



CIO Issues

Bristol-Myers Squibb CIO Susan O'Day Talks I.T.

By Pam Baker

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"I.T. life isn't that simple anymore," said Bristol-Myers Squibb CIO Susan O'Day. "We think in terms of capabilities rather than components because many components are needed throughout the ecosystem to achieve a capability. Conversely, a lone component usually doesn't deliver an entire capability."

▶▶As CIO and VP of Global Shared Services for pharmaceutical giant Bristol-Myers Squibb, Susan O'Day must refine and deploy innovation as deftly as her company deals with life-threatening diseases.

Bristol-Myers Squibb (BMS) is a worldwide pharmaceutical company whose stated mission is to extend and enhance human life. It is engaged

in the discovery, development, licensing, manufacturing, marketing, distribution, and sale of pharmaceuticals and other health-care related products.

In an organization where every problem is considered curable, O'Day and her team must perform flawlessly in order to facilitate the innovative work at the center of Bristol-Myers Squibb's operations. This means working well ahead of a group of scientists who have long since passed the bleeding edge of numerous technologies.

As CIO, O'Day's focus not only is on maximizing company assets and driving quality and consistency across complex global processes, but also is on delivering services to all units where and when needed.

In 2004, the company reported annual global sales from continuing operations of \$19.4 billion. Two product lines achieved sales of over \$2.5 billion each. An additional 44 product lines achieved more than \$50 million each in annual sales. That same year, the Bristol-Myers Squibb invested \$2.5 billion in research, a 10 percent growth over 2003, and expects to increase spending on drug development to accelerate the development of its late-stage pipeline.

O'Day joined the company in 1996 from CSX, and since then has served as director, Information Management Technical Services, vice president of Information Management Services and vice president of Global Shared Services and Information Management. She holds a bachelor's degree in mathematics from Saint Lawrence University and a master's degree in business from the College of William and Mary.

O'Day spoke with CIO Today about the inner workings of a drug company bent on saving humanity.

CIO Today: What are your top concerns as CIO?

O'Day: Three areas have most of my focus. And I list them here in no particular order.

Maximizing investment value is paramount. As research and development drives our business, we invest in technology that is most productive. Ensuring that we have minimized the cost for the company but that we are still fueling research and development is key.

Secondly, driving efficiency of the operation itself -- increasing spending in R&D strength in the R&D pharmaceutical pipeline.

Lastly, how to horizontally integrate across key processes -- discovery, development, manufacturing, and commercialization. In our line of work, science is responsible for addressing the unmet medical needs of the public. In order to do this, we must integrate both the science and marketing efforts at BMS, and do it as rapidly as possible.

CIO Today: Has the I.T. environment changed from five years ago?

O'Day: In essence, business used to be about vertical silos; now the driving force is to build and deliver horizontal integration. An example for us would be integrating marketing and science so that we can put more science in front of doctors in the hands of our sales people.

There has also been a real generation change of leadership. The new leaders -- on all levels -- have a higher technical acumen. I don't really want to attach an age limit to this statement, but as a general rule, people in their 40s moving into leadership positions are far more comfortable with technology and change. That actually helps I.T. leaders function.

But, also, expectations are higher from a more tech-savvy user-base, and that dictates I.T. parameters, considerations like ease of functionality and integration, for example, in making final I.T. decisions.

CIO Today: How have new legislative demands affected the I.T. department and the CIO in particular?

O'Day: We are in a very regulated industry. We have worked with many regulatory bodies, like the FDA, for a very long time.

Certain FDA legislation requires that companies within the health care industry regulate change control. We must maintain control over the quality of our information management systems, track intended results, document what we do with our systems, and maintain evidence.

So really, there are no new demands on us. [Sarbanes-Oxley] was just an extension of what we are already doing; it just delves a little deeper in the functions of finance and marketing. We've been able to leverage FDA compliance for Sarbox compliance.

CIO Today: Which enterprise component or technology will be growing most in terms of its slice of your company's budget pie in the next 12 months?

O'Day: I.T. life isn't that simple anymore. Today, we think in terms of capabilities rather than components because many components are needed throughout the ecosystem to achieve a capability. Conversely, a lone component usually doesn't deliver an entire capability.

Capabilities that will require considerable investment from us will be [security](#) and privacy, of course, and global information systems that are nimble and highly available, such as collaboration tools and mobility with data integration.

CIO Today: Can you walk us through the decision-making process of implementing a large-scale, business-process management initiative?

O'Day: Our mission is to extend and enhance human life; our strategy is to focus on addressing serious unmet medical need. All our business units prioritize resources and efforts against that strategy.

Each unit has an executive committee, and there are some at the corporate level. These develop the initiatives and information management, and the architectural boards decide how to make it happen.

The Capital Planning committee at BMS, of which I am a member, approves all our capital investments above a certain threshold. Some of the metrics we use to evaluate a project are, of course, return on investment, associated savings, and revenue. Additionally, there are investments that mitigate risk, in which case we measure the impact of a potential risk.

If a project is approved, there is the expected and normal planning activity, followed by execution. We generally plan on a three-year horizon, but longer product-to-market cycles (eight to 10 years) are also normal in our industry. Smaller projects can be implemented sooner.

CIO Today: What are one or two software or hardware products your company uses that you would describe as outstanding?

O'Day: I am impressed with anything that extends the enterprise and allows people to function anywhere. Our scientists need to be able to freely move about the lab, in the field, and even collaborate with peers halfway across the globe.

We use both large and small suppliers that have products that meet our business needs. One software supplier is SAP, but there are many small niche providers that meet our industry's unique needs.

CIO Today: Which emerging technology do you see as most important to the enterprise?

O'Day: We are piloting tablets with full-feature functionality, specifically as lab notebooks. In our case, lab notebooks are formal evidence of our research; they are crucial to our operation. So we are piloting other form factors for e-lab books as well.

We are also very interested in control panels of scientific instrumentation that will negate the need for PC work. And, in mobility tools, whether it is in the form of a PDA, Palm Pilot, or handheld scientific instrument.

There is also some interest in RFID, but that is in the very early stages in the pharmaceutical industry. The technology is being used in retail to track high-value products, certainly, and many products that have a high probability of being counterfeited. Pfizer, for example, is using RFID on Viagra. But here at BMS, we are not deploying RFID widely yet.

CIO Today: Where do you go to do your research on new technologies?

O'Day: We use traditional research firms such as Gartner and Forrester. We also participate in various industry groups, all of which explore technology in their fields of interest, such as marketing, R&D, and pharmaceutical groups.

I also am a member of the CIO Executive Board for The Working Council of CIOs. This provides an avenue to connect with other CIOs, understand how they are addressing challenges, and do some high-level benchmarking.

Then there are our own research groups, including the architecture boards. These boards focus on technical architecture regarding a specific area -- servers, desktops, data, and applications -- and bring evolving or emerging trends to my attention.

