A case study of a successful measurement program as a key input into Improving the development process

Benefits for delegates/participants

To share the experiences of using software measurement to improve the efficiency and quality of enhancement to a large legacy application in a government department

To provide examples of measures and the insights that they can provide into better managing and controlling development.

Abstract

The presentation reviews the implementation of measurement within a large government department and how the measures have provided new insights into their development and enhancement processes.

The original object of the measurement and benchmarking activity was to assist the IT Department in demonstrating the cost efficiencies and benefits achieved by the gradual re-factoring their large legacy application (14,000 fps) over a period of 4 years.

Although the demonstration of the efficiencies of the re-factored functionality was the initial primary objective of implementing measurement, the process of baselining, collecting and analysing the measures has provided insights into the Departments development processes that have enabled significant productivity and quality improvements within their current system. These insights have changed the way that the Project managers plan and estimate their ongoing change requests that make up their quarterly Release packages. They have made measurement one of the major inputs into their decisions on where to focus their improvements.

The presentation looks at what are the key success factors of this measurement program that has been now going successfully for over 2 years and how senior management have used the data in their decision making.

Profile

Pam is the Managing Director of Total Metrics and has 20 years experience in the area of Software Measurement. She was the president of the Australian Software Metrics Association (ASMA) and currently holds a position on their Executive and the Benchmarking Database Special Interest groups. In 2007 she was elected as Vice President of the International Software Benchmarking Standards Group (ISBSG) and is on the ISO/IEC Study group for the NWI Benchmarking Standard. She represents Standards Australia as the international project editor of the ISO standard 14143-1 and 2 for Functional Size Measurement. She was the international convenor of ISO/IEC/WG12 group developing FSM standards from 1997 to 2004 and plays an active role internationally in the development of measurement standards. Ms Morris was a member of the International Function Point User Group (IFPUG) Counting Practices Committee in the USA from 1993 to 2000 and is a reviewer of the IFPUG documents. She is a member of the COSMIC-FFP Core Group who is responsible for in the development of the COSMIC-FFP FSM method. She has been an IFPUG Certified Function Point Specialist (CFPS) since 1994, and a COSMIC Certified Practitioner and a Certified Software Measurement Specialist (CSMS Level 3) since 2006. In 2006 Pam was awarded the Australian ITP Lifetime Achievement Award for her services to the IT Industry. In 2007 Pam was invited to be an international expert partner of the Chinese Software Benchmarking Standards Group.

Ms Morris is a regular guest speaker on the topic of software metrics numerous international conferences in the USA, China , Japan, India, South Korea, New Zealand, Germany, South Africa , Spain, Italy and the UK. Pam has combined her consulting experience in software metrics with her previous experience in the educational field to develop and present a variety of Software Metrics and Function Point Counting training courses. She has provided consulting services and presented training courses to over 200 corporate and government organizations in the USA, Japan, China, Australia, India and New Zealand since 1991.