Starting in 1992, IBM’s technical leaders and top researchers have produced an annual “Global Technology Outlook”. The GTO identifies significant technology trends early. It looks for high impact disruptive technologies leading to game changing products and services over a 3-10 year horizon. This overview covers some of the technology thresholds that have the highest potential for creating new business opportunities.

Over the years, IBM has seen an evolution of the “computer” from a tool for calculation, to a data warehouse, to the delivery of information. Computers have gone from tabulation to a primary means of social interaction as well as providing collection of previously unimaginable amounts of data that can be analyzed to produce the knowledge that society craves.

In 2011, the GTO focuses on:

- **Smarter Planet** which arises from the exponential increase of instrumentation, all leading to new interconnections which, in turn, produce new information – often referred to as the Internet of Things.
- **Analytics** which covers everything from small scale business improvements to the deep predictive analytics driven by exabytes ($10^{21}$) and the anticipation of reaching $10^{30}$ bytes of data by 2020 or earlier.
- **Next generation computing systems** including workload-optimized computing and “Liquid Metal” (LIME) – computers that configure the way hardware operates in order to drive speed and efficiency.
- **And Services**, often referred to as Services Science, Management and Engineering (SSME), as a response to the world’s economies shifting from agricultural to industrial and now to services (Canada’s economy is cited as being around three-quarters services-based).

Stephen Perelgut is IBM Canada's University Relations Manager. In that role, he coordinates IBM's connections with universities including recruiting and research collaborations such as the new Centre for Advanced Studies based here in Fredericton. Stephen's academic background includes a Bachelor of Applied Science in Engineering Sciences and a Masters of Science in Computing Science. Over the years, he has led the Consortium for Software Engineering Research and has been instrumental in the adoption of social computing technologies at IBM.