

# Electronic Commerce Travel: A Case Study in Information Technology Use, Market Flexibility, Adaptability, and Diversification

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## EXECUTIVE SUMMARY

*Convenient Travel<sup>1</sup> (CT) is an organization that conducts business with its customers primarily on the Internet. As such, CT is considered an Internet travel provider. CT competes with many of the most easily recognizable Internet travel providers including Expedia.com, Travelocity.com, Orbitz.com, and many others. Its niche market focus concentrates on Mexico and the Caribbean. Our case study focuses on (a) electronic commerce technologies that improve productivity, provide real-time data, and increase profits, (b) strategic corporate responses to unexpected events that caused market downturns in travel following the September 11, 2001 attacks on the U.S. as well as Hurricanes Emily and Wilma in the Yucatan Peninsula in 2005, (c) corporate ownership restructuring to provide employee incentives, (d) online marketing and promotion techniques, (e) market diversification and market adaptability to replace lost sales in key markets and grow sales in new markets, (f) cost control through adoption of open source enterprise-class technologies, (g) cost control through management of merchant account and vendor fees, and (h) customer relationship enhancement through technical development and employee training.*

*Keywords: adaptability; diversification; electronic commerce, flexibility; markets; strategy; technology; travel*

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## ORGANIZATION BACKGROUND

Convenient Travel<sup>2</sup> (CT) was incorporated in 1999 in the state of Utah as a subchapter S corporation. CT is an electronic commerce company focusing on specific travel markets in Mexico and the Caribbean. The organization has grown every year since its inception, except in 2001. Current year growth (2005) has exceeded 2004 with monthly increases over the prior year of up to 105%. Revenue growth rate for 2005 is estimated at 15% above 2004. CT was originally financed with \$75,000 in cash and thousands of hours of *sweat equity*<sup>3</sup>. CT is currently free of

any debt. At present, the organization claims 7 employees, 8 shareholders who hold ownership and 5 shareholders who serve on the board of directors. Almost every employee is a shareholder (with the exception of some part-time employees). Moreover, all employees participate in profit sharing. Annual revenues are in the millions and profitability and productivity are high.

CT provides hotel booking services to Mexico and the Caribbean for its customers. It owns approximately 90 domain properties related to two targeted travel markets. CT primarily promotes online travel via opt-in direct e-mail, Internet search engines, and directory listings. Its main products are available online<sup>4</sup>. CT sells its products (i.e., hotel booking arrangements, transfers, and tours) to travelers from the U.S., Europe, and Asia. U.S. customers comprise the organization's largest market share with European travelers second. However, CT is increasing its sales to Japan and other Asian countries. Corporate offices are located in St. George, Utah; 125 miles north of Las Vegas, Nevada and 300 miles south of Salt Lake City, Utah.

### **Type of Business**

CT is a *pure play* electronic commerce travel company. Pure play means that CT conducts all of its business online. CT has a variety of key Internet domain properties and hundreds of Web sites related to travel destinations in Mexico and the Caribbean. CT books hotel reservations, transfers, tours, and other travel services through secure Web sites, but will handle bookings over the phone if the customer so desires.

### **Products/Services Provided**

CT believes that its services are superior because of its focused market niche, efficiently packaged customized tours, and well-trained and dedicated employees. Customized tours include adventure travel, transportation, and a wide variety of services on the Web. Employee dedication stems from ownership of the organization, interest in the business, and buy-in to the corporate mission. The CT corporate mission is to *provide the best possible travel experience to its customers at a reasonable price*. Concentrating on the Mexican and Caribbean markets allows CT to be more focused than its competitors. Moreover, a small, but dedicated workforce enables CT to promote customer satisfaction over any political or bureaucratic concerns that may hamper its competitors. Specific product offerings include (a) hotel booking services in Mexico and the Caribbean, (b) airport transfers and transportation services, (c) customized travel packages, and (d) tours and charter services.

### **The CT Relationship with Product and Travel Vendors**

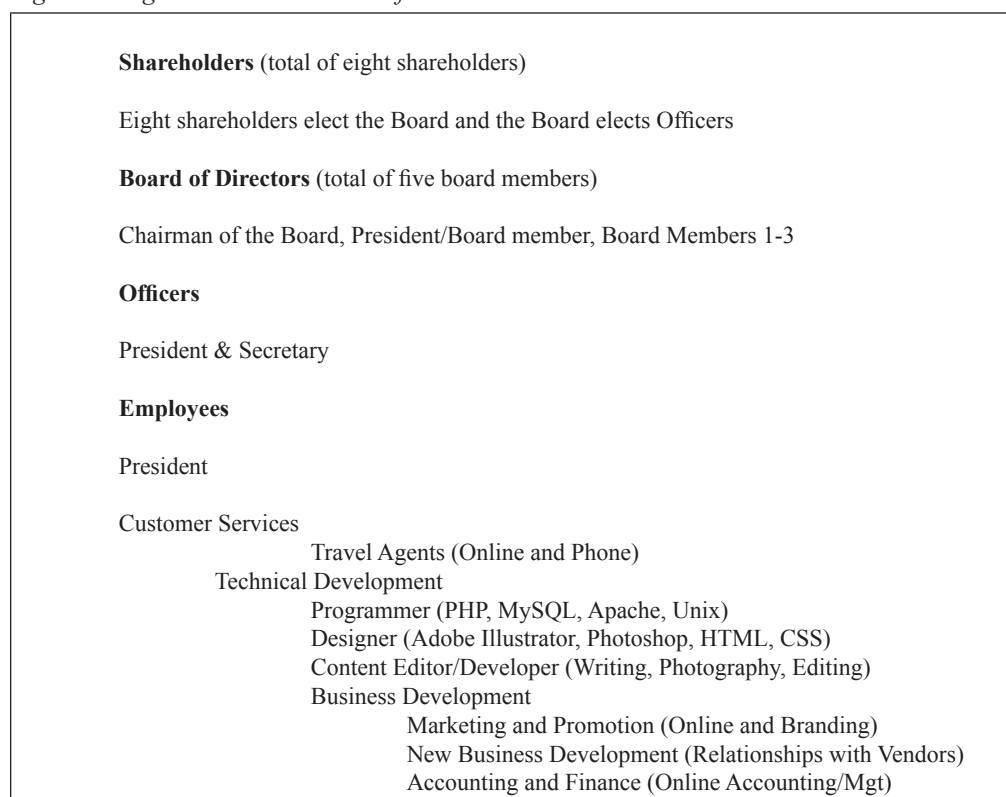
CT develops relationships with targeted hotels, transportation services companies, airlines, and tour and charter companies. It selects product vendors based on their reputation in the travel industry with regard to value, price, customer service, capacity to serve additional customers, strategic value to existing CT customers, and customer satisfaction. CT then negotiates long-term relationships with vendor organizations. To maintain quality control with its long-term vendor partners, CT provides a professional Web site for each vendor including a professional photo shoot and customized write-up on the property. CT also purchases a domain (or hosts the vendor's Web site on an already established domain) and hosts the newly developed Web site. The hosting services CT provides to its clients includes promotion and marketing of Web sites through search engines, development of direct customer relationships via email, and other *ad hoc* services as deemed appropriate by CT management. CT thus ensures tight control of its travel Web site services to its customers by ensuring that they can make secure room reservations to all vendor products online in a seamless manner.

## Management Structure

The management structure of CT is lean. With only 7 full-time employees, the management structure is by default uncluttered. That is, everyone has direct access to everyone else which vastly reduces politics and bureaucracy. The company is directed by a board consisting of 5 shareholders, one of which is the president of CT. The chairman of the board is an active participant in almost all aspects of the company. The president runs the day-to-day operations of the organization. There are three main employee groups at CT including (a) customer services, (b) technical development, and (c) business development.

Figure 1 provides a visual representation of the management structure. Command and control is top-down with the board of directors reporting to shareholders, officers reporting to the board, and employees reporting to officers. However, the leanness of CT enables worker empowerment to be very fluid as management and the board wants to provide necessary resources wherever possible to improve productivity and customer satisfaction. Moreover, everyone knows everyone else because CT employs only 7 people. Everyone sees each other almost on a daily basis. Employees share family stories, often times meet for lunch, and engage in other social activities together. CT is a small, “family-oriented” shop. That is, most of the employees’ family members know each other and relate together well.

Figure 1. Organizational structure of convenient travel



## Financial Status

CT is currently a financially healthy company<sup>5</sup>, but it has not always been that way. Annual revenues for 2005 were \$2,969,125. Profits for 2005 were \$269,786.00. The company is debt free and has a rainy day fund of \$66,000. However, CT struggled financially in both 2001 and 2002 due primarily to a downturn in global travel following the Sept. 11, 2001 attacks on the World Trade Centers in New York City.

From September of 2001 to 2003, the travel market prospects remained weak at best. Correspondingly, the travel revenues garnered by CT dropped significantly. The poor revenue picture forced the organization to enact major changes. The first mandate dictated by the board was managing costs more efficiently. As such, cost cutting measures were undertaken to ensure the survival of the company. A corporate reorganization resulted from a series of cost cutting measures. From one employee's perspective, "We were all worried that we would have to find another job; we didn't want to leave the company because we liked the tight working environment and family orientation." Another employee reinforced this feeling, "They [CT] have been great for our family financially and otherwise. I would hate to leave. I really enjoy the environment, but understand the possible problems that might face this industry."

An extremely deep cut in travel revenues and numerous travel cancellations necessitated cost cutting at an unprecedented level. This financial situation, which presented itself immediately following the September 11, 2001 attacks, created a management challenge, a challenge where the survival of the company hung in the balance. With only a few thousand dollars in the rainy day fund in 2001 and drastically shrinking cash flows caused by cancellations and lack of new reservations, CT found itself in a dire situation. The president of CT stated this succinctly to the board and employees, "If we don't reduce our cost structure immediately, we will probably have to close our doors for good."

Additionally, CT also struggled in 2005 due primarily to hurricanes Emily and Wilma and their destructive effects on the Yucatan Peninsula; a primary travel market for CT. Since unexpected events, such as terrorist attacks and hurricanes, began to occur at increasing rates, CT management believed that it had to become proactive in making the unexpected into the expected. The president addressed the board and employees by stating, "The world is changing and may have changed forever. If we are going to prosper as a business, we need to assume the worst. We have to become much more prudent with how we deal with expenses and find ways

Figure 2. CT financial overview

CT Business Element	Year 1999	Year 2000	Year 2001 (9/11) ***	Year 2002	Year 2003	Year 2004	Year 2005
Gross Sales	500,845	756,224	1,203,540	1,256,542	1,742,621	2,604,435	2,969,125
Rainy-Day Fund ( \$ )	25,000	22,000	0	10,000	50,000	75,000	66,000
Number Employees	5	5	4	6	7	8	7
Profit	0	0	0	20,000	250,000	322,786	269,000

to become much more efficient.” These unexpected events actually became the impetus for change and CT began to change how it operated so that the unexpected in its markets became the expected. As a result, CT became a more flexible, adaptable, and prepared organization. The chairman of the board addressed CT employees right after the world trade center incident, “This is a time of trouble for many in the world and our country, but we must survive and prosper for our families. The president has a plan of action and it appears to make sense. Let’s back him completely and work hard to make our company strong.”

The president’s plan involved innovative management that drew upon an astute understanding of the potential of information technology, the existing corporate climate, and the economic outlook and potential of the travel industry. Implementation of the plan allowed CT to survive the lean years in the travel industry and position itself to prosper in the future. As the case unfolds, we will discuss how the plan incorporated strategy, culture, information technology, and the economic climate to enable CT to survive and even prosper.

### **Strategic Planning**

From a strategic standpoint, CT was actually well positioned. Company founders and officers have been involved in the travel industry for over 20 years. Moreover, the board and employee base have over 60 years of combined experience and relationships in the industry. This was and is a key to the company’s success. The reputation of board members and employees is excellent and has been used to the company’s advantage. Most of the relationships with travel vendors come from personal relationships with board members and employees. Relationships and experience are salient components of the CT operating model. Moreover, most employees share in the ownership of CT, which is a large part of the strategic plan. That is, part of CT’s strategy is that employee ownership is the key to happy and productive workers. The president touted, “The strategic base of our company is sound because we have the experience and technical acumen required to prosper in the travel industry, even in lean times such as what we now face. We also rely on employee ownership to push us in the right direction. Our basic strategy thereby doesn’t have to change much. We just have to better utilize IT to improve operational efficiencies. We also have to use IT as a strategic tool in securing and maintaining market share and increasing existing and future customer satisfaction with our product lines.” An IT employee added, “We embrace the president’s vision because we are part owners. We have a stake in the success of the company.” Another employee stated, “We know each other well enough that we have trust in each other’s abilities. Our talents are also complementary. We agree with the major thrust of the company’s strategy to prosper.”

The image that CT presents is intended as professional and technologically advanced. Its team of Web and systems developers seeks to lead the industry and create superior technology and technology-related products and services. At CT, there exists a culture and organizational openness that promotes continuous improvement and innovation among the technical developers. The president states, “Everyday we communicate with each other how IT is a tool for customer service. We don’t limit ourselves to what IT vendors tout. We explore and exploit open source tools that can better our organization. Open source tools are free to acquire and appear to be more robust than most proprietary software.” One Web developer agrees, “Our president is great because he allows us to experiment with any IT tools that may help the organization. This is wonderful because I can help the company, which helps my family because I am a stockholder.” An IT employee adds, “It is unusual that a company president understands technology well enough to interact with technical people at a relatively technical level. The president has a programming and business background, which makes it very easy to explain to him our technical needs.”

Employee skills and personalities are complimentary at CT. Employees work hard, have opportunities for training and advancement, and produce hundreds of thousands of dollars of revenue annually per employee. Employees receive incentives through two different reward structures including a point-driven bonus plan for base employees and a shareholder distribution plan. Both plans combine to create an environment where everyone benefits when the company is doing well. Another impressive attribute at CT is the attitude of teamwork and selflessness, meaning that people really look out for each other and work toward the best interest of the organization. As one employee reported, "The reward system is fair and is helping me earn a lot more than I would in another organization because my sweat equity is appreciated. I mean that when I provide ideas that help the company, management either rewards me with money or shares." Another employee said, "The family atmosphere is great, but the reward system is an even better incentive. It is fair!"

Strategically, CT plans to increase annual revenues in 2006 by 50 percent over 2005 while still maintaining high profitability levels. The challenge CT faces is drafting plans that can be implemented to bring this strategy to fruition.

### Organizational Culture

CT's organizational culture is (a) shareholder and employee driven, (b) technologically advanced, (c) customer-service oriented, (d) open, (e) reward-based for employees, shareholders, and officers, and (f) professional and enjoyable. Shareholder- and employee-driven mean that CT shareholders and employees invest and work to provide well for themselves and their families. CT management wants to instill such a philosophy because it believes that building a positive culture improves productivity over the long term. "Technologically advanced" means that the organization is continuously updating and upgrading equipment and systems to provide superior technological resources for its employees. A customer-service orientation is one way the company differentiates itself within the industry. That is, CT clearly looks out for its customers. Open means that the barriers between employees and management are nonexistent. Reward based means that there is a financial balance between shareholders, employees, and customers. One employee stated, "I was really worried about my job in 2001 for obvious reasons. I really like it here, but business is business. Luckily, our company survived and I can remain in a wonderful work environment. I have to credit [the president] because he is very bright strategically and makes us feel that we are important as employees." Another employee stated, "I almost left [the company] after the terrorist attacks, but I was encouraged by [the president] to gut it out. He is very strong and smart. He also makes me feel like I am important to the company. Needless to say, I am glad that I am here."

Financial balance hinges upon several criteria. CT has a plan to benefit shareholders through shareholder distributions that link to stock ownership in the company. Employee bonus plans are based on each employee's strategic value to the company. Investments in equipment, software, systems, services, and relationships are based on benefit to customers in the long term. Such a complex financial balance requires CT officers to make ongoing adjustments to investment policies concerning IT, shareholder distributions, and employee bonuses. As a result, CT priorities concerning shareholders, employees, and customer requirements change over time. Another challenge faced by CT is to decide upon what policies should be put into action to maintain financial balance. The president stated, "We are not a large company, so our IT budget is small. As such, we must explore opportunities to save money while maintaining quality. One area that is wonderful is open-source. We have the technical staff to support open-source software and the flexibility to allow our IT to adapt to software changes rapidly."

## Economic Climate

Present market conditions for travel are below average in Mexico and the Caribbean. Currently, CT revenues in travel to Mexico and Caribbean are down about 15% over 2005 figures. However, travel conditions can change very rapidly. This year, 2006, travel revenues to Mexico and the Caribbean are below average or slightly growing in some local markets. However, revenues year-to-year can fluctuate more than 50% in a given year.

The travel industry is known for its ups and downs. There are many events or occurrences that impact travel. A few potential threats to travel include hijacked planes, geo-political tensions, wars, weather, economic downturns, and price wars. Uncertainty about the future can reduce revenues because travelers tend to stay close to home during chaotic economic and political periods. As such, travel companies must be flexible and recognize the need for planning for economic downturns. The president stated, "Our survival depends on our ability to adapt to industry changes rapidly. One of the reasons that we have been successful is that the idea of adaptability is built into our company vision." One of the most senior employees stated, "I have worked for other organizations in the travel industry. The reason I like it here is because of the company's emphasis on dealing with change head on. There are no games or politics. The only real concern is prosperity for us and the satisfaction of our customer base." Yet another challenge in this industry is deciding on the types of business planning that might increase the likelihood of survivability during economic downturns or other events that impact travel.

## Literature Review

With the almost ubiquitous availability of the Internet and low entry costs, smaller organizations can effectively compete with larger rivals (Marshall & McKay, 2002). The Internet offers smaller organizations a relatively efficient and effective media channel to provide and exchange information related to advertising, marketing, transaction processing, and distribution of goods and services (Czerniawska & Potter, 1998; Ernst & Young, 2000; Baldwin, Lymer & Johnson, 2001). However, managers and owners of small organizations often lack the requisite technological knowledge and skills necessary to be competitive (Baldwin et al., 2001). Moreover, "establishing an Internet presence that provides appropriate quality assurance (including trust) is a formidable task for small [business]" (Fader, 2002, p. 5). To alleviate these potential problems, Internet service providers (ISP) offer technical and business acumen to assist small organizations at relatively reasonable prices (Cirillo, 1999). However, over reliance on an ISP can be counterproductive.

One problem with an ISP is that it may not be around for the long-term. "Almost half of last year's leading ISPs have already disappeared, most through mergers and acquisitions" (Cirillo, 1999, p. 53). Another problem is that an ISP is a generalized service organization. That is, it offers Web hosting, application services, and electronic commerce solutions in a general sense. The ISP may not have any experience with the special needs of a particular industry or the special requirements of a particular business. As a result, one must be very careful when deciding upon an ISP (Cirillo).

Research suggests that the success of electronic commerce hinges on "determining an appropriate blend of electronic commerce vision, strategy and technology, coupled with knowledge of industry and marketplace pressures and trends, and e-customer concepts of value creation" (Marshall & McKay, 2002, p. 4). Marshall and McKay argue that owners and managers of smaller organizations must adhere to a holistic approach of planning for the adoption and implementation of electronic commerce. A vital element of such a plan is strategy. Research suggests that electronic commerce strategic development and management is vital to any suc-

cessful electronic commerce venture (Chen, 2001; Lientz & Rea, 2000; Venkatraman, 2000; Willcocks & Sauer, 2000).

White (1998) argues that smaller organizations can obtain advantages over large enterprises through establishing personal customer relationships, customized offerings, and targeting niche markets. Kleindl (2000) adds that the Internet can help small businesses enter niche markets at no additional cost. Further, Benjamin and Wigand (1995) note that establishment of Web sites enables smaller firms access to markets quickly. However, for smaller organizations, developing customer relationships is the basic marketing philosophy (Sparkes and Thomas, 2001). Customer relationships are so important to such organizations because they lack the name recognition, resources, and reputation of larger enterprises. Smaller organizations have an obvious advantage over larger organizations in this respect because the lack of bureaucracy and politics enables employees to better cultivate personal relationships with customers.

A Web site that engages the customer with content and services differentiates the Internet from other forms of marketing and can thereby provide an organization a viable competitive advantage (Sparkes & Thomas, 2001). Moreover, online content involves a lower cost in the exchange of information (Sparkes & Thomas, 2001). Kleindl (2000) suggests that online content allows for a *publish once, read-many-times* environment. Web sites can also bring mass customization to a wide range of products and enables employees to focus their marketing efforts on developing close customer relationships (Peppers & Rogers, 1996).

The degree of customer impact provided by a Web site can be divided into three categories, namely informational level, transactional level, and relational level (Ditto and Pille, 1998). According to Ditto and Pille, bringing these three levels together to create a shared vision is critical toward creating an interactive Web presence. The informational level is the ability of a Web site to provide an information infrastructure for managing the firm (Lederer, Mirchandani & Sims, 2001). That is, the ability of a Web site to provide the same information available through traditional marketing (Sparkes and Thomas, 2001). The transactional level is the ability of a Web site to automate a firm's financial events (Lederer et al.). Such automation can also extend to customers by allowing them to interact with the enterprise by e-mail, telephone or the Web site itself (Sparkes and Thomas). The relational level is the ability of the Web site to provide interactivity with the customer (Sparkes and Thomas). The Web site can act as a conduit to develop closer relationships with customers.

## SETTING THE STAGE

CT uses a diverse set of computer platforms, technologies, and management approaches. It employs this myriad of techniques for different purposes. CT groups its key information technology (IT) functions and systems into several categories. Major IT categories include (a) systems administration and security, (b) graphic design and development, (c) back-end systems development and database design, (d) content and communications management, (e) contract management, and (f) accounting information systems (real-time revenues and resort inventory controls). For a small firm, such IT diversity is atypical. The president stated, "An integral part of our vision is to embrace IT as a facilitator of business processes. That is, new IT is only an answer if it helps us better serve our customers and realize our company mission." One employee stated, "We do a good job of communicating with each other the importance of IT toward the business bottom line. Our IT people are not uses their technical expertise to impress management. They really help us do our job." One of the IT employees stated, "This place is really different. I have worked for many organizations as an IT specialist. I used to spend most of my time maintaining bad systems that mostly got in the way of the business. It is refreshing to work with people that understand how IT and process can work together."



CT uses open source applications for its Web services. Macintoshes and Apple computers loaded with Adobe and other graphics software applications are used by CT employees for content development. Windows computers are used for office and client communications. Specifically, CT owns four Macintosh high-end computers used primarily for graphics, content, contract, and communications. In addition, it owns three Windows computers that are used for reservation management, communications, and contract management. The two FreeBSD (UNIX) servers CT owns are used for managing Web services, domains, content, communications, security, and accounting information systems software.

CT has chosen open source solutions, specifically PHP, MySQL, Apache, and FreeBSD for their electronic commerce applications. Among their reasons for choosing an open source development platform are cost, speed, enterprise capability, and reputation among other developers in companies using open source solutions. CT has co-located its servers at a high-end Internet service provider (ISP), which provides more than 140Mbps of bandwidth to the Internet backbone. CT also has broadband connectivity so that employees can have Internet access at home. This capability is critical because demands in the travel industry for exceptional customer service as well as prompt responses to customers needs often prompt office managers and administrators to provide client support services from their homes. Additionally, board members have computers, networks, and broadband access from their homes to the company's real-time accounting and revenue information.

### **Technological Concerns**

The more one learns about technology and its potential for unforeseen problems, the more one worries about "what if" scenarios. What if the power goes out in town? What if the network connection to the Internet gets cut? What if a hard drive fails on the main server? What if someone compromises the security of the system? These are just a few of the potential problems that might occur. Clearly, there are many technological concerns for electronic commerce companies as they seek secure, reliable, fast, and redundant technical environments. Broadly speaking, the technical concerns at CT include (a) reliability (are all systems reliable?), (b) redundancy (are network connections and servers redundant?), (c) security (are systems and data secure?), and (d) speed (are all systems and servers up-to-date and fast?).

Since technology is used as a key element for conducting business and is therefore core to business operations, what specific things should be done to address technical concerns such as reliability, redundancy, and security?

### **CASE DESCRIPTION**

CT started business in 1999, shortly before the technology bubble began to burst. The business model was based on the long-term relationships of two CT board members with travel vendors in Mexico and the Caribbean. These two board members had been booking travel and taking groups all around the world for over 20 years and had relationships with key vendors. Based on business relationships built over the years with travel vendors, the two board members approached several technical people that they believed could support the technical needs of a Web-based travel company. The start-up team for CT consisted of IT developers and travel experts. Using existing relationships and the IT capabilities of their newly formed technical team, a number of travel vendors were approached and rate agreements were negotiated. CT began to design, develop, author, and implement vendor Web sites in accordance to the negotiated agreements.

CT is a company built on vision and strategy. The president is responsible for the vision and the board is responsible for helping the president create, implement, and execute company

Table 1. Strategic alternatives

Alternative Approaches For CT Corporate Startup	Advantages	Disadvantages
Low Risk, Small Capital Investment, Sweat Equity, Part Time Technology Development, utilizing Sub Chapter S Corporate Advantages	<ul style="list-style-type: none"> <li>• Easy to secure startup investor</li> <li>• Little or no risk</li> <li>• Demonstrate and Prove Technology Before Launching Corporation</li> <li>• Small Number Investors</li> <li>• Sub Chapter S (No Corporate Taxes)</li> <li>• Startup Personnel had 20 year relationships with Hotels</li> <li>• Startup personnel had 20 years travel industry experience</li> <li>• Startup personnel had state-of-the-art IT expertise</li> <li>• Startup group had completed a feasibility study before moving forward with concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Takes Longer to Start-up</li> </ul>
Secure Large Number of Dollars for Startup	<ul style="list-style-type: none"> <li>• Sub Chapter S (No Corporate Taxes)</li> <li>• Startup Personnel had 20 year relationships with Hotels</li> <li>• Startup personnel had 20 years travel industry experience</li> <li>• Startup personnel had state-of-the-art IT expertise</li> <li>• Startup group had completed a feasibility study before moving forward with concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Must obtain startup money</li> <li>• High Risk Startup</li> <li>• Typical High Tech Startup</li> <li>• Corporation pays for Startup Development Costs</li> <li>• Quicker Startup</li> <li>• Subject to High Tech Business Fluctuations</li> </ul>
Secure Moderate Number of Dollars for Startup	<ul style="list-style-type: none"> <li>• Sub Chapter S (No Corporate Taxes)</li> <li>• Startup Personnel had 20 year relationships with Hotels</li> <li>• Startup personnel had 20 years travel industry experience</li> <li>• Startup personnel had state-of-the-art IT expertise</li> <li>• Startup group had completed a feasibility study before moving forward with concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Extremely High Risk</li> <li>• Must obtain startup money</li> <li>• Typical High Tech Startup</li> <li>• Corporation pays for Startup Development Costs</li> <li>• Quicker Startup</li> <li>• Subject to High Tech Business Fluctuations</li> </ul>

strategy to realize the vision. In the president's words, "The vision of CT is to create travel products that meet or exceed customer expectations with the facilitating capability of IT and the sweat equity of our excellent employees." To realize this vision, CT management had to approach strategic development in a systematic fashion. The first step was to articulate the best viable approaches to creating an organization that is flexible, adaptability, and capable of competing

in a competitive and sometimes very turbulent environment. The president and board thereby developed a set of alternative approaches for the business as shown in Table 1. They used this table as a means to systematically analyze the alternatives. The advantages and disadvantages of each alternative were then carefully scrutinized and discussed.

The first alternative as shown in Table 1 was chosen as the best path for success. This choice was the most viable based on the expertise and experience of the board, president, and CT employees. It was also less risky in terms of general and technical capital expenditures. The president stated, "The unique skill sets that we brought together to form this company is atypical. We knew that we had to get IT people who understand business process and are not afraid to experiment with new software, especially open source." One of the IT employees stated, "It is refreshing to work with someone [the president] that understands programming and open source potential. I think this is why we have such a competitive advantage. We match IT with business processes and are not tied to proprietary software. Of course, to accomplish this not so trivial task we have to have the experience and background." Another IT specialist stated, "We not only have the technical expertise, our minds are open to change and new ideas. This is definitely atypical in a large organization."

The choice of strategy was exacerbated by the composition of the organization and board. CT had the business and IT personnel in place with the energy to make it all happen. According to a member of the board, "Without the core of talented and motivated people we assembled, this alternative would not have worked. We knew that our idea was sound if we could assemble the people to execute our vision. We think that we did a good job." The chosen startup strategy was also low risk with minimal capital investment and proven technology. Another board member stated, "Low risk and small investment is typically not a way to gain high returns. However, our experience in this industry and technical acumen helped us better focus investments toward employee facilitative processes rather than proprietary IT. Most organizations have huge IT budgets because they fail to integrate their business processes with IT. That is, they fail to use IT to actually help business processes. Moreover, they have too much sunk cost in dated proprietary hardware and software. We were able to think through how IT can help us from scratch. We didn't have any real sunk costs in proprietary hardware and software." The president stated, "Everything that we do in terms of process is discussed openly with our people. We want to know if everyone agrees that our business processes make sense. We do not buy into the idea that IT solutions are necessarily expensive. With open source software available for almost any business purpose and cheap hardware, the IT budget can be value-adding rather than just a huge drain on profits."

Following from the choice of business strategy, the next step taken by CT management was choice of regional marketing strategy. Management formulated only two alternatives. One was to focus on two specific markets, namely Mexico and the Caribbean. These two markets were chosen based on the experience, expertise, and contacts that CT employees possessed. The second was to focus on the biggest markets such as the United States and Europe. The first alternative was the only viable choice if the basic strategy was to be followed. That is, focusing on just two locations was very risk adverse and required low capital expenditure because the connections to vendors and markets had already been established. Specifically, startup risk was minimized because key personnel had already established relationships with hotel owners in Mexico and the Caribbean, and possessed twenty years of travel experience in the region. Table 2 presents the two alternative marketing choices.

From CT's ability to focus closely on just two markets, it redefined the way travel arrangements were conducted in their travel niche. CT was able to work closely with the vendor

Table 2. Regional market alternatives

Regional Market Alternatives	Advantages	Disadvantages
Mexico and Caribbean	<ul style="list-style-type: none"> <li>• Startup Personnel had 20 year relationships with Hotel Owners in this region</li> <li>• Startup personnel had 20 years travel industry experience in this region</li> <li>• Startup group had completed a feasibility study for this region before moving forward with concepts</li> <li>• Startup personnel had state-of-the-art IT expertise</li> </ul>	
United States, Europe, South America, and all other Geographical Regions	<ul style="list-style-type: none"> <li>• Startup personnel had state-of-the-art IT expertise</li> </ul>	<ul style="list-style-type: none"> <li>• Startup Personnel had no relationships with Hotel Owners in these regions</li> <li>• Startup Personnel had no travel industry experience in these regions</li> <li>• High Risk (No established relationships and experience)</li> </ul>

as a marketing and promotion partner as well as a technical delivery partner. That is, CT pooled its marketing and promotion resources with its vendors to save resources. This way, CT could take advantage of its vendor's marketing expertise without additional cost. Of course its vendors could do the same. CT also worked with its vendors to delivery content on the Web. Since its vendors already had a Web presence, CT could use these resources as well as its own to save huge amounts of software development time and expertise. One of the senior IT people stated, "It is amazing what some of our vendors are doing in terms of marketing and IT delivery. Our relationship is so trusting with our vendors, that we can share existing marketing, IT, and business resources. We have this level of vendor trust because our people have so much experience working with them [vendors] over the years." The president stated, "It was part of our initial strategy to bring together people with travel industry experience in the Mexico and Caribbean markets. We knew that we had a good chance of pooling resources (both marketing and IT) if we could hire the right people."

Another important innovation established by the company was to *wave fees* to vendors for technical development, content development, and visual and design development. In lieu of such fees, CT negotiated a set percentage of vendor transactions. This approach differed from the typical business model at the time, where travel vendors contracted with Web developers to both create a Web site and promote the company online. The company's business model and approach has proven itself over the past four years in terms of increasing profits and growth. Additionally, the CT business model has shown that it will last in the long term. Such an approach creates a strong relationship between the vendor and CT. This is because CT must market and promote the vendor hotel or travel services Web site in order to earn bookings and sales commissions and the hotels and travel services companies only pay commissions bookings that they make money on as well. One board member stated, "We are essentially locking in the vendor

to our way of doing business. Of course, the vendors know that it is advantageous so they are happy and we are happy.”

Once the overall and regional strategies were in place, CT now looked at the IT strategy. Three alternatives were articulated by the board and president. One alternative was to let the hotel pay for its own IT development costs. A second alternative was to have CT develop each site for each hotel at no cost to the vendor. The third alternative was a combination of the first two. Table 3 articulates the alternatives.

CT chose the second alternative because the difficulty of recreating individual Web sites for each hotel was minimal. The reason is because the underlying business processes supported by each Web site are very similar. The only difference is some graphic content. With CT developing each Web site, the company can monitor quality control very easily and make sure that the underlying technology is working seamlessly. One of the IT people stated, “We love the control of the Web sites. If the vendor wants a change, we can do this for them quickly and easily without it impacting how the technology supports transactions.” The president stated, “The vendors like it because it costs them nothing. Our IT people like it because IT control is centralized with us. The organization prospers because it doesn’t cost much and it minimizes risks associated with bad data and unhappy vendors. Customers like it because the Web sites are easy to navigate and function transparently.”

CT also improved upon the online marketing techniques being used in the travel industry at the time. Specific techniques used by CT were *pay-per-click*, e-mail campaigns, and *adwords*. CT found that by using a mixture of such marketing and promotion techniques, the profit per booking increased, revenues increased, and the cost per booking decreased. This mixture helped

Table 3. IT marketing strategy alternatives

Marketing Strategy Alternatives	Advantages	Disadvantages
Hotels Pay for their own Web site development costs	<ul style="list-style-type: none"> <li>Minimizes capital for CT Startup</li> </ul>	<ul style="list-style-type: none"> <li>Turns off Hotel Owners</li> <li>Hotel Owners assume all risk of venture</li> <li>Not Win/Win scenario</li> </ul>
CT Develops Individual Web Sites for each Hotel at no cost to Hotel	<ul style="list-style-type: none"> <li>No risk to Hotel</li> <li>Easier for CT to secure binding agreement with Hotels (Win/Win Situation)</li> <li>Easier for CT to negotiate Commissions (Win/Win Situation)</li> <li>Improves potential CT business relationships with Hotel Owners</li> </ul>	<ul style="list-style-type: none"> <li>Higher CT Startup Costs (CT minimizes through sweat equity concepts)</li> </ul>
Some Combination of the previous two alternatives	<ul style="list-style-type: none"> <li>Reduced amount of capital for CT Startup</li> </ul>	<ul style="list-style-type: none"> <li>Turns off Hotel Owners</li> <li>Hotel Owners assume a portion of the risk</li> <li>Not Win/Win scenario</li> </ul>

the company better manage frequent online promotion changes. Currently, CT uses a combination of Overture's pay-per-click and Google's *adwords* to maximize revenues and profits. One of the board members stated, "Sweat equity is the key to creativity. Since our excellent employees have a stake in the prosperity of the company, they come up with great ideas that work."

In 2001, CT implemented a PHP/MySQL-driven client communication system. The productivity gains from this system implementation were significant. The system manages all communications with clients as well as providing templates for responses to client e-mails. The benefits of the new system reduced employee errors with regard to giving out correct information. It also enhanced customer satisfaction and employee job satisfaction. CT also noticed that the system enabled employees to handle more customers more effectively. A review of the advantages of open source and proprietary technology alternatives is provided in Table 4.

After September 11, 2001, CT, and the travel industry in general, experienced a significant downturn in revenues. Because of this, company costs came under greater scrutiny from the board of directors. The board mandated that all costs be reviewed and that managers actively seek means for reducing costs. Through this cost reduction process, the company's merchant account came under review and it was found that a new relationship structure had to be established in order to reduce the costs of transacting business via the Web. Almost all of the company's revenues were coming in through VISA/Mastercard, and such revenues were in the millions of dollars. The merchant fees were between 3.5-4%, which was considered exorbitant by the board. As a result, a relationship was established with a new merchant company that would accept a 2.1% fee. The savings garnered from the new merchant relationship resulted in cost savings in the tens of thousands of dollars in annual merchant fees. Additional cost cutting measures took place over the next 18 months and these measures significantly reduced monthly costs.

Technological improvements and ongoing technical upgrades, in addition to cost cutting proved successful and have resulted in strong current revenues, productivity, and profitability. CT continues to make improvements and additions to its IT systems. These systems have provided a new level of scalability for the company. One company executive forecasted that because of the electronic commerce IT systems in place, CT can handle *ten times* their current revenue and customer support levels without adding additional employees.

The CT success story hinges on strategic thinking. The board and president formed the company based on a vision that a small group of experienced and motivated people can create a profitable entity with the facilitative power of inexpensive open source software, sweat equity, and a great working environment.

## CURRENT CHALLENGES/PROBLEMS FACING THE ORGANIZATION

CT currently faces a number of challenges including (a) competitors with significant financial and technical resources as well as market share, (b) changing economic conditions that require flexibility, adaptability, and diversification, and (c) the market demands for ongoing technical research, development, and innovation. These challenges are principal driving forces behind what makes companies better or what eliminates them from the market place. These are the common challenges and opportunities of the market place; to plan, to research, to strategize, to compete, to adapt, to diversify, to be flexible, to prepare, to respond, and to innovate and to do it again and again, and again.

Table 4. Proprietary and open source IT alternatives

Open Source Technology Alternatives Chosen in CT	Advantages	Disadvantages
FreeBSD Apache PHP MySQL	<ul style="list-style-type: none"> <li>• OS – Unix, Free, Enterprise tested, historically stable</li> <li>• Web Server -- Most used Web server. 70% of all Web servers run Apache</li> <li>• Scripting for Web – Most used module on the Apache Web server</li> <li>• Database – Large user base, has been enterprise tested, historically stable, standard compliant, fast, secure, capable for small to medium sized organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Technical skill requirements are high</li> <li>• Learning curves are steep</li> <li>• Support can be an issue</li> </ul>
Open Source Technology Alternatives Explored in CT		
Linux Windows – Dot Net PostgreSQL	<ul style="list-style-type: none"> <li>• OS – Unix, Free, Enterprise tested, historically stable. The decision to go with FreeBSD was a developers preference and experience with the OS</li> <li>• Development Environment and OS – Well integrated Web development environment</li> <li>• Enterprise Class</li> <li>• Database – Medium user base, enterprise tested, stable, standards compliant, adequate speed, capable. The decision to go with MySQL was a developer preference by going with what they knew and were comfortable with.</li> </ul>	<ul style="list-style-type: none"> <li>• Technical skill requirements are high</li> <li>• Learning curves are steep</li> <li>• Support can be an issue</li> <li>• Cost excessive</li> <li>• Developer preference</li> </ul>

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## ENDNOTES

- 1 A pseudonym is used to protect the name of the organization.
- 2 A pseudonym is used to protect the name of the organization.
- 3 Sweat equity is work performed in return for company shares (ownership)
- 4 The Web site address is not provided to secure anonymity.
- 5 Financial information reported in this case is limited at the request of CT.



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