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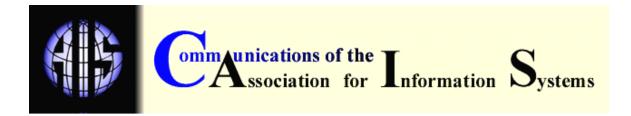
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DARTCOR MANAGEMENT SERVICES

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ABSTRACT

This case describes the challenges and opportunities that a relatively small organization in the contract management and catering business faces with the introduction of new technology. The case provides students with significant information about the firm and its industry and allows them to engage in the justification process for a new system. The case also provides the opportunity to discuss the advantages and disadvantages offered by new, web-based applications.

KEYWORDS: System selection, system justification, IT investments, online ordering, contract food management, catering.

INTRODUCTION

There is so much information technology out there, how do you decide what's appropriate for your company and how to measure the return it provides? Giving up short-term profits to take the resources and the time to implement new technology – when you are not sure of the payoff – is a hard decision to make. (Michael Giamarino, VP of Operations)

In the summer of 2002 Dartcor Management Services, an onsite foodservice provider, was poised for growth in the New York City and the surrounding New Jersey areas. Executives believed that Information Technology (IT) could be a key enabler in its quest for expansion, and a tool that would allow Dartcor to compete with its much larger competitors. Leading the charge on the technology front was a young Cornell graduate, Joey Essenfeld.

As Joey quickly learned, the IT challenge in a small company was identifying, selecting, and implementing new technology with limited resources and an eye to future expansion. In his search for appropriate technology Joey identified a software application that allowed catering orders to be placed online. After substantial data gathering and research, Joey was getting ready to present his findings and his recommendation to the executive team. With limited resources at his disposal, Joey knew that he had few opportunities for funding and should provide a balanced and convincing case.



DARTCOR'S BACKGROUND

In 1985 a Cornell Hotel School graduate, Warren Leeds, and his partner, Christopher Schiavone, started Dartcor as a retail gourmet deli store. The café seated about 25-30 people. "Our deli was similar to a Dean & Deluca operation. It had a real New York feel in the suburbs of New Jersey" Leeds recalled. As the young entrepreneurs learned the business, it soon became clear that an important component of the operation was off-premise catering. Describing the early days, Leeds said: "The retail side grew slow and steady, while the catering side really took off very quickly due to our close proximity to many Fortune 500 companies." This proximity prompted Dartcor to enter the business and industry (B&I) segment of the on-site foodservice business provided.

The first place was fabulous, but we made a few mistakes. We paid for the entire build-out of the facility and did not negotiate exclusivity in the office park. The revenue could never support our substantial investment. Although we lost money, it was such a beautifully designed café with great food and service that many other real estate developers came to us and requested our services. (Leeds on early experiences)

Without an active selling approach, but due to positive word of mouth, the contract foodservice venture continued to expand. Seeing the opportunities in the B&I segment, Leeds hired Michael Giamarino (Figure 1 shows Dartcor's organization chart).

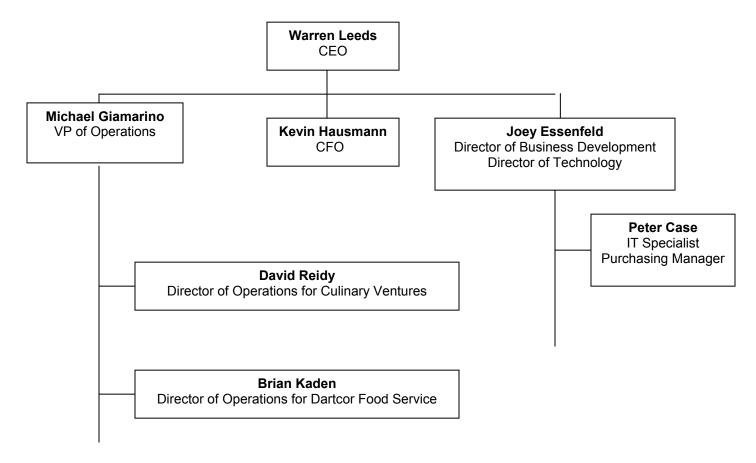


Figure 1. Dartcor Organization Chart

Since then, Leeds said, operating cafés with a service orientation became Dartcor's signature and its key competitive differentiator.

I figured, if we were going to be great at this, what we must be sure to do is provide what I call "legendary service." We are so focused on service that we have a director of legendary service whose role is to make sure that all cafés achieve the Dartcor standards. (Leeds)

In 2000 Dartcor bought Culinary Ventures, an established foodservice management company with over 40 accounts. Culinary Ventures provided the opportunity for segmentation of the market because it was much more focused on industrial and factory accounts – the blue-collar side of B&I foodservice – and academic accounts. Speaking about the differences between the two brands:

Culinary Ventures accounts typically are more focused on industrial and manufacturing facilities. Employees at such facilities tend to prefer less complex "comfort foods," so we would be unlikely, for example, to have a sushi day or serve mahi mahi at these accounts. In terms of menu development and selection there is significant difference, but we have similar specs in terms of food quality and service. (Giamarino)

At the heart of Dartcor's operation was a restaurant approach that started with recruiting entrepreneurial employees who were challenged to understand the idiosyncrasies of their building's tenants, develop relationships with the client and, as Leeds put it, "run the café as if it were their own restaurant." Dartcor believed that delegation of authority to the unit level improved the responsiveness and flexibility of the organization and enabled it to compete much more effectively with larger players. "Ultimately, we have to become part of the organizations we serve; we want to mesh with their culture and be perceived like just another organizational department rather than as an external entity" Giamarino concluded.

I thought there was tremendous opportunity for a great regional niche player in this market. Our goal was to take the Dartcor brand and target high-end multitenant class A office buildings and single tenant clients who really wanted high levels of service. (Leeds)

THE CONTRACT MANAGEMENT BUSINESS

The global on-site foodservice industry, spanning operations in B&I, healthcare, schools, colleges, correctional facilities, and sports and recreation venues, accounted for about \$230 billion of the \$800 billion global foodservice industry. The opportunity in the United States alone was enticing, with on-site foodservice sales approaching the \$80 billion mark. These sales were divided almost equally between two types of operations: self-operated foodservice outlets—run by the same organizations they served – and contract-foodservice providers, also known as managed-services companies, that served those organizations outsourcing foodservice operations.

Since the 1980s, the number of contracted operations increased steadily. Managed services providers touted a systematized approach to a business in which most host organizations had



little experience and competence. This naiveness was particularly true in B&I accounts. Large corporations generally realized the benefit of outsourcing foodservice to experts who could manage the enterprise more cost-effectively (based partially on the economies of scale associated with purchasing) and with higher quality (owing to the management expertise and systematized approach to the business' operations).

Traditionally, organizations outsourced their foodservice and paid the contractor a fixed fee for service. The total cost to the host organization was the same or less, but the quality generally improved. The contractor, in turn, provided foodservice to the organization's employees using a subsidized cost structure. As long as food and service quality was maintained, the contractor bore little risk; if costs increased, they were passed along to the client. Even in extreme situations, such as when different businesses were combined or sections of plants were closed. contractors were able to pass along any added expenses without sacrificing their management fee. But as businesses focused more and more on their bottom line and short-term financial returns, they began looking at ways to reduce non-essential operating expenses, such as those associated with providing foodservice to employees. Thus, many clients began asking contractfoodservice providers to assume more risk. This change resulted in a greater number of accounts operated under a profit-and-loss (P&L) arrangement, wherein the contractor operates in a manner similar to a commercial restaurant. The contractor assumes more risk (if business declines, so do profits), but potentially receives greater gains if it manages the operation effectively.

This dynamic marketplace was dominated by three global companies: Aramark, based in the United States, Sodexho Alliance, with its corporate office in France, and Compass Group, PLC, operating out of the United Kingdom. In addition, regional players abounded, each focusing on close-to-the-customer relationships, offering customizable programs, and maintaining ever-flatter and leaner organizations. From the contractor's side, the best contract was known as an 'evergreen' agreement: a contract with no end date. Not surprisingly, most clients preferred fixedterm contracts in order to provide more leverage in reducing costs with each renewal period. Regardless of the type or duration of the contract, nearly all featured an 'out' clause for both parties. Thus, if the contractor encountered a situation where profitability was impossible, or where a client was unable to meet its financial obligations, the managed-services provider could formally cancel a contract, typically with 30, 60, or 90 days notice. Giamarino noted: "The out clause is important. For example, if there are massive layoffs you don't want to be contractually obligated to serve food to 200 rather than 800 employees. That's how regional foodservice companies go out of business." Clients, too, could terminate the relationship, which generally occurred if the perceived quality of food or service was low, or if personal disagreements arose between the client and the onsite managers.

The contract foodservice management industry was one with small margins, with after-tax income sometimes as low as two or three percent of sales. Even when an average of 50 percent of the building's population dined on-site (widely recognized as the industry average), the contractor still had to contend with labor issues and operating expenses. The final challenge was represented by tight cash flow. While most contracts dictated net 30 terms, many clients did not pay on time. Reticent to cancel a contract for late payment, contractors sometimes threatened to affix interest charges (as stipulated in most contracts) on outstanding receivables, only to be rebuffed by clients who knew the contractor would rather have the net amount, albeit late, than risk losing the entire contract. This situation led managed-services providers—particularly smaller companies—to encounter problems with their payables. As a result, relationships with vendors often became strained when the contractor's cash was inadequate to cover a given month's invoices.

DARTCOR'S OPERATIONS

Since the acquisition of Culinary Ventures, Dartcor segmented its core B&I business internally along two lines.

- Accounts that aligned with the business side of B&I were generally referred to as "Dartcor" units.
- Accounts in factories and similar host organizations were referred to as "CV" units.

Further delineating these businesses, the company generally preferred the P&L model for Dartcor accounts and fee-based arrangements for CV accounts. Accounts in both segments featured a foodservice director, a chef, or chef manager for small accounts, and 6 to 20 employees. The largest accounts included a production supervisor and a sous chef. The pay varied by geography, but base salary for line employees generally exceeded minimum wage and was competitive with that paid to individuals in similar positions in nearby commercial restaurants. Foodservice directors and the chefs in high-end Dartcor accounts, such as the Avon account in New York City, commanded a salary ranging between \$50,000 and \$60,000. Smaller accounts were those that had a managed volume—sales in a P&L account and sales plus the subsidy in subsidized accounts—of less than \$250,000. Large accounts were those with managed volume in excess of three-quarters of a million dollars.

The greater the managed volume, the greater the challenges in managing the operation. But we pay our managers not just for the amount of money they manage, but also for the skills they bring to the table, not the least of which are an entrepreneurial approach and the ability to motivate the crew. Inevitably, these abilities translate to higher unit-level profit and, ultimately, stronger client retention (Giamarino)

In terms of strengthening P&L unit sales:

Our focus is on building relationships so we can achieve our target capture rate of 55 to 60 percent. We want our managers on the floor, talking with customers, understanding what they want. The key is to be interacting with them, listening to their needs and immediately addressing their suggestions on improvements. (Giamarino)

This focus on customer relations was also evident in the company's belief in a service-oriented approach to café operations as reflected in its continuous hours from 7:00 am to 3:00 pm. Breakfast was typically responsible for 25 percent of the total daily covers and staff arrived as early as 6:00 am to begin preparations. Peak times for breakfast operations ranged from 7:30 am to 9:00 am while peak time for lunch ranged from 12:15 pm to 1:15 pm - when 60 percent of the lunch business was realized. Purchases were generally cash based, with some of them being charged to "house accounts." Credit cards for individual purchases were not accepted. Giamarino explained: "We don't accept credit cards because they slow down the checkout process. We have a target of 5 minutes from the customer entering the café to checkout. " Cash transactions were handled using an electronic cash register, while house account charges were handwritten on a piece of paper. The cashier obtained the customer's name, company affiliation (in multitenant buildings), noted whether it was breakfast or lunch, obtained the account number to be charged, and noted the transaction amount. At the end of each day the paper was stored in an appropriate folder - the "weekly folder" - and charged sales were recorded in a spreadsheet along with other operational measures (e.g., total sales, number of breakfast and lunch covers, and outside purchases – known as the payout).



While the goal was to use the same accounting system in units regardless of the Dartcor or CV designation, the businesses in each segment were different. For example, in Dartcor units, of which there were 22, the goal was to drive revenue to maximize the bottom line in a manner similar to restaurant operations. In the 20 CV accounts, the fee was dictated by the contract and was not subject to revenue variability. As Giamarino put it: "In a P&L account you look for a nickel on a dollar. In a subsidized account you want all costs in line in order to be able to charge your management fee knowing that you are delivering maximum value to the client." As in any foodservice venture, food and labor costs represented the largest component of costs. Specific to Dartcor accounts, this combination represented some 85 percent of sales, with labor costs commonly exceeding food costs. These economics spurred a growing interest in technology that would automate any labor-intensive job.

Dartcor not only offered breakfast and lunch service in its cafés, but was also available to cater any events the tenants would host. These were generally high-end events, such as board meetings or corporate sponsored functions, which required a separate, more sophisticated menu of a la carte items. In its most important accounts, Dartcor could access the facilities and talent necessary to provide on-site catering. For the remaining accounts, catering was centralized for each geographic location and supplied by a commissary with the ability to produce the appropriate gourmet menu. Catering operations realized substantially higher margins than regular café operations. Joey Essenfeld, Director of Business Development and Technology, commented:

In high-end accounts, profit is mostly generated on the catering side. In these accounts we will cater anywhere from 150 to 250 catering events per week. An account can generate 20 to 30 percent profit on catering sales by utilizing the production staff from the café to complete the food preparation. (Joey)

In aggregate Dartcor estimated that a total of 2,000 to 4,000 events would be catered each week by its units. The average catering ticket was \$12/per person with a typical order serving 15 to 30 people. Analysis of the catering business indicated that catered events could be separated into routine events - recurrent events with little or no variation with respect to number of people attending, item selection, time of delivery, etc. - and complex events - irregular or very high-end events requiring accommodation of special needs and other special arrangements.

A catering transaction began when authorized administrative assistants called the manager and. menu in hand, provided their name, the date of the event, how many people would be attending, and listed the required items and any special request. Alternatively they used a fax or email order form. The size and complexity of the order determined the necessary lead-time for preparation. True to its service orientation, Dartcor strived to honor any request, even prioritizing catering orders in an effort to meet the customers' demands. The order was written down by the chef or manager on a catering slip and, at the appropriate time, prepared (Figures 2 and 3).

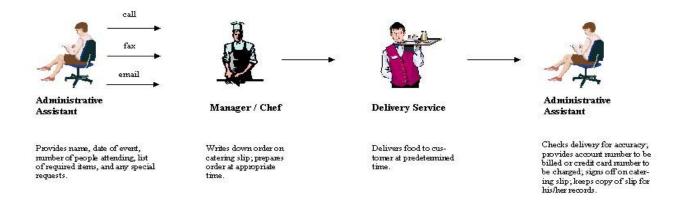


Figure 2. Catering Order: Order and Fulfillment Process

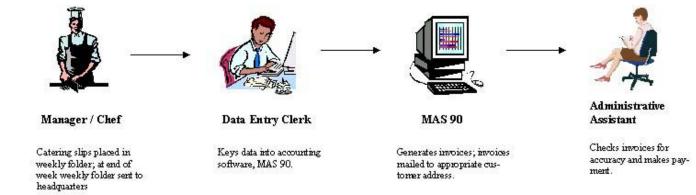


Figure 3. Catering Order: Billing Process

Catering at a typical high-end account is comprised of 95% routine events and 5% complex ones. A typical call for routine events lasts between three and five minutes. Complex orders require significant customization and discussion over unusual menu-item requests, service preferences, or merchandising. The calls for these orders typically last between five and ten minutes. (Joey)

When the order was delivered a copy of the original catering slip accompanied it. The administrative assistant would check the delivery for accuracy, provide the account number to be billed or the credit card number to be charged, and signed off on the catering slip while keeping a copy for his or her records. The manager kept the catering slips in the weekly folder and, at the end of the week, sent them to headquarters for billing.

The process of handling the weekly folders was very time consuming. At week's end, after each unit's weekly folder was received, a full-time employee at headquarters separated the documents (e.g., accounts receivable, accounts payable, sales) and typed the data in the appropriate accounts of Dartcor's accounting software, MAS 90. Once the data were input, a bill for every



customer was generated and mailed to the appropriate customer address (Figure 2). If payment was not received within 30 days the collection process was initiated and payment was solicited through email, fax, or phone, Kevin Hausmann, Dartcor's Chief Financial Officer, estimated the labor intensity of this process:

Including the process necessary to record the entries that have to be made to record the sale, we have two people a day working every day on data entry. Including salary and benefits the two full time equivalents cost, in aggregate. about \$80,000 a year. Of this time, catering accounts for 50% and charged sales make up the other 50%. (Hausman)

With some charges as small as three dollars, Hausmann estimated that the company lost money on some of them due to the laboriousness of the process:

We consider it part of the customer-service experience to be able to charge these small amounts, but at times it is a bit frustrating to see that such small figures generate so much work. You have to have someone input the charge. generate the bill, send it out, and then after sixty days the \$3.75 still has not been paid and you have to have someone call and follow up. It is something that has always been an issue. (Hausmann)

Joey also stressed the significant delay that accounts receivable generated: "The best we can do on a catering account receivable is seven days, when a customer provides a credit card number to charge the purchase to." Company officials did not believe that customers would delay payments as a matter of policy. Rather, it was the small nature of many of the invoices, and their significant human handling, that lead to them being ignored, lost, or delayed.

For what we are charging I don't believe our clients play the float. These amounts add up to thousands of dollars for us, but for each client they are quite small and most companies we deal with are fairly large. If anything, because our invoices are relatively small, they fall below the radar screen. The client gets a stack of invoices that need to be sent to the appropriate departments, approved, and returned to the accounting department. At every step there may be delays or something may go wrong and we end up having to follow up. (Hausman)

DARTCOR'S IT INFRASTRUCTURE

Joey joined Dartcor, immediately after graduating form Cornell in the summer of 2001. At the time, the firm's IT infrastructure consisted of one file server running Microsoft Windows 2000 and providing a gateway to the Internet via a fractional T1 line. Workstations were provided to the officers and support personnel at headquarters but only the officers had access to email. Each machine ran the Microsoft Office suite including Word and Excel. The payroll function was outsourced, and Dartcor ran only one specialized package - MAS 90 - to support the accounting function. Dartcor's long time senior accounting manager had set up the IT infrastructure and was responsible for managing and overseeing IT operations until he left the company following the acquisition of Culinary Ventures.

Since his arrival, Joey revised the agreement with Dartcor's Internet Service Provider (ISP) and was able to secure enough email accounts to ensure that all headquarter personnel, all managers and chefs in the field, and anyone else who requested it, could receive a personal email account. Like many early websites, the original Dartcor site looked amateurish. Upon joining the company, Joey made a successful case for engaging a design firm and secured \$20,000 to redesign the web presence of the Dartcor brands completely.

When we are handing out our business card trying to sell a multimillion dollar account and they go to our website and it fails to meet their expectations, they are going to say: "OK, these guys aren't professional." The web site is going to be out there, people will look at it, and their impression must be positive. (Joey on justifying the investment)

Senior management believed that its website (http://www.dartcor.com) was now comparable in quality to Dartcor's large competitors and was a positive investment that enabled the firm to project a high quality, service- oriented image. While successful, this effort provided some important lessons about the risks and challenges associated with technology projects. The designer originally commissioned to redesign the site did not produce work of appropriate quality. The relationship needed to be severed with a settlement payment. But the designer registered the domain name dartcorfoodservice.com and held it hostage demanding to be paid further.

I spent a significant amount of time calling him every day and talking to him, engaging our lawyer to put pressure on him, alerting our ISP, and so on. We finally put enough pressure on him and he released the domain. (Joey)

While Joey made an impact at headquarters, his strongest contribution to IT operations was at the unit level. Each unit was equipped with one Windows-based personal computer running the Microsoft Office suite of productivity tools. These personal computers offered Internet access at varying speeds — mainly depending on the speed supported by the tenant's own network. No other computing equipment was at individual locations. Sale transactions were supported by one to three standalone cash registers.

Managers were provided Excel spreadsheets for reporting. Daily records were kept for sales, purchasing, and catering. Separate sheets were provided for weekly inventory and bi-weekly time cards reports.

At the end of each week, the managers produced sales and inventory reports. They printed the reports and faxed them to headquarters. At headquarters a clerk would receive the fax, key in the number, and throw away the fax, but they would only input certain numbers such as sales, catering, receivables, payables. In essence they were just picking certain numbers off a fax. (Joey)

Joey wanted to streamline the process. Using free software that formatted the report and automatically attached it to an email directed to headquarters, he enabled the creation and transmission of the reports to be collapsed into one step. At headquarters the email software automatically filtered the messages in appropriate folders for easy access by the administrative assistants. Speaking about the challenges associated with the new process:

We originally filtered the reports by email subject, but we had to rely on the managers and chefs to provide the correct subject line. They are computer novices and are also very busy. We had a two-day training session in a client's training lab. That worked for a couple of months but unfortunately, when you stop calling them and visiting them often, 'operating report' becomes ops report, OR, or some other acronym. We now filter on brand and unit, which is more reliable because it minimizes human input. (Joey)

A second initiative, still in beta testing, was the updating of the inventory reports. The current version of the report enabled the unit manager to input current inventory levels, but provided no checks for accuracy. Every week, managers would clear the report, manually check inventory and input the new values. Joey explained: "Being a small company we are very vigilant with our



inventory, that's why we check it weekly. But input errors in the report are the biggest challenge. These errors are time consuming because they need to be caught and you need to follow up on them." The new report was designed to provide a four-week rolling snapshot of the unit's inventory. When managers ran a macro, the values for the last four weeks would shift and the new values could be input. This format enabled managers to view four weeks of inventory quantities on one screen:

With the new report they can see trends and identify input errors. If you had ten cases of tuna last week and today you have one hundred, there was clearly an input error. But the managers are having trouble visualizing the four weeks and understanding how the values shift and where to put the new values. When we are sitting in our office Peter [Case] and I are very computer literate and what we think may work at the units, may in fact not work. (Joey)

Dartcor evaluated an automated solution to some of its data transmission and information management challenges. It recently evaluated a proposal from a local computer consulting company for a software interface that would capture accounts receivable information and automatically input it into MAS 90. As Joey explained: "The quote came back for about \$30,000, an amount we could certainly not devote to a software interface." Dartcor also recently contemplated very seriously whether to upgrade its unit level IT infrastructure by replacing cash registers with Point of Sale (POS) terminals — available for about \$3,000 per terminal (hardware/software bundle). After substantial debate and analysis, the firm decided not to invest in the initiative.

With a POS system replacing the cash registers we could completely remove the reporting processes. We could automatically generate all the reports, inventory could easily be input in the POS and we could eliminate the current spreadsheet-based reporting process. (Joey on the proposed benefits of the initiative)

Hausman also believed that POS terminals could improve the accuracy of data used for decision making while, at the same time, alleviating some of the needs for labor-intensive data processing and re-entry. Explaining his vision for technology use, Hausman noted:

Ideally you would have a cash register or other terminal that could handle all the information we need such as what was purchased, by whom, on what account. A sophisticated enough terminal could then interface directly with our accounting software and feed information directly to it — we would not need to re-input the data. (Hausman)

Dartcor's leadership felt that the benefits of the POS project could only be reaped if the new technology was consistently deployed in all units.

Unless we were able to absorb the significant expense associated with a full rollout, little benefit would ensue from the POS project. Its real value is in its ability to significantly reduce duplication of effort and the need for significant data re-entry. But this can't happen unless all units implement the POS. (Giamarino)

These early IT projects had surfaced many of the key challenges associated with new IT initiatives at Dartcor. Among them were the resource constraints typical of a small private company, the current IT infrastructure that limited the firm's ability to introduce new technology, and the difference in operations, processes, and technology that characterized different units.

When TGI Friday, as an example, sets up its restaurants, they are all the same. Their kitchens are the same, their menus are the same, their cycles are the same. When you need to implement technology across units it is straightforward.

But every one of our facilities is different, catering menus can be different, billing processes are often different; it is much harder to standardize and leverage technology across the units. (Giamarino)

The limited computer literacy typical of unit level personnel, coupled with the need for the staff to focus on operations was another significant challenge:

A lot of our chefs are very talented chefs, but they are not necessarily computer savvy. More importantly, there is only so much information we can ask our chefs and managers to absorb in a given week. Therefore, we make it management's priority to stay clearly focused on our goals and objectives. (Leeds)

We have managers that work very hard from 6:00 am to 3:00 pm, technology must be easy to use and understand. If you put a system in that is burdensome they are not going to use it. (Giamarino)

THE NEW IT INITIATIVE

Reflecting on the role of technology at Dartcor, Leeds said:

The challenge on a daily basis is to raise the bar on service, quality, and create a fun working environment. On one front, information technology can help us minimize the time that our managers spend on process and maximize the time management spends with our guests. (Leeds)

Joey was excited about IT and understood its potential for streamlining business processes and for taking advantage of new opportunities. His background prepared him for his role at Dartcor, both as a technology champion and as the driving force behind new IT projects and proposals.

One of the reasons we were very excited about Joey joining us was that he brought an understanding of technology and new ideas about its use. Joey is out there, I tend to be more conservative, and Warren is sort of in the middle. As a team this works out very well; that's what we want. (Giamarino)

Since his arrival at Dartcor, Joey evaluated various possible applications of information technology. One – the online catering project – stood out for its potential.

THE ONLINE CATERING PROJECT

The online catering project consisted of a web based ordering system that allowed Dartcor to load the gourmet catering menu with pictures and make it available to administrative assistants to log on to (Figures 4, 5, and 6 show screenshots of a similar software application). The application was relatively small and could be easily hosted on a web server provided by the client. Each assistant would receive a profile and be given access to the history of previous catering orders.



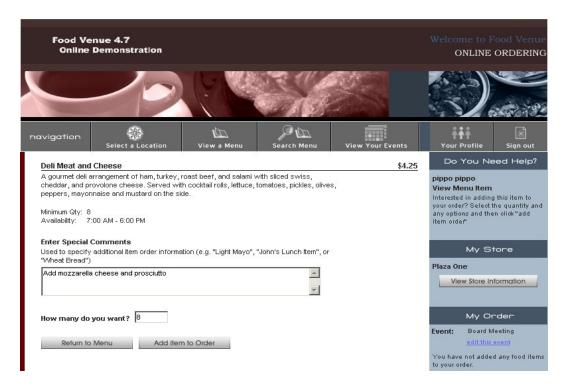


Figure 4: Online Menu (Source: http://trial.area101.com/)

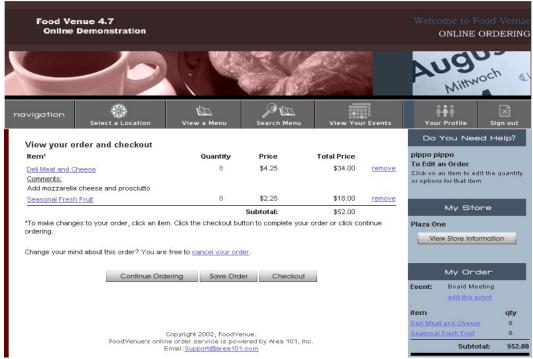


Figure 5. Event Ordering Screen (Source: http://trial.area101.com/)

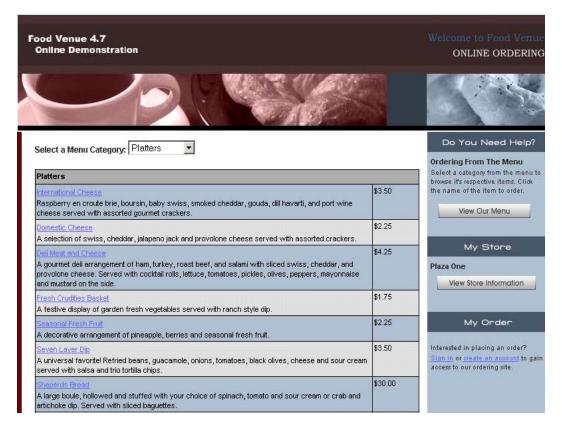


Figure 6. Order Summary (Source: http://trial.area101.com/)

Chefs are very busy and it is difficult for them to come to the phone. The administrative assistant logs on to the catering ordering system. Now they don't have to wait for the chef. Menu items can be selected online and notes can be input for any customized request. If it is a repeating event they can pull up the previous order, modify it appropriately and submit it instantaneously. The software provides ordering convenience cuing ordering time, it can cross-sell by suggesting similar items, and it provides an audit trail so there is no doubt as to what was ordered. (Joey)

Joey was particularly interested in Food Venue, a software application produced by Area101, Inc., a start up based in Colorado. Particularly appealing was that the software could be integrated with customers' accounting software as well as Dartcor's accounting application (Figure 7).



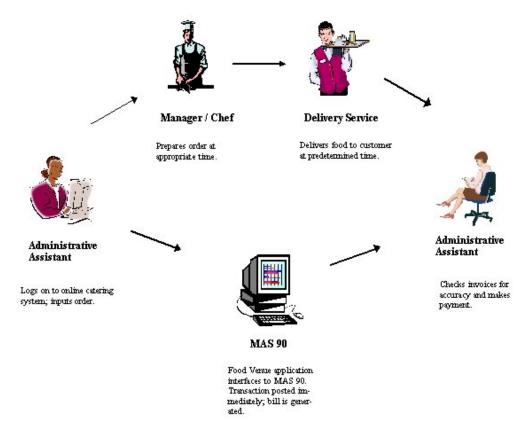


Figure 7 Proposed Integrated Process

The Food Venue application can be interfaced to MAS 90. We would purchase an add-on called Visual Integrator for \$1,500 and Area101 would write an automated interface at no extra cost. Interfacing with client's software is also at no extra charge, assuming that their system supports standard data communication protocols. (Joey)

Joey discussed the advantages of the completely integrated solution:

If the client pays by credit card, the order is immediately charged, the software has a secure gateway to our merchant account, and we receive payment immediately. If the transaction is charged to a house account, the transaction is posted immediately to MAS 90. We don't have to wait for the weekly folders to come in. (Joey)

Food Venue enabled automatic credit card payment processing and, because of the software's ability to track and record orders, Joey believed that the online catering system provided significant advantages to the clients as well.

They can reconcile all of their catering with a couple of clicks rather than going through and adding up all the catering slips. Their accounts payable can also

produce all kinds of reports: company wide, by department, by administrative assistant, by type of event, and so on. They enjoy great operational efficiencies without having to support the software. (Joey)

Acquisition of Food Venue entailed the purchase of the needed licenses, a one-time configuration charge and the payment of yearly hosting and maintenance fees. Two licenses would be required for the configuration envisioned by Dartcor, one enterprise suite license (\$4,800) and a corporate location license (\$3,600). Configuration fees for each license would be \$6,000 and \$2,400 respectively and included the installation and configuration of the software, as well as the one-time creation of the menus and training of a Dartcor representative on the configuration technique. Yearly maintenance and hosting fees were \$1,800 and \$1,300, respectively, and included routine maintenance and support as well as the hosting of a secure connection to major credit card clearing houses to authenticate credit card transactions.

Area101 would be responsible for the creation of initial menus, but Dartcor had the ability to access them and modify them at will.

During the initial configuration process we will provide text and graphics and Area101 will produce the menus. From then on, we have access to a web interface that allows us to modify them. I don't foresee changing them often—maybe once a month—probably a couple hours of my work. Chefs and managers can also access the system via their PCs to introduce specials or highlight and push certain items. (Joey)

Joey estimated that his involvement during the implementation and testing of the software would be up to eighty hours of work. After successful implementation and integration with Dartcor's IT infrastructure he expected to be able to pass the responsibility to the account manager whose ongoing involvement was estimated at one hour per week for troubleshooting and other maintenance tasks associated with the Food Venue software.

Area101, Inc. had an established track record in this market and a number of installations with large food service managers. Based on this experience, the firm felt comfortable providing an implementation plan (Table 1), cost estimates (Table 2) and projected ROI calculations (Table 3).

Table 1. Proposed Implementation Plan

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Phase	Duration	Deliverables
Phase I	1 Week	Architecture design and documentation of the technology, data and data integration needs between existing applications and Food Venue.
Phase II	3 Weeks	Implementation and configuration of the application, including features, graphics, and data.
Phase III Phase IV	2 Weeks	Rollout, testing and approval. Application live in production environment.

Table 2. Analysis of Benefits

		Time Savings		
Activity	Beneficiary	(hrs)*	Time per Year	Savings per Year**



Event planning	B&I Client	6	per day	1,560	\$ 39,000
Billing	Dartcor	8	per month	96	\$ 2,400
Billing reconciliation	B&I Client	2	per week	104	\$ 2,600
Monthly reporting	Dartcor	8	per month	96	\$ 2,400
Monthly reporting	B&I Client	8	per month	96	\$ 2,400
Approval and Payment	B&I Client	8	per month	96	\$ 2,400
Food waste reduction	Dartcor				\$ 5,000
Incremental orders	Dartcor		Total Operations Savings	2,048	\$ 56,200 \$ 10,000
incremental orders	Darteoi			Total Indirect Savings	\$10,000 \$10,000
				Total Savings	66.200

^{*} Assumes 5 days/week and 52 weeks/year

Source: Area101, Inc

Table 3. ROI Calculations

Year	1	2	3	4	5	Total
B&I Client Savings	\$ 46,400	\$ 46,400	\$ 46,400	\$ 46,400	\$ 46,400	\$ 232,000
Dartcor	\$ 19,800	\$ 19,800	\$ 19,800	\$ 19,800	\$ 19,800	\$ 99,000
Total Savings	\$ 66,200	\$ 66,200	\$ 66,200	\$ 66,200	\$ 66,200	\$ 331,000
Total Corporate Cost _	\$ 20,100	\$ 3,300	\$ 3,300	\$ 3,300	\$ 3,300	\$ 33,300
Total Savings	\$ 46,100	\$ 62,900	\$ 62,900	\$ 62,900	\$ 62,900	\$ 297,700
Annual ROI	329%	2006%	2006%	2006%	2006%	994%
NPV of Total Savings	\$211,740					
Discount Rate Source: Area101, Inc	12%					

THE DECISION

Joey did significant research and it was time to produce a recommendation for the executive team. Whether he recommended to purchase and install the Food Venue solution or not, Joey had to provide a compelling case based on careful analysis. This care was necessary because at Dartcor many projects competed for limited company resources – pursuing only the ones with the highest potential was fundamental. Sitting at his computer Joey pondered some of his own words:

Working on the business development side as well. I can see that cash must be spent on many fronts: upgrading the units, merchandising, IT, and so on. We must make investments in the most critical areas, those that differentiate us and allow us to compete. We can't go in and say that our back office system is better, because nobody is going to care, or believe us because of our size. (Joey)

^{**} Assumes labor cost of \$25/hour

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Dennis Reynolds is Assistant Professor of Food and Beverage Management in the Cornell University School of Hotel Administration. His research focuses on pathways leading to enhanced managerial efficiency and effectiveness with specific application to foodservice organizations. His research is published in the *Advanced Management Journal*, the *Cornell Hotel and Restaurant Administration Quarterly*, the *Journal of Hospitality and Tourism Research*, and the *Journal of Foodservice Business Research*. He is also the author of *On-Site Foodservice Management: A Best Practices Approach* (Wiley and Sons, 2003).

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