

Event Theme

**Measurements - "Prediction is very difficult, especially about the future" - Neils Bohr**

Presenters

**David Card**

The Managing Director of  
DNV ITGS, Inc

**Alfred A. Allik**

The Head of Quality Assurance in  
BMO Financial Group

Topic  
Summaries

**Integrating Lean, Six Sigma, and the CMMI: A Measurement Perspective**  
illustrated with the example of  
measurement for project management

**CMMI ML4: Critical Success Factors**  
with real life examples

The CMMI approach to process improvement has become widely accepted in the software industry. However, many software producing organizations are parts of larger system and product manufacturers where the Six Sigma approach also has become established, typically in manufacturing. Now, executives are pressuring their software organizations to adopt Six Sigma (and Lean) in addition to CMMI. These three approaches use different terminology, are promoted by different vendors, and sponsored by different professional societies – increasing the chances of conflict among the resulting initiatives.

Today's IT Applications has a higher risk of failure than ever before. Inadequate performance and poor quality of systems can result in more than just a temporary slowdown; it can jeopardize the very existence of a business or forever change a company's competitive position in the industry.

This presentation will discuss the relationships among the CMMI, Lean and Six Sigma approaches to process improvement. The interaction of these approaches will be illustrated with the example of measurement for project management. Each approach contributes a different perspective on how to implement an effective measurement process. Rather than creating conflict, these approaches can be implemented synergistically. In particular, the CMMI creates a need for Six Sigma skills, that otherwise might not be utilized to their fullest. Adoption of Six Sigma and Lean helps to ensure that the CMMI initiative does not become an exercise in satisfying documentation requirements.

To maintain a competitive position within the financial community, The Bank of Montreal continuously strives to improve its productivity through innovative means of developing and integrating new software solutions that results in providing enhanced services to its customers.

The Bank of Montreal's ongoing commitment to improve productivity has led it to adopt the Carnegie Mellon CMMI (Capability Maturity Model Integration) approach, along with ISO 9001, Six Sigma and ITIL, which it believes enhances its effectiveness in the decision-making process and overall operational effectiveness.

The Bank of Montreal is the only Financial Institution in Canada to be assessed at SEI CMMI Level 4 (version 1.1).

This presentation will describe the journey The Bank of Montreal is on and share the critical success factor that made it possible in achieving SEI CMMI Level 4.

## Biographies

David N. Card is the Managing Director of DNV ITGS, Inc. Previous employers include the Software Productivity Consortium, Computer Sciences Corporation, Lockheed Martin, and Litton Bionetics. He spent one year as a Resident Affiliate at the Software Engineering Institute and seven years as a member of the NASA Software Engineering Laboratory research team. Mr. Card is an internationally recognized expert in software measurement and process improvement. He has worked extensively with high maturity organizations where quantitative and statistical methods are essential. Recent clients have included Siemens, Bosch, Lockheed Martin, Rockwell Collins, and BAE Systems. Mr. Card is the author of *Measuring Software Design Quality* (Prentice Hall, 1990), co-author of *Practical Software Measurement* (Addison Wesley, 2002), and co-editor ISO/IEC Standard 15939: Software Measurement Process (International Organization for Standardization, 2002). Mr. Card served five years as Editor-in-Chief of the *Journal of Systems and Software*. He is a Senior Member of the American Society for Quality.

Alfred A. Allik is the Head of Quality Assurance in BMO Financial Group.

His commitment to process improvements has led him to create a Quality Assurance Group that:

- Provides management with visibility into established processes through compliance monitoring, metrics analysis and quantitative decision making
- Monitors adherence to standards
- Actively participates in the implementation of processes and quality improvement activities (for example, SEI CMM/CMMI, ISO 9001, ITIL)
- Implemented a Function Point Program
- Identifies process improvement opportunities.

Through active involvement in assisting different development areas the QA Group was a major contributor in the success of reaching the SEI CMMI Level 4.

## Date / Time

Tuesday, April 22<sup>nd</sup>, 2008 5:30pm – 8:30pm

Note: Light supper included prior to presentations.

## Location

Auditorium, IBM Canada  
 3600 Steeles Avenue East  
 (northeast corner of Steeles & Pharmacy)  
 Markham, Ontario, L3R-9Z7  
 Free Visitor parking available (follow signs)

## Registration

<http://www.TorontoSPIN.com> \$20.00 at the door

## Future Events

June 2008

Thanks to IBM for providing the location for this event.

## Call for Volunteers

Toronto SPIN continues to seek volunteers to help with internal management activities as well as event management.

### Sponsors

Sponsorship represents a key source of funding for the continued operation of Toronto SPIN. Sponsors receive recognition and visibility at Toronto SPIN events, as well as a link to their website on the Toronto SPIN website during the sponsorship period. Sponsorship levels start as low as \$50.



If you are interested in becoming a sponsor, please contact Rekha Kulshreshtha at [rekhak@ca.ibm.com](mailto:rekhak@ca.ibm.com).

### Speakers

Toronto SPIN is always interested in speakers with knowledge and experience in software process improvement. Speaking opportunities at Toronto SPIN are an excellent opportunity for practitioners to share their knowledge with others in the community and build public speaking skills.



If you are interested in speaking at a future Toronto SPIN event, please contact Rekha Kulshreshtha at [rekhak@ca.ibm.com](mailto:rekhak@ca.ibm.com).

### Sub-Committee Members

Non-profit organizations like Toronto SPIN operate through the support of Sub-Committee volunteers who contribute their skills and time. We have a number of Sub-committee positions open (program, sponsorship, communication, web). Becoming a Sub-Committee member requires a commitment to participate in the monthly Sub-

Committee teleconference calls as well as as volunteering for at least 50% of the Toronto SPIN events in the year.



If you are interested in becoming a Sub-Committee member, please contact Rekha Kulshreshtha at [rekhak@ca.ibm.com](mailto:rekhak@ca.ibm.com).

### Web Developers

Toronto SPIN continues to look for individuals in the Toronto software community that are interested in volunteering their time and skills to help with maintenance and the development of new functionality for the Toronto SPIN website. We're looking for web developers interested in helping us continue to improve our website.



Do you have skills in HTML, PHP, My SQL and knowledge of FTP? Other useful skills are graphics and Flash. If you have these skills and are interested in this volunteer opportunity, please contact Rekha Kulshreshtha at [rekhak@ca.ibm.com](mailto:rekhak@ca.ibm.com).

### Event Volunteers

Event Volunteers contribute to Toronto SPIN by participating in the planning and management of Toronto SPIN events. This involves venue selection and preparation, registration materials, and active support on the day of the event.



Event Volunteers do not pay the registration fee for the event they volunteer at. If you are interested in becoming an event volunteer, contact Rekha Kulshreshtha at [rekhak@ca.ibm.com](mailto:rekhak@ca.ibm.com).

## Toronto SPIN Steering Committee Members

1. Doris Concepcion – IBM Canada Limited
2. Andrew Gurudata – Telus Mobility
3. Sanford Hersh – Computer Elations Incorporated
4. Rekha Kulshreshtha – IBM Canada Limited
5. Winifred Menezes – Freya Consulting Limited
6. Susan Muckle – Ontario Energy Board
7. Vivienne Suen – IBM Canada Limited
8. Steven Turner – ESI Canada
9. Erika Vintan – Bank of Montreal
10. Rodolfo Zuniga – IBM Canada Limited

## Toronto SPIN Sub-Committee Members

<p><b><u>Program Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Andrew Gurudata (Telus Mobility)</li> <li>2. Sanford Hersh (Computer Elations)</li> <li>3. Orhan Kalayci (SSHA)</li> <li>4. Rekha Kulshreshtha (IBM)</li> <li>5. Renay Langdon (SSHA)</li> <li>6. Winifred Menezes (Freya)</li> <li>7. Ruben Montero (IBM)</li> <li>8. Steven Turner (ESI)</li> <li>9. Erika Vintan (BMO)</li> <li>10. Jian Zhang (RBC Financial Grp)</li> </ol>	<p><b><u>Communication Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Doris Concepcion (IBM)</li> <li>2. Rekha Kulshreshtha (IBM)</li> <li>3. Joyce MacDonald (Gregory Consulting Ltd)</li> <li>4. Vivienne Suen (IBM)</li> <li>5. Hamid Yazdanpanah (IBM)</li> </ol> <p><b><u>Web Team</u></b></p> <ol style="list-style-type: none"> <li>1. Evan Jiang</li> <li>2. Lalit Jairath (University of Guelph)</li> <li>3. Rekha Kulshreshtha (IBM)</li> <li>4. Duffy O'Craven (Quinda Inc.)</li> <li>5. Marie Shafi (IBM)</li> <li>6. Kirk Zapa (KayCee Inc.)</li> <li>7. Juana Zegarra (CGI Inc.)</li> </ol>	<p><b><u>Membership Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Emmanuel Gonnet (Gem Up Consulting)</li> <li>2. Andrew Gurudata (Telus Mobility)</li> </ol>
<p><b><u>Sponsorship Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Ashok Kaushal</li> <li>2. Rekha Kulshreshtha (IBM)</li> <li>3. Sue Muckle (OEB)</li> <li>4. Steven Turner (ESI)</li> </ol>	<p><b><u>Volunteer Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Rekha Kulshreshtha (IBM)</li> </ol>	<p><b><u>Finance/ Administration Sub-Committee</u></b></p> <ol style="list-style-type: none"> <li>1. Doris Concepcion (IBM)</li> <li>2. Rekha Kulshreshtha (IBM)</li> <li>3. Sachin Quadros (IBM)</li> <li>4. Rodolfo Zuniga (IBM)</li> </ol>

## Toronto SPIN Past Sponsors

- Bell Canada
- Compuware
- LBMS
- Ontario Government
- TBI
- Nortel
- Worldwide Online
- CIBC
- IBM Canada Limited