# Special Session on Software Measurement as a Strategy for Software Value Management

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Software measurement process has become an integral part of other software processes due to their significance in project estimations, decision making and software process improvement. Project stakeholders have become more and more aware of the benefits that quantitative monitoring & control processes bring and their role in achieving higher maturity and capability levels. However, although many organizations started measurement programs and took actions to benefit from them, the failure rates for software measurement programs in software organizations are still very high.

One of the key reasons reported for the failures is the focus on the data collection process rather than on linking measurements to the organizational goals and formulating clear action plans for improving the organizational processes and/or making decisions. Based on their goals, the software organizations require collecting as few measures as possible from a large number of measures while fulfilling the needs of different stakeholders under some constraints. Another major reason is the lack of top management support. The support exists only if the top management sees the value of the measurement program for their business. On the other hand, in order to be able to improve their competitiveness by managing the *value* produced based on the strategic business goals, the software organizations must know how to align their strategic business goals to the goals and objectives of different levels in the organizations. One of the instruments that organizations can use for managing such integration is the measurement programs.

Therefore, there is a need for moving beyond the current state-of-the-art in the software measurement area for integrating and aligning different stakeholders' goals in an organization by including the *business level* and its relationships to the lowest levels of the organizations in a more structured and visible way. This should enable establishing both *horizontal* and *vertical* links among goals and sub-goals of different stakeholders as well as between these goals and measures in order to be able to trace and manage the contributions of different levels in the organization to the 'business *value*' produced. The impact of the changes in the priorities of any stakeholder's goals on the measurement decision and collection process in the whole organization should be traceable. The measurement process can serve as a business management strategy for such integration within the organization.

This session aims to provide a forum for both practitioners and researchers to discuss the most recent advances in software project, process and product measurement from both practical and theoretical perspectives in the scope of value creation and its management in software organizations. We invite professionals responsible for, involved in, or interested in software measurement to share innovative ideas, experiences, and concerns within this scope. The session targets two types of contributions: (1) <u>Experience contributions</u>: problem

statements and practiced solutions in designing and using measurement and estimation for management decision-making, and (2) <u>Research contributions</u>: empirical studies, hypothesized models, and suggestions on explaining and improving software value management by using measurement.

The session topics include but are not limited to:
- Software measurement support for business value management
- Software measurement goals alignment to organizational and business goals
- Developing and using business cases for software projects
- Cost-effective measurement programs
- Factors influencing success rates of measurement programs in organizations
- Software benchmarking for better management
- ICT Balanced Scorecards: Tailored-Balanced Score Cards (e.g. with more than four perspectives), cause-effect analysis for strategic maps and Return On Investment

The conference website is at http://users.encs.concordia.ca/~sera2010/

## Session organizers

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## Important Dates

Papers due: February 1st, 2010
Notification of authors: March, 1st 2010
Revised papers due: March 15th, 2010