In June 2002, Elizabeth Winters accepted a new position with Capston-White. CW had just merged with Microtech, nearly doubling its revenues to over $60B. Ms. Winters had been a general manager in Microtech’s information technology (IT) services division. Her new charter was managing the Document Management and Production Services (DMPS) venture at CW. The division provided imaging and printing related outsourcing and consulting services to corporations.

Ms. Winters expected the position to challenge her like no previous position in her twenty-four year career in IT services, much of which she spent in Asia, rolling out services that had been developed elsewhere. DMPS had been struggling since inception in 1996. It had a staff of nearly 250 people, but had yet to turn a profit. Ms. Winters viewed the business as “something between a startup and a turnaround.”

DMPS was a high priority for Ms. Winters’ superiors. Markets for printers, copiers, scanners, and fax machines, once distinct, were converging. Further, the new “multifunction devices” had to operate effectively as a part of large corporate networks. Given the complexities, effective service provision was viewed as an important part of the overall strategy for CW’s Document Production Group (DPG), a $16B giant that provided the bulk of CW’s pre-merger profits. DPG’s brand was strongest in the printers market, but because of the market convergence, that position no longer appeared secure.

The transition to service-intensive, networked, multifunction devices had been anticipated for some time. It became real in 1999, when, for the first time, a major corporate client refused to renew their contract for CW printers because they considered CW’s service offering inadequate. Instead, the client replaced their entire fleet of printers with thousands of multifunction devices made by Duplico, a company with a reputation in the copier market that had long-standing successful service packages. Mark Spencer, who directed worldwide services delivery for DMPS, commented on the significance:
“All of a sudden, we realized that if we didn’t win a big contract today, with services included, we could be locked out of a corporation for perhaps five years or more.”

DMPS was not an optional growth opportunity. Ms. Winters was happy to have the added motivation:

“I think we need the threat to our core business to propel us forward. We have the capability, technology, people, and expertise. There is no reason we should not surpass Duplico and be in the leadership position. We just haven’t packaged it, marketed it, and taken it to the street.”

After only eleven weeks on the job, by September 2002, Ms. Winters had already made a number of important decisions. For example, she chose to implement a new organizational structure, and created a new “complex business development team” to augment the existing sales capabilities. Would her approach turn the business around?

**IT Industry Overview**

In the late 1990s, the typical large corporation spent little time thinking about how to most effectively manage the printers and scanners connected to their computer networks. Corporate IT departments had far more pressing issues to be concerned with, including the Y2K bug, the launch of the Euro, and, most of all, determining how to make the most effective use of the Internet, which appeared at the time to have the potential for imminent and unprecedented industry transformation. As a result, printing and imaging assets tended to be managed in an uncoordinated, highly decentralized fashion. Few corporations had a full reckoning of the expenses involved.

By contrast, centralized facilities management groups closely managed most corporate copier fleets. The copier industry had developed a sophisticated set of services for corporate clients – from leasing to on-site maintenance to management of an entire fleet.

The development of multi-function devices – single machines that could print, copy, scan, fax, and connect to a computer network – had the potential to disrupt this separation between the printer and copier markets. As a result, the intensity of competition that the DPG was receiving from companies like Duplico was increasing. In 2002, Y2K and euro conversion projects were complete, the pressure to develop Internet strategies had waned, and the economy was in a slump. IT departments focused on cost management, and viewed their printing and imaging assets with an eye towards economizing and potentially outsourcing.
CW Overview

From an initial competence in electrical engineering and focus on instrumentation, CW expanded into various high-end computing products in the 1970s. CW began building its commanding position in printing in the 1980s, with the launch of laser jet and thermal ink jet printers. These products were CW’s first successful mass-market products.

By 2001, DPG led the printer market, and its revenues of approximately $16B were roughly equal to revenues from the computing systems division. Combined, these divisions constituted 85% of CW’s revenues. In 2001, the computing systems division’s revenues dropped 14%, while DPG revenues declined 5%. CW’s stock price followed the rest of the technology sector sharply downward, falling 80% from its peak in March of 2000 to September of 2002.

Though CW had traditionally been product-focused, it also managed a $5B IT services group. The group served large corporate customers, often through partnership with other IT services providers such as Accenture and PriceWaterhouseCoopers. The services business was the only segment within CW to increase in revenues in 2001, by 6%. In 2002, the acquisition of Microtech roughly doubled the size of the services group and the computing systems division, but effectively had no impact on DPG.

Under the guidance of its founders, CW had developed a distinct set of core values that became known as “the CW Mindset.” Trust in and respect for individuals were at the core of the CW Mindset, as were flexibility and innovation. To maximize the potential contribution from each individual, CW developed a highly decentralized organization, with dozens of business units. Each was responsible for developing and commercializing its own products. Although this created some duplication and also some confusion for large clients who dealt with multiple CW sales representatives, this was regarded as an acceptable tradeoff for the increased innovative energies that it unleashed.

The organizational strategy changed under the leadership of Chris Maddox, who became CEO in late 1999. After his immediate reorganization, there were only five divisions. Two units focused on product development and delivery, one for computers and one for imaging and printing equipment. Two units were responsible for sales and marketing, one for consumers and one for corporations. The fifth group, known as CW Services, or CWS, continued to manage service offerings.

The theory was that in addition to presenting a simple, common front to customers, the new organization would encourage more collaboration between the old business groups. Under the decentralized regime, each individual unit had felt empowered to innovate, but there was little cooperation. Mr. Maddox believed that in the networked computing environment, in which everything had to be able to
interoperate with everything else, cooperation was crucial. Most new business opportunities demanded the combined expertise of multiple business units.

By 2002, CW had decided that the new organizational structure had created too much separation between the product development groups and the sales and marketing groups, and had created dedicated sales and marketing groups for the computing systems division and for DPG. The Microtech merger set off another reorganization. A chart showing DMPS’s relationship to other CW business units as of September 2002 is shown in Figure 1.

**Document Production Group Overview**

The Document Production Group conducted research at the frontier of printing technology, and developed and commercialized a wide variety of products for users ranging from the home photo hobbyist to the large corporate enterprise. CW’s printing products were widely regarded as easy to install and to use. As a result, few users gave them much thought after purchase, other than to occasionally replace ink or toner cartridges.

CW imaging and printing devices were often sold with service packages such as warranties. The customer services group managed the delivery of these services, and organizationally was a part of CWS, not DPG. However, CWS’s growth ambitions were focused on higher-complexity, higher-touch services such as systems integration projects.

Historically, customers did not seek higher-complexity services for their printing and imaging assets. As early as 1995, however, CW executives were anticipating that they eventually would. They expected significant markets for consulting services focused on managing and improving corporate printing and imaging environments.

The creation and production of printed marketing materials such as high-quality color brochures was one area of opportunity. Traditional printing presses were expensive capital investments typically owned by commercial printers. New digital printing presses were much less expensive, and were economical investments for corporations. As such, the roles of commercial printers and advertising agencies were in flux, and difficult to predict. CW wanted to position itself to have a profitable role in the new regime, by offering a full set of hardware, software, and services. CW had announced the purchase of DigiPress Systems N.V. in 2001, a company that developed and commercialized top quality digital printing presses.
The New Business Development Environment at CW

CW enjoyed a strong reputation for innovation. However, like most companies, CW was most successful at introducing innovations that involved technical improvements to existing product lines, or new products that could be sold through existing channels, as opposed to completely new ventures. In fact, the most notable success in building an entirely new venture had been the introduction of laser jet and ink jet printers.

In the late 1990s, as part of a corporate growth study, a group of volunteers, each of whom had been involved with a new business initiative at CW, convened to discuss ways to improve the venturing environment at CW. Because CW had operated in a decentralized structure for many years, each division had developed unique approaches to managing new ventures. There were many perspectives.

In 2001, building on this corporate study and conversations with executives in other industries, a team within DPG had defined a “New Business Creation” (NBC) process. The process was designed to steadily generate business of moderate potential. It was not designed for ventures that were very high in potential or very strategic, such as DMPS. The process consisted of the following elements:

- A dedicated venture fund, protected from the core business, managed by a central funding approval body
- A steering and guiding committee that selected promising ideas and coached venture leaders
- Performance milestones that triggered additional funding
- Frequent best-practice sharing

By 2002, DPG had applied the NBC process to several potential ventures, one of which had proceeded beyond the startup phase. The NBC process included staffing mechanisms designed to draw a broad variety of CW employees into new ventures. This was consistent with CW’s overall staffing philosophy, which emphasized promotion from within to maintain continuity and sustain “the CW Mindset.” However, Amir Sharma, a DPG vice-president responsible for the corporate market, did not embrace the philosophy unilaterally:

“It is great to staff internally when you are creating a new category and you are learning at the same time as your competitors. But when you enter a market that has existing competitors with strong value propositions, you don’t have that same flexibility. That’s when you can increase your odds by bringing people like Elizabeth Winters in.”

According to Mr. Sharma, CW had reasonable success in attracting their talented managers to new ventures. Innovation was at the core of CW’s culture, and success
in new ventures was viewed as a path to accelerated promotion. In addition, at the
top levels, a significant proportion of compensation was tied to business
performance. New ventures, if successful, offered potential for a tremendous bonus.

There were also compensation related issues, however. Compensation at CW was
generally increased as either headcount or revenues under management increased. In
some cases, CW agreed to “grandfather” certain elements of existing compensation
packages to entice senior managers to take on the challenge of the new venture.

Some CW employees believed that both the potential risk and reward of involvement
in new ventures needed to be increased, to be more in line with the incentives for a
venture capital backed entrepreneur. Although potential compensation was
significant, it did not compare to the wealth an individual could amass through a
successful independent startup. At the same time, CW executives that failed with a
new venture lost nothing more than their place in the “pecking order” upon return to
the core business.

Another aspect of the reward system was written performance evaluations. Mr.
Sharma felt that CW’s approach to personal performance evaluation needed
improvement:

“We have a lot of people who are evaluated as ‘great to work with,’ or
‘terrific people,’ or ‘good team players’... and they are ranked very
highly. But somewhere you have to factor in whether or not they
delivered the business results they said they were going to deliver.
We’ve improved the situation over the past couple of years, by
implementing the Balanced Scorecard and more of a manage-by-
objectives approach. Microtech’s culture is naturally reinforcing this
direction.”

In Mr. Sharma’s view, quantitative metrics were less appropriate for personal
performance evaluation in a startup environment, because of the uncertainties
involved. However, qualitative substitutes, such as questions like “How fast are we
learning?” and “How fast are we adjusting to what we learn?” were reasonable
substitutes.

**Document Management and Production Services (DMPS)**

By 2002, DMPS served twenty-three corporate customers, generating revenues of
several million dollars per year. For example, DMPS managed 1,100 printers (with a
possible expansion to 11,000 built into the contract) at 55 locations for a major U.S.
automaker. CW owned the printers; the customer was charged on a per-page basis.
DMPS handled preventive and corrective maintenance, replaced toner cartridges,
managed installation and upgrades of printer drivers, monitored printer usage, made
sensible installations and removals of printers, and integrated their services with the
customer’s internal IT help desk. The contract included networked digital copiers and
other multifunction devices. Customers chose from a menu of service levels, which
determined the required response time for each service. Some contracts were large
each to demand a representative on site full time. DMPS often used subcontractors
to deliver services.

For some customers, DMPS also installed “output server software” and integrated it
with Enterprise Resource Planning (ERP) software packages from vendors such as
Oracle and SAP. These ERP packages had little functionality for hard-copy output –
in fact, designers typically focused on eliminating the need for hard copy. The output
server software coordinated routine emailing, faxing, and printing of business results
from the ERP system. Services under development included document management
services, on demand digital publishing services, and services that facilitated e-
commerce.

DMPS classified their competitors as either print-oriented or IT-oriented. Their
biggest print-oriented competitor was Duplico. IT-oriented competitors included EDS,
IBM Global Services, and CSC. IT oriented competitors typically buried document-
related services deeply within much larger IT services contracts. Occasionally DMPS
would be a subcontractor in such contracts, but this approach led to conflict, because
IT-focused competitors sought to prevent CW Services from getting in the door to
compete directly for large IT services contracts.

Ms. Winters envisioned a business with broader scope and capability. First, she
foresaw expanding the range of products that the group could service, to include non-
CW printers and copy center equipment. Second, she anticipated expanding to higher-
complexity services, such as an as-yet-defined role in the production of high quality
marketing materials. Finally, she envisioned building a more complete global
presence.

Ms. Winters recognized numerous challenges in achieving this vision. She identified
several resource shortfalls, including knowledge in a wide range of non-CW products,
skills in managing within a truly global organization, skills in consulting firm
management and consulting project management, and abilities to market imprecisely
defined, complex services. Perhaps most importantly, DMPS needed to develop
relationships with other groups within CW that could help DMPS meet its goals, such
as CW services, plus the DPG sales force and product development groups.

Unfortunately, Ms. Winters inherited a significant credibility shortage upon taking
her new position. Groups from which DMPS needed help were unlikely to assign
priority to a small venture that they did not respect. Mr. Spencer described the issue:

“I think the organization’s credibility has been strained because of its
inability to hit the numbers. When we went through our latest round
of strategy with managers from outside of DMPS in the room, it was clear that they were thinking 'What's going to be different this time?"

In addition, the business model for DMPS broke many of the assumptions about what makes a business successful – assumptions that were deeply embedded in the CW mindset.

First, CW succeeded by developing technologically superior products. Therefore, the role of a service business, if any, was to increase product sales. By contrast, Ms. Winters intended to serve any vendor’s equipment – to even occasionally recommend that clients buy other vendors’ hardware. One team member who was present at the first meeting in which the change in direction was announced recalled how people literally “dropped their jaws” at the “heresy.” But Ms. Winters persisted, explaining that it was a multi-vendor world, and that if CW was serious about being in the services business, they had to accept it.

Second, CW was oriented towards hiring the most talented people available to perform the most value-added tasks, then outsourcing everything else. Their business model called for very high revenue-per-employee. Building a large, human-resource intensive services business like DMPS was anathema.

In addition to a credibility gap, Ms. Winters would also have to overcome some conflicts-of-interest with other groups at CW. One example was whether ownership of DMPS should be within the DPG or within CW Services. Because DPG was the strongest group financially, there was an advantage to being part of it. In addition, Ms. Winters perceived soon after arrival that CWS was overburdened by the economic downturn, to the extent that it had little interest in worrying about a venture as small as DMPS.

If DMPS started to succeed, however, CWS might make the argument for a “takeover.” Bolstering the argument, DMPS customers had already expressed confusion over DMPS’s reporting arrangement. Furthermore, the customer services group was already part of CWS, and they had developed services that went far beyond simple warranty packages and overlapped with some of DMPS’s offerings.

Another issue was the motivations of the product developers within DPG. Their goal was to make the best possible products. This resulted in designing firmware and software for printers that were incompatible with one another – for good technical reasons. However, in an ideal managed print services environment, there would be commonalities across all printers’ software and firmware. This would simplify the development of robust remote measuring and monitoring software and the provision of higher-complexity services.

In addition, there was a software development group within CW that developed tools for simplifying the management of corporate print environments. Essentially, these
were tools for corporations that wanted to “self-manage” rather than outsourcing print services to a group like DMPS. The same group developed and improved the IT infrastructure that supported DMPS. While there was some overlap in the necessary functionality, there were also conflicts. The software group was reluctant to develop features for multi-vendor print environments, and tended to prioritize their own business first.

Finally, Ms. Winters was concerned by a natural conflict with CW’s distribution channels. By selling service contracts, CW was improving its position to sell its printing and imaging products direct. At the same time, CW’s channel partners were valuable, especially for selling to middle-sized and smaller firms. What would the role of the channels be if the new service business succeeded, particularly as DMPS expanded to serve smaller customers?

Early in her tenure, Ms. Winters spoke to many of the CW employees that had been involved in DMPS since its inception in 1996, hoping to learn as much as possible from its history.


In 1995, Amanda Little, the head of the Document Production Group, identified the need for a services business within the printer franchise. Ms. Little had observed how services had become an important part of the Duplico strategy. Given the expected convergence of the copier and printer markets in the evolving networked and digital workplace, Ms. Little believed building a services business was critically important for keeping the printer business competitive. It was also a sensible growth opportunity, and offered CW an opportunity to get beyond selling “boxes.”

After fully evaluating the potential of the business with her staff, Ms. Little allocated the funds necessary to get the business started. A few million dollars of startup capital was required, but did not seem significant within a business of CW’s size, especially given that CW was accustomed to much larger investments for new product launches.

Ms. Little believed that the only way for the business to grow quickly was by leveraging the capabilities of CW’s channel partners. The model was for the channels to both sell and deliver the services, while CW would provide the needed tools and expertise – including defining the services, providing marketing materials, training service delivery personnel, and developing software tools. Some members of the management team doubted that channel partners had the capabilities to succeed, but others felt a strong bias against building a human-resources-intensive business internally.

In 1996, looking to give the business a boost by hiring the most professional and experienced general manager available to run the business full-time, Ms. Little hired
Ed McBride, who had previous experience at CW but was currently working for Duplico. Mr. McBride was assigned a staff of six.

By October 1997, DMPS had launched its first service package, known as “CW ClearCost.” The sales pitch for CW ClearCost called attention to total cost of ownership rather than a simple evaluation of price and quality. In delivering the service, DMPS consultants installed tools on the customers’ networks that allowed them to collect information such as total costs for paper, toner, and maintenance. Service technicians monitored usage statistics on-site, and recommended ways in which a printer fleet could be expended, reduced, or reconfigured to improve productivity. Mr. McBride envisioned gradually migrating to more complex services by launching a new service every six months.

Although the printer business was performing extremely well, customers were less interested in the services package than was hoped. As Emily Smith, who would later become the general manager of DMPS, observed, “the business didn’t go because the printers were selling themselves.” At the same time, Duplico was doing quite well with their services.

The DMPS management team concluded that part of the problem was that the distribution partners did not have the needed capabilities to deliver the services, particularly in utilizing the related monitoring and evaluation technology. Nor did they have the motivation, since their existing business model was still succeeding. One DMPS executive recalled, “They were really good at moving boxes and were making good money doing so.” In addition, customers were not confident that the channels could deliver services. They trusted them only to “deliver boxes.” Customers wanted the accountability and expertise of CW more directly behind the contract.

In 1998, revenues fell well short of expectations. The impact of the losses on CW as a whole was small. CW did not choose to report financial results for DMPS in its financial disclosures to investors (nor did it through the date of this case study, late 2002.)

Through its marketing communications efforts, DMPS did succeed in creating some awareness that CW was moving into services. One effect of this awareness was increased interest from competitors in the same opportunities.


When Ed McBride was asked to manage a different internal venture (one that was eventually to become an independent company), Margaret Johnson was named the next general manager of DMPS. She had been at CW through several positions, most recently managing a large customer support group.
Although the Document Production Group had never had a direct relationship with enterprises, Ms. Little had decided even a few months before Ms. Johnson’s arrival that such a capability was necessary. DMPS proceeded to build its own sales force, which worked in partnership with the DPG sales force (which interacted with channels), the CW Services sales force, and the representatives from the customer services team.

The CW Services sales force, which already had deep relationships with its customer’s IT departments, was in a good position to generate initial leads. However, selling document-related services was not at the top of their list of priorities. Ms. Smith recalled the challenge of building a more collaborative relationship:

“At the time, CWS was making money hand over fist selling services to Internet startups. We were looking for collaborative selling into existing global accounts, and inclusion in marketing collateral and events. We were also trying to get them excited about using printing expertise as a point of differentiation against IBM. But we had a hard time just getting the time of day.”

In theory, leads from CW Services would be turned over to the DMPS sales force, which would collaborate with the DPG sales force and the customer services group to generate consolidated quotes.

For roughly one year, to facilitate collaboration, the customer services group changed its name to Commercial Hardcopy Support Division and reported to DPG. It was subsequently returned to CW Services. By then, the customer services group had launched a separate service package called DocumentEdge, which they described as a “full service lease.” Priced on a per-page basis, DocumentEdge was a very standardized, could be sold through channels, and included repairs, call center resolutions, maintenance, and upgrades.

In addition to continuing to bolster the direct-sales capability, Ms. Johnson decided to expand the services offering. External consultants had advised that to be taken seriously in this market, DMPS needed to offer far more complex services, including document-related consulting and system integration services.

A powerful vision accompanied the expanded service offering. CW had the potential to become the only company that offered a full spectrum of IT products and services. They competed with IBM in computing systems and with Duplico in document production systems, but only CW offered both. In 1999, CW acquired Regal, to add integration of an “output server” into ERP systems to DMPS’s menu of service offerings.

In 1999 and 2000, investment in the Internet accelerated and the NASDAQ soared. There was a lot of creative thinking within DMPS regarding ways to use the Internet
to manage and monitor thousands of printers at dozens of enterprises from one central location. Neal Boutin, head of technology for DMPS, led the creation of such a system. With a budget of $3M, a team of roughly fifteen people completed construction of the system in about one year. Mr. Boutin commented on the process:

“This has always been a very popular area for intellectual property development. Many people and teams had already developed some partial solutions. Once we committed to a direct relationship with customers, we could economically justify converging the existing ideas and building a solution. Finding motivated people to do the work was not a problem.”

When completed, the system published printer usage data to a secure client website. DMPS account managers, working in collaboration with clients, were then able to make recommendations for alterations to the print environment. At the time of completion, Mr. Boutin was very concerned about the ability of the nascent system to handle rapid growth. He didn’t want IT to limit the growth of DMPS. In addition to improving the scalability of the system, his team began investing in added functionality, such as measuring application-specific hard copy usage, to support more complex services.

To enable delivery of more sophisticated services, Ms. Johnson also began expanding the service delivery capability of DMPS, hiring consultants with backgrounds in system integration. Two factors led Ms. Johnson to accelerate the hiring rate. First, the sales force warned her that they were concerned about making a services sale that CW did not have the capacity to deliver upon. In addition, the hiring environment in the midst of the Internet boom was challenging. It would be difficult to hire on short notice. To be safe, Ms. Johnson hired well ahead of sales. Her confidence was bolstered by consultations with IT industry experts such as the Gartner Group, who assured her that the market for imaging and printing services would develop.

Over this time period, DMPS participated in a rigorous, annual planning cycle just as did every other division within CW. However, DMPS also incorporated some additional planning practices that they believed were appropriate in a new venture environment. First, they implemented a process known as “Discovery Driven Planning,” which emphasized the identification of key uncertainties in a business model, and the rigorous, retrospective validation of the assumptions made in the face of those uncertainties. In addition, DMPS took to revising their plans on a more frequent basis than was customary within CW, to ensure that they could incorporate any lessons learned as quickly as possible. These practices created a considerable burden for DMPS managers, particularly insofar as they had to coordinate their planning with the other groups within CW with which they worked. As a result, they ultimately abandoned the “Discovery Driven Planning” methodology, though in Mr. Spencer’s view, the “do and learn” spirit survived.
By early 2000, DMPS had expanded to a staff of roughly 250, on multiple continents. However, they only had two signed contracts. Revenues were well below expectations. With the Y2K and euro conversion issues, along with heavy focus on the Internet, corporate IT departments were not prioritizing the improvement of their document production environments. An additional problem was that the sale of complex services required a long sales cycle. This was unfamiliar to DPG, and in forecasting revenues, it had not been accounted for.

The lack of sales had the team disillusioned. Ms. Little felt that too much was being spent on developing the business. A McKinsey study, gave a skeptical review of the business (and CW’s ability to grow new ventures internally), and suggested that the only way to build a bigger services business was through acquisition.

**DMPS under Emily Smith (2000-2002)**

Acquisitions were considered, particularly of companies that serviced copier fleets. However, CW was unable to identify a target that it viewed as an appropriate fit. (Acquiring or merging with Duplico was considered out of the question for anti-trust reasons.)

Investment in DMPS continued, though on a reduced scale. Layoffs reduced the headcount by more than one-third. Ms. Little approved the promotion of Emily Smith, who succeeded Ms. Johnson. She had been in the industry for twenty-three years, including positions in R&D, marketing, and sales, as well as experience abroad.

Ms. Smith refocused the business on a much narrower set of simpler services, similar to what had been offered under Mr. McBride. Her view was that they had spread themselves too thinly, and were doing nothing well.

While the business was a disappointment with similar offerings in the 1996-1998 time period, Ms. Smith saw reasons for optimism. First, she believed that the direct model was appropriate. More direct contact with customers would allow the division to converge on the services that the customers really wanted and needed more quickly. In addition, the imaging and printing market was starting to shift. Use of networked, multi-function printer-copiers was growing. As these machines were more complex, customers were more likely to purchase services to ensure that their investments were well managed.

Finally, DMPS had developed internet-based methodologies that could generate significant savings for their customers. Ms. Smith commented:

“We had developed methodologies that spanned from consulting to integration to outsourcing. We had a knowledge book, literally, a binder, that described them all. We could go in to a customer and
track how many printers, how may fax machines, how many copies, how much spending on supplies and electricity, and how much impact on employee productivity. It may seem simple but it is more complicated than it sounds.”

Ms. Smith’s superiors encouraged her to consider exiting the business by selling the methodologies to a services firm such as EDS or IBM global services – but each had had frustrations selling services for outsourcing PC fleets, and assumed that they would have no better luck with printers.

As the printer and copier markets converged, DPG competed more directly with Duplico. In one head-to-head sales competition, DMPS learned that Duplico was succeeding with much simpler contracts, and that price was a more important decision influencer than DMPS had recognized. As a result, a greater emphasis was placed on delivering services at a low cost. An increased use of subcontractors and even temp agency employees were utilized in service delivery as a result.

DPG also realized that they needed new products with copier functionality. The first effort, which they called the Multimax, did not meet revenue expectations. The group that introduced the product started working closely with DMPS. The two needed each other.

Ms. Smith felt that DMPS was under “constant probation” during her tenure. CW was implementing a significant reorganization under new CEO Chris Maddox, and there was uncertainty from day to day about whether DMPS would be discontinued.

It was hard to show immediate improvements. It took time to develop relationships with Chief Information Officers, and once a contract was signed it could take six months before it started generating revenues.

Senior management pressured Ms. Smith to get to profitability as quickly as possible. No longer would hiring take place in front of demand. In fact, Ms. Smith never asked for a larger budget during her tenure. She felt there were plenty of people involved, and that if they could crisply execute simple services, they could succeed. She focused on ensuring that each employee understood their role, and how their activities created value.

Despite Mr. Maddox’s emphasis on more inter-business collaboration at CW, Ms. Smith did not have much success improving coordination with CW Services. In her view, CW Services was tied tightly to the computing systems side of CW, and the document world was entirely different. She described CWS’ lingering attitude towards DMPS: “You don’t need a service contract for something that never breaks.”

Over time, DMPS started to make some changes to their sales and marketing approach. First, they increased their emphasis on asking potential clients’ CIOs thought provoking questions such as “What is your overall document strategy?”
rather than describing their services as “outsourcing.” The approach seemed to generate more enthusiasm, and overcome skepticism that CW’s real interest was simply selling more printers. DMPS also began to recognize that the heritage of a division focused on products affected their sales approach. With a product sale, you talk very specifically about features and performance. In selling services, by contrast, especially in a new venture context, a much more flexible approach was needed. The sales team had to trust that the delivery team could handle a wide range of services.

Under Ms. Smith’s tenure, the management team monitored a variety of performance measures. Though revenue growth and profitability were the most important, they also tracked capacity utilization, total customers, total devices under contract, market awareness, market preference vs. competitors, and brand strength.

Mr. Nick Kennedy, who had succeeded Ms. Little upon her retirement, reviewed performance quarterly. Ms. Smith understood profitability to be the most important metric by which she was evaluated. Though she missed written targets, she did not receive feedback from Mr. Kennedy that she was “failing” as a result. And, she felt good that she was getting greater traction with customers. Mr. Kennedy had communicated an accommodating mindset towards new ventures. He felt that new ventures could take five to six years before they were profitable. With the economy in a general slump, DMPS was much less a concern to Mr. Kennedy than the core business.

At times, the DMPS team was frustrated with internal cost allocations that, in part, determined profitability. At one point, they discovered that CW Services was charging them more for certain services than they charged external customers.

By 2002, sales effectiveness had improved, increasing the customer base to twenty-three enterprises. For a time, sales were going so well in Europe that they struggled to keep up with demand, and regularly flew delivery people across the Atlantic. Despite the growing pains, DMPS never lost a customer, and credibility improved over time. The team felt that they were succeeding. Approximate revenues and expenses for the period 1998 to 2001 are shown in Figure 2. Not reflected in the financials is the full value of the multi-year contracts that were in place by late 2002, valued in excess of $100M.

Nonetheless, in the wake of the merger with Microtech, DMPS was reassigned to Ms. Winters. Mr. Sharma, who had retained Bain & Company, a consultancy, to analyze the market opportunity and develop a detailed business plan, gave Ms. Winters a broad mandate for change, and a charter to once again expand the complexity of services offered.

Because there was a sense that the business was improving on its existing track, some members of the DMPS team felt anguish over the decision to redirect the business. Reflecting on DMPS’ six-year history, the team offered several thoughts on things
they might have done differently. First, they wished they had focused sooner on developing a more effective sales approach. The integration of the Regal sales team, which was accustomed to selling software not services, plus the organizational changes directed by Mr. Maddox had caused some loss of momentum. Second, they wished that they hadn’t let expectations rise so highly during the 1998-2000 period. One member of the team said that he had learned that sales people are just wildly optimistic. Mr. Boutin commented:

“If we had been able to set sales targets more realistically it would have changed our behavior. Anticipating rapid growth, we drove people very hard and spent a lot of money – building assets we weren’t able to take full advantage of. I think the reality is that probably 1% of startups are more successful than expected. The rest underperform. If we had set more realistic targets, we would have allocated resources more efficiently, and learned sooner.”

Third, CW tended to keep new ventures isolated while they were “incubating.” This bias may have hindered DMPS – more “forced” integration with related groups may have helped. Fourth, they wished they had more consistent leadership. There had been multiple changes, both in the position of general manager of DMPS and his or her direct superiors. Fifth, they wondered if lowering price and shortening contract length would have helped increase demand.

Finally, they regretted bad timing. They felt that they had moved the business in a very positive direction between 2000 and 2002, and it would have showed in the results much more clearly had the economy remained strong. True, corporate IT departments had shifted from investing in Internet infrastructure to finding ways to save money. However, printer purchases tended to be decentralized, so few corporations knew how much they were spending. Other ways to cut costs were more easily identified.

DMPS Under Elizabeth Winters (2002)

After the consulting work completed by Bain & Company, which supported the notion that there was indeed a market for more sophisticated document-related services, DPG senior management redoubled their commitment to DMPS. They felt confident because they believed that they had a better understanding of customer needs than ever before, and that with Bain’s help they had been extremely thorough in researching the opportunity. In less formal interactions, IT consultancies also reacted positively to their direction. Mr. Kennedy and Anita Fields, head of CW Services, talked frequently about how the two organizations would coordinate their efforts, and began documenting their expectations.
Acknowledging the strategic importance of the business, DPG senior management widely communicated expectations for a broader set of services and more rapid growth. By selecting a Microtech executive, Ms. Winters, to run the business, and by supporting the creation of a new organizational structure, they created a sense of a “new start” for DMPS amongst DPG and CW Services employees.

Ms. Winters immediately moved to capitalize on this opportunity. Recognizing that support from senior management did not automatically convert to support from middle management, she began meeting with as many managers as possible, primarily to build excitement around the direction and potential of DMPS. It was a difficult time to be building support for a new business. In the midst of both an economic downturn and a large merger, many people were most concerned with simply keeping their own jobs, or with jockeying for power and position in the new organization. Although Ms. Winters felt she succeeded in building excitement, she also sensed an underlying skepticism:

“I think the new investments and the new plans for this business have been well received by most of the organization. Everyone is optimistic and excited. Having said that, I think a lot of people are thinking, ‘I wonder how real this is.’”

Ms. Winters felt that the new business, with expanded services, could not possibly succeed without solid coordination with other internal organizations, and partnerships with external organizations as well. She also felt that there needed to be better customer intimacy in delivering services. As a result, she chose a matrixed organizational structure. There were regional general managers, lines-of-business managers (responsible for specifying new services and acquiring the resources needed to deliver them), and functional managers. See Figure 3.

Ms. Winters made it clear that all positions within DMPS were open. Managers within DMPS would have to interview for a job in the new organization. Ms. Winters intended make an effort to attract more people from outside of CW. In DMPS’s past, many positions at operational levels had been filled from outside, but almost all management positions were filled from within. The main criteria for selection were flexibility and adaptability, and a willingness to experiment and learn. Ms. Winters also emphasized experience in a service-oriented business, some exposure to the documents business, and a global perspective. She expected every new hire to meet at least two of the three criteria. She also wanted diversity, passion, startup experience, and experience working in a complex organization like CW.

To augment the DMPS sales capabilities, Ms. Winters also created a new “complex business development” team. She hired eight representatives, some from the former Microtech and some from outside of CW, each of whom had many years of experience. This team had the capability to enter an unfamiliar IT environment,
quickly assess the situation, and design solutions. Ms. Winters established incentives for the team based on measures of customer retention and profitability by account.

Ms. Winters designed the organization to create heavy horizontal interaction amongst leaders in various regions, functions, and lines of business. Each manager also reported along multiple lines of authority. For example, regional managers reported to Ms. Winters, to a general manager in CW Services, and to a general manager in DPG. The DMPS sales force reported to each region, to a global sales manager, and to the DPG sales force. To the extent possible, Ms. Winters intentionally created a structure that paralleled CW Services' structure. That served two purposes. It would facilitate interaction – people would naturally understand each other’s responsibilities – and it would make a future integration with CW Services, if it happened, easier to implement.

In formal planning, DMPS continued to be treated like any operating division at CW. However, Mr. Sharma differentiated his relationship with Ms. Winters from his relationship with other general managers. First, he allowed a greater tolerance for the unknown. Not only were financial results unpredictable, even the value proposition was likely to evolve. Second, he set singular milestones for evaluation, rather than ongoing financial targets. Third, he invested his time disproportionately in DMPS, because it was a startup. Fourth, he placed more stock in Ms. Winters’s judgment, given his extensive experience in services business.

Mr. Sharma prioritized his activities with DMPS as follows: 1) Help Ms. Winters navigate the CW senior management structure, 2) Help build a stronger relationship with CW Services (which now included many Microtech executives that Ms. Winters knew well), 3) Help build Ms. Winters’s credibility, 4) Help acquire resources for DMPS, as necessary.

Expectations for the business were established during the consulting engagement with Bain. The most talked about milestones were to generate ten showcase accounts (accounts that involved a broad array of services) in 2003, and to generate $100M in revenues in 2004. Ms. Winters felt comfortable with these milestones, and also viewed customer satisfaction and customer retention as important performance indicators. Because DPG’s senior management now viewed DMPS as a strategic business, they placed less emphasis on profit targets. Although a five-year financial model had been created, targets beyond 2004 were not given much credibility. Frank Roberts, the controller for DMPS, believed that if DMPS met their two milestones, they would have no trouble exceeding expectations for years beyond that. In fact, while a detailed P&L was in the business plan, he downplayed the importance of anything but these two milestones:

“At the end of the day, senior management knows, because we are a new business, predictability is low. So there is a little more tolerance for the P&L. The numbers next year are still small relative to the
mainstream business. The mentality is ‘We just have to get some real traction with customers next year.’ If we get those 10 showcase accounts, and they are real showcase accounts in that there are sizable contracts with well-known companies that have some reference value, then our value proposition is validated.”

In order to estimate profit-and-loss, Mr. Roberts and an analyst at Bain had collaborated to estimate costs, based on best guesses as to how the services would be defined and conversations with service delivery personnel. They also did some benchmarking against competitors’ prices and costs. They had to make many assumptions, and documented them as such for later testing and evaluation. However, Mr. Roberts reflected that CW did not always have a sufficient orientation towards carefully reviewing the past, diagnosing disparities between expectations and reality, to learn from plans.

**Conclusion**

Having built as much internal momentum as possible, Ms. Winters’s priority was defining services and taking them to market. Line-of-business managers worked closely with the marketing team to specify services and to establish agreements with internal and external partners to ensure that they could deliver. They defined the services loosely, expecting to understand customer needs more precisely over time. One DMPS executive described getting the marketing team comfortable with less precise messages as “challenging.” It required several meetings between the marketing staff and the service delivery staff to increase comfort with marketing in a services environment. After the effort, rather than operating in a mode of “design a product, launch it, and succeed or fail,” the marketing staff expected an ongoing feedback loop between themselves and the service delivery teams.

The increased support from senior management came with increased expectations. Ms. Winters felt that her future at CW was at risk. In her estimation, if the business failed to meet expectations, she might get another chance, depending on why it failed. She felt that inability to overcome internal resistance would be no excuse.

Ms. Winters described the approach to funding DMPS as “somewhat cautious.” While she felt certain she could succeed more quickly with more capital, she acknowledged that her superiors would demand evidence of success with the showcase accounts before allocating additional capital. In Mr. Sharma’s view, the growth constraint for DMPS was not capital, it was sales capability, and then delivery capability for more complex services.
Discussion Questions

1. Does a promising market for imaging and printing services exist?

2. What lessons can be drawn from DMPS’s experiences between 1996-2002?

3. Would you want Ms. Winters’s job?

4. To what extent should the philosophies embedded in NBC apply to DMPS?

5. If Ms. Winters were given a 100% increase in the size of her budget, what would be the best way for her to allocate the funds?
Figure 1 CW Organizational Structure as of September 2002

- **CEO**
  - Chris Maddox

- **CW Services**
  - Personal Printing
  - Corporate Printing
    - Amir Sharma

- **Document Production Group**
  - Nick Kennedy

- **Computing Systems**
  - Digital Publishing
  - Supplies

- **Geographic Sales Teams**
  - Supply Chain
  - Ops/IT
  - R&D

- **Shared printers (hardware)** (~1000 people)
- **Connectivity (software)** (~700 people)
- **DMPS**
  - Elizabeth Winters
    - (~300 people)
Figure 2 Financial Results DMPS
Figure 3 DPG Services Organizational Structure

Elizabeth Winters, VP & GM

Reports to corresponding executives in DPG and CW Services

Americas
- Mark Spencer

EMEA

Asia Pacific

Reports to corresponding executive in CW Services

Consulting and Integration
- Everett Stevens

Customer Support

Managed Print Services
- Emily Smith

Reports to corresponding executive in DGP Corporate Printing

Complex Business Development
- Frank Roberts

Marketing

Finance

Human Resources

Sales

R&D

Global Services
- Neal Boutin

[Note: Only names of people mentioned in the case are shown. Many positions were unfilled as of October 2002.]