

NEWS.COM VISION SERIES PROFILE

PROCTER & GAMBLE'S

STEPHEN DAVID

BY: GREG SANDOVAL

AS THE EPITOME OF A TRADITIONAL, CONSERVATIVE CORPORATION, PROCTER & GAMBLE HARDLY EVOKES IMAGES OF CUTTING-EDGE TECHNOLOGY.

But in learning the ins and outs of information technology, the company once called "the house that Ivory built" has gotten digital religion in a relatively short period of its 165-year history. A far cry from its roots as a family-run soap and candle business in Cincinnati, today's Procter & Gamble credits technology for a dramatic turnaround in productivity and efficiency.

Executing such basics as moving its internal operations to Web-based systems and creating a computer-based inventory management system, the company now buys raw materials on online exchanges and uses the Web for consumer product testing to save millions of dollars and hours of productivity. That may not sound revolutionary, but such changes become exponentially more complex--and vital--when a \$120 billion multinational with 5 billion customers in 140 countries finds itself with 4,000 internal Web sites and a multitude of organizational units.

The person in charge of the technology initiative is Chief Information Officer Stephen



PROCTER & GAMBLE CIO STEPHEN DAVID

THE TECH SUCCESS THAT IVORY BUILT

CIO STEPHEN DAVID SAYS PROCTER & GAMBLE'S APPROACH TO TECHNOLOGY IS BOLD, YET PRACTICAL. AN EVEN MORE IMPORTANT LESSON: NEVER STAND STILL.

David, who started working at Procter & Gamble as a sales rep fresh out of college in 1970. He describes a company that has approached technology with a combination of bold strokes and judicious practicality, part of a revolution to update all aspects of Procter & Gamble's business as it struggled in the late 1990s.

The company's sizable bet on the Internet appears to have paid off and is at least partly responsible for the rise in its share price in the past year from \$61.68 to a recent 52-week high of \$93.73. But its embrace of technology carries ram-

A: I think in our interaction with consumers. We used to do all of our own concept testing in a focus-group-type arrangement. You get consumers to come in and you talk to them, and you do four or five of these. Getting those results back will take 12 to 16 weeks and cost you about \$25,000 to \$50,000 per concept test.

Today we do that all on the Web. So we can go get a representative sample of consumers,...do the test in the morning, and by midafternoon, potentially we've got a couple of hundred respondents that have gotten back to us. We can run

that's saving the company?

We probably do 400 or 500 (concept tests) a year around the world. I'm sure we'll save tens of millions of dollars just on concept testing. But it's a speed issue and a quality-of-information issue. It's hard to put a value on the speed--we're just that much faster. If we can take a year off of the development of a new product, that's one of the most meaningful things we can do. That's one year we don't have to invest resources and one year earlier that we start to get revenue.

We've got other tools--one called Consumer Corners. It's a virtual store that allows consumers to make choices on shelf arrangements and types of products and labeling and packaging that is again transforming that process of understanding what consumers want. We carry it out all the way to a virtual test market. The Web is allowing us to speed up our innovations to the marketplace, and hopefully (we're) offering much better value to consumers.

During the Internet heyday, there were a lot of companies hawking whiz-bang technology. Older, traditional companies were accused of being too slow to adopt technology. Did P&G invest heavily back then? Did P&G understand early that the Web would change its business?

No, we didn't invest heavily, but hopefully we invested wisely. The

**"I'LL TELL YOU HONESTLY,
WE CAN'T LIVE WITHOUT THE WEB."**

ifications that go far beyond the company, sending the message that even the most cautious enterprises need to update their operations whether they are shrinking or growing.

In a recent interview with CNET News.com, David discussed how the company's future is linked inextricably to its use of new technology.

Q: What areas of P&G's business has technology most dramatically transformed?

more tests that day or pass the information to Asia or Europe to continue running tests that afternoon. We're able to do virtually almost all our concept testing in the U.S. on the Web at a tenth of the cost or a twentieth of the cost and time that we were able to do it before. It allows us to do our consumer understanding much cheaper, much faster, and we get more input than we were able to the old way.

How much money do you think

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\$11 billion
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types of things we invested in were tools that we saw were a benefit, and that if we were to use them then we would invest in them to help those companies along. So a couple of examples would be Plumtree, a corporate portal application. They really met our needs internally for our own intranet. They have been relatively successful because they actually have a product that works and delivered it on time and on budget. We had another one with I-many--which worked in several of our pharmaceutical businesses--that also delivered on time. The services were as good as advertised or better.

So at a certain point in your thinking, this became something that you believed was strategically important to the future of the company?

I think we were reasonably strategic in making the choices of where we were going to invest. Then there's the question of adoption by older companies. Our philosophy is that you need to have people who are always looking at the future, but you don't get so enamored with that future that it colors the things you have to do today. You need to make some bets out there that are going to be important for your company to move forward. People who sit back and wait generally don't get the capability to see how those technologies can be integrated into their company and pay dividends to employees, share-

holders and customers.

Let me give you an example of one of those. At the 25-year anniversary of the bar code that was held at the Smithsonian Institute, Procter & Gamble and the Uniform Code Council announced the establishment of the Auto-ID Center at MIT. The purpose of the center was to put together the technologies necessary to replace the UPC (Universal Product Code) with a low-cost chip that will go on every package. The reason we need that is there is a much greater need for information associated with each package.

In the store we felt there was going to be a need for things to talk to other things. In a wireless environment they will talk to one another. Practically speaking, a retailing outlet could do instantaneous inventories in their stores. We could do things for anti-counterfeiting. We could do things for theft protection. But most importantly, we can start to work on the supply chain by knowing where the product is in the supply chain. We started working on that.

What have been the most important technology choices you've made for P&G?

We have Oracle databases, but most of our information sits in five global reference databases. These are materials, formulas, customers, employees and suppliers. SAP sits

over the top of those global databases, and then we're able to manage, look at and help project our business in the future versus some of our competitors that operate either on a country level or a region level. We believe SAP and Oracle and others have provided us the tools that allow us to stitch together the information we need to operate effectively as a global company.

In terms of tracking inventory, we are indeed attempting to reinvent our supply chain. People take some raw materials and then transform them into products and then go out and sell them. The basis for that supply chain is to buy the raw materials at the best possible price you can and keep your manufacturing costs low, then offer a good value, and hopefully you get the lion's share of the business. There's nothing wrong with that. And we're certainly not going to change emphasis on that.

What is your vision for P&G's supply chain?

One of the things that our industry is not necessarily doing a great job with is the consumer at the store. (Running out of merchandise in the store) is a really bad problem with the industry. For the top-2,000-selling items, grocery stores have anywhere from a 12 to 15 percent out-of-stock rate in the United States and an 8 to 10 percent out-of-stock rate in Europe. We need to look at

the supply chain through the consumer's eyes. That means asking, "How do we ensure that we have the right product, at the right place, at the right time, at the right price?"

The vision is that when someone buys a roll of Bounty paper towels,

the past. The bar code is now almost 30 years old. The adoption of the bar code has only taken place in the last 20 years. It took 10 years to get to first base. We can't afford to wait that long again.

When deciding on buying a tech-

"THE VISION IS THAT WHEN SOMEONE BUYS A ROLL OF BOUNTY PAPER TOWELS, WE CAN SEE THAT TRANSACTION IN THE SUPPLY SYSTEM AND SOMEONE IN CANADA KNOWS TO CUT DOWN A TREE FOR THE BACK-END SUPPLY."

we can see that transaction in the supply system and someone in Canada knows to cut down a tree for the back-end supply...To do that, we need the Web. I'll tell you honestly, we can't live without the Web.

(The Internet) is the transforming technology for us, but with one caveat: We need standards. We need data transmission standards. We need XML standards. We need some business process standards. We've got to work with people like the Uniform Code Council, who put bar codes and their counterpart outside the U.S., to get these standards and then adopt these standards--and do it much quicker than we have in

nology, how do you measure the return on investment?

About 18 months ago, IT rolled out a set of tools that help us better measure our IT projects...For the first time in a long time we really have something a business unit can look at and decide what they are going to get from an IT project and how it relates to other types of things they can do. When they make a choice, then there is a poll from the business unit because they are counting on that IT project to deliver that NPV (Net Present Value), and it becomes part of their operating goals or objectives. We've really tried to infuse good financial-tracking programs and NPV into our

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IT managers' capability so we can compete for capital and can compete for the projects that can help the business units be even more successful.

What three technologies do you think will matter most in the future? What will P&G be investing in?

The broadest heading is wireless. When you think that there is going to be hundreds of trillions of these cheap chips on individual packages and the infrastructure needed...it's going to have to be by its very nature a wireless environment.

In our space, I'm very interested in biometrics. This is in combination with some of the genomic work that goes on in our pharmaceutical organization. This is hopefully going to make a material impact on the health and well-being of people around the world. Our ability as an IT organization to be able to deal with all types of genetic information on the scale and the amount of information available is going to be critical. So we're spending a lot of time and effort and money in the genomic and biometrics field.

Then I guess the third one is virtual reality. The visual simulation of processes is going to be more important, and I think that will slowly morph its way into virtual-reality tools. The car manufacturers have been using these for quite a

while. How do you get inside an engine and really understand how to make an engine run more effectively? We're using (visual simulation) on packing lines and our manufacturing processes, but we're also starting in-store applications. We've always done simulations, but 10 years ago when you ran a simulation it all came out on hard copy, and you had your "ah-ha!" moment on Page 287. You said, "Oh, that's what is happening." The simulation tools will give us that discovery much faster and cheaper.

Are these technologies already developed, or do they have some ways to go before they can help you out?

I think there are some industries a little further along than others. I think wireless capabilities are going to explode. I just look at my home today. I've got a 2.4-gig phone system. I've got a wireless network, and every once and awhile my wireless network turns on my microwave because it's also a 2.4-gigahertz thing. We're going to have to work out how the home environment and how the retail environment work synergistically. But I think the payout in terms of productivity enhancement and consumer value is going to be terrific.

How much do you plan to spend on IT this year, and is it more or less than last year?

Well, we don't give out our num-

bers. But I'm going to answer the second part of your question in two ways. The actual budgets are going to be roughly the same, but the internals of those will be shifting dramatically. We have pretty much built out our (enterprise resource planning) systems, so we're moving from development in our back-end ERP systems to maintenance.

The Web service technologies are going to be growing dramatically. We're looking through a portfolio analysis of all of our IT projects and asking, "How do we get more bang for our buck?" And then, "How do we take and shift our spending to areas that are going to impact our business units to achieve their goals better?" So in total, we're going to spend the same as in the past, but the internals are going to seem a lot different.

You've talked about global Net exchanges before. How have they changed your business, and will they change it in the future?

I'm going to call them public Net exchanges. They help us become connected to suppliers. They dramatically facilitate the connectivity, and that helps us drive costs down. When I say connectivity, I mean Net exchanges help connect trading partners. Global Net exchanges provide tools that provide better scale. They also provide ways to stitch services into common trading platforms so that you can seamlessly tie into your ERP system. And this will

help drive costs down.

What's your biggest tech nightmare, and what's your biggest disappointment with Web-based technologies?

My biggest disappointment is that many of the Web-based technologies have cost more than they said. They've overpromised on the capabilities and they take twice as long to deliver. Many of the software vendors have just not been able to deliver. That's not everybody, but either they are under-resourced or undercapitalized in some cases. Or with some large vendors they feel like their footprint has got to cover every single component or aspect or capability on the Web, and they just haven't the capability to do everything.

My biggest nightmare revolves around security issues, disaster recovery. I hesitate to say this because as soon as I say this we become a target. I don't wake up every morning in dread that someone is going to do a denial-of-service (attack) on us, but it certainly could happen, and we're protected in those areas. But it's more like the earthquake in Turkey or the earthquake in Japan or domestic disturbances in parts of the world where we have major operations that worries me.

In the old days, if one country's system went down for 24 or 48 hours, it wasn't a huge inconvenience. But

PROCTER & GAMBLE

CONSUMER GOODS
MANUFACTURER.

FOUNDED

1837

HEADQUARTERS

CINCINNATI

NUMBER OF EMPLOYEES

106,000

ANNUAL REVENUE FOR 2001

\$39 BILLION

ANNUAL EARNINGS FOR 2001

\$3.5 BILLION

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if one of our three global data centers goes down, we've got to hustle to make sure the business keeps running. Our old disaster plans called for 72 hours of recovery time, and I've got to tell you that I can't live with those time tracks that we signed as recently as three or four years ago.

How do you measure success and failure as a CIO?

I ask myself these questions: Are IT initiatives aligned to the needs of the business units and delivering the expected NPVs?...Are IT solutions helping to improve the productivity of the company? Are IT solutions materially helping to lower our cost of doing business? ■