective manner, helping to ensure that supervisors have the right tools, training, and information to effectively manage human resources.

In view of the increasingly competitive business environment, many HR professionals are also under pressure to reduce human resource management costs, provide higher quality services, and create a more effective and competitive company culture. Hence, HR reengineering is used to help achieve these goals. In addition, we want to say that redesigning the HR process is essential for the repositioning of the HR function to provide other high value-added services.

The goal of most HR reengineering efforts is to improve the processes that create value for customers and
strengthen the company’s competitive advantage. From the perspective of human resources, the focus of HR reengineering should be to help ensure that HR processes and personnel practices enhance the company’s ability to succeed in the market \[13-16\]. Best practice research indicated that there are four key reasons why companies choose to redesign the HR competency. These include:

1) Desire to improve core HR processes which are vital to attracting and retaining quality talent. These processes include selection, performance-reward, training, and career development.

2) Need to identify and implement people practices which reinforce the behavior and performance customers’ value most.

3) Need to ensure cost-effective delivery of HR support to the business.

4) Desire to better align the HR competency with the business.

HR reengineering is a powerful tool for the change and improvement. However, many companies invest in HR reengineering without formulating a reasonable business digitalization strategy. Studies have shown that when a company lacks vision and a sound business digitalization strategy, spending time trying to redesign HR processes and personnel practices is a poor use of resources \[13,16\]. Most companies also see HR reengineering as a tool to reduce costs. As we have seen, excessive cost cutting can destroy value and demoralize employees. The main purpose of HR reengineering should be to create value for customers and create a competitive advantage for the companies by making full use of human assets \[13,16\].

Thereby, based on the above discussion, this research proposes the following propositions,

Proposition 1: The impact of business digitalization strategies on digital transformation and HR engineering.

Proposition 2: The impact of business digitalization strategies and HR reengineering on talent value creation.

3. Method

This research chose a qualitative method because it may be difficult to use quantitative methods to capture the essence of management practices \[17,18\]. In our analysis, we especially use the inductive, critical incident approach \[19\] and empirical phenomenology, which means that the actors’ perspective is essential in the analysis, but we also recognize that the research in theory \[20\].

In addition, like many companies facing digital transformation challenges in the 2010s, they have realized the importance of examining current business processes to find opportunities to increase productivity and efficiency while reducing costs. In view of the insufficient understanding of the nature and dynamics of digital transformation and HR reengineering, it is necessary to clarify the relevant concepts and hope to deconstruct the research problem into a clear research model, so a qualitative method is considered appropriate. Digital transformation in order to get rid of the initial reserves and increase important insights for understanding the reengineering of human resources at work \[21\].

3.1 Sample and Data Collection

Given the macro and micro evidence of business digitalization strategy, our data will be collected from a specific single company. Thereby, this research is an in-depth qualitative study of a selected benchmark company located in China. This selected benchmarking company is a leading manufacturer and marketer of healthcare products and services, specifically in the treatment of heart disease. It occupies a dominant position in China and is rapidly expanding in the domestic market. Its annual operating growth rate has been maintained at more than twice the rate of nearly five years.

This study lasts for one year. In order to test the purpose and problems of this research, at least 30 unstructured in-depth interviews were conducted with different stakeholders of this selected company, namely: CEO, HR supervisor, HR manager, heads of major functional departments, line managers with customer of the organization. 65% of respondents are men and 35% are women. 85% of respondents have at least 5 years of work experience. Although we did research from a different sample of this selected company, this is a relatively experienced and diverse sample.

The selected company interviewed will reflect a desire to gain a comprehensive understanding of the research themes and is consistent with Eisenhardt’s (1989) recommendations. All interviews will follow the prescribed interview schedule to ensure that all issues are discussed. Obviously, the level of mutual trust and understanding between interview partners is critical to data quality. After confidentiality guarantees, general introduction of research purposes, demographics and work experiences’ questions, then the main questions are asked. We designed the semi-structural questions as follows:

What is the HR reengineering value of digital transformation processes and practices?

How well is the HR competency itself supporting the digital transformation?

How satisfied are customers with the quality of HR competency?

How can the HR competency improve its service and operating-profit impact on the digital transformation?
At least three researchers will attend all in-depth interviews and take notes separately. Each of the two researchers independently coded the interviews using coding schemes that emerged over a period of time, and placed parts of the interviews in these codes/themes. In most cases, these broad codes/themes will reflect concepts studied from a literature perspective, for example, HR reengineering interventions for business digitalization strategies (e.g., flexibility, empowerment, job redesign, job enrichment, work intervention, HR information system and team building); and identify specific cases and critical events that reflect management change propositions in support of this digital transformation.

3.2 Content Analysis

Although qualitative research can be used to drill deep holes in order to obtain the information needed for in-depth explanations, the above semi-structured questions will be designed to initiate a dialogue on the broad themes of digital transformation strategies and HR reengineering, rather than arouse targeted or ideal response. In other words, the above questions will be used to initiate a more free-flowing and open-ended narrative. At the same time, the interviewer can also encourage the respondents to further report details and reflect through exploratory questions. After a formal and legally binding guarantee of complete anonymity for individuals and organizations, all respondents will be recorded and subsequently transcribed verbatim [23].

Then, data analysis based on a systematic process of transcript-based analysis following the iterative stage process outlined by Turner [23] and then utilized both inductive reasoning and comparative methods. This procedure is akin to that it employed axial and selective coding processes leading to the emergence of subcategories and the identification of linkages and relationships [22,24,25].

The first step is for one of the researchers to use NVivo 9 software to decompose all interviews into 1655 “thought units”. A “thought unit” can be a single word, phrase, sentence, entire paragraph, or even a single sentence or part of a paragraph, as long as it is a unique and complete thought or idea.

In the second step (“categorizing”), the researcher performing the unitization step and the second researcher use NVivo 9 software to recognize patterns and organize thinking units into categories. This is an iterative and intersubjective process. In this process, researchers compare the similarities and differences between thinking units and organize thinking units into categories. The goal of this step is to maximize the difference between the categories while minimizing the difference within the categories [26].

In order to ensure consistent placement of “thought units” and compliance with “categorizing” definitions [24], researchers conducted frequent “reality checks” (for example, re-reading the original in-depth interviews and modifying “categorizing” labels as needed). After rigorously categorizing all “thought units”, we deleted all “thought units” and “categorizing” that are not directly related to our research questions, including the description of the situation or background of the incident (943 thinking units), and the factors of the response plan (265 “thought units”), doing (209 “thought units”), checking (226 “thought units”) and action (243 “thought units”). Hence, a total of 712 “thought units” (43% of the total) were excluded from further research analysis.

In order to ensure the reliability of the “categorizing” process, the third researcher who did not participate in the “categorizing” step independently classified 943 randomly selected samples of the remaining “thought units” into the “categorizing”. Consistent with similar analysis, we selected at least 25% of the “thought units” from each “categorizing”, resulting in a sample of 330 “thought units” (35%). The conservative P-statistic is used to calculate the agreement among evaluators, where the total number of “thought units” agreed by all three evaluators is divided by the total number of “thought units”. The initial inter-rater agreement was 74%, which was below the 80% threshold used in similar analyses. After negotiating the differences, the final consensus rate among evaluators was 82%, and at least two of the three evaluators agreed with a consensus rate of 98.9%. This degree of consistency indicates that “categorizing” is appropriate for the data. In the third or classification step, the two researchers who performed the “categorizing” step grouped all categories into higher-level “categorizing” or topics. This is an iterative, inter-subject process, similar to the process used in the “categorizing” step. However, the goal of this step is to group “categorizing” into broad topics to aid analysis and data presentation. Similar to the “categorizing” step, the classification process involves negotiation and reformulation to ensure that the subject fits the data.

4. Result Findings

We have formulated four key research questions around the key areas of empirical interest highlighted above. The analysis yielded 42 “thought units”, which were “categorizing” into four dimensions corresponding to our research questions: (1) plan, (2) do, (3) check, and (4) action. The “check” dimension corresponds to the four key features of HR reengineering related to business digitalization strategy, and how to create talent value when a company successfully implements business-led digital transformation, HR reengineering, and talent value creation, including (1) talent planning, (2) talent introduction, (3) talent adjustment, and (4) talent development. (See Table 1 for details).
5. Conclusions and Discussion

In view of the increasingly competitive business environment, many HR executives are also under pressure to reduce human resource management costs, provide higher quality services, and create more competitive companies. Therefore, reengineering is used to help achieve these goals. In addition, we would like to say that redesigning the HR process is essential for the repositioning of HR competency to provide high value-added services.

Observing the case study in this research, through business digitalization strategy, they completed 100% process reengineering and 15% system redesign. This HR reengineering saves the company about $500,000 in after-tax expenses each year. As a result of this HR reengineering, the human resources department redesigned the company’s work process, and the company’s total human re-
sources have been reduced by 55%. Since the start of HR reengineering, HR costs have been reduced by 74%, and compensation costs have been reduced by 59%. Enterprise human resources executives become composed of customer-oriented experts, responsible for providing high-quality products and services. In any case, these changes still ensure that the company complies with laws and regulations. Regulatory requirements.

In terms of research limitations, due to the difficulty of collecting data on contemporary high-change digital transformation cases, this research only observes a representative company. In addition, in terms of industry, because this representative company happens to be the healthcare industry, this also results in a relatively single industry observation. In the part of future research recommendations, first of all, in terms of research methods, this research uses qualitative research case study. If there are more data on digital transformation cases in the future, researchers can also develop quantitative research methods or the emergence of new technologies, such as through content exploration technology explores the financial report content of the digital transformation cases, so as to find the commonality of the digital transformation case companies.

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