CIS 500: Information Systems for Decision Making
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Cohesion Case Study

for the

Broadway Cafe

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Abstract

Established in 1952, the Broadway Café starts out with a competitive advantage from an established menu and loyal customer base; however, in a business landscape where new competitors are arriving on the scene rapidly, the café also has much to benefit from upgrading its business practices with information systems. Knowledge management, customer relationship management, and business intelligence systems will help preserve the knowledge of older employees for future business operations, bring in a new generation of customers, and guide management in making the best strategic decisions in future operations. By merging the café's unique, classical offerings with Information Age innovations, the business will not only benefit from information technology, but also actively contribute to the World Wide Web's online community.

Part 1: Porter's Five-Force Analysis

One hurdle for the Broadway café is the high **Buyer Power** force it must overcome. Cafes are a dime a dozen. In the small town of Elizabeth City, North Carolina there are 97 restaurants serving a population of 40,000 people, offering potential customers a wide variety of restaurants to choose from with a wide variety of dining options (Yahoo, 2008). A customer loyalty program is one way to lower this force; however, such a solution requires a "large-scale IT system (Baltzan, 2008)," which could be cost-prohibitive for a small business like the café. Another way to lower this force is to have the café specialize in meals that other cafes do not offer, thus creating a niche dinning experience that may only be purchased at the café.

The café has a low **Supplier Power** force to contend with, as there are a wide variety of suppliers from which to purchase. A Google search for "restaurant supplies" turned up 5.3 million results (Google, 2008), with almost every single site listed in the first ten pages of results offering online ordering or 1-800 numbers to call in orders. With such a wide range of suppliers offering convenient delivery and variety, any supply issues experienced may be quickly remedied with a simple mouse-click to the next web site on the list.

The **threat of substitute products or services** is high for the same reasons buyer power is high, there are many restaurants and cafes offering the same services and products; however, this threat is different from buyer power in that it must be considered in the context of what specific products the café offers. If the café offers a particularly popular dish, produced with a unique recipe that no other café has access to, then the café

has effectively lowered this force. As the only switching costs the café has over its customers are the distance they must travel to the café and the price of a meal versus the prices offered by the café's competitors, maintaining a unique selection of popular meals based on recipes that other restaurants do not have access to is the best strategy for keeping this threat to a minimum.

The café having such a low supplier power to contend with means that new entrants also have a low hurdle to overcome in acquiring what they need to open up shop; in this respect, the **threat of new entrants** is high. However, there are some aspects to opening a café that cannot be purchased, and those are customer loyalty and a library of unique and established recipes. It may be easy for another café to find what they need to start up their business, but it will not be as easy to get customers to give up their regular dining habits and try out untested recipes that new chefs have yet to perfect.

In addition to high buyer power, the large number of restaurants also means a high **rivalry among existing competitors** (Rice, 2008). Prices must be competitive so customers will view the café as affordable in comparison to other restaurants. Service must excel to keep customers happy, and the menu must offer a novel selection of items customers cannot get anywhere else.

As we have noted, the café faces high competition, new entrants, and buyer power when we take a broad look at the food industry, but these forces are much lower when looked at in the narrower scope of food service specialization; therefore, a **focused differentiation strategy** will best tackle the forces presenting the biggest obstacles to the café. The Broadway café cannot be "all things to all people (Baltzan, 2008)," but it can

offer a selection of high-quality recipes that have been established in over 50 years of business that no other restaurant can offer.

Part 2: Developing an E-Business Strategy

The Broadway Café needs a variety of e-business solutions to keep the business functioning in the Information Age just as IHOP has done (Kontzer, 2004). A Knowledge Management System is necessary to prevent the irretrievable lose of all the recipes stowed away in the minds of the employees. In addition to the list of ingredients and the algorithms for producing the meals, additional data could be gathered about the recipes, including customer reviews, variations, and how today's leftovers can be turned into tomorrow's special.

A Customer Relationship Management system is necessary to keep current customers and attract new ones. A customer rewards program that tracks customer spending at the café, offering freebies to customers who spend a lot of money and provides incentives to new customers, would be a proactive strategy for improving customer relations. A customer loyalty card that ties into a CRM system to track individual spending habits is an opt-in method for providing employees with the data they need to identify loyal and new customers.

This system would also be gathering Business Intelligence information. By tracking customer-spending habits, the system will be able to profile customers into different types. The system could also put date-time stamps at point-of-purchase entries and provide metrics on peak sales times by time of day, day of week, and time of year.

A website with the current menu, specials, and events taking place at the café is another very important piece of the puzzle (Australian Government, 2006), allowing customers to review meals and specials. An online suggestion box would allow customers to suggest meals, request that discontinued dishes be brought back, or rate and

critique current meals. The café could also offer the ability to place orders online, accepting credit card payments for customer convenience and allowing customers to have their meal ready for them when they come into the café just as Papa John's Pizza has done (Papa John's Pizza, 2008). This is perfect for people hitting the café on their lunch break.

A high priority for the café is setting up an unsecured wifi connection for customers to surf the Internet with their laptops. Café's aren't just about sandwiches and coffee, they are about providing a place for social and intellectual gatherings, live music, and poetry readings. Providing free Wi-Fi is a fantastic incentive for bringing customers into the café (BBC News, 2008).

The free Internet access will also get the café listed in online directories such as Wi-Fi Free Spot (Wi-Fi Free Spot, 2008), and, while the connection is free, the café can offer the service in a way that a small, collapsible portion of the browser has advertising displayed on it, providing some additional revenue to the café (Fleishman, 2006).

Kiosks are definitely a nice touch, and would provide a competitive advantage over other coffee shops and cafes, which do not offer them. Wi-Fi is good for customers with laptops, kiosks are great for customers on their lunch break who don't have a laptop with them. To keep the kiosks accessible, software will need to limit customers to 20-minute sessions during peak hours.

Part 3: Telecommunications Considerations for M-Coupons

According to NetInformer, a provider of mobile coupons:

> [Mobile Coupons] have higher redemption rates than paper or e-coupons because they are not forgotten, or left at home. M-coupons can drastically reduce delivery and redemption costs, and trigger impulse buys (Netformer, 2008).

Additionally, the site notes that m-coupons allow a business to offer real-time discounts by region, track results by customer, and offer rewards for customer loyalty.

One concern with an m-coupon marketing campaign has to do with the relative newness of the strategy. A unique id could allow a coupon to be verified; however, there is the concern of people fabricating new coupons. If the coupon is a text-message, then this is relatively easy to accomplish. If the coupon is an MMS, then we are burdening the customer with having to download it.

Another issue is the potential perceptions of the customers receiving the texts. Will they consider receiving m-coupons just another form of spam, which gives customers a negative perception of the business (BizCommunity, 2008)? Tempering the number of coupons sent out, keeping them infrequent enough to avoid this perception is important to preventing the campaign from backfiring.

There is a problem with this particular marketing idea that is a showstopper. For the wireless network or whatever system that is being used to know that someone is within a 15 foot radius of the store, it would have to have a means of detecting their cell phone, acquiring the number, and then text-message the coupon. To text-message someone's cell phone unsolicited is an invasion of privacy. People have the right to remain anonymous. It is unethical for a business gather this kind of information from

people simply because they happen to be within the vicinity of the store; therefore, the strategy for deploying this marketing campaign is completely unacceptable.

In the future, such broadcasting technology will be possible without such an invasion (Dominikus, 2007), until then the campaign must be modified to a system like the one McDonald's has implemented, where potential customers may opt-in to receive a coupon, texting the service and having the service reply. This way, they are voluntarily giving away their contact details rather than having them mined by a wireless network.

Coupons will have ID numbers printed in the text message. Customers who voluntarily text the system to receive a coupon are connecting his or her phone number to that identification number. This offers a magnificent opportunity for gather metrics about customer behaviors. If the same number appears attached to multiple coupon ids, then we know a customer is using the system to its full advantage. If a new phone number enters the system, then we know we most likely have a new customer or, less likely, an old customer has a new phone. An m-coupon campaign that has an established history can identify customers who have not been in the café for a long time (Knight, 2008).

Customers who forward their coupon to another phone allows us to establish networks of customers, a "who knows who" database. This can inform us of communities of people who frequent the café, have the system flag individuals in these groups and have an employee ask them for input about what they like about the café. The café's success hinges on community buy-in; therefore, surveys of the individuals who make up the communities will help to foster them and make them grow. Additionally, being able to recognize a customer who has forwarded on their coupon, allows the business to

reward that customer for the referral, providing an incentive for that customer to refer others to the café.

If coupon ids are connected with a point of sale record, then we also have data about what else they purchased. How effective was the 15 percent off as an incentive to having a customer purchase more than his or her average purchase? What products do customers like to purchase along with their latte? Data on customer buying patterns will be transformed into information that will serve business decisions.

Part 4: Second Life for Customer Relationship Management

It may seem a waste of time and effort to purchase real estate in Second Life for the café; after all, the café deals in tangible, perishable products that cannot be sold online. But good coffee shops are all about selling culture as well as caffeine. They are a place for people to hang out, relax, and bond with others. We cannot sell coffee and dinner in Second Life, but we can sell *community*.

The café has to close for the night, but a Second Life location does not. A group of customers, engaged in deep conversation don't need to pack it up for the night or continue their discussion outside in the cold; instead they can meet at the Second Life location and chat as late as they like.

Similarly, Second Life is accessible to people all over the world. The café could hold small concerts, poetry slams, and other events that would appeal to all Second Life residents and not just locals. At the same time, the Second Life venue provides a way for locals to meet and connect with people from all around the world.

Staffing the Second Life café is problematic. Employing a fulltime representative of the shop at the Second Life location would not have a good return on investment; therefore, the online location would only have someone from the shop present for events, a volunteer if possible, preferably someone hosting the event or a temp from a Second Life staffing firm like Semper International (Semper, 2008). The Second Life location should offer free virtual coffee, music, and chairs for customers to hang out and make the location their own for when it is not staffed. Upcoming events, local artwork, and music should be available for customers visiting by themselves to find a reason to explore the site.

Along with this issue of cost, is the cost of owning real estate in Second Life. Because of a recent crash in virtual real estate values, Linden Lab has increased the prices on virtual land hosting by two-thirds to $125 a month (Krangel, 2008). Collaborating with neighboring businesses to set up a line of locations in the same tract online could offset this cost. This way the Second Life presence becomes a community effort, giving other shop owners in the area a stake in the location and a reason to encourage customers to visit online as well. The Second Life real estate, therefore, becomes a virtual representation of not just the café, but the area surrounding it as well.

It is important that the Second Life location not render the real life location obsolete (Revkin, 2008). If all of the customers looking for a place to socialize end up hanging out in the Second Life location all the time, they are not at the café spending real life dollars. It is essential then that the café advertise incentives at the Second Life location to promote customers coming into the real life location on a regular basis. Because anyone in the world can visit the café in Second Life, promoting the real world café there holds the promise of enticing people who visit the café's real world region to visit it in real life.

Part 5: Aspects of Outsourcing Systems Development

While we appreciate Nick Zele's offer to build the timesheet component of the Supply Chain Management system for our organization, there are some fairly big concerns to take in consideration. What are Mr. Zele's qualifications? The profit margins for a café are very slim, and the costs of building an in-house application could be very high. It's very important to get the system right at minimal cost; therefore, we must also consider what other projects Mr. Zele has worked on. Are there systems he has designed of similar scope and function?

Another other concern with having Mr. Zele design the system is accountability. If Mr. Zeke designs a payroll system that has a bug that deletes important information, or is improperly backed-up against the possibility of a hard drive crash, then what recourse do we have? The system loosing a month's worth of employee hours and payroll information could be fatal to the café staying in business.

What is Mr. Zele going to offer by way of supporting the system he designs? Will he be available at all hours of the night, ready to offer help desk support the night before paychecks are printed if the system is having problems? What if Mr. Zele takes a job somewhere else and no longer has the time to support the system?

In contrast, a carefully selected COTS product with lots of great reviews offered from an established vendor will also come with guaranteed support. Documentation and help files are crucial features that an individual working solo might tend to gloss over, believing they will provide personal support. Plus a software vendor will have staff on call 24 hours a day to support their product.

The key letter in to be concerned with in the COTS acronym is “C.” How customizable is the product? Will the software support the business, or will the business need to conform to the software? With the increase in software customization, follows the increase in the complexity of customizing it.

There is the possibility of finding a middle ground. Setting up a system in Microsoft Access isn’t too highly technical a solution. Access offers a numerous wizards for setting up a database and a front-end for managing it (Munk, 2006). Letting Mr. Zele design a system in Access would be a solution halfway between producing something in-house and a COTS system and create a system that is simple enough for a non-technical manager to make adjustments to.

For a time-keeping system, it’s hard to imagine employees having too much of a problem adapting to it. Admittedly, older employees, who lack experience with computers, will experience stress dealing with the new system. When you don’t know how to tab from field to field or use keyboard shortcuts, it’s difficult to see how an electronic system is more efficient than entering the data on paper.

Demonstrating the benefits of entering data into a database could go a long way to persuading these employees to use the system (Finkle, 2008). Showing them the reports and cost savings the system will provide will encourage these older employees, who presumably have more interesting in the café’s success, to contribute and a adapt to the new method of doing business. This persuasive tactic might also prompt them to contribute their own suggestions to improving the system.

Conclusions

The Broadway Café has the potential to not only stay in business, but also improve business success by leveraging information systems into its daily business practices. By pursuing a focused differentiation strategy, promoting the unique, established menu items that only the Broadway cafe has to offer, the business will mitigate the obstacles presented by the restaurant businesses' high competition, new entrants, and buyer power. Knowledge, Customer Relationship, and Business Intelligence management systems will contribute to all aspects of the business, with a website and free wi-fi enhancing the business' services and increase its visibility.

Mobile coupons will give customers incentives to come into the cafe as well as identify and reward loyal customers; however, broadcasting coupons to customer cell phones that are within range of the cafe would be unethical, so an opt-in system for receiving coupons would be the proper alternative strategy for distribution. Second Life offers a method for building a community around the cafe, encouraging visitors to hang out, and, by collaborating with neighboring businesses on developing Second Life real estate, build a local community online.

While an in-house employee could build some of the less-intensive information systems, using a COTS product or Microsoft Access as a rapid application development environment, issues of maintaining and supporting any system developed must be addressed. Any new system will need to be "sold" to older employees by demonstrating the value added to the business through its use.

Overall, this project, the exercise of evaluating a wide variety of technical and informational possibilities, is a success. A wide variety of aspects of the business have

been explored, a wide variety of information solution options have been discovered, which, in turn, offer a wide variety of strategies for business improvements.

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