Research on the Introduction of Agile Development in Administrative Agencies Summary Report

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[Purpose] In today's world, administrative agencies are required to offer user-centered administrative services and respond to rapid changes in the environment. Against this background, this report lists and organizes practical issues in the increasingly important field of agile development and presents solutions to them.

[Method] (1) Interviews with administrative agencies, practitioners, and experts who have experience in agile development, (2) Examination by a study group comprised of the government and member companies, (3) A literature survey on agile development methods

[Results] Following the interviews and discussions at the study group, "Issues and Approaches for Solutions" and concrete solutions that are considered to be useful in the actual practice of projects are presented below

| Category | Issue (How government officials feel) | Approaches for Solution |
|-------------------------|--|--|
| Scope of Application | We cannot decide on the scope of application for agile development | Present the concept of dividing the scope of application for agile development according to the service development phase/scope Review the necessity and appropriateness of introducing agile development from a specialist perspective, and verbalize the significance of agile development Share examples of agile development practice in government and decisions taken on application |
| Project planning | We are concerned about whether the deliverables will meet expectations when the specifications have not been clearly defined in advance | Clarify the concept of quality in agile development (create while checking step-by-step, finally define in the PO)/Share examples of how to describe the deliverables in the specifications |
| | We are unable to secure external human resources and digital services in a timely manner | Anticipate the needs for human resources and digital services throughout the organization and secure throughout the year/Prepare a system for quick procurement |
| Human resources | Administrative staff cannot properly fulfill their required role as a product owner | Staff with knowledge and experience in agile development and information systems should assist and support product owners Implement training programs for product owner candidates and managers |
| | We find it hard to hire talented private sector personnel with experience and skills in agile development | Share job description templates for project-based fixed-term employment/Clarify positioning as a career Create contact points with human resources suitable for agile development |
| Organization | We don't know how to define the role of the product owner in the administrative organization or how to manage the project | Clarify the role of the product owner played by administrative staff Establish a system to carry out the functions of the product owner as a team |
| | Every time the direction of the requirements are changed in a short period of time and repeatedly, we must still follow the consensus process within the organization, and we lose speed | • Give decision-making authority to operational level staff members as much as possible, and achieve both accurate and smooth coordination with related departments by obtaining commitment from managers/build a system that is suitable for each phase |
| | Since we have to rely on outsourcing for many of the roles required for agile development, it is difficult to accumulate practical knowledge in the administrative agency | As a COE (Center of Excellence), the specialized organization for digital services collects, accumulates, and shares knowledge on topics such as composition, know-how, lessons learned, and case studies, and supports the efforts of each agency |
| Procurement | We don't know how to define agile development requirements in procurement specifications when making contracts | Use different requirements definition methods according to the procurement phase (1) For procurement where the requirements can be defined by man-hours: Only define the number of sprints for development, the span of iterations, and the estimated man-hours (2) For procurement that does not require deliverable requirements to be defined: For example, implement MVP identification/verification as a research project Use of quasi-outsourcing contracts |
| | We find it hard to evaluate and select suppliers for work related to agile development | Build a platform or network where information such as case studies/documents, know-how/lessons learned from application of agile development can be shared among persons in charge Procurement assistance and support by personnel with knowledge and experience in agile development and information systems |
| Contracts | For outsourcing contracts, administrative staff are restricted from communicating closely with development team members | Clarify and share the administrative communication methods to avoid the risk of fraudulent contracts Procure external resources through worker dispatch contracts |

[Conclusion] • Agile development is not an all-purpose tool, and it is important to identify the phases and areas where it should be used. Project composition and management methods should be refined and made more sophisticated through the accumulation of case studies

• The success or failure of agile development depends largely on the competence of the team members. It is important to assign experts who can provide support, give participants practical knowledge, and create the proper project environment