
**Message from
the Corporate Director,
IBM Software Test**

How do you know that the product is going to work? How do you know it is ready to ship? How do you know it will meet expectations? The answer is “verification of committed requirements,” better known as testing.

Testing has become extremely important to both our business and our customers. Solutions are more complex—interconnecting more and more intricate technologies across multiple operating environments. With the increasing business demand for more software coupled with the advent of newer, more productive languages and tools, more code is being produced in very short periods of time. Software vendors typically spend 25 to 50 percent of their total product development budget on testing. Customers are expecting solutions that work the first time, every time, because outages are more visible and costly. No business wants an outage to make the front page of the morning newspaper. Testing has expanded to the point that a rapidly growing testing services market has emerged.

In IBM, we have formed a company-wide test community to facilitate sharing, teaming, and improving testing methodology. Testing is recognized as a long-term career for software engineers. Under this community-wide focus, advanced test practices and associated tools have been designed and are being developed and aggressively deployed. These have yielded over a thousand improvements in testing organizations across IBM—ranging from automation of existing tasks to fundamental advances in testing technology. Another benefit of this focus is a much closer partnership between developers and testers in jointly delivering higher quality solutions.

With such an emphasis on testing in the industry and within IBM, innovation has been a natural result. The papers in this special issue of the *IBM Systems Journal* provide a glimpse into some of the advancements being made. As recognized experts and practitioners in the industry, the contributing authors provide a set of insightful papers derived from their research and experiences in testing and verification. Many more advances will be needed as testing continues to increase in importance in the 21st century—ensuring that customer expectations will be met.



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