

Dear Ivar, Bertrand and Richard,

# ivar.bertrand.richard@gmail.com

1<sup>st</sup> March 2010

# Position Statement on Software Engineering Method and Theory (SEMAT)

## About Fujitsu

Fujitsu is one of the world's largest IT companies and one of the most mature having been created in 1935 as an offshoot of Fuji Electric. We have a \$47bn turnover and 186,000 staff across 70 countries worldwide. Our customers include more than half the Fortune Global 500 and, include all of the G8 countries. Approximately 50% of all Fujitsu business globally is in the provision of services, of which a third is in projects.

### **Our Software Development Challenges**

Fujitsu's own experiences of process methodologies were similar to many other large IT service providers. For every project where the approach was successful there were other projects where the same approach was either inappropriate or ineffective, or sometimes both. Consequently many different methodologies emerged. Our experience showed us that over time effective ways of working always developed between Fujitsu and our customers. However, the time taken to achieve a common integrated way of working could be detrimental to the service being delivered.

Fujitsu is fully aware that when establishing the most productive processes and tools for a project the influence of the customer, the project size, the team's experience and location are among many factors that must be accommodated. We were looking for a way of working that could scale up, or down with the size of the project, was easy to adopt and flexible enough to integrate with our customer's preferred ways of working. Whatever approach we eventually adopted it needed to generate repeatable outcomes, be measurable, and extensible. In 2007 Fujitsu instigated a project to improve the methods and tools used in software development whilst retaining the benefits of proven approaches.

## **Our Software Development Solution**

Fujitsu's vision for application development includes a flexible environment within which specific methodologies can be composed from predefined practices. The methodologies must be configurable to meet project-required levels of sophistication and ceremony. In addition the environment must accommodate the most appropriate tools to support the project practitioners. Such an environment is largely future-proofed and able to be enhanced relatively simply with new practices and tools.

Fujitsu incorporated a practice-based methodology framework called EssUP from Ivar Jacobson International. EssUP facilitates the creation of a tailored methodology by the composition of a set of proven practices that best fits the needs of the project. The underlying kernel and EssUP practices support customisation, enhancement and extension. This provides a good solution to Fujitsu's goal of tailored processes. Importantly the formal kernel definition enables the method to be executable which means the method can be integrated with the tools. This has allowed Fujitsu to marry practice delivery with tooling to provide assessment and monitoring of process adherence and detailed project cost analysis, tracking, and improved work distribution.

Fujitsu is able to codify established processes. This allows project teams to combine modern methods and their own tried and tested best practice. The ability to unite the old with the new enables an inclusive approach which allows traditional and proven practices to be accommodated whilst retaining the benefits of a modern method framework.

#### **Our Experiences**

With the introduction of the Fujitsu combined method and tools environment known as Apt we embarked upon a change programme to standardise development approaches throughout our applications service business. Through this programme we have gained valuable experience in delivering lean software development projects following modern development techniques.



The nature of each project, level of previous experience of the practitioners, and the stage of the project were all factors in determining the number of practices that could be composed and adopted whilst minimising disruption to the project. In general, we have found larger projects able to absorb two or three practices per release with the remaining ways of working continuing to be followed. Smaller projects with more experienced practitioners are able to take on practices to a greater extent. Adopting the iterative, and use case practices with other practices focused on delivering business value and acceptance has been a common successful approach.

The Business Use-Case practice (jointly developed with Ivar Jacobson International) has proved to be very effective and agile way of allowing us to understand and adapt existing business processes to align IT solutions with business needs.

In service-led environments we have seen a take-up in alternative approaches. There has been a shift away from the development lifecycles towards a focus on managing and understanding business benefits and delivering incremental change. In these environments we have found the product practice has been used effectively to understand the business value of new initiatives or change controls, while the component practice enables delivery of major and minor changes.

A large part of Fujitsu's business covers the delivery of application managed services for customers. We have utilised existing practices where appropriate to deliver incremental change, and developed a core service element around which Fujitsu is authoring a number of service based practices. An example is Manage Application Transition and Application Migration.

We have a large number of customers who are still operating legacy systems, and who look to Fujitsu to support them in their modernisation endeavours. We are in the process of transposing our established modernisation approaches into a set of practices.

#### Fujitsu and SEMAT

Fujitsu is in a good position to contribute to SEMAT through its own experience in utilising practice-based methods. We have successfully utilised practices on significant commercial projects covering a variety of business sectors and customers, each with differing needs and delivery requirements. In addition Fujitsu has extensive experience in developing in-house practices and we have continued to invest in the development of new practices, kernels, and kernel extensions. Fujitsu also contributes to community EssUP practices, such as Business Use-cases. All these factors demonstrate a deep understanding and commitment to the SEMAT vision and goals.

The SEMAT initiative is closely aligned with Fujitsu's goals in developing lean approaches to all of its delivery models; to drive efficiencies and reduce waste; but not at the expense of control, or validation. We believe that SEMAT offers the opportunity of tightly integrating our own approaches with our customers' and partners' ways of working, through the common adoption of a standardised kernel. We feel such a kernel language would accelerate the establishment of close working relationships with our customers and partners and quickly and effectively enable us to deliver, innovate and add value.

Yours sincerely,

Duncan Tait Managing Director, Private Sector Division Duncan.Tait@uk.fujitsu.com

