

# A Survey on Expected Transformations in Human Resources: Towards Necessity in Digitalization (NID)

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## Abstract

The sharing of knowledge is sometimes known as knowledge transfer. This transfer made digital technologies to be considered in reaching the cultural, societal and economical changes. Human resources are important, demanded and available at high cost. So, there is a need to transform into digitalization and there is a Necessity in Digitalization (NID) in any business. Currently, digitalization is the most important in replacing human resources and being able to account for big data. In knowing the necessity in digitalization, a survey was done with the help of AI Tools.

**Keywords:** Knowledge, Digitalization, Human Resource, Business

## I Introduction

### 1.1 Knowledge

Acquaintance with or understanding of a science, art, or technique is called knowledge, defined as per merriam-webster dictionary[1].

Example : At that time the word science had not been narrowed down to one kind of knowledge; it meant whatever was known, and men of learning were still able to possess most of it.

### 1.2 Digitalization

Digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business as per the definition of gartner glossary.

### 1.3 Human Resources

Human resources (HR) is the division of a business responsible for finding, recruiting, screening, and training job applicants as per the definition of investopedia. HR plays a key role in helping companies deal with a fast-changing business environment and a greater demand for quality employees in the 21st century.

### 1.4 Need of Knowledge Transfer

The following are the complicated factors, which may tell regarding the need of knowledge transfer

1. Inability to recognize and articulate compiled or highly intuitive competencies such as tacit knowledge ideas

2. Geography or distance
3. Limitation of information and communication technologies
4. Lack of shared and superordinate social identity
5. Area of expertise
6. Internal conflicts such as professional territoriality
7. Generational differences
8. viii. Union-management relations
9. Incentives
10. The use of visual representations to transfer knowledge
11. Problems with sharing beliefs, assumptions and cultural norms
12. Previous exposure or experience with something
13. xiii. Misconceptions
14. xiv. Faulty information
15. xv. Organizational culture non-conducive to knowledge sharing such as knowledge is power culture
16. xvi. Motivational issues
17. xvii. Lack of trust
18. xviii. Capability

## II Literature Review

### 2.1 For Cultural

Culture is indeed an evasive and complex concept. It is evasive because we are surrounded by culture and we live deep in it; in a practical sense, culture is the air and water we breathe and drink day in and day out. Since humans are fundamentally social beings, individuals cannot live without cultures of their own. Glen Fisher, for instance, employed an analogy of computers to state that culture is comparable to the “programming” of an individual’s mind (Fisher, 1997) [3]. With this cultural programming, a person is then generally able to function appropriately and effectively in his/her own culture. Success and failure in interacting with others in a culture is contingent upon the types of cultural programs a person has obtained. This analogy further suggests that human cultures have both tangible and intangible contents comparable to the hardware and software of computers.

According to Valentine (2011) developing the right knowledge system enables organizations to improve work practices, make better decisions and avoid the criticism that comes from failing to learn from previous experiences [4].

Organizations can also enjoy better performance if they occupy a central network position that provides access to new knowledge developed by other units. This unit, however, depends on the units’ absorptive capacity and ability to successfully replicate new knowledge (Aoker and Keller, 1990) [5].

Hirsch (1988) once stated, “To be culturally literate is to possess the basic information needed to thrive in the modern world” [6].

In Borden's (1991) view, a person is considered culturally literate when he/she possesses both the language codes and contextual knowledge of a social environment [12].

### 2.2 For Societal

Digital transformation rests upon four pillars, according to a paper published in IEEE Software. These four concepts serve as the underpinnings for a successful digital transformation strategy:

1. **Customer experience transformation:** Understanding a customer's needs and behaviors, upgrading the customer's experience, and automating sales processes
2. **Business process transformation:** Digitalization, supporting employees' tasks, and integrating analytics into performance management
3. **Business model transformation:** Incorporating organizational modifications, establishing new digital services, and planning digital international expansion
4. **Organizational transformation:** Integrating a digital strategy, creating new organizational structures, and acquiring and developing talent to help implement the digital transformation journey

A traditional manufacturing value chain focuses on vertical integration: a company designs and makes a product, distributes it to retailers, and sells it. But Industry 4.0 is flattening this model because innovation responds to direct and immediate consumer feedback.

### 2.2.1 Digital Transformation and Societal Perceptions of Value

Smart products—refrigerators, watches, even home gyms—collect data and share information with the parent company through IoT. The collection of this data is just the first step in the implementation of a digital transformation strategy.

Next, information moves upstream for analysis. All of these bits feed into machine learning systems, which integrate and analyze data from all of a company's smart products. These patterns not only predict maintenance or other potential problems with a customer's product but also aid in prototype design.

Through IoT, the end-users and the manufacturer work together to customize the user experience. This provides value to the customer as well as a competitive advantage for businesses, inexorably connecting business and society.

### 2.3 For Economical

As written by, Zia Qureshi, January 18, 2022, in the book of title : “Shifting Paradigms: Growth, Finance, Jobs, and Inequality in the Digital Economy” [13]. We are living in a time of exciting technological innovations. Digital technologies are driving transformative change. Economic paradigms are shifting. The new technologies are reshaping product and factor markets and profoundly altering business and work. The latest advances in artificial intelligence and related innovations are expanding the frontiers of the digital revolution. Digital transformation is accelerating in the wake of the COVID-19 pandemic. The future is arriving faster than expected [2].

### III Methodology

The following steps are considered for the survey of Expected Transformations in Human Resources, towards necessity in digitalization

Step 1 : Open ChatGPT AI Tool

Step 2 : Give queries as input for all the factors mentioned in the introduction as : Necessity in Digitalization for the Factor, F from the human resources, in the case of X change

Where F is a Factor, X is cultural, societal, economical changes

Step 3 : Apply the Step 2 for Cultural, Societal, Economical changes

Step 4 : Make a Table for Step 3

Step 5 : Extract the information from the table

## IV Results and Discussions

### 4.1 Results

After the steps from 1 to 4, we get the following results from AI tools and the results are divided into 3 tables, as may be useful for explanation.

Factor / Change	Cultural	Societal	Economical
Inability to recognize and articulate compiled or highly intuitive competencies such as tacit knowledge ideas	Need to invest in knowledge management systems, encourage open communication, and foster a culture of knowledge sharing	Adaptation to Societal Changes, Knowledge Preservation, Knowledge Sharing, Data Analytics, Efficiency and Productivity, Global connectivity	Efficiency and Cost Reduction, Remote Work and Collaboration, Data-Driven Decision-Making, Knowledge Management, Innovation and Adaptability, Global Market Access, Customer Engagement, Supply Chain Management
Geography or distance	Remote Collaboration, Communication and Knowledge Sharing, Cultural Sensitivity Training, Global Team Management, Data and Analytics, Crisis Management, Document Sharing and Collaboration, Feedback and Surveys, Global Talent Acquisition	Remote Collaboration, Communication and Knowledge Sharing, Global Talent Management, Training and Development, Crisis Response, Data Analysis and Insights, Global Reach, Cross-Cultural Collaboration, Resource Optimization	Remote Work and Collaboration, Communication and Coordination, Resource Allocation and Management, Global Talent Pool, Data and Analytics, Customer Engagement, Supply Chain Management, Training and Development, Crisis Response
Limitation of information and communication technologies	Resistance to Change, Digital Divide, Data Privacy and Security, Depersonalization, Cost	Efficiency, Access to Information, Remote Work, Data Analysis, Innovation	Skills Gap, Resistance to Change, Cost and Accessibility, Data Privacy and Security, Digital Inclusion, Overreliance on Technology
Lack of shared and superordinate social identity	Communication and Collaboration Tools, Virtual Work Environments, Diversity and Inclusion Training, Inclusive Leadership Development, Feedback and Survey Platforms, Cultural Exchange Initiatives, Recognition and Rewards	Communication and Collaboration, Inclusive Communication Channels, Virtual Communities, Diversity and Inclusion Initiatives, Feedback Mechanisms, Crisis Management, Recognition and Rewards, Learning and Development	Communication and Collaboration Tools, Virtual Work Environments, Inclusive Communication Channels, Diversity and Inclusion Initiatives, Feedback Mechanisms, Crisis Management, Recognition and Rewards, Learning and Development
Area of expertise	Digital Learning and Training Platforms, Knowledge Sharing Platforms, Remote Expertise Access, Data Analytics, Communication and Collaboration Tools, Diversity and Inclusion Initiatives, Performance Management Systems, Feedback and Evaluation	Talent Acquisition, Employee Training and Development, Workplace Transformation, Data Analysis, Change Management	Efficiency and Cost Reduction, Data-Driven Decision-Making, Remote Work and Flexibility, Talent Management, Adapting to New Regulations, Employee Well-being
Internal conflicts such as professional territoriality	Streamlining Communication, Data Sharing and Transparency, Automation of Routine Tasks, Training and Development, Change Management, Performance Metrics and Evaluation	Collaboration Tools, Centralized Data Management, Workflow Automation, Data Analytics, Change Management, Training and Development	Centralized Data Management, Workflow Automation, Collaboration Platforms, Data Analytics, Change Management, Training and Development

**Table 1**

Table 1, may cover the factors like, Inability to recognize and articulate compiled or highly intuitive competencies such as tacit knowledge ideas, Geography or distance, Limitation of information and communication technologies, Lack of shared and superordinate social identity , Area of expertise, Internal conflicts such as professional territoriality.

Factor / Change	Cultural	Societal	Economical
Generational differences	Communication, Training and Development, Data Analytics, Mentoring and Knowledge Transfer, Flexibility and Remote Work, Employee Engagement	Communication, Training and Development, Data Analysis, Change Management, Flexible Work Arrangements, Mentoring and Knowledge Transfer	Communication, Training and Development, Data Analysis, Change Management, Flexible Work Arrangements, Mentoring and Knowledge Transfer
Union-management relations	Efficiency and Transparency, Data-Driven Decision Making, Remote Work and Flexibility, Training and Development, Communication, Cost Savings	Efficiency and Communication, Remote Work and Flexibility, Data Analytics, Data Transparency, Training and Skill Development	Efficiency and Cost Reduction, Data-Driven Decision Making, Remote Work and Global Talent, Transparency and Compliance, Employee Engagement and Retention, Training and Reskilling
Incentives	Personalized Incentive Programs, Communication and Recognition, Gamification, Transparency and Accountability, Feedback Loops, Measurement and Analysis, Skill Development	Adaptability, Real-Time Communication, Data-Driven Decision Making, Diversity and Inclusion, Remote Work and Flexibility, Employee Engagement, Feedback and Transparency, Skill Development	Rapid Adaptation, Data-Driven Decision Making, Cost-Efficiency, Remote Work and Flexibility, Transparency and Communication, Feedback and Employee Engagement, Skill Development, Compliance and Accountability
The use of visual representations to transfer knowledge	Enhanced Communication, Globalization and Multilingual Workforces, Memorability, Engagement and Buy-In, Accessibility and Remote Work, Feedback and Collaboration, Measurement and Analytics, Training and Onboarding	Effective Communication, Cultural Sensitivity, Remote Work and Virtual Collaboration, Scalability, Feedback and Engagement, Measuring Impact, Training and Onboarding	Improved Understanding, Efficient Communication, Universal Language, Engagement, Data Visualization
Problems with sharing beliefs, assumptions and cultural norms	Communication and Transparency, Global Workforce, Training and Development, Data Analytics, Challenges	Enhanced Communication, Accessibility, Virtual Collaboration, Training and Education, Data Analytics	Efficient Communication, Remote Work and Flexibility, Virtual Training and Development, Data Analysis, Inclusivity
Previous exposure or experience with something	Digital Learning Platforms, Customized Training, Feedback and Assessment, Accessibility and Inclusivity, Communication and Collaboration	Customized Training, E-Learning and Online Resources, Feedback and Assessment, Accessibility and Inclusivity, Communication and Collaboration	Customized Training and Development, E-Learning and Online Resources, Feedback and Assessment, Accessibility and Inclusivity, Communication and Collaboration

**Table 2**

Table 2, may cover the factors like, Generational differences, Union-management relations, Incentives, The use of visual representations to transfer knowledge, Problems with sharing beliefs, assumptions and cultural norms, Previous exposure or experience with something

Factor Change	Cultural	Societal	Economical
Misconceptions	Involve employees in the process, Provide training and support, Create a culture of open communication and feedback, Celebrate successes	Education, Healthcare, Social justice	E-commerce, Fintech, Industry 4.0
Faulty information	Create a central repository of accurate and up-to-date information, Use digital tools to communicate with employees and stakeholders in a timely and effective manner, Use digital tools to train employees on the cultural change process and on how to identify and correct faulty information, Create a culture of open communication and feedback	Empower citizens to participate in the democratic process, Promote social justice and equality, Improve access to education and healthcare, Protect the environment	Increase innovation and productivity, Create new jobs and industries, Expand access to markets and customers, Reduce costs and improve efficiency.
Organizational culture non-conducive to knowledge sharing such as knowledge is power culture	Promoting transparency and openness, Empowering employees to share their knowledge, Rewarding knowledge sharing	Creating a wiki or knowledge base for a social movement, Using social media to spread awareness of a social issue, Creating online courses and tutorials on important societal issues	Creating a company-wide wiki, Implementing a system for tracking and measuring knowledge sharing, Rewarding employees for sharing their knowledge, Creating a culture of open communication and feedback
Motivational issues	Implementing a new performance management system that uses digital tools to track and measure employee performance, Creating a learning management system (LMS) that provides employees with access to online training courses and tutorials on a variety of topics, including cultural change, Implementing a social media platform or communication tool that allows employees to connect and collaborate with each other	Creating a company-wide social media platform where employees can share stories about the impact that their work is having on the world, Developing a mobile app that allows employees to volunteer their time to societal change initiatives, Implementing a diversity and inclusion training program that uses digital tools to educate employees on the importance of creating an inclusive workplace	Implementing a new performance management system that uses digital tools to track and measure employee performance, Creating a learning management system (LMS) that provides employees with access to online training courses and tutorials on a variety of topics, including how to adapt to economical change, Implementing a social media platform or communication tool that allows employees to connect and collaborate with each other.
Lack of trust	By providing transparency and accountability, By empowering employees, By creating a more inclusive and equitable work environment	Raise awareness of important societal issues, Connect people who are working on the same issues, Facilitate collaboration and activism, Empower people to participate in the democratic process	Increase productivity and efficiency, Create new jobs and industries, Expand access to markets and customers, Reduce costs and improve efficiency
Capability	By providing access to information and resources, By facilitating communication and collaboration, By providing opportunities for learning and development	By providing access to information and resources, By facilitating communication and collaboration, By providing opportunities for learning and development	Creating a company-wide wiki or knowledge base on economic change, Implementing a learning management system (LMS) that provides employees with access to online training courses and tutorials on economic change topics, Creating a social media platform or communication tool where employees can connect with each other and share their experiences with adapting to economic change

**Table 3**

Table 3 may cover the factors like, Misconceptions, Faulty information, Organizational culture non-conducive to knowledge sharing such as knowledge is power culture, Motivational issues, Lack of trust, Capability

## 4.2 Discussions

### 4.2.1 From the table 1:

For the factor, Geography or distance, the common necessities for the cultural, societal and economical changes are Remote Collaboration, Communication and Knowledge Sharing, Cultural Sensitivity Training, Global Team Management, Data and Analytics, Crisis Management, Document Sharing and Collaboration, Feedback and Surveys, Global Talent Acquisition

For the factor, Lack of shared and superordinate social identity, the common necessities for the cultural, societal and economical changes are Communication and Collaboration Tools, Virtual Work Environments, Diversity and Inclusion Training, Inclusive Leadership Development, Feedback and Survey Platforms, Cultural Exchange Initiatives, Recognition and Rewards

For the factor, Area of Expertise, the common necessities for the cultural, societal and economical changes are Talent Acquisition, Employee Training and Development, Workplace Transformation, Data Analysis, Change Management

### 4.2.2 From the table 2:

For the factor, Union-management relations, the common necessities for the cultural, societal and economical changes are Efficiency and Communication, Remote Work and Flexibility, Data Analytics, Data Transparency, Training and Skill Development.

For the factor, Problems with sharing beliefs, assumptions and cultural norms, the common necessities for the cultural, societal and economical changes are Enhanced Communication, Accessibility, Virtual Collaboration, Training and Education, Data Analytics.

#### 4.2.3 From the table 3 :

For the factor, Motivation issues, the common necessities for the cultural, societal and economical changes are Creating a company-wide social media platform where employees can share stories about the impact that their work is having on the world, Developing a mobile app that allows employees to volunteer their time to societal change initiatives, Implementing a diversity and inclusion training program that uses digital tools to educate employees on the importance of creating an inclusive workplace.

#### V Conclusion

The survey made with the help of AI tools, like chatGPT or MSbard would help us to know the necessities for digitalization and could give certain importance as common necessities, observed from the discussions section via the tables 1,2,3. Which may indicate the need of knowledge transfer towards necessity in digitalization to overcome certain complicated factors.

#### VI References

1. <https://www.merriam-webster.com/dictionary/knowledge#dictionary-entry-1>
2. <https://www.brookings.edu/articles/how-digital-transformation-is-driving-economic-change/>
3. How an Individual's Mind Works. Attention Centers on the Best Discrimination between Present and Past, DAVID A. BOOTH, School of Psychology, University of Sussex, U.K
4. Linking Human Resource Management to Knowledge Transfer for Organizational Development, International Journal of Business and Social Science Vol. 4 No. 12 [Special Issue – September 2013], Tabitha Wangare Wambui Lecturer Human Resource Department, School of Business and Economics Karatina University, Kenya, James Gachahi Wangombe Lecturer Human Resource Department, School of Business and Economics Karatina University, Kenya Margaret Wanjiku Muthura Lecturer Human Resource Department, School of Business and Economics Karatina University, Kenya.
5. ABSORPTIVE CAPACITY AND KNOWLEDGE TRANSFER PROPENSITY : TOWARDS THE OBTAINING OF A COMPETITIVE ADVANTAGE, Vincent CHAUVET IAE, Aix-en-Provence Clos, Guiot - BP, 33 13540, PUYRICARD.
6. In Literacy for a Diverse Society: Perspectives, Practices, and Policies, edited by Elfrieda H. Hiebert, pp. 58-74. New York: Teachers College Press, 1991.
7. Bloom, A. (1987). The closing of the American mind: How higher education has failed democracy and impoverished the souls of today's students. New York: Simon & Schuster
8. Hirsch, E. D., Jr. (1986). Cultural literacy does not mean a list of works. ADE Bulletin, 84, 1-3.
9. Hirsch, E. D., Jr. (1988b). Cultural literacy: What every American needs to know (with an updated Appendix by E. D. Hirsch, Jr., J. Kett, & J. Trefil). New York: Vintage.
10. Ravitch, D., & Finn, C. E., Jr. (1987). What do our 17-year-olds know? A report on the first national assessment of history and literature. New York: Harper & Row.
11. At [www.Shpm.com/articles/cultural/culture.html](http://www.Shpm.com/articles/cultural/culture.html) readers can find a cultural competence checklist provided by Dr. Jean Chin
12. Communication and Cultural Competence: The Acquisition of Cultural Knowledge and Behavior, vol 7, issue 1, 11-2011 , Jianglong Wang Western Washington University, [jlwang@cc.wvu.edu](mailto:jlwang@cc.wvu.edu)
13. The Labor Market Impacts of Technological Change: From Unbridled Enthusiasm to Qualified Optimism to Vast Uncertainty, David Autor, MIT and NBER, May 24, 2022.

14. [www.culturalcompetence.ca/](http://www.culturalcompetence.ca/) This is the website of the Center for Organizational Cultural Competence, Canada, which provides training classes, books and other resources relating to issues of diversity and cultural competence.
15. In this short video, [www.youtube.com/watch?v=oAJ8ZqanZr4](http://www.youtube.com/watch?v=oAJ8ZqanZr4) a group of elementary students is shown acquiring a second language and the cultural knowledge of the language simultaneously.