

Designing a Conceptual Framework for Digital Employee Experience

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Abstract

Digital transformation plays a critical role in the way organizations undertake their businesses. To deliver a successful digital transformation and increase productivity, organizations should rethink their digital employee experience (DEX) and improve it. This paper aims to conceptualize the concept of DEX, identify its components and sub-components, and present a conceptual framework for this concept. This qualitative study was primarily based on a two-phase research methodology. In the first phase, a systematic literature review (SLR) was conducted in academic resources and grey literature. The second phase was then conducted to approve or modify the results of the first phase of research. In the second phase, eleven semi-structured, face-to-face, long interviews were held with eleven experts of digital transformation and human resource (HR) domains. The outcome of this study is a definition and a framework with eight components and 70 sub-components about DEX. The results of this study might guide organizations to improve DEX in workplaces and rethink their relationship with their employees to survive in the current competitive business environment.

Keywords: Digital transformation, Employee experience, Human resources, Workplace

1. Introduction

Modern life is digital, and digital transformation affects everything and everywhere, from creating smart buildings to delivering great new experiences. Besides, these innovations make our personal lives simple; they play a critical role in the way companies undertake their businesses. Although some companies are concerned that any disruption will cause problems with customer services, sales, and other areas, they know that ignoring or avoiding digital transformation is a recipe for disaster (Brandon, 2019). The importance of digital transformation is known to everyone, and we should remember that technology is not disruptive on its own. In other words, technology provides conditions to increase productivity, and the mindset of people (employees), leaders' support, organizational culture, and practices drive successful digital transformation. Possibly because of the lack of this viewpoint among organizations, around 70% of all digital transformation initiatives do not reach their goals, and the risk of digital transformation was the first concern of directors and CEOs in 2019 (Tabrizi et al., 2019). In support of this claim, Capgemini's research (2018) showed that employees became a significant barrier to implementing digital transformation because they were not invited to the digital transformation journey (Capgemini, 2018). Therefore, to implement the

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digital transformation, organizations must consider employees. In addition, to create a successful customer experience, organizations should develop skills, train their employees accordingly, and improve their productivity and affiliation (Zinck, 2017).

Nevertheless, issues in workplaces are not as simple as they seem. One issue that organizations face is employee engagement. A new report from Achievers (2020) revealed that around two-thirds (64%) of employees in the survey may leave their job by the end of 2020, and only 19% of employees feel engaged in their workplace (Achievers, 2020). In addition, a result of another survey revealed that 66% of employees are either partly engaged or not engaged in their workplaces (Sage People, 2018). Another critical issue is a talent shortage that causes fierce competition for skilled talent in the marketplace. According to Manpower Group's survey (2020), 54% of employers are experiencing difficulties for filling roles in organizations, which shows a nearly 100 percent increase compared to the last decade. To show the intensity of the problem, we might note that baby boomers are continuing to retire at unprecedented rates, leaving key organizational positions for millennials and z generation that have entirely different expectations. Millennials and z generation are looking for meaning in their work: a supportive, collaborative environment, a greater work-life balance, better personal well-being, technology-driven employee experience, and an employer that can match the lifestyle they want to enjoy (Gallup, 2018; Hamerman & Schooley, 2017).

To deliver a successful digital transformation and customer experience, increase employee engagement and productivity, meet the needs of younger employees, and attract and retain the best talent (to drive innovation and deliver better customer experience), organizations should rethink their digital employee experience (DEX) and improve it. Mazor et al. (2019) found that organizations with the most compelling employee experience have generated 22 percent higher engagement among their workers compared to organizations with a less compelling employee experience. They also provided 12 percent greater customer satisfaction than other organizations, and their three-year revenue growth rate was 2.3 times greater than the average of the whole sample. Moreover, employees of these organizations were also four times more likely to stay in their job positions than those at organizations with a less compelling employee experience.

Despite the importance of the DEX and the necessity to improve it in organizations, there is a dearth of academic research and limited grey literature about understanding this concept and its components. Therefore, this study aims to define DEX and provide a conceptual framework that contains its components and sub-components. Further, the findings of this study will enable the organizations to improve DEX in workplaces and rethink their relationship with their employees to survive in the current competitive business environment. For these reasons, this paper seeks to address the following research questions:

RQ1. What does DEX mean?

RQ2. What are the components and sub-components of DEX?

To answer these questions, a survey based on a two-phase research methodology was designed. In the first phase (systematic literature review (SLR)), due to the limited research about DEX, "employee experience" and "DEX" definitions and frameworks were extracted. Then, in the second phase, by interviewing eleven experts, the definition and final framework about DEX were completed.

2. Literature Review

In general, the evolution of human resource (HR) approaches in organizations can be divided into four periods. After usefulness period (when the focus was on usefulness and utility), productivity period (when the goal was to reach high productivity in employee's

performance), and engagement period (when the goal was to look for ways to benefit employees, and understand how and why they work), we are entering the employee experience period. This period aims to try to understand how employers can create a company where employees want to show up vs. need to show up. Although engagement and employee experience concepts work together in organizations, they come from two different worlds. Engagement is about short-term cosmetic changes and employee experience is a long-term redesign of the organization (Morgan, 2017).

Nelson and Doman (2017) state that employee experience involves employees in designing and shaping the company, helps identify organizational strengths, and discovers the situations in which people learn and perform best. These insights are used to restructure (remove silos, layers, and titles), trim processes, and turn rules into employee judgment, all of which help companies unlock new paths to faster growth, profitability, and innovation. Although new titles, roles, and practice areas regularly emerge about employee experience, there is a lot of confusion and uncertainty about understanding this concept and the way it should look like (Morgan, 2017). For this uncertainty, this concept is confused with words such as new and improved HR, perks and parties, employer or employment branding, treating employees as customers, or employee engagement (Lee, 2018; Ludike, 2018; Wride, 2016). In fact, employee experience includes most of these concepts. Table 1 shows some definitions of employee experience and DEX in the SLR.

Table 1. Some Definitions About Employee Experience and DEX

No	Employee experience and DEX Definitions	Resource
1	Employee experience in IT terms: A combination of people, process, and technology Employee experience in HR terms: A combination of employee technology, workstyle, and culture Employee experience for both: Employee experience influences and is influenced by DEX	VMware, 2019:2
2	The workforce experience is the outcome of all interactions between an organization and its people. Employees, including freelancers and gig workers, respond diversely to direct and indirect contact with a company and its brand through their whole journey - from initial recruitment, through to offer and onboarding, and as a fully-fledged worker.	Sage People, 2018:3
3	<ul style="list-style-type: none"> The employee experience is the journey an employee takes with your organization. It is the sum of all interactions an employee has with an employer, from pre-recruitment to post-exit. It includes everything from major milestones and personal relationships to technology use and the physical work environment. All of the individual moments of an employee's experience play a role in how a worker feels about an employer's purpose, brand and culture. These feelings directly affect employee retention, engagement, performance, and development. 	Gallup, 2018:5
4	Employee experience can be defined as the employee's holistic perceptions of the relationship with his/her employing organization derived from all the encounters at touchpoints along the employee's journey.	Plaskoff, 2017:2
5	The employee experience begins the moment someone sees a job opening at your company. While a prospective employee may already be familiar with your brand, once they begin to consider you as an employer and imagine a career with your company, they initiate a process with your company. From the application process to the hiring process and their daily work life, every employee has needs to be met and expectations for the experience of having those needs met- essentially, the employee experience.	Raia, 2017:2
6	Employee experience is about the day-today experience of collaborating with others and encountering workplace complexity. Positive employee experience can enable innovation; negative employee experience can inhibit innovation.	Dery et al., 2017:150
7	DEX is a personalized set of interactions, processes, and content resources that enables every employee to achieve success and enjoy a positive work experience.	Hamerman & Schooley, 2017:3
8	Employee experience is the sum of all experiences an employee has with an employer, over the duration of their relationship with that employer. Employees are all on a journey with their employers.	Oracle, 2014:7

After reviewing some definitions of employee experience and DEX, a question may arise that what employee experience and DEX include. The answer of the question helps individuals and organizations get familiar with components and sub-components and pay more attention to them when they design a program to improve these concepts. Table 2 shows some employee experience and DEX framework. As shown in the table, nine out of the ten identified frameworks are about employee experience, and only one of them is about DEX.

Table 2. Some Information About EX and DEX Models

No	Name of framework	Publisher	Release year	Components	Description
1	Lahey & Barnes Employee Experience Model	Lahey & Barnes	2018	Brand, culture, Manager, Deal, Technology & process	Five components and 18 sub-components
2	Morgan Employee Experience Model	Morgan	2017	Physical environment, cultural environment, technological environment	Three components and 17 sub-components
3	North Highland Employee Experience Ecosystem	North Highland	2017	In the core: explore, apply, join, learn, contribute, grow, do transition, leave, endorse, rejoin In second layer: services, products, content, workplaces and environments, artifacts and events In third layer: purpose, organization architecture, culture, leadership and management In forth layer: employer brand promise	Four layers
4	The Employee Experience Index around the globe (relying on workplace practices)	IBM & Globoforce	2017	The environment (organizational trust and supportive coworker relationships) The work (meaningful work and continuous feedback, recognition, and growth) The person (empowerment and voice, and work-life balance)	Introduce effective workplace practices to improve employee experience
5	Maylett & Wride Employee Experience Model	Maylett & Wride	2017	Expectation alignment, the three contracts (brand, transactional, and psychological), trust	Three key components
6	Deloitte's Employee Experience Framework (The Simply Irresistible Organization)	Deloitte (Mazor et al.)	2017	Meaningful work, supportive management, positive environment, growth opportunity, trust in leadership, collaboration, and connection	Six components and 16 sub-components
7	The Employee Experience Index	IBM & Globoforce	2016	10 items: behaviors and actions, organizational trust, coworker relationships, meaningful work, recognition, feedback and growth, empowerment, and voice work-life balance; Five dimensions: belonging, purpose, achievement, happiness, and vigor	Five dimensions and 10 items
8	IBM Employee Experience Model	IBM (Lesser et al.)	2016	Work sphere, social sphere, physical sphere	Three spheres, five strategies and four methods
9	Foresee's Employee Experience Measurement Model	Foresee	2014	Experience elements (advancement, compensation, teamwork, empowerment, environment, job, manager, work support, leadership, corporate culture), employee satisfaction, future engagement	Three sections and 15 elements
10	CGI DEX Model	CGI	2015	Three layers of value, insight, and experience (culture and working practices, experience and process design, technology enablers, infrastructure, and operating model and organization design)	Three layers and five components

It should be noted that the employee experience concept is not new, but by entering the digital world, it is looked from a new perspective. As can be seen in Table 2, five out of the ten frameworks published over the last three years confirm this new perspective. Furthermore, eight out of the ten reviewed frameworks are from grey literature¹; this emphasizes the importance of this concept in the professional world. In addition, there is not any single model that addresses all the components and sub-components of DEX or even employee experience. There are components or sub-components in a framework that are not mentioned in another one. Even the lack of a comprehensive framework for DEX is more noticeable than employee experience. In grey literature, there was just one related model that was more appropriate for creating a digital workplace.

3. Research Methodology

The current research uses a two-phase research study: an SLR and interview with experts.

Phase 1: SLR

In the first phase, we used an 8-step SLR methodology that entailed determining the purpose of the literature review, developing the protocol, and training, searching for the literature, practical screening, conducting quality appraisal, extracting the data, synthesizing the studies, and writing the review. In the SLR, besides journal articles and books – as Okoli and Schabram (2010) mentioned – grey literature² such as professional reports and whitepapers was also used. Due to limited studies about DEX, the “employee experience” and the “experience of employee” keywords were included in this research. After four stages of screening (i.e., basic criteria screening, title screening, abstract screening, and two times of content screening), 22 primary resources were selected. These selected resources that address the answer of the main research questions were evaluated by CASP³ method and were rated qualitatively. Then definitions, components, and sub-components were extracted from selected resources. By using the open coding method⁴, a basic definition along with its primary components and sub-components were identified.

Phase 2: Interviews with digital transformation and HR experts

In the second phase, semi-structured, face-to-face, and long interviews were conducted with digital transformation and HR experts after they were selected through snowball sampling⁵ method. In this phase, seven interviews were conducted, and to assure achieving theoretical saturation, which happens when new data does not produce new content, the interview process was continued to the 11th interview. Table 3 shows the demographic profiles of interviewees.

1. This concept will be explained in the research methodology section.

2. Grey Literature includes reports, theses and dissertations, conference proceedings, research in progress, leaflets and posters, media reports, patents, letters and diaries (Ridley,2012:32)

3. Critical Appraisal Skills Program

4. Open Coding is generally the initial stage of qualitative data analysis and helps researchers build theories in an inductive process.

5. Chain sampling, chain-referral sampling, referral sampling

Table 3. Demographic Profiles of Interviewees

Demographic features	Description	Number	Percent
Gender	Male	6	54.5%
	Female	5	45.5%
Age distribution of experts	25-35	4	36.4%
	36-45	7	63.6%
Level of education	Master's	4	36.4%
	PhD	7	63.6%
Work experience	0-3 year	2	18.2%
	4-6 years	5	45.4%
	Above 6 years	4	36.4%

4. Research Findings

As mentioned before in the introduction part, this research aims to answer two primary questions. Based on the research findings, both of them were answered.

The first research question: What does DEX mean?

In the first phase of the study (SLR), out of 16 different definitions, seven unique codes were extracted. Because most of the reviewed definitions in the literature were about employee experience, the term “digital” was added to the definition to bring it closer to the DEX. The following definition was then obtained from SLR:

An employee's comprehensive and holistic perception derived from his/her understanding of direct and indirect interactions with the organization's digital touchpoints, which begins before the employee enters the organization and lasts for life (even after the employee leaves the organization).

In this definition, an “employee” refers to full-time, part-time, and contract employees as well as the retirees.

After conducting the second phase of the study (i.e., interviews with experts), some codes such as touchpoints, employee types, and lifecycle were eliminated, and some points such as digital workplace and components of DEX were added. Eight components identified for the DEX included career, personal characteristics, business strategy, technology, culture, physical environment, brand, and leadership. Finally, the following definition was given for this concept. The DEX is “the result of a comprehensive and holistic employee's perceptions in the digital workplace resulting from the sum of employee's direct and indirect interactions with his/her career, other employees, managers, customers, strategy, systems, culture, brand, organization competitors, and is also influenced by his/her personal characteristics.”

Second research question: What are the components and sub-components of DEX?

In the first phase of research (SLR), from 21 different resources that mention components and sub-components of DEX, seven components (including career, business strategy, technology, culture, physical environment, brand, and leadership) and 39 sub-components were extracted. After conducting the second research phase (i.e., interview with experts), the “personal” component was identified and added to the final framework. In addition, from 39 identified sub-components, 30 remained unchanged, three were deleted, six were modified, and 34 new sub-components were added. It should be mentioned that comments that were approved by at least six interviewees were deemed as acceptable and were added to the final framework. Table 4 shows the trend of changes in the two phases of the research methodology. As shown

in the following table, brand sub-components remained unchanged, and cultural sub-components had the most changes in the second phase.

Table 4. The Trend of Changes in the Two Phases of Research Methodology

DEX Framework	Number of extracted components / sub-components from SLR	Number of unchanged components / sub-components from SLR	Number of eliminated components / sub-components from SLR	Number of modified components / Sub-components in interviews with experts	Number of identified components / sub-components in interviews with experts	Sum
Number of components	7	7	0	0	1	8
Career sub-components	5	3	0	2	7	12
Personal sub-components	0	0	0	0	7	7
Business strategy sub-components	3	2	1	0	3	5
Technology sub-components	7	5	0	2	1	8
Cultural sub-components	10	8	2	0	8	16
Physical environment sub-components	4	3	0	1	3	7
Brand sub-components	3	3	0	0	0	3
Leadership sub-components	7	6	0	1	5	12
Sum	39	30	3	6	34	70

Table 5 shows the contribution of the two-phase research method separately in the final result of the research. As shown in the following table, SLR has more impact on defining DEX and providing components and sub-components of this concept.

Figure 1 and Table 6 illustrate the final framework.

Table 5. The Contribution of the Two-Phase Research Method Separately

Research questions	SLR	Interview
Q 1 (DEX definition)	60%	40%
Q 2 (DEX components)	88%	12%
Q 2 (DEX sub-components)	51%	49%

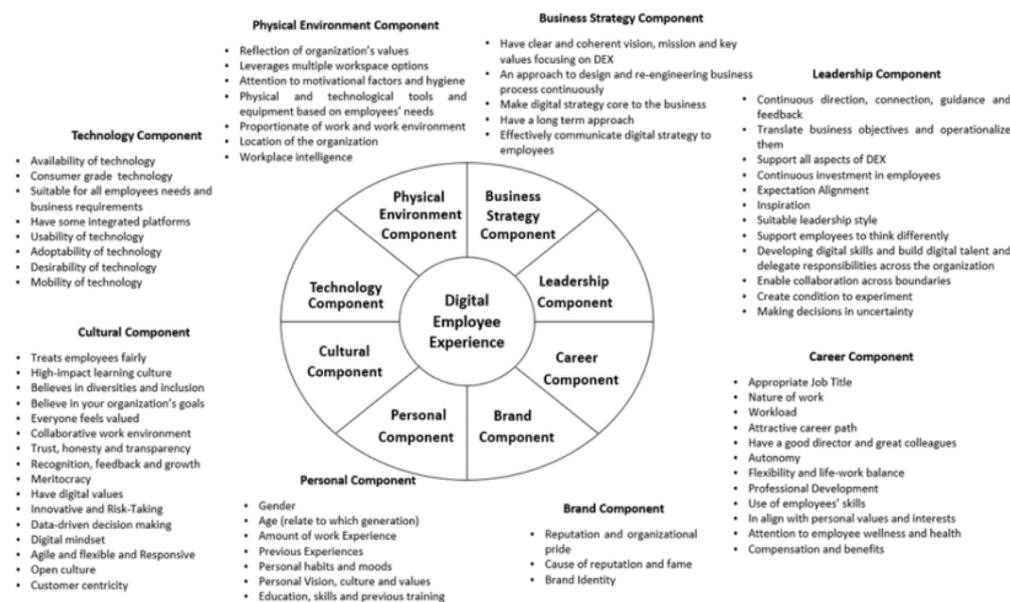


Fig. 1. DEX Framework

Table 6. DEX Framework

Components	Sub-components	Description
Business Strategy	Having clear and coherent vision, mission, and key values focusing on DEX	The mission, vision, and key values must be transparent, cohesive, based on the digital employee experience, and support it.
	An approach to design and re-engineering business process continuously	Organization's processes need to be reviewed continuously and the processes that do not create value should be eliminated.
	Making digital strategy core to the business	Digital strategy must be at the core of the business because strategy has a huge impact on it.
	Having a long term approach	The organization should have a long-term strategy (10 to 20 years).
	Effectively communicating digital strategy to employees	An organization's strategy should not only support senior executives, but also lower-level executives and frontline employees.
	Continuous direction, connection, guidance, and feedback	Leaders are coaches and controllers, and they need to be in touch with, mentor, and provide feedback.
	Translating business objectives and operationalizing them	Leaders should describe and analyze business goals for their employees.
Leadership	Supporting all aspects of DEX	Leaders must believe in creating a positive digital employee experience and support all aspects of it.
	Continuous investment in employees	Leaders must continually support their individuals and managers for growth and succession.
	Expectation alignment	There needs to be alignment between employee experiences and expectations at different times.
	Inspiration	Leaders should inspire team to follow them provide passion, commitment, and direction, and infuse energy to the team.
	Suitable leadership style	Leadership style (such as Democratic Leadership) has a significant impact on employee performance and leaders need to have a leadership style appropriate to the organization.
	Supporting employees to think differently	Leaders need to support people to think differently because it not only helps them understand what employees think and see, but it also helps them understand what their customers expect.
	Developing digital skills, building digital talent, and delegating responsibilities across the organization	Leaders need to help develop the skills and nurture digital talent across the organization (not just in one department), and delegate some of the tasks to other employees to focus their energy on the critical aspects of organizational growth.
Leadership	Enabling collaboration across boundaries	Leaders should provide some spaces for employees to collaborate across boundaries.
	Creating condition to experiment	Leaders need to create an environment where employees are encouraged to try smart and even unsuccessful and provide a virtual or physical platform to test their business models and new ideas.
	Making decisions in uncertainty	Leaders must also be able to make decisions in the uncertainty conditions.
	Appropriate job title	An appropriate job title implies the authority of the employees and should give them a particular image both in the organization and outside the organization (in front of customers).
Career	Nature of work	This is the employee's perception of his or her own job. The nature of the work itself, such as whether it is challenging, motivating, or interesting, and role clarity (i.e., whether the task is clearly defined and understood) should be considered.
	Workload	The proper workload to perform the job and related tasks should be considered. This is related to work-related stress and exhaustion.
	Attractive career path	Employees need to know that they can grow in their jobs and reach higher positions in the organization.
	Having a good director and great colleagues	Because employees spend many hours in the organization, they should have good directors and great colleagues to communicate with.
	Autonomy	Employees need to be able to choose how they do their job and know that they are responsible for their work.
Career	Flexibility and life-work balance	The organization should give its employees flexible working options and support them to create balance and deal with all the other things happening in the life, e.g., offering to work at employees' favorite hours wherever they want.
	Professional development	Employees should also have the opportunity for personal and professional development in their jobs because they like to take on new roles, learn different jobs, and grow in general.

Table 6. DEX Framework

Components	Sub-components	Description
	The use of employees' skills	The organization should be able to use employees' skills and abilities in the workplace, as it has a significant impact on their job satisfaction.
	Alignment with personal values and interests	Employees' jobs must be aligned with their interests and values so that they can feel better about their jobs; in other words, they should be able to live whatever lifestyle they want.
	Attention to employee wellness and health	The organization must invest in the physical and mental health and wellbeing of its employees.
	Compensation and benefits	The organization should consider compensation and benefits of each job, as for many employees it is the main indication of the extent to which the organization praises their work.
Brand	Reputation and organizational pride	It indicates how the organization's business looks to other people.
Brand	Cause of reputation and fame	This refers to the reason(s) for which the organization is known.
	Brand Identity	What the organization is saying or advocating.
	Gender	The gender of the employee, whether male or female, affects the digital employee experience.
	Age (which generation they are related to)	The age of the employee and the generation they belong to (X, Y, Z) affect the digital employee experience.
	Amount of work Experience	The number of years an employee has professional experience influences by the digital employee experience.
	Previous experiences	The organizations the employee has collaborated with, the workshops and seminars he/she has attended, and the professional experiences he/she has affect the digital employee experience.
Personal	Personal habits and moods	Each employee's moods, habits, and interests influence the digital employee experience.
	Personal vision, culture, and values	Personal vision, culture, and values of an employee influence the digital employee experience.
	Education, skills, and previous training	Employee education, skills, and previous training influence the digital employee experience.
	Fair treatment of the employees	Employees must feel treated fairly in the organization.
	High-impact learning culture	The organization supports employees to learn new things and provides resources and opportunities to do so.
Cultural	Belief in diversities and inclusion	The organization should respect individual diversities, such as diversity in appearance, race, and religion.
	Belief in your organization's goals	Employees in the organization must pursue and believe in the organization's defined goals.
	Feeling valued	In the workplace, employees need to feel valued.
	Collaborative work environment	Employees need to feel they are part of a team and constantly collaborate with their colleagues.
	Trust, honesty, and transparency	There should be trust, transparency and honesty in the organization and the employees should be aware of it.
	Recognition, feedback, and growth	Employees need to be continually evaluated, received feedback from their directors, and get help to grow.
	Meritocracy	People should be praised in the organization for their abilities and competencies.
Cultural	Having digital values	An organization should have a chain of digital values.
	Being innovative and risk-taking	The organization should support risk-taking, challenging, and disruptive thinking, and propose new ideas.
	Data-driven decision making	The organization should use the data and analyze it to make better decisions.
	Digital mindset	Employees must have a digital mindset and believe that digital solutions are the default forward way.
	Being agile, flexible, and responsive	The organization should have high speed and agility for decision-making as well as the ability to adapt to changing demand and technology.
	Open culture	The organization must work extensively with external networks such as start-ups, customers, and third-party vendors.
	Customer centricity	The organization should use digital solutions to help expand customer base, transfer customer experience, and collaborate to create new products.
Technology	Availability of technology	The technology should be available to everyone in the organization who wants so.
	Consumer grade technology	The technology that is used in the organization should be consumer grade, that is, it should be so well designed, useful, and valuable that you would consider using something similar in your personal life if it existed.

Table 6. DEX Framework

Components	Sub-components	Description
Technology	Being suitable for all employee needs and business requirements	The technology used in the organization should focus on meeting the needs of employees rather than just focusing solely on the technical needs of the organization.
	Having some integrated platforms	Technological tools and platforms need to provide organizations with integrated experiences and seamless channels.
	Usability of technology	Technology should be easy to use for employees.
	Adoptability of technology	Technology should be easy to learn for new users.
	Desirability of technology	Technology should be desirable and demanding for employees.
Physical Environment	Mobility of technology	Technology should have mobility, that is, the employee should be able to access the technology even when they are away from the workplace.
	Reflection of organization's values	The physical space reflects the values of your organization (e.g., if the values are collaboration, openness, transparency and fun, then you wouldn't expect to see a dull environment with nothing but cubicles!)
	Leveraging multiple workspace options	Your organization offers employees multiple workspace options (e.g., open spaces, conference rooms, quiet areas, collaboration spaces, café style environments, etc.).
	Attention to motivational factors and hygiene	The organization should pay attention to motivational and environmental factors such as ambient lighting, temperature control, noise, and ventilation. Furthermore, all workplace environments need to be hygienic when it comes to work area cleanliness and restroom facilities.
Physical Environment	Physical and technological tools and equipment based on employees' needs	The organization should pay close attention to the configuration and design of individual and team workspaces and the configuration of office furniture.
	Proportionate to work and work environment	The work environment of employees should be commensurate with the type of work activity.
	Location of the organization	The organization should have a good geographical location (organization area, types of access routes, convenient access to public transport).
	Workplace intelligence	The building of the organization should be smart and use disruptive technologies such as IOT.

5. Conclusion and Suggestions

This study aimed to define DEX and provide a conceptual framework for it. For this purpose, based on SLR and interviews with experts, a definition about DEX and a framework with eight components and 70 sub-components was identified. These components include career component (with 12 sub-components), personal component (with seven sub-components), business strategy component (with five sub-components), technology component (with eight sub-components), cultural component (with 16 sub-components), physical environment component (with seven sub-components), brand component (with three sub-components), and leadership component (with 12 sub-components). In the first phase of the study (i.e., SLR), seven components with 36 sub-components were identified, and in the second phase (i.e., interviews with experts), "personal component" and 34 other sub-components were identified. In this research, the contribution of the first phase (SLR) to answer both research questions is more than the second phase (interview with experts). It should be mentioned that most of available framework in academic resources and gray literature are about "employee experience," and none of them point to all of the components and sub-components of DEX in a unique framework.

Finally, there are some limitations in this research that might be used to suggest an agenda for future research. Limited studies on DEX in the academic and professional world, access to few experts on digital transformation and HR areas, and the subjective nature of experience (i.e., related to people's feelings and perceptions) are the main limitations of current research. Based on the mentioned limitations, and considering research findings, it is possible to make some insightful recommendations for future research. The following topics can be considered in the future studies,

- Surveying the generalizability of the framework by quantitative methods;
- Providing a DEX management framework;
- Identifying the success and failure factors in implementing DEX in organizations; and
- Providing a model for measuring the DEX in organizations.

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