Coors Brewing Company Point of Sale Application Suite: Winning Mindshare with Customers, Retailers, and Distributors

Jack Buffington  
Coors Brewing Company, jbuffington@mtginc.com

Donald J. McCubbrey  
University of Denver, dmccubbr@du.edu

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COORS BREWING COMPANY POINT OF SALE APPLICATION SUITE: WINNING MINDSHARE WITH CUSTOMERS, RETAILERS, AND DISTRIBUTORS

Jack Buffington
Coors Brewing Company

Donald J. McCubbrey
Daniels College of Business
University of Denver
dmccubbr@du.edu

ABSTRACT

Coors Brewing Company is the third largest company in the highly competitive U.S. beer industry. The primary target market for its products is young adults, who demand innovative approaches to marketing from brewers, including relevant and creative point of sale (POS) materials in retail outlets. Coors depends upon the cooperation of distributors and retailers to place Coors’ POS materials in ways that will give their products greater visibility. Since all retailers and most distributors of Coors products also sell competitors’ products, Coors realized that it must win the battle for mindshare with its distributors and retailers who are in a position to influence what the retail customer buys.

For many years, Coors was at a competitive disadvantage with its POS deployment process. The distribution of POS materials was costly and time-consuming, involving paper-based procedures for ordering and fulfillment. In 2001, Coors created an e-Business Department to address enterprise-wide opportunities such as the POS process. As one of their first efforts, members of the e-Business Department created a portal-based POS Application Suite that proved to be highly effective in addressing the needs of its distributors and retailers for POS materials in support of Coors marketing campaigns.

As one element of the POS Application Suite, Coors partnered with HP to create an "e-POS system". The e-POS system contains embedded innovative technology that permits distributors to customize POS materials for their specific needs while, at the same time, letting Coors maintain central control over what is permitted to be used under an important new national licensing agreement with the National Football League.

The POS Application Suite gives Coors a first-mover advantage over its larger competitors.

Keywords: e-business, e-commerce, internet, marketing, mass customization, offshore development, point of sale, portal
I. INTRODUCTION
THE MARKETING CHALLENGE

The primary target market for beer is young adults. While beer sales were relatively flat in the 1990’s, sales were expected to grow at 1.5% annually as more baby boomers’ children reach drinking age. The forecast was based on the observation that “22 year olds drink more than 33 year olds” and that demographics are in the brewing industry’s favor for the next 10 years [Tarquinio, 2002].

However, this target market is a difficult one for brewers to reach. Young people demand increasingly creative and innovative approaches to marketing. In addition to television advertisements, timely, relevant, and creative point of sale materials (e.g. banners, signs, figures, lighted signs, and table tents) in retail outlets are a key component of the marketing mix. Coors depends upon the cooperation of distributors and retailers to place their POS materials in ways that will give Coors products greater visibility with retail customers than those of the competition. Since substantially all retailers and most distributors of Coors products also sell competitors’ products, Coors realized that it must win the battle for mindshare not only with those who buy its products at retail, but also with its distributors and retailers who are in a position to influence what the retail customer buys. Produce-to-order products (PTO) are ordered for placement in specific retail locations and are the POS items that consumers see at retailers. Examples of typical PTO materials are illustrated in Figures 1 and 2.

![Figure 1. PTO store display](image1)

![Figure 2. PTO Neon Sign](image2)

To be effective, many POS materials must be customized for local markets. For example, in March 2002, Coors outbid its major competitors to become the official beer of the National Football League (NFL) through 2007. [McArthur and Toricelli, 2002]. The licensing agreement with the NFL permits it to use the NFL logo on POS materials. However, all POS materials must conform to the terms of the national licensing agreement which contains many restrictive conditions imposed by the NFL to protect their brand image. At the same time, Coors depends on its distributors and retailers, who are closer to local markets, for input on which POS materials are likely to be most effective. Such input must take into account both assessments on what will appeal to distributors, retailers, and consumers, as well as knowledge of what competitors are doing with their POS programs. An example of an NFL PTO item is illustrated in Figure 3.
SIDEBAR 1: ABOUT COORS

Coors Brewing Company of Golden, Colorado is the third largest company in the highly competitive U.S. beer industry with an 11% market share in 2002. Coors’ brands include Coors Original, George Killian's Irish Red, and Zima, but the Coors Light brand accounts for four-fifths of its domestic sales. Anheuser-Busch of St. Louis, which makes Budweiser and other beers, is by far the dominant company in the industry, with about half of the market. Miller Brewing, with 19 percent of the market, makes Miller Genuine Draft and other brands.

Coors Brewing Company is a subsidiary of Adolph Coors Company, which was founded in Golden, Colorado in 1873. Coors was a family-run firm through the years, and members of the Coors family are still active in its management. Peter Coors serves as Chairman and Bill Coors is Vice Chairman. However, former Frito-Lay executive Leo Kiely was hired as President and Chief Executive Officer in 1993. Kiely, whose background is in consumer products marketing, was the first non-family member to serve as CEO.

“Kiely brought to Coors a hands-on management style, financial discipline and strong cultural attributes. All helped Coors improve its performance.” Peter Coors as quoted in [Coliath, 2000]

The company became the second-largest brewer in the United Kingdom when it acquired the Carling business from Bass Brewers, part of Interbrew, for $1.7 billion in December 2001. [Tarquinio, 2002]. In this acquisition, Coors obtained the largest selling beer in the United Kingdom (Carling), as well as other popular brands in the U.K. such as Worthington’s, Grolsh, and Reef. Coors products are available throughout the United States and in more than 30 international markets in North America, Latin America, the Caribbean, Europe and Asia. Their corporate headquarters and primary brewery are located in Golden, with other major brewing and packaging facilities in Elkton, Virginia, Memphis, Tennessee, and seven brewing facilities in the United Kingdom. The Coors brewery in Golden is the world’s largest on a single site. In addition, Coors owns major facilities in Colorado which manufacture aluminum cans and ends, as well as bottles, and is a partner in ventures that operate these plants. [Coors 2003].

Coors is a large publicly traded corporation, ranked in the top 500 in the United States. Net sales for 2002 totaled $3.78 billion. Net income in 2002 was $161.7 million, up 31.5 percent from 2001. In 2002, Coors’ sales volume was 31.8 million barrels\(^1\). [Coors 2003].

\(^1\) 1 barrel equals 31 gallons
II. SHORTCOMINGS OF THE FORMER POS SYSTEM

Despite its importance in increasing sales, for many years Coors was at a competitive disadvantage with its POS deployment process. The distribution of POS materials was costly and time-consuming, involving paper-based procedures for ordering and fulfillment. The creation of POS materials customized for local markets was outsourced to third parties, some overseas, but the overall process was plagued by weak supporting systems. The systems were time-consuming and hampered by logistical difficulties and high costs.

Prior to the introduction of Coors’ electronic POS system, the POS business processes were essentially manual and quite time-bound in ordering, production, and fulfillment. (Coors attempted to replace the manual system with an automated system in the past, but the initiative was not successful.) For example, each year, Coors produced a paper catalog containing both information and images describing available promotional products. Coors brand managers would work with the Company’s partner marketing firm to develop the catalogs, which typically ran to 60 pages and contained as many as 400 items. In many cases, significant and expensive efforts would be needed to develop and submit material that missed the catalog print schedule deadline. Due to the lead-time to produce and distribute the catalogs (2 months), Coors brand managers were often under severe time pressure to reconcile the need for last minute ideas to the long lead times needed for catalog production.

Once the catalogs were produced, they were sent to over 600 Coors distributors in the United States and several hundred abroad. If changes were later required, inserts were prepared and sent to distributors for inclusion in the catalog. Obviously, this was not a desirable procedure even though it was a frequent event given the fluid nature of marketing. Once distributors received their catalogs, they would decide which POS materials to order for their local outlets. In many cases, the printed catalog did not contain enough information to permit distributors to make an informed decision and Coors corporate would have to be contacted. These procedures did not readily support the multi-location nature of distributorships, and how decisions were made on POS within their businesses. In addition, the catalogs did not integrate well with Coors’ cost-sharing strategy for their distributors. Distributors were given a spending allowance for POS materials by Coors, but Coors’ goal was for distributors to exceed their allowance and use some of their own funds for more POS materials. Distributors needed to make separate inquiries to manage their total spending in relation to their spending allowance. The process was cumbersome, and therefore did not support Coors’ goal to have distributors order more POS materials.

Distributors often ordered materials at the last possible moment for a given promotion, which tended to introduce errors into the manual process. The distributors would look at the catalog and fill out a form that would be faxed to Coors’ marketing partner. A reconciliation process would then occur manually between the marketing partner and distributor and the Coors’ field sales department. Since the marketing partner would manually key in orders to be sent to the fulfillment companies, errors occurred, particularly at the last minute. For some of the products the marketing partner dealt directly with suppliers; in other cases, they dealt with third parties, who dealt with the suppliers. In either case, the many manual handoffs led to significant order errors.

The process flow of the prior system was not well thought out. Whoever was responsible for fulfilling a task in the process owned the process. Systems did not support automation, and processes did not support a viable system. Therefore, most processes were ad hoc and, in many cases, difficult to understand. This point is important, for if distributors did not understand or adhere to the processes for ordering Coors’ POS materials it could make them less inclined to favor Coors over other beer companies who are competitive in promoting POS materials. Therefore, while Coors measured POS success solely upon the positive impact of the message on the end user, order creation and fulfillment ease-of-use impacted the ultimate success of the programs. A similar set of issues complicated the ordering and ultimate effectiveness of another category of products, Licensed Promotional Materials (LPM). LPM materials are shirts, hats, and
similar items. The LPM system linked to 60 third party licensees of LPM materials, who contracted the manufacturing of these materials in developing countries such as China.

Because of the cumbersome customization processes, distributors and retailers tended not to optimize their potential ordering of customized materials and, as a result, non-customized POS materials were most often used in customer-facing settings. This counter-productive circumstance occurred even though high quality, targeted POS marketing materials were known to increase sales. Thus, in this highly competitive industry, Coors was not able to realize the benefits of customized POS materials because of inadequate processes, materials, and supporting systems.

III. THE IT ENVIRONMENT AT COORS

Like many companies of its size and longevity, Coors was an early user of IT. In typical fashion, mainframe computers were used beginning in the early 1960’s for transaction processing systems such as payroll and general accounting. An in-house staff was responsible for custom development. Because the manufacturing function is so important at Coors, unlike most other companies, early attention was paid to manufacturing control systems such as inventory management and production scheduling. Throughout the 1970’s, 1980’s, and into the early 1990’s, functional departments operated with a great deal of autonomy. This management style was reflected in the way that IT applications were developed. While many companies used IT systems that operated in independent functional silos, Coors was near the far end of the spectrum. For example, financial and marketing systems were developed and run on IBM mainframes while manufacturing control systems were developed for DEC minicomputers. Internal systems were generally not coordinated. Stories abounded about management’s inability to, for example, reconcile shipments recorded by manufacturing control systems to shipments recorded by the financial and sales and marketing systems.

In the mid-1990’s Coors began installing SAP software to integrate its disparate (and outdated) applications. In 2001, it signed an innovative outsourcing contract with EDS, in which EDS is paid monthly for building and managing the IT infrastructure for the SAP accounting system, based on Coors’ day-to-day use of the system rather than paying a large up-front fee as is typically done. At the same time, approximately 70 Coors IT employees were hired by EDS [InformationWeek 2001]. At the end of 2003, the traditional component of the IT organization consists of about 150 employees who focus on new systems development and systems enhancement and maintenance. Since 2000, custom system development was de-emphasized in favor of acquiring commercial off-the-shelf software whenever possible.

ESTABLISHMENT OF THE E-BUSINESS DEPARTMENT

The Internet revolution caught many large companies by surprise. A common phrase in the vocabulary of Web entrepreneurs in the halcyon years of 1998 to 2001, when referring to traditional companies which were sitting on the sidelines, was that “They just don’t get it.” Ultimately, large companies “got it” too, and began to create Web-based applications to harness the power of the Internet for business benefits. For example, GE’s Chairman and CEO Jack Welch was quoted at the time as saying: “Where does the Internet rank on my priority list? It’s number one, two, three and four.” [Fingar and Aronica 2001].

In many cases, CIOs (and CEOs) found that it was more effective to establish separate groups of Web-oriented IT specialists who were grounded in the Web’s potential rather than try to re-orient employees from their traditional IT organizations. In some instances the e-Business group was totally separate from the IT organization and in other cases it was simply a distinct group within IT focused on e-Business. Arguments exist on both sides of this issue, of course. Some companies that established separate groups folded them back into the traditional IT organization (e.g. GM) [CIO, 2002]. In 2001, after some deliberation, Coors decided the best way for the Company to gain business benefits from Internet applications was to establish a separate e-Business
Department. After an extensive search, Vice-President Tammy Berberick hired Jack Buffington to head the new unit.

Buffington’s experience included 10 years experience in IT both as a consultant and in management positions. His most recent previous position was as Director of e-Business for a large international insurance company. He brought broad business experience to the table, as well as extensive experience in the design and installation of IT systems and was current in e-business strategies. He also was a firm believer in the cost-effectiveness of offshore development, based on favorable experiences using developers based in India. Shortly after he arrived he built his Department to an initial level of 12 people. Very few, if any, had any e-Business experience since these individuals were hired at the height of the dot-com phenomenon. Nine were hired from the outside and three transferred in from other Coors IT units. His immediate goal for the team was to make a significant impact on Coors through quick hit wins with readily apparent business value, while simultaneously reining in the spending of user departments for items not authorized by IT.

Coors found that a separate e-Business unit worked well for them, and maintained its separate identity within the larger IT organization for some time. In 2003, however, Coors chose to link the e-Business Department more tightly with the overall IT organization, as e-Business evolved into a more mature concept that is viewed (rightfully so) as a tool rather than as a process (as it needed to be in 2001).

INITIAL FOCUS OF THE COORS E-BUSINESS DEPARTMENT

The charter of Coors e-Business Department was to partner formally with business units on critical needs within the company through the use of practices that supported sound business decisions for Coors. The charter contains little or no reference to “IT” or “technology”. They were not the intended focus when the Department was established. Rather, the goal was to oversee the completion of critical business projects that can be solved through web-based technologies. What was missing was the bridge between the business need and the IT solution.

Progress in e-Business was evolutionary at Coors. At a time when the “Internet Revolution” mystified many companies, Coors was seeking to gain modest but realistic ROIs from IT investments. At that time, as indicated at the beginning of this section, Coors was in the midst of outsourcing its routine IT processes to EDS. In the past, business unit internal customers rarely experienced success with IT support in meeting their goals, and were therefore wary of relying on IT in meeting their critical business needs.

Establishment of the e-Business Department was a crucial decision because, before it was made, business units typically made side deals with technology third parties to deliver solutions. In many cases, the business units opted for third parties with close business relationships with Coors in the area of the business specialty, such as POS. While these companies often fully understood the present-day nature of the business, they frequently did not possess a suitable level of technical expertise to make logical technical and design decisions, or know how to design a more efficient model. In too many cases, the relationships either failed after considerable investment from Coors, led to silo systems that were redundant to others already existing, were “point solutions”, and/or were difficult, if not impossible to maintain within the enterprise.

Buffington knew that he needed to achieve a quick success to have an immediate impact and to establish credibility with the business units. Casting about for opportunities, and talking with other managers and executives, it soon became apparent that the POS application would provide significant impact by the e-Business team. Clearly, marketing was critical in the competitive brewing industry, and Coors admittedly fell short in realizing the potential of POS.

POS turned out to be even more important when Coors later signed the NFL contract to be the exclusive beer sponsor for the league. The contract was expensive, and full of upside potential
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for Coors, potential that could only be realized if a truly effective POS system could support the marketing campaign.

When the e-Business department commenced the new partnership with the Sales department to focus on POS, there was no time to go through a formal process of choosing a vendor, or thinking through the "buy versus build" question. Given that POS fulfillment systems were often specialized within the industry (i.e. built by smaller niche players rather than ERP companies), the e-Business Department felt that it could not risk creating another third party relationship that could lead to another unsuccessful system. The belief was that process, not technology, would matter most in designing a solution. By owning the responsibility for designing the system, from business to technical, the e-Business team could deal with a critical business need on its own.

IV. DECIDING ON A COURSE OF ACTION

When the decision needed to be made, the options for Coors were:

- use a partner who understood the specifics of POS within a three tier consumer products company,
- use standard ERP software tools\(^2\) for integration, or
- build it themselves.

While it was the practice of Coors to stay away from homegrown solutions as much as possible, the circumstances did not support such a decision. It was felt that the specialized tool providers could understand certain aspects of the business process, but would still need to customize a significant portion of their software to meet Coors’ needs. A primary concern was whether a third-party vendor would be a business or technology specialist, when what Coors needed was a strong focus on integrating the two.

Since Coors is a process manufacturing company, they often found it prudent to use traditional ERP tools to develop add-on business systems. In the case of POS, however, greater integration was needed with the Company’s marketing partners than what would be needed with a manufacturing system that was essentially internal. As many of the marketing partners were smaller companies with widely varying IT capabilities, their technology differed from Coors’ (e.g. using Mac versus Windows). The ERP or standard tools within the industry had yet to focus on the specialized set of requirements for the POS application. Furthermore, neither of the options provided Coors with material examples of experience in succeeding in the type and extent of solution that was needed for the company\(^3\).

In the end, Coors e-Business felt that the most viable option was to design and build a system using existing application tools in-house. Given the philosophy Buffington brought with him was to focus on business and technical requirements and then outsource the actual technical development, it was the stance of e-Business that Coors was best suited to understand and formalize the business process around POS, and that the third party development company was best suited for cost-effective rapid application development, as long as they were given solid designs.

THE FIRST STEP: CREATING A PORTAL

The e-Business Department began the transformational effort for POS by first creating a portal for its distributors, suppliers, and retailers to use as a collaborative workspace. The portal permitted

\(^2\) Software applications which aid in development and other generalized functions are commonly called “tools”

\(^3\) Later analysis showed that many of Coors’ competitors faced the same problems.
such functions as targeting, personalization, and data management to be performed with ease and permitted participants to see the value of an Internet-based collaboration mechanism.

The term, "portal" is viewed as a technical problem within the IT sector [Fox 2002]. At Coors, however, it was always clear that the reference was less about technology and more about business process. The portal was to become a technical framework that supports the way that Coors conducts business with distributors, suppliers, consumers, employees, shareholders, and other stakeholders. It is foundational, easily supporting whatever initiative is needed at the company quickly, and with the necessary scalability.

It is intended to be transparent to the business customer, be reliable, and possess the requisite flexibility to support a fluid competitive environment. The portal, however, was not a popular concept when first discussed with the Sales Department, because it seemed to focus more on a foundation for the future than on "needed yesterday" functionality. Within their competitive landscape, business users felt it was a less urgent step when compared to their immediate tactical needs. In the end, their objections were overcome, and the team turned its attention to providing a framework for e-business through a portal approach, as illustrated in Figure 4.

Figure 4. CoorsNet B2B Portal

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4 Scalability refers to the notion that an IT system can easily absorb increasing volumes of transactions as demand increases. Scalability will be shown to be an important requirement in Section IV.
The specific approach taken was to construct interlocking portals of B2B (business to business), B2E (business to employee), and B2C (business to consumer) that would readily support future initiatives such as POS. Therefore, the POS solution on Coors’ B2B portal (primarily for distributors) would not be handled as separate from other critical tasks needed to be performed by distributors electronically. The portals offered distributors one place to interact with the company. As a result, Coors became an “easier to use” company. The portal framework brought forward infrastructure, governance, and structure that allowed for rapid execution on business needs (as was subsequently demonstrated with the POS system). Next, after building a scalable portal foundation, the team turned its attention to rationalizing critical business applications, such as the POS ordering and fulfillment process.

**POS SYSTEM REQUIREMENTS**

All system modules were developed on tight timelines (e.g. Only about four months were available in 2002 to roll out the e-POS module needed to support the NFL promotion), and the proper systems and processes were needed to support the POS aspects of this critical promotion. Because of the tight timing, the e-Business Department was in much more of a “firefighting” mode than it would have liked. Also, because the POS project was such a critical one for the e-Business Department (and the Company) they insisted on doing it right by using structured and formalized software development practices that commenced with a deep analysis of the business processes. Although Sales found it difficult to understand why such steps were necessary, by taking the time to document and formalize the business processes properly around POS with the customer, e-Business was able to develop the requirements needed to build the system within three months, a short period of time for such an effort. This procedure was an instance of the well-known, but too-seldom followed paradox of software engineering, that by taking the time to follow structured, disciplined practices in the requirements phase, time is cut from the overall schedule, [Leffingwell and Widrig 2000]. The software engineering approach married very busy and focused Sales leaders, e-Business team members, and third party marketing providers, to software developers separated by an 11.5 hour time difference. Only through a disciplined approach was it possible to integrate all of these parties successfully within tight timeframes. Examples of the development timeframe for various modules are shown in Table 1.

<table>
<thead>
<tr>
<th>Module</th>
<th>Start Date</th>
<th>Completion Date</th>
<th>Elapsed Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2B Portal</td>
<td>1/15/2001</td>
<td>4/1/2001</td>
<td>2.5 months</td>
</tr>
<tr>
<td>PTO Application</td>
<td>1/1/2002</td>
<td>3/1/2002</td>
<td>2 months</td>
</tr>
<tr>
<td>LPM Application</td>
<td>3/1/2002</td>
<td>4/15/2002</td>
<td>1.5 month</td>
</tr>
<tr>
<td>e-POS Application</td>
<td>3/15/2002</td>
<td>7/15/2002</td>
<td>4 months</td>
</tr>
<tr>
<td>DST Application</td>
<td>1/31/2003</td>
<td>4/15/2003</td>
<td>2.5 months</td>
</tr>
</tbody>
</table>

Note: Acronyms are spelled out in the List of Acronyms following the References

**DEVELOPING THE POS SUITE**

With the portal addressing the “plumbing” of how Coors does business with its distributors and marketing partners, precious time was saved in developing the POS suite. Furthermore, the POS suite of tools did not need to be introduced. Users were trained as if the suite was a separate idea from other tools provided to distributors on the portal. The concept was to roll out applications like POS in the same way as Microsoft deploys a separate tool within the Windows framework.
Because all users understand how to use Windows, less time needed to be spent understanding how to use specific tools. Therefore, to gain a deep and quick adoption of the POS system, Coors needed to build a suite of tools that corresponded to the specialized business process and standardized workplace provided by the portal. In planning and execution, the realization of this goal was not a trivial matter. Most important, it required constant and effective communication between Coors users, external users, the e-Business team, and the third party developers.

**Phase One**

The process of designing and building the POS tools differed from the way Coors developed systems previously. For example, only the foundation of the design, and critical applications were designed and built in Phase One. The primary reason for this decision was time; however business processes also needed some work before further expansion was to occur. Different assumptions existed relative to customer’s expectations that needed to be addressed during this first stage. Given the negative experiences of both the Sales Department and its distributors with earlier attempts at POS technology solutions, the e-Business team felt it must focus on meeting basic business process needs, and provide strong system performance and reliability. This approach was in contrast to seeking to build all of the functionality in one iteration, hoping that full functionality would win the customers over. The new paradigm was to promise only core functionality that performed well. This thinking was especially important given the atmosphere of anticipation at Coors and its distributors and retailers over the new NFL promotion. This conservative decision was more a function of business process than technology, and it also addressed the credibility issue in proving e-Business as a viable solution partner.

In the design and build of the system, two factors were of paramount importance:

- the longer and deeper involvement in the entire process by the Sales Department, and
- the earlier and more front-end involvement from the third party system integrator.

Given what was at stake, the business customers from Sales and Coors’ marketing partners were willing to involve themselves deeply into the design, even though they were not often asked for this level of participation in technology projects. In many cases, employees of the system integrator were involved in the middle of the deeper business process sessions for knowledge transfer (from Sales to them) and in assessing what could and could not be done within the time frame. This process of including the business customer deeper and later, and the system integrator earlier, was particularly successful given that the plan was to do the actual software development in India. It would have been very difficult for the system integrator to understand the nuances of the POS business process when developing without an initial involvement in the project.

**THE PRODUCE TO ORDER (PTO) SYSTEM WAS FIRST**

An application system for produce to order products was rolled out first. As described in Section I, PTO products are those that consumers see at retailers. The PTO system is more than just an ordering system. It links orders to Coors for general management, budgeting, and reporting and from Coors to a single third party producer of the PTO materials.

The general architecture of the PTO application was relatively simple from a technical standpoint. It used Java and JavaScript as the foundation of the tool, and a robust content management engine to manage program changes routinely. Java and JavaScript were used because the underlying technical architecture needed to be scalable open source. Scalability was important because Coors needed to ramp up capacity quickly based upon the success of a single program such as the NFL campaign. Open source was important because it made integration simpler and insulated Coors from subsequent software upgrades associated with proprietary software.
The content management tool needed to be robust enough to support a multitude of different programs yet simple enough to use on top of its open source architecture. Users needed a tool that could be managed from a program standpoint by non-technical administrators, but be scalable for more dynamic campaigns. The PTO tool was therefore created to the business requirements of the marketing partners who were to use the tool in production. It met their standards from an ease of use and a dynamic tool standpoint. The target user for the “ease of use” criterion was an end user at a marketing partnership with prior experience using paper catalogs but no online experience in creating marketing programs.

Prior attempts for this application did not consider the joint needs of scalability, flexibility, and non-technical ease of use. In prior versions, programs were hard coded into a tool. As a result, every new marketing program was an application development effort. This proposition was costly and inefficient for Coors and its partners. Furthermore, prior architecture efforts were limited in functionality to basic ordering procedures, as opposed to a full integration suite of all services and processes that would occur within the POS process. These tools were built as end solutions for specific tactical needs, rather than considerations of total cost of ownership, maintenance, and scalability.

LICENSED PROMOTIONAL MATERIALS WERE ADDED

Next, Coors added licensed promotional materials (LPM) to the system. LPM materials are shirts, hats, and similar materials, which support PTO materials and brands. While similar in concept to the PTO system, the LPM system linked to 60 third party licensees, who contracted the manufacturing of these materials in developing countries such as China.

The technical architecture for LPM was not just similar to that of PTO, it was actually the same. While prior vendor attempts sought to provide the two business processes under separate application paradigms, the e-Business team consolidated them into one.

One reason prior vendors separated the tools was for scalability; not trying to conduct too many transactions within one technical structure. To the contrary, the e-Business team saw enough technical similarities to architect one paradigm for all POS applications, considering scalability to be more of a function of how the “foundation” was built, and opting for more processes and functions to be completed within the dynamic content management tool. This decision was a major win for the business customer who felt that they needed to compromise integration in business processes between PTO, LPM, budgeting, and other systems for the sake of scalability. As Coors built even more applications within the POS application foundation, the tools still meet the system requirements of its users. The lesson from this exercise was that if a strong foundation is built within an application suite, the term “scalability” can be viewed much differently than before. With a solid technical and business architecture, scalability can be defined as optimizing the use of software and hardware, as opposed to seeking to add more hardware and software when additional business procedures are introduced.

The Portal architecture itself takes basic user procedures such as security, customer targeting, and sign-on away from the tool, which greatly improves its capabilities. Outside the portal, the content management tool provides the flexibility and dynamic ability to create programs. Content management reduces the work that needed to be done at the application level, the level which needs to provide power and scalability to the process.

THE E-POS SYSTEM

The PTO and LPM systems were quite effective, but they lacked the ability to enable distributors and retailers to customize POS materials for local marketing needs while still permitting Coors to maintain central control over what is permitted under its national licensing agreements. Managing POS in the field is especially challenging. Not only must Coors be aware of how its more than 600 distributors use POS so that Coors can maintain integrity (e.g. the image is not being distorted in any unwanted way), it also must ensure that legal requirements are maintained,
particular when celebrities are involved. Naturally, local distributors wanted to use POS materials featuring local teams and players. The PTO and LPM materials did not possess the mass customization features that would permit POS materials to be customized for local markets and ordered through the Coors portal.

After researching alternative options, Coors approached HP with a request for a secure, streamlined digital imaging system. They found that HP was beta testing such a system based on sophisticated digital publishing technology – including HP Indigo presses and large-format digital printers. The system facilitated the mass customization Coors was looking for. Using

- HP Digital Publishing Consulting
- innovative Web-based software designed and customized by HP and
- a network of partners,

Coors’ 600 U.S. distributors were given the ability to log on to a Web site and create, download, and print posters, table tents and other point-of-sale materials with branded full-color graphics along with customized messaging and pricing for local markets. [HP 2002]. The system, dubbed the “e-POS System” enables users to tailor certain Coors POS materials to their own unique requirements while giving Coors positive assurance that national licensing agreements are complied with. An example is shown in Figure 6.

![Customized ePOS item](image)

**Figure 6. Customized ePOS item**

With the e-POS system, each Coors distributor logs on, selects a design template, chooses from a variety of high-resolution graphics and customizes the messaging. Orders are validated for conformance to central policies and transmitted to one of 60 fulfillment vendors for fabrication and delivery. The important aspect of the e-POS application is that it permits customer self-service and mass customization while, at the same time, allows Coors corporate to maintain management of the images for license compliance. The system also gave Coors a first-mover advantage over its larger competitors, as its agreement with HP is exclusive for Coors in the industry. Overall, the POS system provides innovative and widely-accepted support for the Company’s marketing programs, as noted by Coors and Coors partner managers involved in the project:
“In the past, distributors often resorted to producing handwritten signs and banners in order to customize messages to local consumers,” said Ted Glauth, national manager, point of sale and merchandising, Coors. "Using the HP e-Point-of-Sale solution provides a stair-step improvement towards optimizing the quality of Coors point-of-sale to leverage consumer impact. Now we can take a high-quality national brand campaign and tailor it to specific markets, which gives us terrific mileage for our advertising dollars." According to Bruce Summers, group director of marketing services at The Integer Group, the agency for Coors managing the campaign, the quality and consistency of HP digital color printing has been a pivotal element in the program's successful launch. "Because brand integrity is so important, the ability to control image content and accurately reproduce the various Coors brand colors was a real concern," he said. "But the results have been nothing short of impeccable." [HP 2002].

THE DST TOOL WAS LAST

The last addition to the POS Suite was a “digital sales tool” (DST), developed specifically for retailers by Coors e-Business. Using the DST, retailers can view a layout of their facility (e.g. restaurant, store,) online and evaluate alternative placement of POS materials for maximum advantage. The DST is effective in encouraging a retailer demand pull in the POS marketing space. For example, a Coors distributor who was lax in encouraging the use of POS materials now finds its retail customers demanding them.

V. CONCLUSIONS

The POS application suite improved the ordering process by moving it from a paper-based process to an Internet platform, thus removing time and cost from the process. Distributors and retailers are now able to log on to the Coors portal, tailor POS material to their liking and place their orders. The system gives the benefits of central control combined with mass customization and timely response. At its peak during the 2002 NFL season, for example, it proved capable of handling more than one completed order per minute, with each order consisting of a large number of individual transactions. The fulfillment cycle time was reduced, as were its associated costs. Finally, the e-POS tool, blind-sided the competition, delighted Coors’ distributors and retailers, and supported Coors’ transformational marketing programs with an equally transformational information system.

The most important aspect of Coors’ new POS system is that it strongly supports Coors’ marketing approach aimed at the young adult market. As a result, the POS system is widely accepted by Coors’ distributors, who view it as a robust growth engine to increase sales in their territories. As a result, Coors’ distributors are more excited about the company’s products than was the case for some time. The new POS suite allows the distributors to focus on the message of the marketing campaign, rather than the ordering and fulfillment process.

As is usually the case regarding success in information technology, the true success of this project was not strongly correlated to a novel use of technical tools, but rather to the IT department partnering well with business users over a critical need for the company. In 2002, perhaps no area was more critical for Coors’ IT to partner with than the firm’s sales and marketing departments. At that time, Coors was transforming its approach to sales and marketing in an unprecedented way. Looking back, this transformation was seamless despite the rapid changes that took place in marketing content, in marketing message, and in the delivery mechanisms to place these campaigns in front of the target market. Despite the short delivery time demanded of the e-Business and the business departments, the POS suite met its goal for integration with the business. As a result, the initiative was successful from initial marketing concept to fulfillment (i.e., ordering materials and getting them to the end user).
This initiative was also a strong indicator of IT’s new role within Coors as a “solution enabler” versus a “solution provider”. The difference between these two phrases is the difference between who designs the solution and who delivers it. Coors as a company decided it should involve itself only with tasks that are core to its business. Delivering code is not a core task. Designing systems that match business process to technology is.

Editor's Notes:
1. This article won Honorable Mention in the 2003 Society for Information Management Best Paper competition.
2. The article was received on December 3, 2003 and was published on January 31, 2004.
3. A teaching note for faculty listed in the ISWorld Faculty directory is available from Don McCubbrey at dmccubbr@du.edu.

DISCUSSION QUESTIONS
1. How did Coors' POS Application Suite help to “win mindshare” of wholesalers and retailers? Why is winning mindshare important?
2. Are customized POS materials important to you as a consumer? Give an example of customized POS materials that made a favorable impression on you.
3. If you were the CIO of a company like Coors today, would you establish a separate e-business department or simply add the capability to develop e-business systems in your IT department? Justify the reasons for your answer.
4. The Coors e-business department believed that process, not technology, was the most important factor in developing a good solution for the POS application. What do you think are the reasons why they came to this conclusion? Do you agree with it?
5. What are the advantages of the “portal” approach? Do you think it was the right choice for Coors? Why or why not?
6. The case states that “by taking the time to follow structured, disciplined practices in the requirements phase, time is cut from the overall schedule.” Do you think this is an accurate statement? Why or why not?
7. The Coors application suite was developed and delivered to users in stages. What are the advantages and disadvantages of this approach?
8. What are the advantages and disadvantages of some of the development work offshore, in this case to India?
9. Why are scalability and ease of use important in an application such as this one?
10. Do you think Coors obtained a competitive advantage from the deployment of its POS Application Suite? Why or why not?
11. How do you think Coors’ competitors will react the POS Application Suite?
12. What should Coors’ focus on next in order to continue to reap competitive advantage from IT?

REFERENCES

EDITOR'S NOTE: The following reference list contains the address of World Wide Web pages. Readers who have the ability to access the Web directly from their computer or are reading the paper on the Web, can gain direct access to these references. Readers are warned, however, that

1. these links existed as of the date of publication but are not guaranteed to be working thereafter.
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Distributors to Produce Localized Football Marketing Materials Using HP Digital

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and Anheuser-Busch for $300 Million Prize.” Ad Age March 26.

November 24.

LIST OF ACRONYMS

B2B Business to business
B2C Business to consumer
B2E Business to employees
DST Digital sales tool
ePOS Electronic point of sale
LPM Licenses promotional material
NFL National Football League
POS Point of sale
PTO Produce to order

ABOUT THE AUTHORS

Jack Buffington is a director at the Coors Brewing Company, located in Golden Colorado. In 1990, he started his career in finance, and became a Controller of USF+G, a large Property and Casualty insurance company. He later joined KPMG as a Manager in their Financial Services consulting practice, while concurrently working on his dissertation studying the "corporate productivity paradox". Once his dissertation was completed, he worked as the Director of e-Business for Royal Sun Alliance, another large insurance company, and in 2001 moved to Coors Brewing Company as Director of e-Business. He since moved into a variety of other positions within Coors, primarily working on top corporate initiatives.
Don McCubbrey is Clinical Professor in the Department of Information Technology and Electronic Commerce (ITEC) and Director of the Center for the Study of Electronic Commerce in the Daniels College of Business at the University of Denver. From 1957 to 1983 he worked in the Management Information Consulting Division of Andersen Consulting, Arthur Andersen & Co, where he participated in a large number of IT engagements for clients throughout the U.S. as well as in Europe and the Americas. He was admitted to the partnership in 1969. Since joining the University of Denver faculty in 1984, he concentrates his teaching and research in strategic information systems, electronic commerce, and information systems management. He is a co-founder and Emeritus Director of the Colorado Software and Internet Association. He is also the co-author of several textbooks and author of papers in CAIS, Information Technology and People, and MIS Quarterly.

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