# Digital Governance Code

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経済産業省
Ministry of Economy, Trade and Industry

## Outline of Digital Governance Code

- There are emerging companies that achieve new growth by fundamentally changing their business models (DX: digital transformation) toward Society 5.0, where all elements are digitized. On the other hand, there are some cases in which existing businesses are disrupted by new competing business models in global competition (digital disruption).
- In such a changing era, it is important to do the following things in order to continuously improve enterprise value.
  1. Understand IT systems and business as a unit and draw up a strategy for new value creation.
  2. Prevent IT systems from becoming technical debt and systematically improve performance in order to ensure business sustainability.
  3. Make necessary changes across the organization, including an IT department, DX department, business department, and corporate planning department.

  Considering the fact that reform should be made to the organizational structure and culture of the entire company, as well as to medium- to long-term investment, management must be involved.
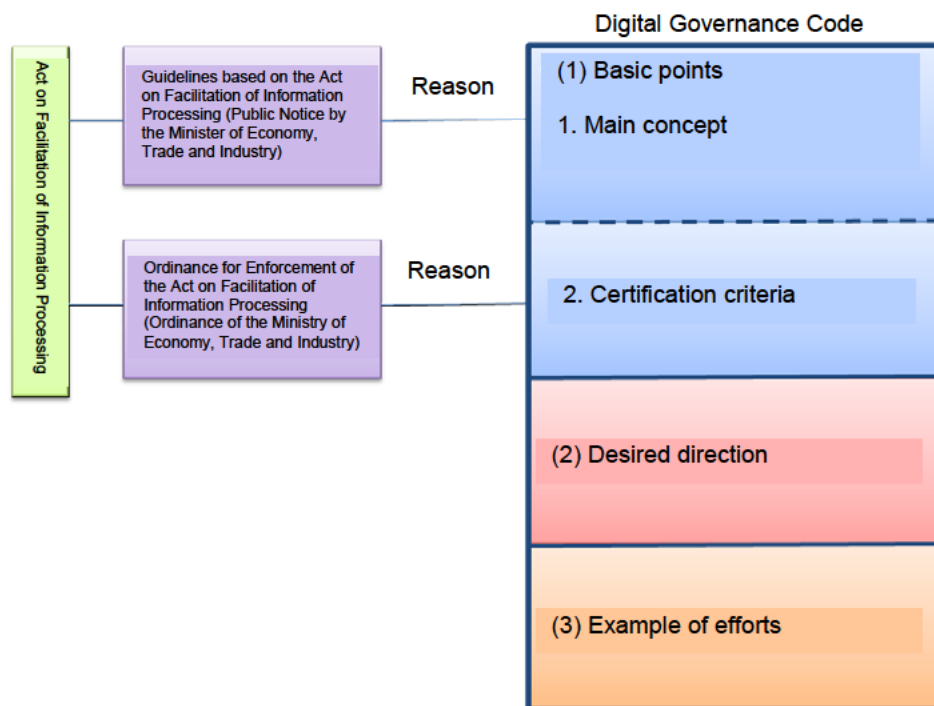- On the other hand, Japanese companies are slow to make full-scale DX efforts. Many companies are still hampered by legacy systems or are working to transform their business models, but are stalling at the entrance to transformation.
- Additionally, there is not sufficient dialogue between managements and stakeholders in which the company's ability to promote DX is considered to be an intangible asset.
- Against this background, we will summarize what managements should do to improve enterprise value in the form of a "Digital Governance Code". We encourage companies to independently and voluntarily promote DX efforts. At the same time, we will create an environment where funds, human resources, and business opportunities come together, especially for companies that regard dialogues with stakeholders as the main role of managements and are actively engaged in such dialogues.
- The targets are a wide range of general businesses, regardless of whether the company is listed or unlisted, large-sized or small- to medium-sized, a corporate business or one-person business. Additionally, the term "stakeholder" includes customers, investors, financial institutions, human resources such as engineers, business partners, partners who collaborate to create value by linking systems and data, local communities, and the like.

## Building Pillars of Digital Governance Code

> **1. Vision and business model**
>
> **2. Strategy**
>
> **2-1. Policy for organization establishment, human resources, and corporate culture**
>
> **2-2. Policy for arrangement of IT system/digital technology utilization environment**
>
> **3. Achievements and key performance indicators**
>
> **4. Governance system**

## Overall structure of Digital Governance Code

(1) Basic points comply with the Act on Facilitation of Information Processing.

**Digital Governance Code**

| Act on Facilitation of Information Processing | | | |
|---|---|---|---|
| Guidelines based on the Act on Facilitation of Information Processing (Public Notice by the Minister of Economy, Trade and Industry) | Reason | (1) Basic points<br><br>1. Main concept | |
| Ordinance for Enforcement of the Act on Facilitation of Information Processing (Ordinance of the Ministry of Economy, Trade and Industry) | Reason | 2. Certification criteria | |
| | | (2) Desired direction | |
| | | (3) Example of efforts | |

\* For details about the certification (Digital Transformation Certification) based on the Act on Facilitation of Information Processing, refer to the following site:

https://www.ipa.go.jp/ikc/info/dxcp.html **(Only in Japanese)**

## 1. Vision and business model

(1) Basic points

1. Main concept

> ● A company must <u>understand its business and IT system as a unit, develop a management vision in consideration of the effects (risks/opportunities) on the company caused by changes in society and the competitive environment due to digital technologies, design a business model</u> for realizing the management vision, and <u>show this business model to its stakeholders as a value creation story</u>.

\* Presenting information to stakeholders does not necessarily mean that companies have to share all information internally and externally. In order to improve enterprise value, companies need to organize and provide the information necessary for conducting dialogues to gain the understanding of stakeholders and the cooperation of and collaboration with stakeholders. (Same for 2. and after)

\* There are various ways to have dialogues with stakeholders in addition to widely disclosing information, such as individually having dialogues. However, in today's uncertain and fast-changing society, companies are expected to consider relationships with a wide range of stakeholders or society as a whole, and to widely disclose information to start dialogues.

\* A business model is a mechanism in which a company provides value to customers and society and connects it to the sustainable improvement of enterprise value by conducting business. Specifically, it means a sequence of steps in which tangible and intangible management resources are invested to create products and services and provide them to customers at a price that reflects their added value. However, in dialogues with stakeholders, it is not always necessary to present such a mechanism in detail, but it is important to provide important elements for the company's business model as a "value creation story". In particular, as society changes due to digital technologies, companies are required to indicate their directions for the future such as how to change or enhance the "value creation story".

2. Certification criteria

> ● <u>The management vision and the direction of the business model</u> in consideration of the effects caused by changes in society and competitive environment due to the digital technology are disclosed.

\* Judgment on certification is based on the matters described in institution-approved public documents (this means board approval if the company has a board of directors), or the matters created in accordance with institution-approved policies and described in public documents.

(2) Desired direction
- The management envisions the clear scenarios of the effects (opportunities and threats) of digitalization on its business.
- IT/digital strategy is listed as one of the pillars of the management vision.
- The strengths and weaknesses of existing business models are clarified, and the IT/digital strategy and measures contribute greatly to their enhancement and improvement.
- The creation of new business models in accordance with business risk scenarios is supported by the IT/digital strategy.
- Sustainable strengths are realized by IT and digital approaches compared to other companies.
- Various forms of collaborative creation (completely different partnerships from before that are based on the provision of value from a consumer's perspective and the resolution of social issues, and go beyond mere corporate partnerships or business partnerships) are achieved and innovative value is created by connecting various entities with digital technologies and sharing data and knowledge.

(3) Example of efforts
- Set forth a vision for promoting DX in the management policy and management plan (such as a medium-term management plan or integrated report) in consideration of the effects (risks/opportunities) on the company caused by changes in society and the competitive environment due to digital technologies.
- Design appropriate business models in order to realize the vision for promoting DX.
- Lead inter-enterprise collaboration such as ecosystems in DX promotion in order to realize business models.

## 2. Strategy

**(1) Basic points**

**1. Main concept**

> ● A company must <u>develop strategies of utilizing digital technologies</u> as measures to realize the target business model in consideration of changes in society and the competitive environment, and show these strategies to stakeholders.

**2. Certification criteria**

> ● <u>Strategies for utilizing digital technologies are disclosed</u> as measures to realize the business model designed in consideration of the effects caused by changes in society and the competitive environment due to digital technologies.

\* Judgment on certification is based on the matters described in institution-approved public documents (this means board approval if the company has a board of directors), or the matters created in accordance with institution-approved policies and described in public documents.

**(2) Desired direction**

- Strategies are established as a transformation scenario that allows the management vision to be realized.
- Reasonable and purposeful budget allocations are made in the IT/digital strategy and measures portfolio.
- Data is utilized as one of the important management assets.

**(3) Example of efforts**

- Strategies for promoting DX are brought into shape.
- In the management strategy, efforts (improvement of satisfaction by changing customer relationships, marketing, existing products and services, operations, and the like) to transform existing businesses by utilizing data and digital technologies are specified, and the efforts are implemented and show results.
- In the management strategy, the creation of new businesses by utilizing data and digital technologies is specified, and efforts for it are implemented and show results.
- There is a mechanism (system) for grasping the business conditions and business operation conditions, and management and business decisions are made based on data obtained from the system.

## 2-1. Policy for organization establishment, human resources, and corporate culture

(1) Basic points

1. Main concept

> ● A company must <u>build a framework required</u> for promoting strategies that utilize digital technologies, and show stakeholders a vision for organizational design and operation. At that time, it is also necessary to <u>consider securing and training human resources and building relationships and collaboration with external organizations as important factors</u>.

2. Certification criteria

> ● In the strategies that utilize digital technologies, matters related to the system and organization required for promoting the strategies are specifically specified.

> \* Judgment on certification is based on the matters described in institution-approved public documents (this means board approval if the company has a board of directors), or the matters created in accordance with institution-approved policies and described in public documents.

(2) Desired direction

- Roles and authorities are specified so that each person (from management to site staff) can move independently in order to promote the IT/digital strategies.
- The company has the capability (organizational ability) to acquire knowledge, experiences, skills, and ideas including external resources, and is able to move toward commercialization while utilizing the capability.
- The definition of required IT/digital human resources and the personnel system for acquiring and training/evaluating them are established.
- The current gap in the acquisition and development of human resources and the measures to make up for it are clarified.
- Measures are taken to improve the IT/digital literacy of all employees.
- Efforts to transform organizational culture (such as fluidity of employment, diversity of human resources, decision-making democratization, and a culture that permits failure) are implemented.

(3) Example of efforts

- A person in charge of DX promotion (role as Chief Digital Officer), CTO (general manager for science & technology and research & development, Chief Technology Officer), CIO (general manager for IT, Chief Information Officer), and a person in charge of data (Chief Data Officer) are organizationally positioned, clearly defined in terms of their missions and roles, and appointed (they may also have other roles).

- Digital-related skill items for management (such as managers, directors, executive officers) are created and disclosed to stakeholders through a skill matrix.
- Top management gets information about the latest digital technologies and new use cases.
- A dedicated team to promote DX is organizationally positioned.
- The types of human resources required to support DX promotion are clarified, and efforts to secure those human resources are implemented (systematic human resource development, mid-career recruitment, temporary transfer from outside, personnel transfers between business and IT departments).
- Unlike traditional ordering relationships in the IT field, external resources are used to promote DX through approaches such as open innovation, the utilization of external advisors and partners, and collaboration with startup companies.
- A certain amount or certain ratio of money is secured as a budget for promoting DX. The budget is managed separately from other IT budgets and is not affected by changes in the IT budgets.
- There is a system (such as education and personnel evaluation) to support all employees to freely utilize digital technologies and transform their own operations.
- In order to promote DX, there is a system and mechanism to encourage new challenges and support activities aimed at creating a mindset of continuously and actively trying to take on challenges.

## 2-2. Policy for arrangement of IT system/digital technology utilization environment

(1) Basic points

1. Main concept

> ● A company must clarify projects, management policies, <u>technologies, standards, architectures, operations, and investment plans</u> <u>aimed at arranging the IT system/digital technology utilization environment</u> required for promoting strategies for utilizing digital technologies, and show these to stakeholders.

2. Certification criteria

> ● In the strategies of utilizing digital technologies, measures for arranging the IT system/digital technology utilization environment are specifically indicated.

\* Judgment on certification is based on the matters described in institution-approved public documents (this means board approval if the company has a board of directors), or the matters created in accordance with institution-approved policies and described in public documents.

(2) Desired direction
- Optimization of legacy systems (technical debt) is achieved (optimization of comprehensive debt, not just IT debt).
- A mechanism for introducing advanced technologies and conducting independent verification for them is established.
- The IT system/digital technology utilization environment is established as a result of not only efforts that are dependent on each person in charge, but also of the improvement of developer experience and governance.

(3) Example of efforts
- In order to be able to rapidly respond to changes in the business environment, the existing information system and data can smoothly and quickly interface with newly introduced latest digital technologies, and existing data can be utilized.
- In order to prevent the company-wide information system from interfering with the realization of the strategies, the current conditions of information assets are periodically analyzed and evaluated based on the business environment and usage, and issues are clarified.
- Based on the results of analysis and evaluation conducted as described above, necessary measures are taken so as not to cause technical debt (legacy systems). Alternatively, a system (organization and role assignment) for taking them is in place.

- There is a mechanism to ensure company-wide data consistency and avoid complications and black boxes due to individual optimization for each business division in order to optimize the company-wide information system.

### 3. Achievements and key performance indicators

(1) Basic points

1. Main concept

> ● A company must <u>define indicators for measuring the achievement of strategies</u> for utilizing digital technologies and show stakeholders self-assessments of performance based on the indicators.

2. Certification criteria

> ● <u>Indicators for measuring the achievement of strategies</u> of utilizing digital technologies are disclosed.

\* Judgment on certification is based on the matters described in the public documents.

\* Indicators include (1) indicators related to enterprise value creation (financial indicators that are to be used for goal setting by companies or are to be strategically monitored), (2) indicators for evaluating effects achieved by implementing strategies, and (3) indicators for evaluating the progress of the strategic plan. Certification requires that the indicators in (2) and (3) are disclosed, or that the indicators in (1) are disclosed and the approach to associating strategic efforts with the indicators in (1) is clarified.

\* Indicators also include qualitative indicators that can be used to determine achievement in addition to quantitative indicators. It is desirable that target values and benchmarks are set for indicators, but they are not essential conditions for certification. Additionally, in principle, the current values must be disclosed, but exceptions are made when there is no need to disclose the current value, such as a progress indicator for strategies to be implemented.

(2) Desired direction
- Achievement of the IT/digital strategies and measures is evaluated by business KPIs. In addition, target values are set for the KPIs.
- The rationale for how the above KPIs ultimately boil down to financial results (KGIs) is clear.
- Financial results are actually achieved.
- Efforts related to ESG/SDGs are implemented through the IT/digital strategies, and results are achieved.

(3) Example of efforts
- KPIs are set for all of the efforts being implemented and linked with KGIs (final financial performance indicators).
- KPIs related to the improvement of enterprise value are disclosed to stakeholders.
- Indicators (quantitative and qualitative) are set and evaluated to determine whether company transformation adaptable to the digital age is achieved.

## 4. Governance system

(1) Basic points

1. Main concept

> - <u>Management</u> must <u>exercise leadership</u> when implementing strategies of utilizing digital technologies, such as <u>providing information to stakeholders</u>.
> - <u>Management must cooperate with the business department (person in charge) and IT system department (person in charge) to understand and analyze issues based on trends in digital technologies and the current conditions of the company's IT system, and reflect them in the review of strategies</u>. Additionally, management must take appropriate measures against cybersecurity risks, which accompany the implementation of the project.
>
> [If the company has a board of directors]
> - A board of directors must properly fulfill its roles and obligations to indicate the management vision and the direction of strategies of utilizing digital technologies, and properly supervise management's efforts to achieve them.

2. Certification criteria

> - The management actively sends messages to external parties about the management vision and strategies for utilizing digital technologies.

\* Check public documents in which messages are provided with the name of the management.

> - Under the leadership of the management, issues are recognized based on the trends of digital technologies and the current conditions of the company's IT system.

\* Check whether a briefing paper showing that self-diagnosis has been performed by using DX promotion indices has been submitted.

> - Cybersecurity measures, which are the prerequisites for implementing the strategies, are promoted.

\* Check whether a briefing paper showing that measures have been taken based on the cybersecurity management guideline, and security audits (including internal audits) have been conducted has been submitted.

\* For small- to medium-sized enterprises, it is also acceptable to check if they have made a self-declaration (two stars) based on the SECURITY ACTION system.

## (2) Desired direction

- Management communicates the realization of the vision to stakeholders inside and outside the company in its own words, and commits to results.
- The progress and results of management/business-level strategies can be immediately understood.
- When strategies are changed or adjusted, IT/digital strategies and measures are immediately corrected as necessary.
- IT/digital security measures that are consistent with enterprise-level risk management, personal information protection measures, and system failure countermeasures are implemented in all areas such as organization, standards, and technology.

## (3) Example of efforts

- Top management sends a message about DX promotion to improve enterprise value through management policies, plans, and media.
- Top management and the person in charge of the DX promotion department (such as the CDO, CTO, CIO, and/or CDXO) communicate regularly.
- Top management cooperates with the business department and IT system department to understand and analyze issues based on trends in digital technologies and the current conditions of the company's IT system, and reflect them in the review of strategies.
- DX promotion to improve enterprise value is reported upon and discussed at meetings of the board of directors and at management meetings.
- The management recognizes cybersecurity risks to be a source of risk to management, forms a governance system such as appointing a responsible person (such as CISO), and secures resources (budget, human resources) for cybersecurity measures.
- Information to be protected from cybersecurity risks is identified, plans (systematic and human) for handling the risks are developed, and a defense mechanism and system are established.
- As an effort to develop a system that can handle cybersecurity risks, the company encourages the acquisition of qualifications (RISS: Registered Information Security Specialist).
- The company considers cybersecurity risks to be a source of risk to management, and discloses them by describing them in cybersecurity reports, CSR reports, sustainability reports, and securities reports according to the character and degree of risks based on cybersecurity measures.