Podcast on the topic of <u>Testing Services</u>

Welcome to the podcast on the topic of Testing Services. In the discussion is Stephan Weber, Managing Consultant in the area of Test Management and Quality Insurance. The interview was conducted by Christian Achermann.

1. Christian Achermann: "Stephan, could you provide us with some information about yourself and your function at IBM?"

Stephan Weber: "Yes, my name is Stephan Weber, I am the Test Manager at IBM Global Business Services, which is the Business Consulting division at IBM. To summarize my function as Test Manager: it is my task to ensure that the quality of the end product aimed for within the framework of IT projects is achieved, and that the IT solution to be created actually does what it is expected to do. As Test Manager, I can not deliver quality as such, but I can provide impetus and create the necessary environment so that this quality can be produced."

2. **Christian Achermann:** "Why is it increasingly more important, but also ever more difficult, to put the applications through their paces?"

Stephan Weber: "It is increasingly becoming the central element of company strategy. It is expected, and is assumed, that the applications and the IT infrastructure they require function perfectly. It is therefore very important to check all these demands in advance, and thereby to ensure, that no faults or outages lead to serious financial damages, unhappy customers or impact our reputation. On the other hand, it is more difficult to test, as modern IT solutions or IT environments are increasingly complex and intelligent, and at the same time integrated into other systems, and have a multitude of interfaces with partners and customers at their disposal."

3. **Christian Achermann:** "The test effort is underestimated by many companies, and the software solutions are only tested superficially. Why does quality assurance in software development only play such a secondary role in practice?"

Stephan Weber: "It's true that the test effort is in effect often underestimated, although every project leader should know that the effort for quality assurance in a software development project approximately amounts to between 20 and 50 % of the total effort. However, IT project leaders are all too often confronted with budget bottlenecks and time shortages. Unfortunately, it is often the test department that first falls victim to the cost cutting process. And at the same time, those persons responsible for the project, our customers, often don't know about the opportunities for saving that arise from consequent testing when it is employed from the very beginning. It is namely a fact, that the costs for testing are often very quickly redeemed, and not only raise the quality of the end product, but also reduce the length of the project. But to come back to the question: it's not true that quality assurance in general plays a secondary role, but it is accorded the required attention rather late on, namely not until the productive implementation of a solution is involved. But by then it is often too late, and the correction of mistakes is then x times more expensive than if testing had been carried out properly from the start."

Christian Achermann: "What influence does consequent testing have on the project procedure and the development costs?"

Stephan Weber: "The influence is clearly positive. The total duration of a development project will be reduced; thereby, the total development costs will also be decreased. It is definitely not a hollow promise if I say that the IT budget can be reduced by up to 30% if you test correctly and consequently. It is not just the earliest possible correction of errors that reduces the costs; the later maintenance and support of an application

will also be simpler and cheaper in the long term. It is also often so, that through testing, other critical areas of development projects are influenced in a positive way. Here I am thinking of for example, the important bridging between IT and the business, the general communication with customers, the identification of project risks or general defects in the development process, the establishment of a healthy error culture in companies, better specified and documented software and - "last but not least" - greater motivation for all project members, as they know that they are on the right path and that what is being developed is also really what the customer wants."

4. Christian Achermann: "What does IBM offer customers who are interested in IBM Testing Services?"

Stephan Weber: "Basically, what needs to be mentioned is that, thanks to its decades of experience in software development, IBM also has the corresponding experience in testing. With the IBM Testing Services, this knowledge and experience is available to customers on demand, matched with our approximately 10,000 employees worldwide and our testing experience - an unparalleled offer. So that customers can select what they really need, we offer them an initial testing assessment at the beginning of a partnership. This generally has the following three objectives: firstly the documentation of the customer's test maturity in comparison to the test standards and standards within his branch; secondly the identification of gaps in his test process, which is relatively simple; and thirdly, proposals for possible improvements in the testing area. Basically, in so doing, we are continuously striving to optimize quality, development times and costs."

5. **Christian Achermann:** "Which developments are to be expected over the next few years in the testing area?"

Stephan Weber: "Today we notice that, those customers who have in the past successfully outsourced their software development now also want to do this for their testing. The ultimate goal is a reduction in costs with improved quality. Basically, testing also needs to adapt to the trends in IT. IBM has therefore developed for example Frameworks or methodologies in the SOA testing area, Security Testing or Cloud Computing, which are successfully deployed today. Another trend, one that has already been around for a while, is test automation, i.e. the automatic creation or execution of test cases. Testing in the area of so-called agile software development is an additional challenge; here you can actually talk about a mega trend. With agile software development you attempt, amongst other things, to deliver a basic version of the ordered software just a few weeks after the start of the project, and then you can try to verify as soon as possible whether you're on the right track, and whether what you are building is really what the customer wants. The verification of course is a result of the testing."

Christian Achermann: "Many thanks for your detailed and very interesting remarks."