

Proposal on Library-Centered Software Process Assessment

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This paper proposes a framework for Software Process Assessment and Improvement (SPA) and its performance measurement. The main purpose of this framework is to make SPA-related technologies adaptable to the features of an assessed organization such as organizational goals, future products, etc. The key to enact this framework is construction of SPA libraries containing various technologies for assessing, improving, and measuring software processes. Then, we can compose a specific SPA method adapted to the assessed organization by selecting and customizing technologies included in the libraries. This concept has been developed through more than 10 years of software process improvement experience in our company. In this paper, we first introduce our software process-related activities. Next we describe requirements to SPA that we perceived through the experience. Lastly, the proposed framework is explained.

Software Process Assessment (SPA) is an effective method used to understand software organizations' process quality and to identify issues to be resolved to achieve higher maturity. During the past 10 years, various SPA methods have been developed, proposed, and adopted. The first one was proposed by W. Humphrey, Software Engineering Institute at Carnegie Mellon University in 1987, called Process Maturity Model (PMM) [1, 2]. Then came the Capability Maturity Model® (CMM®) Ver.1.1, the Software Process Improvement and Capability Determination (SPICE), Trillium, and others [3, 4, 5]. Recently, a series of international standards for SPA have been developed by International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) JTC1 SC7/WG10 and published as technical reports in 1998 [6].

Since 1990 various SPA-related activities have been conducted at NEC. In 1990 the SPA Working Group was organized to study the PMM. Core members studied *Managing the Software Process* [2] translated into Japanese. Then in 1992, the working group developed a SPA guidebook that contains questions, criteria, and guidelines for a PMM-based assessment [7]. In 1997 the base method was changed from the PMM to the CMM 1.1, and an overall revision was completed. In parallel, the working group members promoted SPA and acted as assessors to gain experience.

Our research group members have joined and led the SPA-working group activities. Additionally, to seek a more effective and efficient SPA method suited to NEC's organizational properties, we

customized and applied several methods apart from the working group's activities [8, 9]. We also developed and applied original SPA methods, which are called SPICE9000 and Software Lifecycle Processes (SLCP)-based SPA. These incorporate the technical trend of SPA, or continuous model-based assessment, and an in-house opinion, i.e., synchronization of SPA and ISO 9000 internal audit. Also several tools have been developed for analyzing assessment data and enabling remote assessment using the network.

To date more than 30 in-house organizations have been assessed using various methods. More than 50 percent have taken multiple assessments periodically, and SPA has been getting diffused. Table 1 shows the history of SPA application that our research group members joined as lead assessors.

Original Methods and Tools

Here we introduce two methods and one tool that we originally developed.

SPICE9000: The SPICE9000 makes it possible to conduct a SPA and an ISO 9000 internal audit simultaneously. SPICE9000 is an integration of the first version of SPICE and ISO 9001 [10]. The assessment framework, the PMM, and the CMM are succeeded by SPICE9000. Relationships between elementary provisions of ISO9001 and practices of SPICE are clarified in Table 2. By using the relationship table both process assessment results such as capability level and ISO 9001 conformance can be obtained from assessment data.

SLCP-Based SPA: There was a discussion whether international standard software process (i.e., ISO/IEC 12207: SLCP) is or is not applicable to SPA in ISO/IEC JTC1 SC7/WG10, which is in charge of standardization of SPA. SLCP-based SPA answers this question and determines its possibilities. The standardized process model is also expected to suit broader types of organizations. SLCP-based SPA has a process model in compliance with the SLCP. To compose an assessment

Table 1: *History of SPA Application*

Org. ID	Date	SPA Method Applied	# of Question	Assessment Style	# of Project	Effort (hours/project)
Org. A	Sep.'95	PMM	85	Only Self	7	3
Org. B	Oct.'95	PMM	85	Only Self	7	3
	March'97	SLCP-Based (+ PMM)	196	Only Self	8	4
Org. C	Nov.'95	SPICE	1111	Only Self	2	2.5
	May '96	SPICE9000	1117	Only Self	1	2.5
	March'97	SLCP-Based (Detailed)	363	Self + Interview	3	2
Org. D	Feb.'96	PMM	85	Self + Interview	4	Self: 3 Int: 4
	March'98	PMM	85	Self + Interview	4	Self: 3 Int: 4
Org. E	Feb.'96	SPICE	1111	Only self	2	3
Org. F	April'96	CMM	124	Self + Interview	5	Self: 3 Int: 4
	April'98	CMM*	131	Self + Interview	2	Self: 3 Int: 3.5
Org. G	Sep.'96	CMM	124	Self + Interview	1	Self: 2 Int: 5
Org. H	May '97	SLCP-Based	163	Self + Interview	7	Self: 3 Int: 3.5
Org. I	Sep.'97	SLCP-Based	163	Self + Interview	7	Self: 3 Int: 6
Org. J	Nov.'97	CMM	124	Self + Interview	1	Self: 3 Int: 2.5
Org. K	March'98	SLCP-Based	163	Self + Interview	9	Self: 3 Int: 4
Org. L	April'98	CMM*	131	Self + Interview	5	Self: 2 Int: 3
Org. M	Oct.'98	CMM*	147	Self + Interview	3	Self: 2 Int: 4

*: Questionnaire is customized to suit the organization.

SPA Method	# of levels	Type of model	# of rating levels*	# of questions
PMM	5	Staged	2	85
CMM	5	Staged	2	124
SPICE	6	Continuous	2 or 4	1111
SPICE9000	6	Continuous	2 or 4	1117
SLCP-based	6	Intermediate	4	363

* 2: Yes or NO
4: Fully, Largely, Partially, or Not Adequate

Table 2: Features of SPA Methods

model from SLCP, the definition of tasks in SLCP is decomposed into sub-tasks and linked to capability levels.

Web-Based SPA Support Tool: A support tool for self-assessment was developed to conduct SPA efficiently [11]. This tool works on the World Wide Web and is mainly used for self-assessment, which is to be done prior to on-site interview. Participants can obtain their self-assessment results interactively in the form of a table or graph.

SPA Requirements

Various methods we applied are characterized in Table 2. Generally SPA methods are categorized into three types by the model shown in Figure 1. We gathered and analyzed assessments then drafted a report of the results for the organizations using different types of methods. Through these experiences we realized the benefits of each SPA method. However, we are still unable to decide which is the best method. One conclusion is that which SPA method is used is not as important as knowing how to use the selected method. We also concluded that the same requirements for conducting successful assessments are

common to all SPA methods. These common requirements of assessment procedure, method, and tool are listed below.

Procedure:

Self - Assessment

- Specific questions should be developed prior to the interview to obtain consistently interpreted process features. If not, assessment data will not be reliable.
- In order to reduce the assessment load, there should not be too many questions. It is helpful to categorize questions by process domain, and ask each process domain's owners to answer the questions related to their domain.

On-Site Assessment

- Reserve a minimum of two hours for the interview to obtain a detailed process status, but do not go beyond one full day of questioning.
- If there are too many questions, they should be prioritized in order of importance, highest ranking questions listed first. Otherwise, they should be categorized by process domain, and all persons in charge of a process domain should be interviewed.
- A surveillance and interview of generic project's status during on-site assess-

ment is helpful to obtain the information to prioritize questions and to draft process improvement proposals.

- Before interviewing, review documentation such as the development plan, progress report, and specifications to flag any interview questions and allow quick retrieval of any documents in question during the interview.

Reporting

- An assessment report is composed of two parts. One part can be drafted systematically, e.g., assessment data analysis. The other part is a descrip-

tion of improvement proposals.

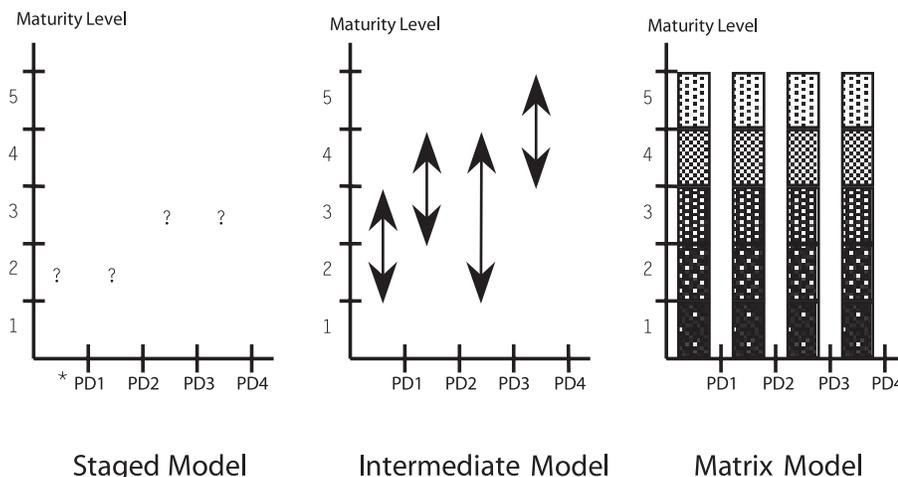
- Support tools to analyze and visualize assessment data are useful for the former, and libraries to store and share assessment know-how aid the latter.

Method

- There is no best SPA method. Methods should be easy to customize for each organizations' goals, needs, or properties.
- SPA methods should be usable for both self-assessment and on-site assessment. Also, it is desirable that the collected data are compatible between methods.
- The number of questions for one interview should be no more than 150, ideally less than 100. The wider coverage and the finer granularity, the better, but it makes a greater number of questions. They should be balanced.
- A well-structured questionnaire makes it easier to find correlations and get answers with fewer questions. It takes effect on saving interview time.
- The role or position of the interviewee should be clarified to get reliable and correct answers.
- A roadmap along with milestones for process improvement should be provided that prioritizes the established issues.
- A means to indicate the effects of process assessment and improvement quantitatively and objectively should be provided.
- The relationship between product quality or project results and process quality should be clarified based on analysis of project data and assessment results. It is helpful to prioritize the process improvement actions to be taken.

Figure 1: Types of Assessment Frameworks

(*PD= Process Domain)



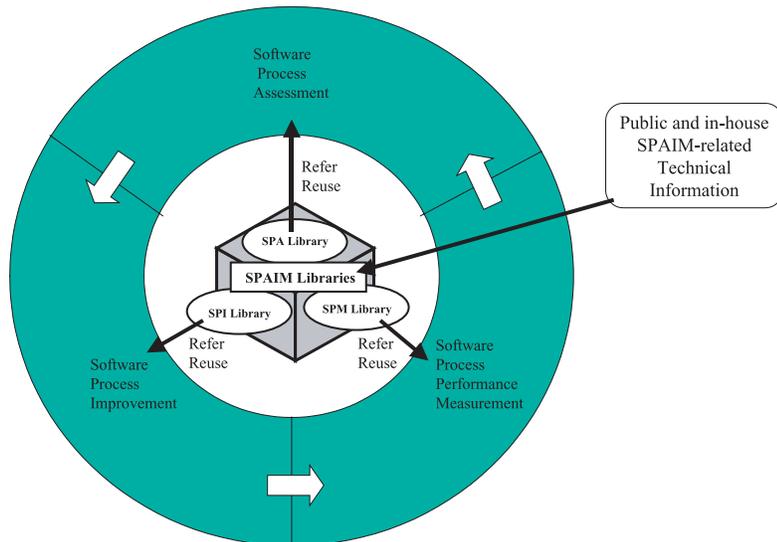


Figure 1: SPAIM Framework

Support Tool

To conduct SPA effectively and efficiently, supporting tools are necessary. Required functions are as follow:

- Assessment data collection and analysis.
- On-line assessment support.
- Analysis and visualization of assessment data.
- Database of historical SPA data.
- (Semi-) Automatic assessment-report generation.
- Library of knowledge and experience on process assessment and improvement.

Reviewing the requirements above and looking back to the actual assessment situation, we concluded that the urgent and important requirements are summarized into the following:

- Adaptability: The possibility to adapt SPA methods to organizational needs, goals, and properties.
- Concreteness: The possibility to reach effective and concrete solutions based on assessment results.
- Validity: The possibility to validate the effects of process assessment and improvement activities.

We propose a framework that satisfies the above requirements hereafter.

The Framework

The SPA objectives differ by organizations, so one assessment method cannot suit all types of organizations. Therefore, it should offer selection and customization.

Also, effective and concrete proposed solutions must be based on the assessment results in order to make them meaningful. Furthermore, the effects of process assessment and improvement must be indicated quantitatively and validated objectively. Here, we propose a software process assessment and improvement (SPAIM) framework to resolve these issues. A key strategy to implement the above requirements is to construct three libraries, i.e., one each for SPA, software process improvement (SPI), and software process performance measurement (SPM).

Overview of SPAIM Framework

An image of SPAIM framework shown in Figure 1 shows that technical information for SPA, SPI, and SPM are stored in SPAIM libraries. They are researched inside and outside of the organization and acquired. Then, they are reorganized into the structure shown in Figure 2 and stored in the libraries as record. When a new record is stored, consistency of terms and wording between records are coordinated to reach required records successfully.

Before starting SPA, organizational requirements for it are clarified. Then, process assessment methods and tools suitable for the organization are selected from the SPA library and appropriately customized. Any customized methods are added into the library for preparing for the next assessment, or for reusing it to the same type of organizations.

When an assessment has been completed, the data obtained is analyzed, and some primary process issues are identified.

Practices, methods, and tools useful in resolving the issues are then extracted from the SPI library, and their concrete solutions are settled. If new improvement methods are developed, they are added into the library.

On the other hand, metrics used to measure the effects of process improvement are either developed new or selected from the SPM library accordingly considering the organizational goals for SPA and SPI. If new metrics are developed, they are added into the library for reuse. Selection of metrics and data collection should begin as early as possible.

In order to validate the effects of process improvement, it is necessary to measure not only the performance of improved processes but also that of current processes. Data required for calculating metrics should be continuously collected in parallel with process assessment and improvement. The collected data is aggregated into measures. Measures on current and improved process are compared, and the effects of SPI are validated objectively.

Architecture of SPAIM Libraries

Figure 2 shows the architecture of the SPAIM libraries, which contain information useful for SPA, SPI, and SPM. These libraries can be implemented as well-structured electronic files according to good naming convention or hyper-linked files. Structures of the SPAIM libraries follow.

Figure 2: Architecture of SPAIM Libraries

SPAIM Libraries

- SPA Library
 - NAME
 - PROCESS CAPABILITY MODEL
 - PROCESS MODEL
 - RULE
 - QUESTIONNAIRE
 - TOOL
 - REFERENCE
- SPI Library
 - NAME
 - TYPE
 - DOMAIN
 - EXPLANATION
 - REFERENCE
- SPM Library
 - NAME
 - DOMAIN
 - FORMULA
 - EXPRESSION
 - EXPLANATION
 - REFERENCE

SPA Library

Generally, the SPA method is composed of a SPA model and rules. A SPA model is composed of a process capability model and a process model. The former is a model that breaks down process quality into ordered capability levels, and further divides each level into features. For example, the process capability model of CMM Ver.1.1 is composed of five capability levels and five common features. The latter is a model breaking down whole software processes into several classes of process domains and work elements, e.g., the process model of CMM Ver.1.1 is composed of 18 key process areas and 316 key practices. The SPA method also includes some assessment rules.

There is never one best SPA method suited to all the assessment cases. This library contains various SPA methods, such as CMM Ver.1.1, SPICE and SLCP-based SPA, and also a method customized for an organization. This library makes it possible to select a SPA method from the variations. Elements of each method are structured and stored in this library. The following is the template to store this type of library information:

Name: The title of the SPA method such as CMM Ver.1.1 and SPICE are described. In organizationally customized methods, the organization name should be attached with the method name such as CMM Ver.1.1 for ABC Division.

Process Capability Model: Sets of identifier, title, and definition of process capability model components are described. Identifiers are assigned as showing classes of components. In the case of SPICE Ver.1.0, there are three classes of components, i.e., capability level, common feature, and generic practice.

Process Model: Sets of identifier, title, and definition of process model components are described. Identifiers are assigned as showing classes of components. In the case of SPICE Ver.1.0, there are three classes of components, i.e., process category, process, and base practice.

Rule: Assessment rules are described such as the rating for each question and a decision of process capability. In the case of CMM Ver.1.1, two levels of rating, i.e., Yes, No, Does not apply, or Don't know is

adopted.

Questionnaire: A series of questions to be used for assessment are described.

Tool: Information of tools to be used for assessment is described. Assessment data collection, analysis, and visualization tools are necessary for each method. Data structure and algorithm of the tools depend on the model and rules of the method.

Reference: References related to the method are listed. They may be books, papers, reports, and Web addresses, which detail the method itself, its application results, and so on. Also, assessment reports using the method should be included.

*“...the effects of
process assessment
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validated objectively.”*

SPI Library

A SPI library contains technical information to be used for the process improvement proposal, plan, and action. They are categorized into practice, method, and tool then stored with the same format in the library. Here, practice is a series of tasks to do some software-related job well. It can be expressed by workflow in conjunction with some additional information such as examples of standards, plans, forms, and checklists. Method and tool may be a research result, commercial product, or originally developed product. Process domain, on which a practice, method, or tool will have an effect, is attached with each record. This makes it possible to extract useful formats for resolving an identified process issue. By using this library, a more concrete process improvement proposal is possible. The following is the template to store information in this library:

Name: Title of practice, method, and tool for SPI such as Project Planning Procedure, COCOMO, and MS-Project

are described. They should be uniquely identifiable. To do so, it may be necessary to attach an organization name or developer name such as Project Planning Procedure of XYZ Corporation.

Type: Type of the information is clarified, i.e., practice, method, or tool. To make it more specific, additional information like the technology area should be attached, for example Method for Cost Estimation.

Domain: Process domain, which is improved by the practice method, and tool, is described as Software Project Planning and Software Configuration Management.

Explanation: Description, figure, and formula that explain the practice, method, or tool are described. For example, workflow may explain practices well. A literal explanation with figures and formulas may suit some methods. Basic functions and operational environment should be used to explain least used tools.

Reference: References related to the practice, method, and tool are listed. They may be books, papers, reports, and Web sites, which address the practice, method, or tool itself, its application results, and so on. In case of tools, contact points of developers may be useful. Also, assessment reports using the practice, method, and tool should be included.

SPM Library

A SPM library contains metrics to be used for measuring process performance. Typically, it is measured from the view of quality, cost, delivery, and customer satisfaction, but not limited to these. By comparing process performances before and after process improvement, effects of the improvement can be validated. Also, metrics can be used to set goals for a series of SPA and SPI activities in conjunction with the target values. Furthermore, action items for process improvement can be prioritized by the strength of relevance to the achievement of goals. The following is the template to store information in this library:

Name: Title of metric such as Mean Time Between Failure and Average Cost Overrun, is described. As for metrics, there may be different metrics with the same name, e.g., fault densities with different size counts. This is not a problem because users will select a suitable one for his or her organization from the alternatives.

Domain: Process domain and/or type of process performance, which is evaluated by the metric, is described. There may be multiple domains to be evaluated with one metric. For example, in case of “Detected Fault Density of Design Review,” both “Quality of Designing Work” and “Efficiency of Design Review” will be listed.

Formula: Formula of metric is described.

Explanation: This includes but is not limited to definition of data elements used in the formula, a means to collect the data, and interpretation of calculated values. It should be described precisely so as to be able to obtain an identical value independent of evaluators.

Expression: Visual expressions of a set of measured values using the metric are illustrated. Typical expressions may be bar chart, reader chart, and line chart.

Reference: References related to the metric are listed. They may be books, papers, reports, and Web sites, which address the metric itself, its application results, and so on. Also, assessment reports using the metric should be included.

SPA and SPI

Requirements for SPA and SPI are specified and SPA method and SPM methods are settled. Requirements are identified from the following viewpoints.

Purpose: Purpose of SPA and SPI is defined. Typical purposes are to grasp current capability level, to identify and resolve issues on processes, and to improve process capability performance. There may be additional purposes such as to evaluate the effect of ISO 9001 certification.

Restriction: Limitations of resource assessment are specified. Resources involve personnel, funds, and time.

Scope: Scope of SPA and SPI is specified. Organizational domain, process domain, and capability level can limit it. Even though a whole organization is assessed, not all the divisions and projects may be assessed. Also, some process domains may not be as important, not applicable to the organization, or out of scope. For example, if the organization develops software by itself, no acquisition process can exist. Furthermore, the capability range may be limited considering the current level of process capability, for example no higher than Level 3 for Level 1 organization.

Process Capability Goal: Capability process capability are specified. Before setting them, it should be decided which SPA method to adopt for the assessment, considering both the requirements of the organization and the features of candidate methods. Goals are set using the selected SPA model. There are a variety of goal settings such as single goal on capability level for an entire software process or multiple

goals on satisfactory level for each process domain. For example CMM Ver.1.1, the former can be expressed as “Level 3” and the latter as “satisfaction of goals on requirement management key process areas (KPA) and software project planning KPA.”

Process Performance Goal: Goals to improve process performance are specified. Goals may relate to process effectiveness, product quality, project results, customer satisfaction, and so on. They are broken into factors such as reliability for product quality. They can be further divided into lower factors and lastly into metrics. Finally, goals are shown quantitatively by the metrics attached with the target values.

(2) Software Process Measurement

Just after the previous step, data collection for the selected metrics begins for evaluating current process performance. As for selected metrics, some data may have been collected. This data is gathered and made usable. All the necessary data is collected thereafter. Process performance is quantified by calculating the metrics using the above data. It will be done at a minimum when the assessment has been completed and analyzed in conjunction with assessment data. Measurement is conducted constantly in parallel with process assessment and improvement. All the measurement results are included in the submitted assessment report.

(3) Software Process Assessment

Assessment is conducted by the selected SPA method. At first, self-assessment is conducted. Personnel within the organization to be assessed answer the questionnaire themselves. The answer is a rated value such as Yes or No. Rating rules vary by method. After that, on-site assessment is conducted by interviews, and all the self-assessment results are confirmed and corrected if necessary. Both assessments refer to a SPA model. They indicate software process and illustrate the desirable practices level by level.

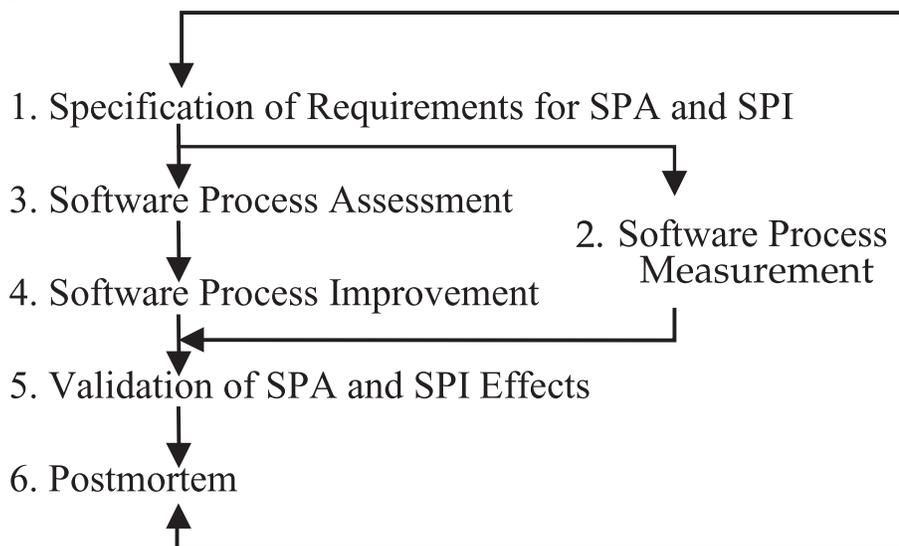
Confirmed rated values are aggregated into values for process domains, process features, and capability level. Those values are visualized in the form of graphs. Issues on processes are identified with these graphs and values, and also interview results. Issues are raised from the views of process domains and process features. Basic patterns to perceive issues are as follows:

SPAIM Library Procedure

The SPAIM procedure based on the framework is shown in Figure 3. SPAIM must be conducted continuously and recursively to pursue upper levels of process and catch up with software technology evolution or changing user needs. Each step of the procedure is explained below.

(1) Requirements Specifications for

Figure 3: SPAIM Procedure



- Compare capability goals with the actual assessment results.
- Find process domains and features interfering to achieve the next level of capability.
- Compare values of the process domains and features with each other and find relatively lower ones.

All the assessment results are included in the submitted assessment report.

(4) Software Process Improvement

If too many issues are raised as a result of the assessment, they need to be prioritized. Criteria for the prioritization are as follow:

- Criticality to the current and subsequent projects' success.
- Harmfulness to process performance.
- An appropriate level of capability.

When primary issues are selected, effective practices, methods, and tools for resolving the issues are searched from the SPI library. The name of the process domain and feature are used as key search words for required information. Concrete proposals for process improvement are drafted using the disclosed information. All the proposals are included in the submitted assessment report.

All the findings and proposals written in the assessment report are explained to the personnel and management of the assessed organization in a meeting. They are discussed and consensus is reached. Once the consensus is made, an action plan is developed, and process improvement is carried out accordingly.

(5) Validation of SPA and SPI Effects

After planned improvement has been done and improved processes may have settled in the organization, the effects of improvement are measured and validated by the process performance metrics. A comparison is made between measured values on process before and after improvement. If the values of the metrics have been moving in a preferable direction, then the effects of SPA and SPI are validated. If not, the cause is analyzed, and a new action plan is drafted. Findings here are included in the assessment report at the appropriate time, or drafted separately in the improvement report.

(6) Postmortem

Looking back through a series of SPAIM activities, modified, acquired or newly

developed practices, methods and tools for SPAIM are identified. Information about them is structured according to the architecture of SPAIM libraries and stored in the libraries. As for practices, methods, and tools used in a series of SPAIM activities, reference to the assessment or improvement reports are added.

Benefits of SPAIM Framework

By using the SPAIM framework, the following benefits are expected:

- The SPA method is suited for specific organizational goals and needs, and features can be adapted. This improves the accuracy of SPA results.
- More concrete action can be planned for process improvement by using stored knowledge and experience on practices, methods, and tools for SPAIM. This makes it sure to initiate process improvement.
- The goals and effects of SPA and SPI can be shown quantitatively and objectively using process performance metrics. This makes SPA and SPI goal-oriented activities, and makes it possible to check the adequacy of these activities and adjust them.

Current Status and Future Works

A prototype SPAIM support tool that partially implements a SPA library was already developed and presented [12]. It is a PC-based tool named Software Process Assessment support System (SPATS). It involves the components of SPICE and makes them customizable. The first version was developed on EXCEL and the second version on ACCESS. In order to make the SPAIM framework concept more effective and practical, enrichment of records in the SPAIM libraries is the most important issue. The following is the status of construction of SPAIM libraries.

SPA Library: The following information has been gathered, but structuring is underway.

- SPA methods: PMM, CMM Ver.1.1, Trillium, SPICE, SPICE9000, and SLCP-based SPA.
- Standards: ISO 9001, ISO/IEC 12207,

and ISO/IEC TR 15504 series.

- The others: P-CMM, SE-CMM, and Malcolm Baldrige National Quality Award Criteria [15].

SPI Library: The following information has been gathered; structuring is underway.

- Process assessment reports (18 cases in Table 1).
- QC activity reports (more than 2,000 cases).

SPM Library: Investigation of process performance metrics is completed. Gathered metrics were categorized and tabled. Structuring is underway.

The first future direction this research will take is that the process domain of SPAIM libraries shall be expanded to system, people, and so on [13, 14, 15]. This makes it possible to treat a greater variety of process issues with the libraries. Secondly, the architecture of SPAIM libraries will be more precisely specified. This formalization will make it possible to store SPAIM-related information into a database and make better use of stored information. Hopefully, this architecture will be standardized, and the international public SPAIM database will be constructed. This will enhance sharing and exchanging knowledge and experience on SPAIM across organizations. Then the assets of software engineering will become more beneficial to the software industry. Finally, a relationship between process quality, product quality, and project results shall be clarified based on analysis of rich experimental data. This makes it possible to prioritize process domains to achieve SPAIM goals and to predict the effects of process improvement.

Summary

This paper introduced software process assessment and improvement activities in NEC. First, research products and an overview of assessment activities are introduced. Second, findings on SPAIM are listed. They are then summarized into primary features required for SPAIM. Third, the SPAIM framework having those features is proposed. The architectural and operational procedures of SPAIM are explained. Finally, future works on SPAIM are described.◆

Acknowledgments

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W e b S i t e s

India Software Network

www.e-isn.com

The India Software Network is a network of leading IT companies and software technology parks in India that has been in operation since 1998. It offers the IT services of companies in its network, which is a selective list of Indian software companies that have highly skilled manpower and excellent infrastructure. India Software Network maintains a database of each of these companies with regard to their specialization, manpower, infrastructure, finance, past projects, management, etc. Some of the companies in the network have SEI CMM Level 5 certification.

New Zealand Software Association

www.nzsa.org.nz

Members get support in management and marketing, export and education, finance and funding. Through conferences, courses, seminars, and visiting overseas experts, members learn more about these and other important subjects related specifically to the software industry. There are regular opportunities to meet informally, share knowledge, pool resources and simply get to know each other. The site features news, events lists, educational opportunities, a resource center, and more.