






Adoption of Digital Transformation on Employee Performance – Systematic Review

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Abstract. Digital transformation is a Computerized change, an idea brought into the world in the web within a short time, which is acquiring its presence lately, portraying the utilization of advanced innovation to all parts of organizations. In the event which is the need of the hour and this movement will totally impact the manner in which a business works, increase collaboration productivity, upgrade work proficiency and carry worth to clients. The advanced organization performs computerized change for essentially all HR exercises, train, pay, evaluation, recruitment and training. This paper attempts to review the different digital transformation forms in the HR field. The objective of this study is to identify the antecedents of digital transformation and how the role of digital transformation enhances Employee performance. Fundamental Challenge faced by an organization in practicing digital transformation is its perspective and misconception of digital transformation, inadequate knowledge Management, training, resources and lack of awareness of digitalisation. The hesitation to try out new things and the active implementation of digital transformation in the company are also the factors which affect digitalization in organizations. There are some Organizations which is successful at addressing digital transformation. The success for the transformation is Creativeness and innovation at work place, Collaboration, Project Automation, Remote working, Perception Skills and training.

The methodology followed, in the study is based on data collected from secondary source such as published research papers and survey reports. The review of the various literature throws light on how adoption for digital transformation increases employee performance and reduce employee turnover of an organization.

Keywords: Adoption of Digitalization · Employee performance · Innovation · Organization · Turnover

1 Introduction

“Digital transformation” is a key Terminology that has been constantly used and is mentioned more frequently from the organizational level to the ministries, sectors and countries, in recent years. The impact of digital transformation as become matter of concern to most of the business and mangers in recent years because of its impact. This paves way to the organizations to take early action to adapt to this period. Digital

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transformation of workplace goes beyond the technology adoption and it has its greater impact of workplace designing to suit for new technology adoption [1]. The Change of working activities implies future of digital transformation with change in tools and technique.

Employees often hesitate to accept changes imposed by old thinking and habits, this in turn creates hesitation in adopting to digitalization. A common misconception is that only if a company upgrades and adapts to the new technology, then only digital transformation will take place. In reality digital transformation is not about software or technology – it's about organizational adaptability and change to digitalized environment. To sustain in this digital time of change, every business must adapt to digital environment as early as possible. Corporate culture can be the single most important determinant of that business's success to enable rapid adjustment to new conditions and incentivize employees to adopt new digital transformations. To keep pace with the change driven by digital transformation, organizations must be agile and adaptable, and organizational culture is critical to the success of any digital initiative. Which number. Digital transformation is distinguished from previous.

The nature and its intense velocity itself changes in IT enabled Business (Bharadwaj et al. 2013 [2]; Porter and Heppelmann 2014 [13]). In the business world, digital technologies accelerate innovation, disruption, and competition. (Downes and Nunes 2013 [3]; Porter and Heppelmann 2014 [13]; Westerman et al. 2011 [14]). To cope with rapidly changing environmental conditions and the acceleration of these changes due to technological innovation, organizations need to fundamentally transform and restructure their organizations in order to survive in a fractious climate (Downes and Nunes 2013 [3]; Porter and Heppelmann 2014 [13]). As a result, digital transformation is more than just digitising products and services; businesses must redefine their industries and value propositions (Porter and Heppelmann 2014) [13]. As a result, digital transformation can be defined as organisational changes that include the digitization of products, services, core processes, customer touch points, and business models with IT support. (Fichman et. al. 2014) [4].

Organizations must develop digital transformation strategies, launch digitalization initiatives, and invest in IT infrastructure to capitalise on such fundamental business transformations. New technologies provide opportunities for emerging societies. Existing research on human resources and organisational behaviours has identified a variety of job satisfaction determinants, including pay or level income, promotion opportunities, coworkers, job conditions, communications, personal growth, security, and working environments (Wu, 2012) [5]. Furthermore, employee turnover intention remains a critical issue for human resource and organisational managements due to the negative consequences for effective organisational functioning. A recent review of the literature on organisational behaviours revealed that the turnover rate of employees within organisations is increasing on a daily basis. This phenomenon may be attributed to organisations that prioritise large profits and returns over employee satisfaction which is attained by employee performance (Abdulbaqi, and Ahmad, 2011) [6].

The impact of information technology, particularly artificial intelligence (AI), on the future of work evolves along the innovation axis of optimization - transformation - disruption. The rapid development of AI technologies in recent years has raised concerns

about the implications for the future of work (Brynjolfsson and McAfee, 2014) [7]. Technological unemployment can be framed as positive, long-standing human project: “The increase of technical efficiency has been taking place faster that we can deal with the problem of labour absorption” (Floridi, 2014) [8].

2 Methodology

2.1 Search Strategy

For this systematic review, we developed a search strategy to review the literature in a systematic manner. This search strategy was tailored to Scopus and google scholar data base only. For the search in Scopus and google scholar the key words used was “DIGITALIZATION” AND “EMPLOYEE PERFORMANCE”, “DIGITALIZATION” AND “HUMAN RESOURCE PRACTICES”. In both the data base the search span was limited to 12 years i.e. from 2011 to 2022. The search included open assess journals, Review paper both printed and under printing process, in English language only.

2.2 Selection Criteria

The selection criteria was based on PRISMA frame work (Moher et al., 2009) [15]. The search mainly focussed on mapping existing literature on Digitalization and Employee performance in the field of Science and humanity, Engineering, Manufacturing industry, marine technology, Environmental sciences, Business and Management and Economics. Then the search was narrowed down to Science and humanity, Engineering, Environmental sciences, Business and Management and Economics only. The search was conducted for all the Asian and European Countries. The total of 188 search results was obtained and after applying all the above said filters 32 search result was extracted (Fig. 1).

2.3 Quality Assessment

The study is only based on original Review paper, research article, and Conference paper. All the duplication was checked thoroughly. For the analysis and purification of the articles to ensure the quality and relevance of academic literature included Abstracts of the article was deeply checked in review process. A careful evaluation of each research paper was carried out at a later stage. The next exclusion criteria was to limit the papers published in the English language only. Three articles in non-English language was excluded from the study. By inclusion and exclusion criteria after applying the filter 32 articles were selected for assessing.

2.4 Data Extraction

In the data extraction phase, 32 articles were selected and the characteristics extracted were:

1. Article Must be original paper, Review paper and conference paper and published reports. Case studies were excluded.

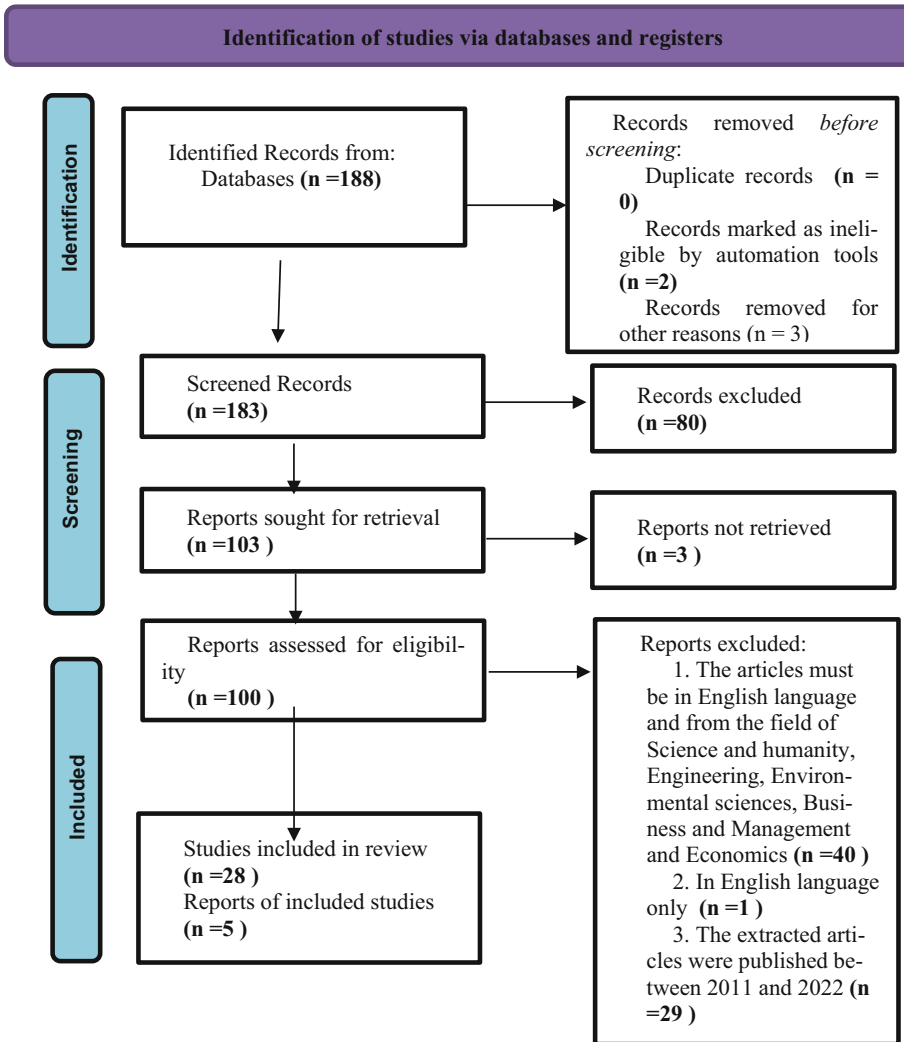


Fig. 1. Data collection process

2. The articles must be in English language and from the field of Science and humanity, Engineering, Environmental sciences, Business and Management and Economics.
3. The extracted articles were published between 2011 and 2022.
4. The extracted papers were from the Asian and European Countries.

3 Results and Interpretation

The articles extracted was exported to the Microsoft excel and the analysis was carried out on various parameters. The first parameter taken into consideration was the no of

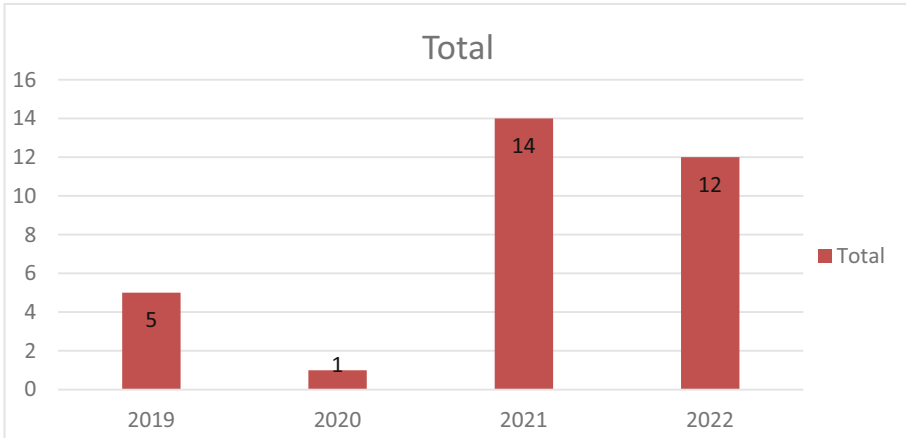


Fig. 2. Number of articles and year

publications for the past 11 years reported after applying the filters. From the graph, (see Fig. 2).

It is observed that even though the digitalization was started earlier two decades ago the importance of digitalization was given only after outbreak of COVID 19 pandemic were remote working and monitoring the performance was also done remotely.

The next parameter taken for analysis is title and the no of times it was cited. It is pertinent to note that Capacity building, Impact of COVID-19 outbreak on employee performance – Moderating role of industry 4.0 base technologies, industry readiness for adoption to digital transformation are cited more.

The next parameter taken for systematic analysis is Author and his citation and the methodology followed by the author in his research paper (see Fig. 3).

From the chart it is inferred that the highest cited author is Narayanamurthy Tortorella under the title “Impact of COVID-19 outbreak on employee performance – Moderating role of industry 4.0 base technologies” he have followed the method of measuring the employee performance by performance metric and wok implication factors.

The another factor for consideration is the publishers. It was analysed that the publishers choice was different depending upon the country and nature of the article, but importance was given to MDPI and Elsevier (see Fig. 4). From the above graphs and analysis it is interpreted that, publication choice of the authors was not confined to any particular publisher. The digitalisation of organisation and industry with technology 4.0 is cited more even though development was there in digitalization of hr practices. Even though the adopting digitalization was there for more than two decaded the importance was known after 2019 were the no of research articles published between 2011 and 2022 was high only between the year 2019 and 2021.

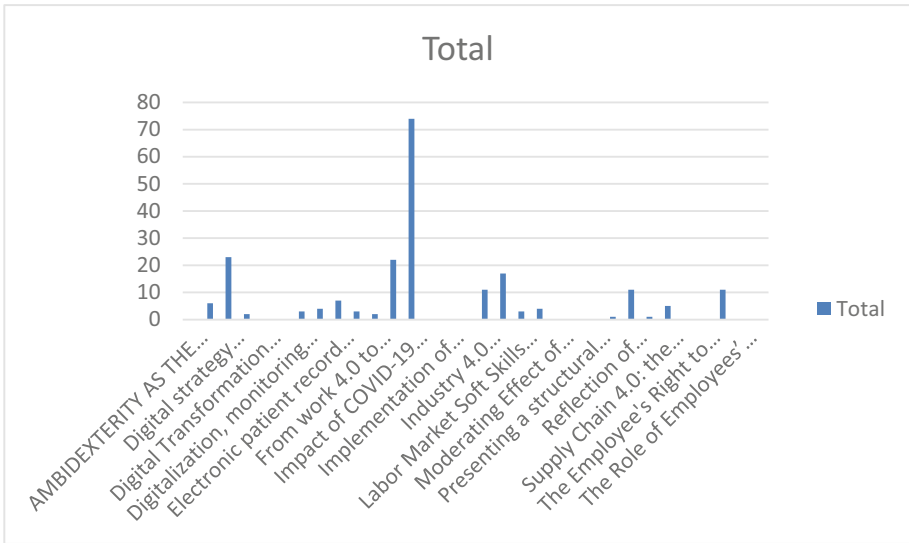


Fig. 3. Topic and number of articles

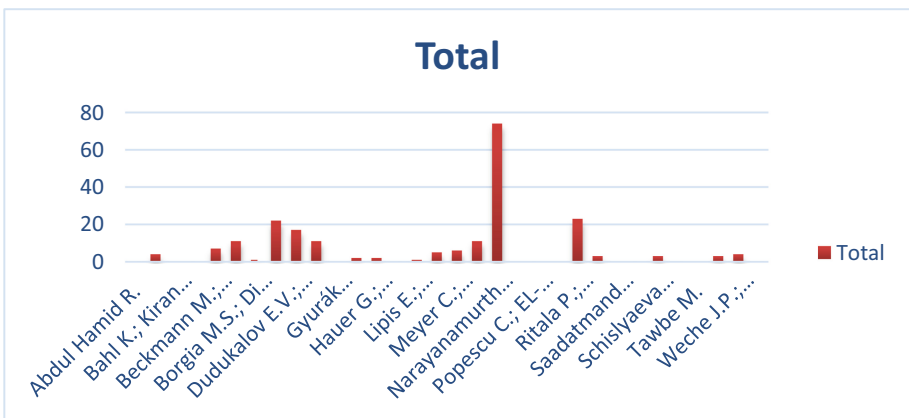


Fig. 4. Authors citation and number of papers

4 Discussion

HR analytics uses different tools, methodologies and perspective depending upon the nature (Kelleher, et.al 2015) [9], Three main factors appear to be important in comprehending why some organisations use HR analytics to measure employee performance while others do not. To begin, it needs to be embedded in a climate that has the structural and managerial ability, including such expertise or knowledge of (HR) managers, to use the data and methods (Angrave, et.al 2015) [10]. Second, it necessitates the opportunity, such as (legal) regulations and managerial prerogatives that allow firms to collect, store, and analyse appropriately. Third, because HR analytics implementation is costly, firms

must be motivated to use HR analytics, such as market factors or market pressures that motivate or even 'force' firms to do so (Levenson, 2018) [11].

On the one hand, it is clear that our framework, which is based on structural and managerial capability, opportunity, and motivation, is broadly similar to the well-known ability, motivation, opportunity (AMO) framework, which is widely used in HRM in the context of performance but also in the implementation of HRM practises. Our framework, on the other hand, differs significantly from most AMO-based studies for two main reasons. To begin, the components ability, motivation, and opportunity in the AMO framework typically refer to the identification and use of HRM practises to develop employee performance. In our framework, capability covers the majority of these three components. As a result, the components in the two frameworks differ.

Second, unlike our framework, the AMO framework conceptualises motivation and opportunity primarily through internal/endogeneous factors rather than external/exogeneous factors. External/exogeneous factors are typically considered and discussed within the context of the AMO framework. In the AMO framework, for example, motivation is defined by organisational or employee specific factors such as extrinsic and intrinsic motivators. In our model, the motivation component is defined by external factors such as market competition, which is provided to organisations. The same is true for opportunity, which in the AMO framework refers to internal, or organisational, factors like employee involvement and job design. Again, this differs from our concept, in which opportunity is defined by external factors such as (legal) regulations.

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As a result, the components of the well-known AMO framework differ from those in our framework, and in the following section, we apply these three main factors to explain why some firms use HR analytics to monitor employee performance while others do not, and we formulate hypotheses. These hypotheses address the potential effects of two types of determinants: those that vary across individual firms and those that do not (organisational level), as well as those that differ across the countries in which these firms are located (national level).

5 Conclusion

As a result, organisations are now focusing more on these aspects, as well as providing better working conditions and environments (Awang, 2014) [12]. Furthermore, happiness has a cumulative effect on many factors that reduces the likelihood of turnover. On the other hand Employee job performance is critical to an organization's ability to compete successfully.

As a result, job performance-specific employment transitions into and out of organisations are critical. Despite the importance of such resource flows, we still know very little about why high and low performers leave, and almost nothing about what these very different types of employees find in the external market.

AMO framework has a positive influence and is still significant in increasing employee performance attainment in the digital era. The future agenda will be to determine the next strengthening and training activity, assess performance attainment based on the results of implemented training. Employees who are happy have lower turnover intentions because they are treated fairly and valued by the organisation. This trait is one of the most important factors influencing job satisfaction and performance.

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