

Establishing New Workstyles Through DX

— *NEC Digital Workplace* —

Masako Imanishi

Senior Manager
Digital Business Offering Division
NEC Corporation



1. Digital transformation of workstyles

A great reset of workstyles is now needed: from “work conduciveness” to “job satisfaction.” Aiming to create workstyles that enable employees to demonstrate higher performance, NEC is promoting new workstyles that combine real and online and pursuing workstyle DX to create workplaces that generate business.

NEC aims to create social value by “creating workstyles to enable everyone to play an active role,” “creating an exciting daily life for everyone,” and “creating experiences that go beyond time or distance.” “NEC Digital Workplace” contributes to making this a reality.

In the midst of the global scale digital shift of society triggered by the COVID-19 pandemic, companies are expected to have the flexibility to respond to changes in the way their employees work. I will talk about the challenges companies face to ensure flexibility and NEC’s services related to workstyle DX that will help companies address these challenges.

2. The global digital shift is changing the way people work.

With the unabated spread of COVID-19, there have been many instances around the world where the movement of people and things have been physically cut off due to restrictions on going out and moving around, lockdown of cities, and closure of borders.

Meanwhile, the volume of Internet traffic in Japan has increased by 49% compared to before the COVID-19 pandemic, and demand for semiconductors for data centers increased in the United States, pointing to the rapid digital shift of society.

This digital shift has brought about significant changes in individuals, society, and the economy.

Personal values have changed, while security and safety in the digital space have become imperative in society. Looking at the economy, we see cross-industry restructuring and global alliances taking place at an increasing pace. The digital shift will continue to bring about various changes around the world. In response, companies must have the flexibility to adapt to these changes. They can achieve this through the use of DX technologies such as AI, robots, and 5G.

The digital shift in society will also have a significant impact on the way individuals work. In her book “The Shift: The Future of Work is Already Here,” Linda Gratton, who also served on the advisory board for the U.K. government’s “100-year Life Plan,”

claims that there will be three changes in the way people work in 2025.

The first is a shift from generalist human resources with wide-ranging knowledge to “continuous specialists” with a high degree of expertise. Second, there will be a need for innovation in collaborations with colleagues and partners, rather than a solitary competition for individual achievements.

The third is a shift from the idea of “working for consumption” to the idea of “being passionate about work itself.” NEC has already taken steps to respond to these changes.

3. An environment that fosters “job satisfaction” as well as “work conduciveness”

NEC has been promoting various initiatives related to cultural transformation since 2018. Among these are office reforms, introduction of the super-flex system, and establishment of telework environment. As a result, our telework rate as of August 2021 has reached 85%, with 31,000 web meetings being held each day, pointing to major changes in the way our employees work. Results of employee surveys also show that the degree of workstyle satisfaction has improved significantly.

These initiatives, however, focus only on “work conduciveness,” pointing to the need to also delve on initiatives that enhance employee’s sense of “job satisfaction,” going forward. To create an environment in which “working itself becomes a wonderful experience,” we must carry out a shift in the work of employees into higher value-added work that robots and AI cannot perform.

By letting robots and AI, as much as possible, perform standardizable tasks, employees will be able to focus on advanced management decisions and creative work. This should enable employees to feel a sense of “job satisfaction” to a much higher degree. Therefore, it is imperative to analyze and utilize various data, not only technologies such as robots and AI.

From this perspective, NEC has launched the “NEC Digital Workplace” as a corporate infrastructure for proactively utilizing data in addition to technology. We will aim to solve social issues while enabling our employees to work autonomously to demonstrate their creativity and produce better results. The concept of “NEC Digital Workplace” is to serve as the foundation for becoming such a company. As the roadmap to achieve this, NEC hopes to establish workstyles that take health and

psychology into consideration, based on safety and security under the impact of COVID-19, and ultimately nurture a workplace where individuals and organizations can grow significantly.

4. Services that NEC provides to establish new workstyles

Among the services provided through NEC Digital Workplace, I will explain in particular those that are related to AI utilization, AI human resource development, data-driven management, and initiatives for human resource transformation.

■ AI Utilization

NEC Digital Assistant

With the uptake of telework among companies, sometimes detailed operations, like coordination of meetings, expense settlement procedures, and personnel-related inquiries, cannot be carried out smoothly, adversely affecting the performance of primary tasks.

The AI chatbot “NEC Digital Assistant” enables employees to make chat-based requests for AI to perform such detailed operations. Since AI learns the chat interactions, it can make optimal recommendations and give accurate answers in response to variously worded questions.

■ Development of AI Human Resources

NEC Academy for AI

After the COVID-19 pandemic, companies have been increasingly faced with the need to deal with curtailment of existing businesses and to implement further measures in response to digitalization and the shift to online activities. However, the lack of highly skilled professionals and know-how has become a bottleneck.

“NEC Academy for AI” is a service provided by NEC to give back to society by offering the training methodologies NEC has developed in the field of AI.

The service classifies the target personnel into four types: Coordinator, Consultant, Expert, and Architect, and develops programs for each type. One of the features of the service is that it does not only support the acquisition of knowledge, but also conducts follow up on dealing with practical barriers that may arise later.

■ Data-Driven Management

Workstyle Visualization & Reform Support Service

When implementing new workstyles, existing rules sometimes do not fit the reality. However, it is difficult to obtain internal consensus on measures based on individual perceptions and opinions. In such cases, supplementation with quantitative and objective data would be necessary.

In the “Workstyle Visualization & Reform Support Service,” experienced consultants conduct quantitative analysis of issues based on Office 365 log information to formulate a transformation roadmap. Flagging human resources considered as “high performers” enables analysis of their differences with other employees.

Utilization of Causal Analysis Technologies (AI, etc.)

While the evolution of technology has made it possible to collect a variety of data, utilizing large amounts of data often lead to problems related to the time required for analysis and variations in interpretation.

Using a causal analysis solution, for example, enables automatically generating and presenting causal structures after analyzing causal relationships, logic of things, and contextual

■ Figure 1: NEC Digital Workplace



structures hidden in data, which cannot be understood by looking at correlations alone.

This technology is attracting attention because it can be applied not only to the analysis of products and services, but also to the analysis of employee engagement.

Pattern Data Utilization Platform

As the life cycles of products and services are getting shorter, the traditional flow of introduction after a long design process can lead to delays in market entry.

To prevent these delays, NEC provides a “Pattern Data Utilization Platform” with only the minimum number of functions. The system can be expanded any time depending on the situation, enabling quick deployment of new businesses.

Business & Data-Driven Agile Partner Service

As mentioned above, all areas of business are being carried out at faster speeds, and corporate budgeting trends are changing.

The inability to speedily deploy business with conventional budget formulation, wherein budget is allocated from the previous fiscal year and used up in the following year, has become a problem. There are thus more companies raising funds in a more agile way.

The “Business & Data-Driven Agile Partner Service” was launched after examining what NEC can do as an IT vendor to address these customer issues.

The service organizes the KGIs/KPIs of the customer’s business and incorporates the specific functions that are actually necessary to improve the KPIs into the design, before proceeding with development. The process usually requires advanced IT and business skills for determining the functions necessary to achieve KPIs, but the service makes it possible to also provide the human

resources equipped with the necessary skills.

Initiatives to Transform Human Resources Support Service for Developing a Framework for Human Resource Transformation

As the demand for human resources is shifting from generalists to specialists, there is a pressing need for companies to take relevant human resource measures, such as securing digital talents and introducing job-based management.

In NEC’s organizational human resources assessment, experienced consultants study the client’s strategic systems and measures in the human resources domain, identifies the issues to address, and supports the creation of a roadmap for transformation. Clarifying the competencies that are essential to the job (= job description) through the service will enable maximizing existing human resources, as well as securing the needed external human resources.

5. NEC’s services help customers accelerate their workstyle DX and expand their business.

In addition to the services mentioned above, NEC is developing other services that leverage the strengths of various technologies, such as security, zero trust, cloud shift, and 5G.

Companies need to be able to respond quickly to the major changes taking place worldwide. NEC provides strategic consulting services for HR organizational transformation and other needs, as well as DX services that fully leverage AI and automation technologies supporting data-driven management. We are committed to contributing to the acceleration of workstyle DX and business expansion of our customers.

Figure 2: NEC Digital Workplace Offering Menu

Safe, secure telework <ul style="list-style-type: none"> ● Virtual Desktop ● Cloud-based Virtual Desktop 	Workplace with strong teamwork <ul style="list-style-type: none"> ● Support for workstyle visualization & reform ● Local 5G managed services ● Local 5G system integration
Telework Security/Zero Trust <ul style="list-style-type: none"> ● Security risk assessments ● Support for development of security policies ● Support for computer security incident response and procedures ● Support for maintenance of secure development/operation system and process ● Support for IoT system security design ● Cloud security platform ● Risk hunting ● Security risk management ● Cloud security measures for Microsoft 365 ● NEC Cyber Security Stadium Exercises 	Zero contact to prevent spread of infection and safeguard workplace <ul style="list-style-type: none"> ● Digital : identity verification web
Cloud shift <ul style="list-style-type: none"> ● Multi-cloud operations ● Public Cloud Connection ● Development support for cloud-based integrated ID management and planning policy 	Resource visibility and tracking <ul style="list-style-type: none"> ● Cloud model for body temperature measurement & face recognition and identification
Fusion of real and online <ul style="list-style-type: none"> ● Business & data-driven agile partner ● Support for standardization of sales procedures and planning introduction of sales force automation (SFA) 	Transparency and confidentiality in digital society <ul style="list-style-type: none"> ● Management strategy support based on data utilization ● Support for planning introduction of data utilization platform
	AI use and automation to focus on complex tasks <ul style="list-style-type: none"> ● NEC Academy for AI ● NEC digital assistant
	Diversification of services provided <ul style="list-style-type: none"> ● Contact center services (Genesys Cloud)
	Autonomy & diversity <ul style="list-style-type: none"> ● Development programs for human resources ● Support for workstyle transformation
	Physical/mental support <ul style="list-style-type: none"> ● Emotion detection