QAZZTEK SECURITY

MSIS PROJECT
Report

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BUSINESS DESCRIPTION

Qazztek's mission is to provide confidence, safety, and security to individuals and companies through providing comprehensive physical and information security. Qazztek will provide a full array of security products and services including:

1. Security Consulting
2. A full range of security products
3. Security Training – a broad selection of training courses and materials
4. Security Certification
5. Security Auditing
6. Security Outsourcing: Physical Security, Software as a Service, Cloud Computing, Monitoring, Data Center Outsourcing, Security Vulnerability Testing, Email Outsourcing, Etc.
7. Security Product Installation: Physical Security (alarms, cameras, access controls, security guards), Security Monitoring software
8. Security Policies and Procedures Implementation

Last year in the United States alone, companies spent over $120 billion on IT related security and another $15.3 billion on security of physical premises (cameras, security guards, etc.). Despite these large expenditures on security, most US citizens and businesses do not feel safe from cyber-attacks, physical and cyber vandalism, identity theft, espionage, embezzlement, etc. It is estimated that cybercrime will cost American businesses and individuals over $550 billion in 2011 up nearly 12% from 2010.

Computer hackers have been able to keep up with increasing security measures and continue to wreak wide spread havoc on business and individuals. Unlike the past, when the average hacker was just trying to prove his or her prowess in breaking into a system, today's hackers are career criminal groups from all over the world with the intent on stealing funds, stealing secrets, or causing havoc to legitimate businesses. The average small business person or home network does not have the skill set, education, or the experience to understand the risks and take appropriate security precautions to avoid significant losses.

Qazztek will be targeting small and medium size businesses and to a lesser extent home networks to provide them with comprehensive security solutions to the growing security threats. The company will use a multi-pronged marketing strategy to contact business executives and deliver its security products and services. Qazztek expects to make extensive use of web-based technologies to advertise, market, and in some cases deliver its products and services to its customers.

PROJECT TEAM

Our team was comprised of five members of the MSIS Program class. While each team member is a current student at the University of Utah, most are not typical students. Several members of the team have extensive IT, management, finance, and security experience. The team is responsible for the development of all the products and services, doing the market research, and

developing company's website, technology infrastructure, database and security. The team currently utilized the insights and management expertise of many others to complete the project including several members of the David Eccles School of Management faculty. The backgrounds for the team members are as follows:

ALAN HARRIS – IT SPECIALIST

Alan Harris is an Information Technology specialist with over 4 years of experience in support of Windows, Macintosh, Servers, and network components. Alan currently serves and an IT Technician for the University of Utah's David Eccles School of Business. In this role, he is responsible for supporting approximately 900 computers, including five computer labs, laptops for the Executive MBA program, laptops for the Professional MBA program, as well as for faculty and staff of the Business School. He has earned his B.A. in Computer Information Technology from Brigham Young University-Idaho and is currently seeking a Master's of Science degree in Information Systems from the David Eccles School of Business.

JEREMY HART – SECURITY SPECIALIST

Jeremy Hart is a young and motivated professional looking to find his niche in the IT workplace. He graduated in 2007 with his B.S. in Computer Information Technology from Brigham Young University-Idaho and has been worked the last 2 ½ years in the Telecom industry as a VOIP Technician. His ambitions and eagerness to learn as much as he can about technology lead him down the path he is currently on, pursuing a Master of Science in Information Systems from the University of Utah. During the summer of 2006 Jeremy was an intern at the Office of Naval Intelligence in Washington D.C. There he assisted the Networking and Firewall team with various day to day tasks, regular maintenance, and daily troubleshooting issues. From 2008 to 2009 Jeremy worked for a small VOIP service provider named One Connect IP as Network Technician. From there he moved onto another VOIP service provider called Phusion Pointe where he served as a Network Engineer. Mr. Hart is excited about what the future holds for him and his career and is looking to strike it big with one of the Big 4 Accounting firms doing IT Consulting and Auditing.

TIMOTHY N. JENSON – SENIOR EXECUTIVE

Tim Jenson is a senior management executive with over 20 years of progressive strategic and operational experience and an exceptional record of delivering results in Finance, Operations, and General Management. He has proven leadership ability demonstrated within respected firms such as fortune 500 companies and start-ups particularly in technology-related industries. His specific expertise is in building and expanding businesses through exemplary leadership, clear and concise communications skills, efficient and effective cost controls, and strategic negotiations. He has a proven track record of restructuring, reorganizing, and revitalizing departments and individuals to be more productive, and in making businesses successful. Mr. Jenson has earned both a B.A. in business management and an MBA in finance from Brigham Young University and is currently seeking a Master's of Science degree in Information Services. Mr. Jenson has served or is serving as an advisor or on the Board of Directors of several public and private firms. Mr. Jenson also serves in various capacities with several non-profit and charitable organizations including We Care of LA, the American Youth Soccer Organization,

and the Boy Scouts of America. He has been a member of the Financial Executives Institute and the American Management Association.

TYLER KANEKO – FINANCE AND SECURITY SPECIALIST

Tyler Kaneko is a senior accountant and business process specialist with over 10+ years of Entrepreneurial and Fortune 500 experience. Tyler earned his B.S. in Finance from the University of Utah and soon after successfully launched two highly profitable companies serving the automotive aftermarket industry. After the successful sale of both businesses, Tyler went on to enhance his business process and accounting knowledge of larger, publicly traded companies. Currently, he is devoting his full time efforts in pursuing a Master's of Science degree in Information Services from the David Eccles School of Business.

KIRK NIELSEN – IT SPECIALIST

Kirk Nielson graduated from the University of Utah in Business Administration where he learned the various aspects of business and how they are related to each other and work together to make businesses successful. Kirk is now in the MSIS program at the University of Utah with an emphasis in IT Security. He has finished the security track in the program which has given him the opportunity to complete a risk assessment for a company along with working with different forensic software and other commonly used security software such as password auditors, port scanners, and packet sniffers to name a few. These security courses have provided Kirk with a state-of-the-art knowledge of current risks facing companies and the approaches that are used to mitigate and eliminate these risks.

OVERVIEW OF PROJECT

This project consisted of seven main areas as follows:
1. Business Plan Creation
2. Data Strategy and Data Governance
3. Systems Development – Website, Database System, HR System, CRM System, and Financial System
4. Training and Certification
5. Security Assessment and Audit
6. Security Assessment for Qazztek
7. Execution of the Business Plan

The project will be tracked and monitored using PMI Project Management standards and Microsoft Project. The project workbook and MS Project file will be submitted as an additional deliverable.

BUSINESS PLAN CREATION

The first step for the project team was the development of the company's business plan. Qazztek is a new start-up formed by Tim Jenson, one of the members of the project team. Each team member was assigned a portion of the plan to research and develop. Frequent team meetings were held to brainstorm and discuss all aspects of the plan. The industry and competitive environment were studied, analyzed and discussed. Overtime the framework for a business plan was developed and specific details were determined. The business plan provided the strategy

and overall direction for the rest of the team project. The final business plan is provided in the Appendix.

DATA STRATEGY AND GOVERNANCE
DATA STRATEGY
Qazztek's management understands the importance of data now and the growing importance of data in the future. Qazztek intends to make liberal use of Qazztek's customer, product and employee data in the future by developing strong data analytical practices. The company expects to organize its data, analyze it, and introduce new features and improvements based on that information. By carefully collecting, organizing and analyzing its customer information, Qazztek can know what customers like and, based on that, gauge what things customers will like in the future. It's this metrics-based analytics that will contribute to Qazztek's future growth. Qazztek's data strategy includes the following philosophies:

i. The company is customer driven, but decisions should be made on "real" data and not management hunches or intuition. True data evidence should drive decisions.
ii. Data must be properly formatted, cleansed and categorized so that accurate comparisons and analysis can be completed.
iii. Try to eliminate bias by centralizing the analytical work so that individual departments cannot influence the outcome from the data. Encourage departments to provide unbiased data with consistent definitions and formatting. Draw conclusions from the evidence not from bias.
iv. Act on analytical results. What the evidence suggests is the basis for making informed decisions. We must act on the results.

DATA GOVERNANCE
Although its value is not represented on the balance sheet, data will become one of the most important assets of Qazztek in the future. Data represents Qazztek's customers, employees, and suppliers; its security activities and purchase transactions; and its outcomes and results. Managed correctly, data can become Qazztek's most valuable asset, helping it to remain competitive and agile, to proactively meet customer needs, acquire new customers, maximize profitability, and to keep costs in check.

However for data to be valuable to Qazztek, it must establish standards, policies, and processes for the usage, development, and management of data in order to provide confidence and integrity of the data and therefore the in the decisions made from the analysis of the data. Qazztek must create the right organizational structure and develop the technology infrastructure to support the governance of their data. Data governance is defined as the processes, policies, standards, organization, and technologies required to manage and ensure the availability, accessibility, quality, consistency, auditability, and security of data in an organization. The goals of data governance for Qazztek are to:

• Ensure data and the analysis of data meet the needs of the business
• Protect, manage and develop data as a valued enterprise asset
• Lower the costs of managing data

Consistency, confidence and integrity in decision making can only come from high quality data that can be trusted and used appropriately. The six attributes of data governance provide a framework for Qazztek to ensure that the data used in decision making will produce the actionable results required to be competitive. For Qazztek, high quality decision making will be the direct result of establishing the processes, policies, standards, organization, and technologies required to manage and ensure the availability, accessibility, quality, consistency, auditability, and security of data in a company or institution. The six attributes of data governance are as defined as follows:

1. *Accessibility*. Ensuring that all enterprise data can be accessed, regardless of its source or structure.

2. *Availability*. Ensuring that data is available to users and applications, when, where and how needed.

3. *Quality.* Ensuring the completeness and accuracy of data.

4. *Consistency*. Ensuring the meaning of data is consistent and reconciled across systems, processes, and organizations.

5. *Auditability*. Ensuring there is an audit trail on the data.

6. *Security.* Ensuring secure access to the data and confidentiality and integrity of data.

For Qazztek some of the main components of data governance that they should implement include the following:

(i) **Standards.** A key function of data governance is to establish the standards for data in an enterprise. Qazztek must establish data definitions and taxonomies, define master data, develop enterprise data models, and enforce development and technical standards related to data;

(ii) **Policies and Processes**. Qazztek should establishing and enforcing policies and processes around the creation, development, and management of data. Qazztek should define data and data-related business rules, control access to and delivery of data, establish ongoing monitoring and measurement mechanisms, and manage changes to data;

(iii) **Organization.** For many companies and Qazztek is no exception, the most important issue when launching a data governance initiative is determining how to best design the organizational structure. Qazztek needs to define the roles and responsibilities within the organization that are accountable for the data. Addressing training and organizational change management issues is also critical if data governance programs are to succeed;

(iv) **Technology.** Qazztek needs to determine the appropriate underlying technology infrastructure. Indeed, many organizations launch their initial data governance programs using manual tools—spreadsheets, Visio, and Word documents—to capture data definitions and document processes. However, most quickly realize that this kind of

manual approach is severely limited and it is nearly impossible to achieve the ultimate goals of data governance using a manual approach.

For Qazztek, there are several key steps in the data integration lifecycle:

- First, all data is accessed, regardless of its source or structure. This includes extracting data out of arcane mainframe systems, as well as relational databases, applications, XML, messages, and even documents such as spreadsheets.

- Second, Qazztek's data sources, particularly poorly documented or unknown sources, are profiled to understand their content and structure, infer patterns and rules implicit in the data, and to flag potential quality issues with the data.

- Third, Qazztek's data must be cleansed to ensure its quality, accuracy, and completeness. This may include addressing errors or omissions, enforcing adherence to data standards, validating values, and eliminating duplicate data entries.

- Fourth, to maintain a consistent view of data across all systems, Qazztek's data is integrated to bring together fragmented information and transformed to reconcile discrepancies in how different systems define and structure various data elements.

- Fifth, the right data must be delivered in the right form, at the right time, to all the applications and users who need it. This can range from delivering a single data element or record to support a real-time business operation, to delivering millions of records to enable trend analysis and enterprise reporting. Delivery also includes ensuring that the data is both highly available and secure in its delivery.

- Sixth, Qazztek needs a high-productivity toolset to enable data stewards, business analysts, architects, and developers to collaborate on the implementation and management of data integration rules and processes. It also ensures the reliability, scalability and performance required to run mission-critical enterprise systems.

Lastly, Qazztek's data must be monitored, and reports on the data are prepared. This includes ongoing measurement of key metrics such as data quality, with an eye toward steady improvement over time. The goal is to track progress on the key data attributes and flag any new issues so that they can be fed back into the data integration lifecycle for resolution and continuing improvement. This step also includes auditing–maintaining a robust audit trail on the data helps to maintain visibility and control, as well as to reduce the cost of future change.

By taking a lifecycle approach to data integration, the technical capabilities of the data integration platform can be brought to bear for Qazztek as part of the ongoing data governance program, with the goal of continual improvement of and accountability for key data metrics. Qazztek needs to address the data integration lifecycle holistically, both from a process and from a technology point of view.

Qazztek has chosen a centralized approach to data analytics and data integration. This unified approach enforces data governance policies and processes systematically across the organization and, perhaps more importantly, instills confidence that the data they rely on to make strategic business decisions is consistent and accurate. A decentralized approach to data integration can quickly derail a data governance program, preventing it from achieving its goals and scaling effectively. The redundant tools and skill sets resulting from these decentralized approaches are cumbersome and costly to maintain. But the bigger problem is the inconsistency in the data and the governance processes themselves. A centralized approach to data governance will promote the development and use of integrated, sharable data throughout applications, preserve the quality of that data and serve the needs of the business more effectively in most circumstances.

SYSTEMS DEVELOPMENT

Since a large number of IT projects fail, it is critical that appropriate methodology is followed in determining Qazztek's business requirements and needs as it relates to any information system project. In this document we describe the Systems Development Life Cycle ("SDLC") for Qazztek's websites, database, customer relationship management ("CRM"), human resources, and financial systems. This will include the Planning, Analysis, Design, and Implementation phases.

We plan on developing the various Qazztek systems following the prototyping methodology. Our recommendation is based off the limited technology knowledge for the organization and limited budget for the information system development. Prototype methodology will also be beneficial to the organization as it makes the first attempt as a start-up entity. A system developed in the prototype methodology will allow for the system to evolve as Qazztek better understands their future requirements for the various systems.

SYSTEMS PLANNING

The first stage of our project was project identification. At this stage, a team member met with Tim Jenson, Qazztek's owner, to discuss the company's strategy and organization structure to see how this would best coordinate with Qazztek's informational technology strategy and its systems infrastructure. The team used a methodology as outlined below to make sure that Qazztek's strategy, organizational infrastructure and IT systems would all be aligned properly.
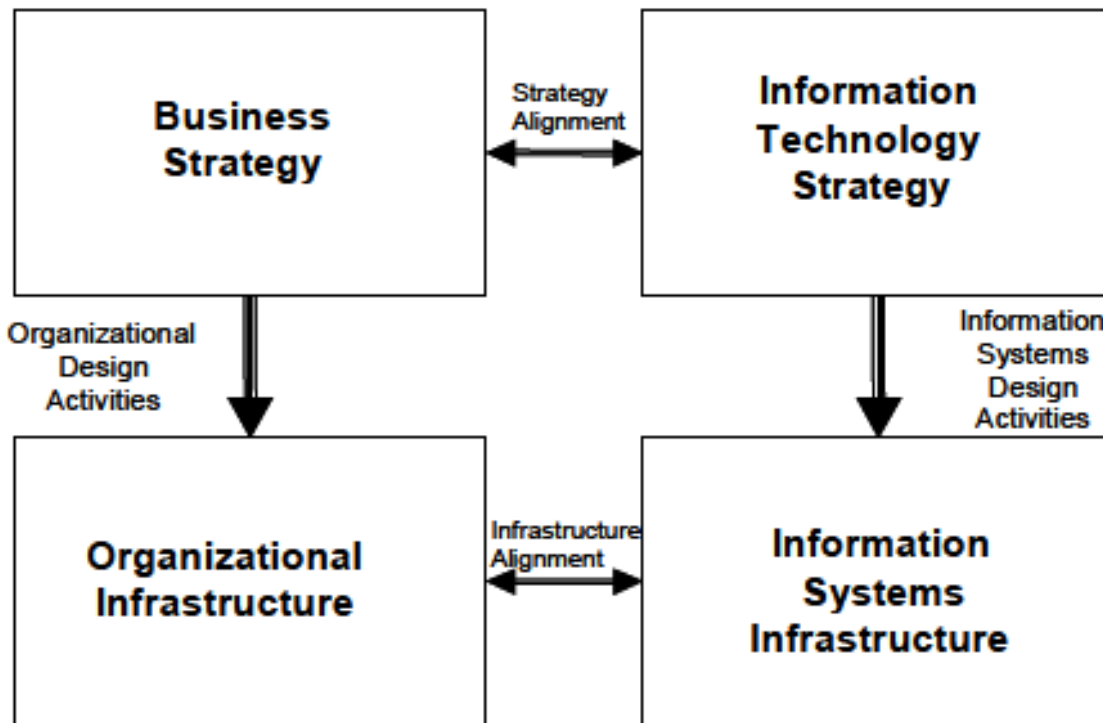
Qazztek's need is for various information systems for its websites and that will track and maintain clients, potential customer leads, contract employees, and potential employees, products, financial data. There are three primary parties that will need to interact with the systems. Internal employees will need to use the system to maintain/update/track current and potential client records including billing, contractors, and point of contact. They will also need to use the system to maintain/update/track current and potential employee records including resumes and background screenings. Potential Clients and web browsers that will need access to see information or make purchases or learn about services. Product vendors will need to interact with some of the systems to provide product update information, review certain financial records and check on payments.

Currently the company is new and has no history so there is no legacy information that needs to be maintained or worried about. Details on each system will be presented next. As part of the planning phase we developed a Systems Request for each system as can be seen in the Appendix.

FEASIBILITY ANALYSIS

The next stage of our planning was feasibility analysis.

Technical Feasibility - Can we build it?

Familiarity with the applications:
Qazztek is a start-up and is not sophisticated in HR, CRM, Web, database nor financial applications or technology. This presents a risk to system implementation but this risk is rather

small because the systems are not very complex, the company is using outside resources and the cloud, and the staff can be easily trained. The proposed systems will need to have a very simple and easy-to-use graphical user interface and training will be required for the staff to understand how to use the system.

The business users understand the processes and the functional requirements of the system very well and will be able to benefit greatly from the increased automation.

Familiarity with the Technology:
As mentioned previously, Qazztek is a start-up and is not sophisticated in technology, information systems, or databases. The business employs no technology personnel, but the owner is technologically proficient and the company is utilizing outside technology resources. The staff is familiar with personal computers, web-based user interfaces, and basic office applications. While the lack of technological sophistication presents some risk, it is minimal since the system will be planned, analyzed, designed and implemented with the assistance of outside resources that will have the expertise and experience in the proposed systems to properly develop, implement, and maintain the proposed system. The planned technology will be very familiar technology and nothing will be leading edge or new for the outsourced development team. As mentioned previously, the proposed system will need to have a very simple and easy-to-use graphical user interface and training will be required for the staff to understand how to use and maintain the system.

Project Size:
The size of the proposed system development is relatively small. Three to four developers should be able to complete all the systems in less than 150 hours of development time. Since the project is relatively small, the project size poses little risk.

Compatibility with existing systems:
The company has no other systems that will need to be integrated with this system and the system will be designed for ease of use, so there is no risk related to compatibility.

Summary:
Based upon the technical feasibility analysis, this project has little risk and should be pursued.

Economic Feasibility - Should we build it?
The next step of our planning was to identify the expected costs and benefits of the proposed systems. First our team focused on the expected costs including development costs, operational cost, hardware and software costs, consultant fees, training, space, licensing fees, etc. Details of the expected costs of each system are shown in the following table:

Expected Costs:

Type of Costs	Description	Expected Amount
1. University of Utah Project Team resources.	This is a "soft" cost. Our team is doing the planning, analysis and design without charging the company, so while these costs are real, they are not actual costs to be incurred by the business. We estimate that the team will take in planning, analysis, and design approximately 1100-1200 hours at an estimated cost of $40.00 per hour.	≈$54,200.00
1. Hardware Costs	The company has some existing hardware to implement the system on, but will need to purchase two servers and other misc. hardware Annual hardware maintenance and upgrades is estimated at $750.00 per year.	$7,000.00 + $750.00/yr
2. Software Costs and Licensing Fees	There will we software licensing fees related to the database which are estimated to be approximately $600.00 per year.	$2,500.00
3. Quality Assurance and Quality Control Costs	Cost contingency for ensuring quality of deliverables	$2,500.00
4. Training Costs	Initial and ongoing training costs are estimated to be about 2 hours of training initially and ½ hour per year thereafter for 4 people.	$1,800.00 +$350.00/yr
5. Office Space and other Office Expenses	No incremental office space is required, but the hardware will take up a small amount of space at a negligible opportunity cost. Misc. Office expenses will be incurred.	$300.00
6. Other Costs	We expect some other minor implementation costs estimated at $500.00	$500.00
TOTAL COSTS	**Initial Out of Pocket Costs**	**$15,600.00**
	Reserves	**$10,000.00**
	Soft Costs	*$54,200.00*
	Total Costs	**$78,800.00**
	Annual Operating Expenses	**$2,500.00-3,500.00/yr**
	The total costs are $78,800 but because much of the costs are not out of pocket but are donated time and effort, the cash outlay is much less at about $15,600 upfront and $2,500-$3,500 in annual costs.	

Expected Benefits:

Next the team evaluated the benefits of the proposed systems including tangible and intangible benefits. The benefits are outlined in the following table:

Benefits	Description	Estimated Amount
1. Increased Revenues	The increased automation is expected to increase annual revenues by 5-10%. We are using a conservative estimate of 5.0% for our analysis	$25,000.00 Per year
2. Future reductions in Staff Needed	To maintain future volumes of business the company will need to employ fewer resources due to the automation of the system. This is estimated to save about ¼ of a person per year.	$1,000.00 Per year
3. Reduced Paper Usage and Storage	Having a computerized system will reduce paper usage and storage. This is estimated to save approximately $200.00 per year.	$500.00 Per year
4. Increased Operating Efficiency	Employee productivity will increase with easier and more efficient access to information to do their jobs as provided by the new system. These benefits are already included in item #2.	$1,000.00 per year
5. Increased Market Share	This is an intangible benefit and the value is already included in item #1.	$5,000.00 per year
6. Increased Brand Recognition	This is an intangible benefit and the value is already included in item #1.	$1,000.00 per year
7. Improved Customer Service	This is an intangible benefit and the value is already included in item #1.	$1,000.00 per year
8. Improved Prospective Employee Management	This is an intangible benefit and the value is already included in item #1.	$2,500.00 per year
TOTAL BENEFITS	Total estimated tangible and intangible benefits (these benefits will grow with the growth of the company each year)	**$37,000.00 Per year**

Next the project team evaluated the costs and benefits over a five year period as shown in the following table:

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Cost/Benefit Analysis						
Project		Qazztek Project		Project #	1001113	
Project manager		Tim Jenson		Sponsor	Tim Jenson	
Project artifacts		C:/A1-Tim/Business Opportunities/Qazztek		Updated	Monday, August 01, 2011	

Annual Rate of Growth in Costs and Revenues: 7.00%

Project Development and Maintenance Costs							
Description	Year Zero	FY01	FY02	FY03	FY04	FY05	Total
Cost of Project Development	(78,800.00)	0.00	0.00	0.00	0.00	0.00	(78,800.00)
Total project costs	(78,800.00)	0.00	0.00	0.00	0.00	0.00	(78,800.00)
Cost of Support							
Operational costs	$0.00	(1,800.00)	(1,926.00)	(2,060.82)	(2,205.08)	(2,359.43)	(10,351.33)
Nonrecurring costs	$0.00	(900.00)	0.00	0.00	0.00	0.00	(900.00)
Recurring costs	$0.00	(700.00)	(749.00)	(801.43)	(857.53)	(917.56)	(4,025.52)
Total ongoing support costs	$0.00	(3,400.00)	(2,675.00)	(2,862.25)	(3,062.61)	(3,276.99)	(15,276.85)
Total Costs	($78,800.00)	($3,400.00)	($2,675.00)	($2,862.25)	($3,062.61)	($3,276.99)	($94,076.85)

Benefits/Savings							
Benefits/Savings	Year Zero	FY01	FY02	FY03	FY04	FY05	Total
Increased Profits from Revenue Growth		$25,000.00	26,750.00	28,622.50	30,626.08	32,769.90	143,768.48
Reduced Paper Usage		$500.00	535.00	572.45	612.52	655.40	2,875.37
Increased Efficiency		$1,000.00	1,070.00	1,144.90	1,225.04	1,310.80	5,750.74
Increased Market Share		$5,000.00	5,350.00	5,724.50	6,125.22	6,553.98	28,753.70
Increased Brand Recognition		$1,000.00	1,070.00	1,144.90	1,225.04	1,310.80	5,750.74
Improved Customer Service		$1,000.00	1,070.00	1,144.90	1,225.04	1,310.80	5,750.74
Improved Employee Mgt.		$2,500.00	2,675.00	2,862.25	3,062.61	3,276.99	14,376.85
Decreased Staff Hiring		$1,000.00	1,070.00	1,144.90	1,225.04	1,310.80	5,750.74
Other		$0.00	0.00	0.00	0.00	0.00	0.00
Other		$0.00	0.00	0.00	0.00	0.00	0.00
Total Benefits	$0.00	$37,000.00	$39,590.00	$42,361.30	$45,326.59	$48,499.45	$212,777.34
Annual Savings	($78,800.00)	$33,600.00	$36,915.00	$39,499.05	$42,263.98	$45,222.46	$118,700.50
Cumulative savings	$0.00	$37,000.00	$76,590.00	$118,951.30	$164,277.89	$212,777.34	$212,777.34
Cumulative costs	($78,800.00)	($82,200.00)	($84,875.00)	($87,737.25)	($90,799.86)	($94,076.85)	($94,076.85)
Cumulative total net benefits or savings	($78,800.00)	($45,200.00)	($8,285.00)	$31,214.05	$73,478.03	$118,700.50	$118,700.50

Discount Rate	15.0%
Net Present Value	$44,304.20
IRR	38.5%
Payback Period (Breakeven)	2.15 Years

Break Even Chart

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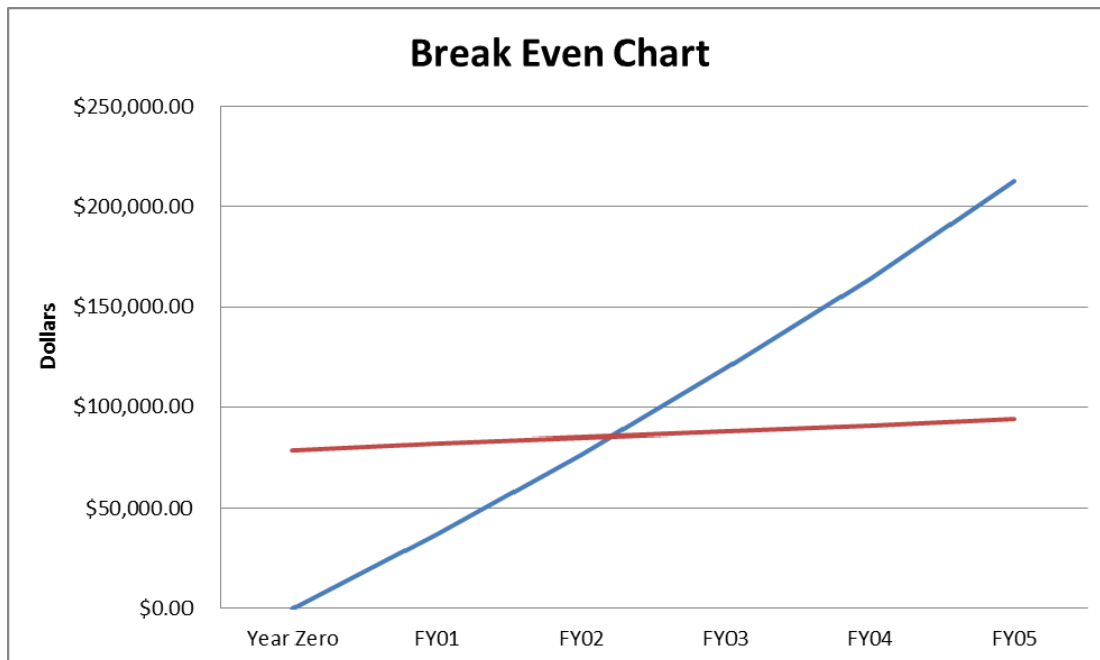
Summary:

Based upon the economic feasibility analysis, this project should be pursued because the benefits far exceed the costs and a substantial portion of the costs are "soft" costs.

Organizational Feasibility - If we build it, will they come?

Our project team then analyzed the organization feasibility. Each system proposal is aligned with the business strategy and goals and will help the business both economically and strategically. The owner and President of the business is the project champion and all the management and staff are supportive of developing this system. All the future users will benefit from the automation which will improve the flexibility and efficiency of the company's security operations.

Summary:

The proposed systems are aligned with the business strategy and supported by management and the users and the organizational feasibility supports development of the system.

Project Selection:

Qazztek has very no information systems projects outside of those being worked on by the project team' therefore at the present time there are no conflicting demands on resources and the current projects are available for selection.

SYSTEM ANALYSIS

After completing the planning phase for all of Qazztek's systems development, the project team proceeded with the systems analysis of each system. The first stage of analysis was our requirements determination.

REQUIREMENTS DETERMINATION

To determine the requirements of the Qazztek, every group member met with Tim Jenson, owner of Qazztek and project manager for this project, for several formal and informal conversations. The team also reviewed all the documents and manuals used by the business to better understand its business processes and the planned system. Prior to the interview, the team did its homework and prepared for the interview by reviewing various documents and researching the business and its industry. During the interview, we ask questions about the processes currently or expected to be used by the company and sought to gain a good understanding of the vision for the company's systems, processes and procedures. The business is a start-up with virtually no systems nor technology.

In addition to the interview, the team held a joint application development meeting with the owner and discussed all the aspects of the existing system and the proposed new system to better understand system requirements.

Team members also observed the company's employees as they performed their duties, so that we could get a deeper and more complete understanding of the business processes and the visualized the proposed future systems.

Based upon all the information collected, the team discussed and analyzed the proposed system and determined various functional and non-functional requirements which are shown in the analysis of each system in subsequent sections of this report:

WEBSITE REQUIREMENTS
Functional Requirements
1. The website needs to provide information about Qazztek, management, products and services.
2. The website needs to be fully e-commerce capable to take credit card and PayPal transactions.
3. The website needs to be able to show pictures of products with descriptions and pricing.
4. The website needs to show services with pricing and descriptions.
5. The website needs to use AJAX and have updating content and search capabilities.
6. The website needs to provide expert advice
7. The website needs to link to other expert security sites and other security blogs and informational sites.
8. The website needs to be attractive and use up to the date visual attributes.

Non Functional requirements
Operational
1. The website hardware needs to fit into the limited space available at the company's site along with all other new systems.
2. The website needs to integrate with the other systems the company is developing (HR, CRM, Website and database) and link to the product and services database.

Performance
3. Website response time should be very quick (under 2 seconds)
4. The website downtime should not exceed 5 minutes in any day and should not occur more than 2 times per month.

Security
5. User permissions must be limited based upon user needs
6. Access to customer parts of website must have authentication requirements like passwords.

Cultural and Political
7. The website should be able to handle inquiries from around the world.
8. The website needs to comply with all industry and governmental standards

The aforementioned functional and non-functional requirements meet the needs identified by the business and allow the business to meet its stated goals. Qazztek requires for its website. The

website is the company's biggest and should be its most effective marketing tool. The look and feel of the website is crucial to the company future success. The proposed website will allow Qazztek to accomplish its business objectives and meet their business needs and requirements.

PRODUCT DATABASE SYSTEMS REQUIREMENTS
Functional Requirements
1. The system needs to be able to handle all products and services of the company for easy access.
2. The system needs work closely with website to populate e-commerce requirements for products and services.
3. The system needs be easy to use and easy to integrate to other systems.
4. The system needs to be able to accept downloads from suppliers for all product information
5. The system needs contain all fields needed for financial systems, HR systems, and websites.
6. The system needs to be relatively inexpensive and easy to use.

Non Functional requirements
Operational
1. The system needs to fit into the limited space available at the company's site along with all other new systems.
2. The systems needs to integrate with the other systems the company is developing (HR, CRM, Website and database)
3. The system needs to be accessible remotely

Performance
4. System response time should be very quick (under 2 seconds)
5. The system downtime should not exceed 10 minutes in any day and should not occur more than 2 times per month.

Security
6. User permissions must be limited based upon user needs
7. Access to system must have authentication requirements like passwords.

Cultural and Political
8. The system needs to comply with all industry and governmental standards

The aforementioned functional and non-functional requirements meet the needs identified by the business and allow the business to meet its stated goals. Qazztek requires a database system that will allow it to populate its website ecommerce systems with relevant products and services. The database system must be automated and interface with other systems used by the company. The proposed system will allow Qazztek to do all the things that they identified as their business needs and requirements.

CRM SYSTEM REQUIREMENTS
Functional Requirements
1. System needs to be able to track business leads, prospects, business opportunities and be able to close deals in a short amount of time.
2. System needs to be able to measure the success of different marketing campaigns.
3. System needs to help in segmentation and in identifying the target market
4. System needs to be able to identify trends in the marketplace
5. System needs to have the ability to use consumer data to create new applications.
6. System needs to have the ability to track email and phone conversations that have been had with customers.
7. System needs to be able to use customer data across all business functions
8. System needs to be able to produce dashboards and reports for management to make accurate data driven decisions
9. System needs to be able to forecast future earnings and demand to help in major business decisions.

Non-Functional Requirements
Operational
1. The system needs to be able to integrate with the other systems present in the company. (Financial, HR, Website, and Database)
2. The system needs to fit into to the daily operations at the company and not disrupt the flow of business.

Performance
3. The system needs to experience little downtime acceptable limits would be not more than 10 minutes a day for no more than 2 times a week.
4. The system needs to have quick response time and be able to give management quick decision making data.

Security
5. System needs to be able to control user access to sensitive customer data that is collected by the system
6. Access to the system needs to be controlled by specific access control methods such as passwords

Political
7. System needs to protect customer data to fit government standards and policies
8. System needs to be able to interact with multiple business functions

HR SYSTEM REQUIREMENTS
Functional Requirements
1. The system needs to be able to track demographic, salary, tax, and HR related data of all employees of the company.
2. The system needs to track all employment history, performance reviews, vacation time, sick time of all employees.
3. The system needs to be able to provide monthly, quarterly, and annual employee reports and any ad hoc reports needed to manage employees.
4. The system needs to track and report on pay changes or position changes for employees.

5. The system needs to track all information for governmental or regulatory requirements.

Non Functional requirements

Operational
1. The system needs to fit into the limited space available at the company's site along with all other new systems.
2. The systems needs to integrate with the other systems the company is developing (HR, CRM, Website and database)
3. The system needs to be accessible remotely

Performance
4. System response time should be very quick (under 2 seconds)
5. The system downtime should not exceed 10 minutes in any day and should not occur more than 2 times per month.

Security
6. User permissions must be limited based upon user needs
7. Access to system must have authentication requirements like passwords.

Cultural and Political
8. The system should be able to handle different divisions of the company.
9. The system needs to comply with all industry and governmental standards

The aforementioned functional and non-functional requirements meet the needs identified by the business and allow the business to meet its stated goals. Qazztek requires a HR system that will allow it to monitor and track the company's employees and changes in pay and positions within the company. The HR system must be automated and interface with other systems used by the company. The proposed system will allow Qazztek to do all the things that they identified as their business needs and requirements.

FINANCIAL SYSTEM REQUIREMENTS

Functional Requirements

1. The system needs to be able to track the financial aspects of both product sales and services performed.
2. The system needs to track all accounting and finance transactions of the business.
3. The system needs to be able to provide monthly, quarterly, and annual financial statements including an income statement, balance sheet and cash flow statements.
4. The system needs to track accounts receivable, accounts payable and customer and vendor financial information and provide for invoicing, billing and payments.
5. The system needs to track and report on payroll transactions.
6. The system needs to track all information needed for payroll and income tax reporting.
7. The system needs to be relatively inexpensive and easy to use.
8. The system needs to track governmental documentation requirements like 1099's and W-4's.

Non Functional requirements
Operational
1. The system needs to fit into the limited space available at the company's site along with all other new systems.
2. The systems needs to integrate with the other systems the company is developing (HR, CRM, Website and database)
3. The system needs to be accessible remotely

Performance
4. System response time should be very quick (under 2 seconds)
5. The system downtime should not exceed 10 minutes in any day and should not occur more than 2 times per month.

Security
6. User permissions must be limited based upon user needs
7. Access to system must have authentication requirements like passwords.

Cultural and Political
8. The system should be able to handle multiple lines of business.
9. The system needs to comply with all industry and governmental standards

The aforementioned functional and non-functional requirements meet the needs identified by the business and allow the business to meet its stated goals. Qazztek requires a financial system that will allow it to monitor and track the company's financial transaction and report them internally and to external sources effectively. The financial system must be automated and interface with other systems used by the company. The proposed system will allow Qazztek to do all the things that they identified as their business needs and requirements.

SYSTEMS DESIGN FOR ALL SYSTEMS
With the planning and systems analysis completed for all Qazztek's systems, the project team began the design phase of the systems development cycle. Since the company has no existing systems, the design phase focuses on a build vs. buy decision – to buy a system that would meet all or most or all the requirements or to build a system from scratch. Since Qazztek is a start-up and its future success is uncertain, building a system from scratch would be an expensive proposition and would not be a wise decision. As a new company, Qazztek does not have an entrenched culture or legacy systems to be concerned with, so it can adapt to the particular nuances of a purchased software package. Qazztek does not require the specialization of a custom build package.

As Qazztek grows, it expects to hire several more people along with a few contractors. These expanding resources will over time change the system requirements and modifications in the systems will need to be made. With Qazztek's expected expansion and the increased functionality requirement of the business, Qazztek reviewed many different packaged programs from various vendors to meet its requirements. Fortunately, several vendors offered packaged applications that met most of Qazztek's immediate and foreseeable future requirements. While

many packaged applications promised and advertised functionality that met requirements, a detailed evaluation resulted in a significant portion of these alternatives becoming inadequate for Qazztek's needs.

One of the key advantages of a packaged product is that packages often embed best practices for managing and analyzing data with predefined metrics, reports, dashboard templates that customers can use to track and analyze the performance of business functions. The metrics and reports represent the knowledge of experts who have implemented the solutions for multiple clients and understand the best way to input, manage, view and analyze information in specific functional areas. This provides an "expert" solution at a much lower cost than building it yourself and paying for the "learning curve." Customers of packaged applications can use the reports and dashboards as-is or tailor them to unique information requirements.

Other key advantages to a buying a packaged application over building a custom product is quicker time to deploy, less overall cost, an enterprise view of data, role-based views for all employees, closed loop processing, and built-in best practices. In short, a packaged application—when deployed correctly—can take much of the grunt work out of delivering an effective systems solution. Since the package pre-integrates the key components using a common set of metadata, the organization doesn't expend time, energy, money, and resources acting as its own application systems integrator. This minimizes costs and the risk of failure.

When deployed properly, leading packaged applications can dramatically shrink the time required to complete the four major tasks involved in delivering a systems solution: 1) backend ETL mapping; 2) designing the data model; 3) defining metrics, reports, and dashboards; and 4) training and rolling out the solution.

For Qazztek, another advantage of packaged analytic applications is that they enable organizations to deploy gradually for one area at time on a smaller scale and then expand seamlessly to support other areas using the same model and platform, delivering a consistent view of enterprise information. A robust packaged application can also help an organization create a unified environment on a single, integrated platform and exploit industry best practices built into the packages.

Despite the benefits of packaged analytic applications, they have some drawbacks. Some packages may not support the specific application or set of applications that Qazztek needs. Also packages typically need significant customization and sometimes the costs of customizing packages to tailor the data model and reports can cost as much time and money as it would have taken to build it from scratch. This undermines the total cost of ownership—the primary value driver for implementing packages—and also creates a migration nightmare when an organization upgrades the package to a newer version.

Another downside of packaged analytic applications is duplication. Since analytic packages come bundled with pre-set tools, Qazztek may find itself saddled with expenses related to maintaining duplicate tools. In these cases, Qazztek will need to decide whether to incur these extra licensing and training costs or to spend money customizing the package to accommodate

their standard tool sets. Another potential disadvantage is that packaged applications lock organizations into a single vendor. Although this might be good for some organizations (offering "one throat to choke"), it makes it difficult to switch vendors, since a package implements a data infrastructure that isn't changed easily or inexpensively.

Conversely, Qazztek must be careful not to implement multiple packaged applications from different vendors, which would create islands of applications that are not easily integrated. In this case, it would be best for Qazztek to create a unified strategy based on a single platform to avert such problems. Also, some packages may not contain best-of-breed tools that are tightly integrated together. Obviously, it's best to purchase packaged applications from vendors that devote significant resources to developing, enhancing, and supporting a truly integrated package of best-of-breed applications. It's clear that packaged applications promise a host of benefits and were evaluated as part of Qazztek's systems strategy.

Based upon the above factors, the project team and Qazztek determined that it would be best to buy various applications rather than build our own applications. The specific applications that were selected are shown below:

SYSTEMS SELECTION
WEBSITE – GODADDY, DRUPAL
The company looked at many different website alternatives. On the hosting side, the team evaluated GoDaddy, StartLogic, Register.com, Google, Amazon, FatCow, Yahoo and others. Based upon Qazztek's requirements, the team determined that GoDaddy was the best fit. It was able to meet all of Qazztek's requirements and yet was near the lowest overall cost. Initially, the team had expected to purchase its own physical server and host the website on its own hardware with a separate virtual server. But after evaluating the security and overall costs of implementing a proprietary server vs. using a hosted provider, it became clear that using a hosted service would be a much better alternative. The costs of using a hosted provider were less a fraction of buying, building, and maintaining a proprietary server (estimated annual costs of $120.00 vs. $1,375.00).

The project team evaluated several alternative software applications for building Qazztek's website and decided to use Drupal. Drupal was supported by GoDaddy and was a free open source alternative with a wide range of options and configurations. Since Qazztek is a start-up, the team decided to use the Linux version with Apache rather than Windows IIS to avoid licensing fees and keep costs low.

DATABASE – GODADDY, DRUPAL
The company looked at many different database alternatives. Because the team chose GoDaddy and Drupal as the website development system, alternatives offered by GoDaddy for free that were integrated with Drupal became very compelling. The team evaluated Access, SyBase, Oracle, MySQL, and others. Since a database is an organized pool of logically-related data, the Data Base Management System (DBMS) must provide an easy to use interface between users and the database(s). Our database decision was centered on four database concepts:

1. Data Definition. Defining new data structures for a database, removing data structures from the database, modifying the structure of existing data.
2. Data Maintenance. Inserting new data into existing data structures, updating data in existing data structures, deleting data from existing data structures.
3. Data Retrieval. Querying existing data by end-users and extracting data for use by application programs.
4. Data Control. Creating and monitoring users of the database, restricting access to data in the database and monitoring the performance of databases.

Databases are structured around different data models which include the hierarchical data model, the network data model, the relational data model and the object-oriented data model. Based upon the team's experience, we determined to use a relational database model. Based upon Qazztek's requirements, the team determined that MySQL provided by GoDaddy was the best fit. It was able to meet all of Qazztek's requirements and yet was near the lowest overall cost. Initially, the team had expected to purchase its own physical server and host the database on its own hardware with a separate virtual server. But after evaluating the security and overall costs of implementing a proprietary server vs. using a hosted provider, it became clear that using a hosted service would be a much better alternative. The costs of using a hosted provider were less a fraction of buying, building, and maintaining a proprietary server (estimated annual costs of $120.00 vs. $1,375.00).

MySQL is free open source database software and is provided and loaded by GoDaddy and integrated with the website and provides a wide range of options and configurations.

CRM – ZOHO

Qazztek evaluated numerous CRM systems such as Sugar, SAS, Salesforce.com, and Zoho. Qazztek thoroughly evaluated these systems and decided to go with Zoho as the CRM system. The reasons for this choice were based upon Zoho meeting the functional requirements needed by Qazztek, the use of the cloud system and the cost benefits associated with that, as well as being comfortable as a startup with using the functionality of this system. Another benefit of using Zoho is that it's the same brand as we chose to use for the HR system so integration will be made easier between these two systems.

As mentioned previously Qazztek initially was going to purchase virtual servers and run their own CRM system but due to the cost benefits and the ease of use of a cloud CRM system the decision was made to go in the direction of the cloud leading to the decision of using Zoho. Zoho will give Qazztek a complete customer relationship life-cycle management software and assist in managing Sales, Marketing, Customer Support, and Inventory activities all within a single system. It is simple to use, yet packed with features for automation, customization, integration, and collaboration that will allow for Qazztek to grow at an accelerated pace.

HR – ZOHO

Qazztek evaluated numerous HR systems (HRIS) such as Zoho, NuView, Oracle, Intuit, SAP, PeopleSoft and others. The function of Human Resources departments is generally administrative and fairly standardized to all organizations. Efficient and effective management

of "Human Capital" has progressed to an increasingly imperative and complex process. The HR function consists of tracking existing employee data which traditionally includes personal histories, skills, capabilities, accomplishments and salary. To reduce the manual workload of these administrative activities, it has become necessary to electronically automate many of these processes by introducing specialized Human Resource Management Systems. Human Resource Management Systems generally encompass the following functions:

1. Payroll
2. Work Time
3. Appraisal performance
4. Benefits Administration
5. HR management Information system
6. Recruiting
7. Training/Learning Management System
8. Performance Record
9. Employee Self-Service

The payroll module automates the pay process by gathering data on employee time and attendance, calculating various deductions and taxes, and generating periodic pay cheques and employee tax reports. The work time module gathers standardized time and work related efforts. The most advanced modules provide broad flexibility in data collection methods, labor distribution capabilities and data analysis features. Cost analysis and efficiency metrics are the primary functions. The benefits administration module provides a system for organizations to administer and track employee participation in benefits programs. These typically encompass insurance, compensation, profit sharing and retirement.

The HR management module is a component covering many other HR aspects from application to retirement. The system records basic demographic and address data, selection, training and development, capabilities and skills management, compensation planning records and other related activities. Online recruiting has become one of the primary methods employed by HR departments to garner potential candidates for available positions within an organization. The training module provides a system for organizations to administer and track employee training and development efforts. The Employee Self-Service module allows employees to query HR related data and perform some HR transactions over the system. Employees may query their attendance record from the system without asking the information from HR personnel. The module also lets supervisors approve O.T. requests from their subordinates through the system without overloading the task on HR department.

Qazztek thoroughly evaluated various systems and decided to go with Zoho as the HR system. The reasons for this choice were based upon Zoho meeting the functional requirements needed by Qazztek, the use of the cloud system and the cost benefits associated with that, as well as being comfortable as a startup with using the functionality of this system. Another benefit of using Zoho is that it's the same brand as we chose to use for the CRM system so integration will be made easier between these two systems and learning curve is reduced.

As mentioned previously Qazztek initially was going to purchase virtual servers and run their own HR system but due to the cost benefits and the ease of use of a cloud HR system the decision was made to go in the direction of the cloud leading to the decision of using Zoho. Zoho will give Qazztek a complete HR package as described above within a single system. It is simple to use, yet packed with features for automation, customization, integration, and collaboration that will allow for Qazztek to grow at an accelerated pace.

FINANCIAL SYSTEM – QUICKBOOKS

Qazztek evaluated numerous financial systems such as QuickBooks, Zoho, SAP, Intacct, NetSuite, Epicor, GnuCash, Openbravo, Tryton, CODA, Microsoft Dynamics, and Peachtree, Qazztek thoroughly evaluated several of these systems and decided to go with Quickbooks Enterprise Edition as the financial system. QuickBooks was chosen because of its large installed base, ease of use, match with Qazztek's requirements, cost, and integration with other systems. QuickBooks has many options to choose from including a cloud based version, but Qazztek has access to the Enterprise Edition at no cost since it is used by a related company that can share the license.

The team had also strongly recommended Zoho financial systems since both the CRM and HR System adopted by Qazztek were from Zoho.   The QuickBooks financial system is used by millions of businesses where the Zoho system has a rather small installed base. If Qazztek had not been able to obtain QuickBooks at no cost, Zoho would have been a stronger competitor with its free cloud based product for fewer than 10 users. QuickBooks will give Qazztek a complete robust financial system that can handle all of its accounting and financial requirements for the next few years and can easily be upgraded to more sophisticated software if needed in the future. Quickbooks is relatively simple to use, yet packed with features for automation, customization, integration, and collaboration that will allow for Qazztek to grow at an accelerated pace.

ADOPTION CHALLENGES (CULTURE, CHANGE MANAGEMENT)

The biggest organizational challenge for most companies in adopting new applications is organizational change. As a start-up, Qazztek will not have this adoption challenge. While new businesses face huge marketing and exposure challenges in getting their business accepted in the marketplace, they have a distinct advantage of not having any built-in cultural barriers or obstacles to overcome.

One of Qazztek's key challenges is the data itself. It is important that Qazztek's create a consistent data strategy for its business users and its IT team in terms of structure and historical records. Thinking through all the various applications and ensuring that they are integrated with and supportive of the overall business strategy is a challenge that must be met.

Another challenge is unfamiliarity with the applications. Qazztek does not have much experience with any of the new applications. Qazztek must come up the learning curve on the systems at the same time it is trying to establish itself in the market – this may be a daunting task.

SYSTEMS IMPLEMENTATION FOR ALL SYSTEMS

The team acquired each system and began the configuration and testing process. System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black box testing, and as such, should require no knowledge of the inner design of the code or logic.

As a general rule, system testing takes, all of the "integrated" software components that have successfully passed integration testing and also the software system itself integrated with any applicable hardware system(s). The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together (called assemblages) or between any of the assemblages and the hardware. System testing is a more limited type of testing; it seeks to detect defects both within the individual system parts and also within the system as a whole. Testing was done throughout the development of the various systems to discover any potential problems. The system testing was performed on the entire system in the context of the various functional requirements. System testing tested not only the design, but also the behavior and even the believed expectations of the customer.

The team went through the following stages of testing:

1. **Unit Testing:** This involved testing of each individual module with test data to see if it's worked as planned

2. **Integration testing:** this consisted of inter-modules and inter-program linkage tests and program function tests

3. **System test:** This tested the overall functional performance of the system. It checked the system for validity of the overall function and performance.

4. **Operational test:** It's done in the actual operating environment to make a fined check to see if newly completed system is capable of actual operation. Mainly conducted by users who also see if the system has been exactly as per their expectation.

After testing, the team underwent training on the systems based upon their needs and future job responsibilities.

TRAINING AND CERTIFICATIONS

Qazztek's training and certification strategy is focused on using its security expertise to train other companies and individuals in the basics of security as well as more advanced Information security policies, procedures, and strategies. In addition, Qazztek can prepare individuals to meet many standard industry certification requirements and provides its own certifications in certain key areas. Qazztek Security's training and certification opportunities are explained hereafter.

TRAINING COURSE SETUP AND OVERVIEW

Training courses will be taught at a corporate level as well as an individual level. The corporate classes will usually be taught on the premises of the corporation. Instruction for individuals will normally be held at a Qazztek specific location. Classes on the corporate as well as the individual level must have at least 10 people enrolled and no more than 20. Classes will vary in length based upon the complexity of the material but we feel on average each course will be between 3-10 hours of instruction. Qazztek plans on bundling certain courses together and over a five day period, Qazztek may teach 3-4 different courses.

Class dates and times will be set for the individual courses but we must be able to enroll at least 10 before the class can begin for cost purposes. Qazztek will make this clear on the website and make sure and keep each individual up to date on if the class is going to be able to start on time or if we will have to make adjustments to the starting date. A day for a class will be a full 8 hour session with an hour lunch and about a half hour of breaks throughout the session. Corporate and individual courses will be similar with the difference being that we will customize are instruction based on the environment the company is working in. Qazztek will also customize its courses based on the specific requirements of our customers. Qazztek intends to separate the courses on the websites in sections labeled individual courses and corporate courses.

PRICING

Based on some research of what the local competition in the market is doing in regards to pricing Qazztek has developed a pricing structure that fits the position as a new entrant into the market. Qazztek's corporate pricing structure will generally be priced at $2,500.00 for a class of 10 people per day for instruction until the specific course is complete. Some will be able to be completed in one day session others will take longer. There will be a separate $200.00 charge for each extra person after 10 that will be participating in the course the maximum will still be set at 20 people. Individuals will be charged $300.00 per day of instruction which is an 8 hour day with an hour lunch break and about a half hour of breaks throughout the session. Qazztek will bundle different courses together to create greater value for our customers

MARKETING STRATEGY- TRAINING COURSES

Qazztek will enter the market with the most comprehensive and applicable security training courses in the market. On the individual level, the courses will be marketed to those individuals looking to gain the necessary knowledge to enter the security profession. These courses will be geared towards giving the students real world knowledge of how to apply these practices in the work force. Courses will focus on how to create value for businesses through proper IT security practices.

For corporations, Qazztek will customize their classes based on the corporation's position in the marketplace and needs assessment. The courses will be marketed as a way to improve and secure business processes through top of the line teaching. Qazztek will show and teach these companies how to apply IT security practices within their organizations and what type of value can be driven from these best practices approaches. Qazztek will look to position itself as the leader in the market by creating professional relationships with organizations that will lead to a valuable reputation and increased business and visibility in the marketplace.

TRAINING COURSES- DESCRIPTION

Qazztek has developed a list of training courses that will be offered along with the certifications that can be earned and our hope is that at some point Qazztek certifications will become something that security professionals will strive to obtain. This list is what we feel the market is demanding at this point in time but after we go live and are able to assess demand we will be able to customize and offer courses that fit the market. We also understand that the security industry is an evolving industry and we will be aware and up-to-date on this evolution and adjust our course offerings accordingly.

The following is a tentative list of the course offerings and will be adjusted based on changing requirements, market demand and need-assessment in the markets Qazztek serves.

Basic IT Security Courses
Information Security Basics Training
- Qazztek will teach you all the basics in regards to information security touching on things such as cryptography practices, AAA (Authentication, Authorization, and Access), CIA (Confidentiality, Integrity, and Availability), Incident and Disaster Response, and other industry leading security techniques.
- Certification Eligible to be Earned: Qazztek's Information Security Certification (QIS)
- Industry Related Certification- CompTIA Security + Certification
- Materials to be used: Qazztek's Information Security Basics Slides
- Class Length- 8 hours of instruction

Physical Security Training
- Qazztek will teach you all the newest techniques access control methods as well as how to secure the building that your all too important company information is stored in
- There will be three levels of training: Basic, Intermediate, and Advanced. Depending on the level that you or your company is at you can assess and take the course that fits you or your organization.
- Certification Eligible to be Earned: Qazztek's Physical Security Awareness Certification (QPSA)
- Materials to be used: Qazztek Physical Security Training Slides
- Class Length- 3-5 Hours

Host Security Training
- Qazztek has knowledge on all the server operating systems and will teach you the different techniques to harden and secure your servers
- Depending on the environment that your company is run in Qazztek will offer specific courses either in Windows, UNIX, and Sun Solaris.
- Certification Eligible to be Earned: Qazztek's Secure Server Certification (QSS)
- Industry Related Certifications: Certifications can be earned based on each operating system such as Microsoft Server 2008 certificate.
- Materials to be used: Qazztek Data and Host Protect Slides
- Class Length- 3-5 Hours

Wireless Security Training
- Qazztek will teach the industry standard techniques that are used to combat wireless threats such as rogue access points and man in the middle attacks.
- Certification Eligible to be Earned: Qazztek's Secure Wireless Practices Certification (QSWP)
- Industry Related Certification: Certified Wireless Security Professional (CWSP)
- Materials to be used: Qazztek Wireless Security Slides
- Class Length- 3 Hours

Security Management Courses

Risk Assessment Training
- Qazztek will you teach the approach that is taken to assess the different security risks that are present for your company and how to develop a plan to mitigate these risks
- There will be three levels offered within this training: Basic, Intermediate, and Advanced.
- Basic will offer a general overview of the process for completing a security risk assessment.
- Intermediate- will elaborate and delve into more of the specifics of each step of a risk assessment and what to look for at each step.
- Advanced- will offer an actual case study of a company and allow for you to do an actual risk assessment for the company.
- Certification Eligible to be Earned: Qazztek's Security Risk Assessment Certification (QSRA)
- Materials: Currently in the development process and will be available as Qazztek grows and demand for class is established.

Security Policy Creation Training
- Qazztek will help you understand how effective policy creation and adherence can help create a secure environment. Qazztek will teach you which policies must be in place and also customize certain policies based on your company's needs.
- Certification Eligible to be Earned: Qazztek's Security Policy Creation Certification (QSPC)
- Materials: Currently in the development process and will be available as Qazztek grows and demand for class is established.
-

Security Audit Training
- Qazztek will train in the proper techniques and importance of internal and external audits. Focusing on how to implement an internal audit group and how and when to require external audit for your organization. The training will also offer other teachings in other industry standard auditing practices. These are critically important to a more secure environment.
- Certification Eligible to be Earned: Qazztek's Security Auditing Awareness Certification (QSAA)
- Industry Related Certification: GIAC Security Audit Essentials

- Materials: Currently in the development process and will be available as Qazztek grows and demand for class is established.

Internet and Email Protection Training
- Qazztek will show you how to protect your company from viruses and other malware contaminating your network from the Internet. Qazztek will also show you the different tools that can be used to control and monitor the access your employees have to the Internet. We will also focus on how to protect your company from e-mail abuse and what protections can be put in place to thwart these types of risks.
- Certification Eligible to be Earned: Qazztek's Secure Internet Certification (QSI)
- Materials to be used: Qazztek Internet and Email Security Slides, these materials will be modified and updated as Qazztek grows and demand for the course is determined.
-

Social Engineering Training
- Qazztek will give you the basics on what Social Engineers do to try to gain access to your company's information and what measures can be put in place to protect your company from this attack.
- Certification Eligible to be Earned: Qazztek's Social Engineering Awareness Certification (QSEA)
- Materials: Kevin Mitnick Book, Art of Deception, will be a part of the materials used for this course but other materials are still being developed by Qazztek and once they become available the class will be offered.

Network Security Courses
Network Defense Training
- Qazztek will teach you all of the newest methods in protecting your network from the basics of firewall architecture to implementing Intrusion Prevention and Detection systems , honeypots, and much more
- There will be three levels of courses offered: Basic, Intermediate, and Advanced.
- Basic will give an overview on the different methods such as firewalls and IDS/IPS along with many others that are used to protect your network.
- Intermediate will dig deeper into the different types of firewall architectures along with other tools such as honeypots and how and why they are effective to use in your network.
- Advanced will focus on the actual implementation of these methods and tools and customize based on your organization's needs.
- Certification Eligible to be Earned: Qazztek's Secure Network Certification (QSN)
- Materials to be used: Qazztek Network Defense Training slides
- Class Length- 3-5 hours

Forensic Courses
Computer Forensics Training
- Qazztek will give you the basic methods used to forensically investigate computers and the procedures that must be taken to ensure the integrity of the data once it has been uncovered. Different forensic tools will be available and shown how to use.

- There will be two different courses offered within this area: Forensically Sound Practices and the other will be Forensic Tools.
- Forensically Sound Practices will focus on how to extract data in a legally compliant that will allow for use in court and in other investigations.
- Forensic Tools will focus on a few tools that are used to image drives and the different functionality that each offers in an investigation.
- Certification Eligible to be Earned: Qazztek's Computer Forensics Specialist Certification (QCFS)
- Industry Related Certification: Cyber Security Forensic Analyst
- Materials: Currently in the development process and will be available as Qazztek grows and demand for class is established.

INDUSTRY STANDARD CERTIFICATION PREP COURSES
Description
Qazztek plans to offer courses that will help prepare security professionals to pass industry standard certifications. These courses will be structured similarly to the training courses but obviously just taught at the individual level. These courses will be based around the study guides and materials Qazztek has selected to use for each certification. Qazztek's slides and other materials are based on the study guides used in each specific course to use in the classes. Qazztek may not currently be permitted to administer some of these certification exams and the student will have to set it up on their own. Qazztek is currently working with the registered owners of these certifications to be able to administer these exams in the future. In all cases, Qazztek's goal is to help students prepare and pass the exams to accelerate their career growth.

The course materials for these classes have not yet been developed. Qazztek will develop these materials over the next several months as it assesses the market demand and requirements of the industry. Qazztek is currently working with industry leading sources to obtain training materials and once Qazztek is able to establish itself in the market these courses will be a part of the comprehensive security package that will be offered.

Marketing Strategy- Certification Preparation Courses
Qazztek's strategy for the offering certification prep courses focuses on the industry reputation these certifications bring to the market. Qazztek based its initial decision on to offer each certification based upon its overall value to IT professionals in the marketplace. These certifications will offer the best opportunity for compensation increases for IT professionals. Qazztek will market these courses to IT Professionals as a way to help them prepare to take the certification exams in the most cost effective and efficient way and thus increase their worth in the job market. Qazztek's target market will be individuals entering and advancing in the security profession that are seeking to accelerate their career growth and gain a competitive advantage in the job market.

Application Security Certification
ISC2's Certified Secure Software Lifecycle Professional (CSSLP)

Attendees will learn the tools and processes on how security should be built into each phase of the software lifecycle. It will also detail security measures that need to take place beginning with the requirements phase through software design all the way through software testing and ultimately disposal. The CSSLP study course will cover secure software concepts, secure software requirements, secure software design, secure software implementation/coding, secure software testing, secure acceptance, software deployment, operations, maintenance, and disposal.

People that should attend:
- Software Architects
- Software Engineers/Designers
- Software Development Managers
- Requirements Analysts
- Project Managers
- Business and IT Managers
- Auditors
- Developers and Coders
- Security Specialists
- Auditors and Quality Assurance Managers
- Application Owners

Materials:
- Book to be used- The CSSLP Prep Guide , Authors- Ronald L. Krutz and Alexander J. Fry
- Amazon price: $49.86

Auditing Certifications
Certified Information Systems Auditor (CISA)

This review course will prepare attendees to pass the CISA exam while ensuring that the information presented is practical and applicable to daily life. The focus of the course is the six content areas that are outlined each year by the ISACA. Qazztek courses will make sure that the students fully understand the information and will be able to apply it in their careers as well as use to pass the CISA exam. CISA has become the standard for ensuring that you understand a standard framework for performing information systems audits.

People that should attend:
- IT Auditors
- IT Managers

Materials:
- Book to be used- CISA Review Manual 2011 by Isaca
- Amazon Price: $135.00

Management Certifications
Certified Information Security Professional (CISSP)

This course is designed to help attendees prepare to pass the CISSP exam. This course assumes that the students have a basic understanding of networks and operating systems and focuses on the ten domains of knowledge determined by the ISC2. Each domain of knowledge is broken down into its most important components. Every component is discussed showing how it relates to the other areas of network security. After completion of the course the student will be fully prepared to pass the exam.

People that should attend:
- Managers who want to understand the critical areas of network security
- System. Security, and network administrators who want to understand how to apply the 10 domains of the CISSP
- Security professionals and managers looking for ways to apply the 10 domains of knowledge to their current jobs

Materials:
- Book to be used: CISSP Study Guide by Eric Conrad, Seth Misenar, and Joshua Feldman
- Amazon Price: $37.01

Penetration Testing
Certified Ethical Hacker (CEH)

This course will prepare attendees to pass the CEH certification exam. This certification will fortify the application knowledge of all security professionals. This course will teach students how to look for weaknesses and vulnerabilities in target systems and be able to think as a malicious attacker and the ways to thwart these attacks.

People that should attend:
- Security Officers
- Auditors
- Security Professionals
- Site Administrators
- Anyone interested in protecting their network infrastructure

Materials:
- Book to be used: Official Certified Ethical Hacker Review Guide, Author- Kimberly Graves
- Amazon Price: $18.66

Wireless Security
Certified Wireless Security Professional (CWSP)

CWSP is an advanced level certification that measures the ability to secure any wireless network. A wide range of security topics focusing on the 802.11 wireless LAN technologies are covered in the coursework and exam. This course will prepare students to pass this certification exam focusing on detecting attacks, wireless analysis, policy, monitoring and solutions.

People that should attend:
- Network Administrators
- Security Analysts
- Any person looking to secure their organizations wireless network

Materials:
- Book to be used: CWSP Official Study Guide, Authors- David D. Coleman, David A. Westcott, Bryan E. Harkins, and Shawn M. Jackman.
- Amazon Price: $43.64

SECURITY ASSESSMENTS AND AUDITING

Security audit and assessments are often described as "necessary evils.". While no business owner, executive or IT manager relishes the thought of enduring an end-to-end security examination, it's generally understood that an audit is the best and only way to fully ensure that all of a business's security technologies and practices are performing in accordance with established specifications and requirements.

Security audits and assessments are typically conducted for the purposes of business-information security, risk management and regulatory compliance. If performed correctly, a security audit can reveal weaknesses in technologies, practices, employees and other key areas. The process can also help companies save money by finding more efficient ways to protect IT hardware and software, as well as by enabling businesses to get a better handle on the application and use of security technologies and processes. As bothersome as security audits are, business owners, executives and IT managers who truly understand them realize that periodic examinations can actually help ensure that security strategies are in sync with overall business activities and goals.

Qazztek's Audit & Assessment Practices and Activities
There is no standard security-audit process, but Qazztek auditors typically accomplish their job though personal interviews, vulnerability scans, examination of OS and security-application settings, and network analyses, as well as by studying historical data such as event logs. Auditors also focus on the business's security policies to determine what they cover, how they are used and whether they are effective at meeting ongoing and future threats.

CAATs (Computer-Assisted Audit Techniques) are often employed to help auditors gain insight into a business's IT infrastructure in order to spot potential security weaknesses. CAATs use system-generated audit reports, as well as monitoring technology, to detect and report changes to

a system's files and settings. CAATs can be used with desktop computers, servers, mainframe computers, network routers and switches, and an array of other systems and devices.

While CAATs can provide definitive data on business systems, auditors must also keep an eye on activities and practices that are not easily quantifiable. Some of the key questions that an auditor must ask include:

- Who is in charge of security, and who does this person report to?
- Have ACLs (Access Control Lists) been placed on network devices to control access to shared data?
- How are passwords created and managed?
- Are there audit logs to record who accesses data?
- Who reviews the audit logs, and how often are they examined?
- Are the security settings for Operating Systems and applications in accordance with accepted industry security practices?
- Have unnecessary applications and services been purged from systems? How often does this task take place?
- Are all Operating Systems and applications updated to current levels?
- How is backup media stored? Who has access to it? Is it up-to-date?
- How is email security addressed?
- How is Web security addressed?
- How is wireless security addressed?
- Are remote workers covered by security policies?
- Is a disaster-recovery plan in place? Has the plan ever been rehearsed?
- Have custom applications been tested for security flaws?
- How are configuration and code changes documented? How often are these records reviewed?

Many other questions pertaining to the exact nature of the business's operations also must be addressed.

Qazztek Auditors

An auditor's skills and affiliations depend on the nature of the audit and the audited company's business focus. An internal audit will usually draw auditors from within the business's own IT and accounting departments, but lacks independence and may be a cause of certain IT problems. Alternatively, a company may hire a Qazztek security consultant to handle the job. A financial institution or other business working in a regulated industry will often find itself dealing with federal and state regulators. Qazztek auditors may also be sent to a business by private standards-setting bodies and other industry organizations to assist with remediation opportunities. Qazztek uses standardized checklists for each audit to ensure accurate, comprehensive and consistent auditing procedures. The checklists are frequently updated for new security practices. A copy of the checklists can be found in the Appendix.

Qazztek Follow-Up

Shortly after the audit concludes, the Qazztek auditors will usually brief a company's owners, executives and managers on what they've discovered and if any immediate remedial action is necessary. A few days or weeks later, the auditors usually issue a formal report. Stakeholders can use both the meeting and the report as opportunities to gain insight into their security practices and make improvements.

While a security audit is usually a specific event, IT security is an ongoing process. As a business designs, deploys and maintains its security policies, technologies and practices, it should strive to maintain a constant state of preparedness that will allow it to pass a security audit at any given moment

Over the last several years, the demand for security testing has grown dramatically as businesses have recognized the need to provide assurance that they are protected from internal and external threats. We provide pragmatic security services using only qualified, credentialed professionals. Whether you need a technical security solution, security program development or something as fundamental as policy creation, we have the right team.

Qazztek's Information Security Audit and Assessment Services analyze security from every practical standpoint to provide a 360 degree view of your organization's security. Our assessment services provide you with an integrated evaluation of how the various components of your information security program work together and assist in determining if they provide the level of security that you expect.

Qazztek's Security Various Assessments and Audits include all of the following:
- Internal & External Vulnerability
- Penetration Testing
- Web Application Security
- Wireless Security
- Social Engineering
- Physical Security
- Secure Code Analysis
- IT Risk

Benefits of a Qazztek Security Assessment

By contracting Qazztek to provide its Information Security Audit and Assessment Services, the following benefits can be realized by the organization:

- ***Threat Exposure*** - Qazztek can identify, and help remediate, weakness and vulnerabilities from a technical, physical and administrative perspective and reveal the level of risk posed to your organization's operations, IT infrastructure, applications, wireless, sensitive data, and personal information for both customers and personnel.

- *Comprehensive Reporting* – Qazztek provides a detailed report both from a technical and management standpoint, showing issues, vulnerabilities and discovery methods as well as provide an action plan to correct the problems in terms of a remedial, tactical and strategic approach.

- *Product and Vendor Neutral Advice* - Qazztek provides objective and independent advice with regard to the best alternatives for the implementation of a sound security strategy. While Qazztek does provide certain security products, it is unbiased in its approach to providing each client with the best alternatives.

Pricing of Audit and Assessment Services

Qazztek's Security Audits and Assessments are priced based upon which specific services are requested and needed. Qazztek can offer fixed price bids or can do the work on a time and materials basis. The hourly rates range from $180.00 per hour to $495.00 per hour depending on the complexity of the assignment.

QAZZTEK SECURITY ASSESSMENT

The project team also performed a full security assessment of Qazztek's operations and provided a comprehensive set of security policies for the company to use at it moves forward with its business operations. The purpose of the report was to assist Qazztek in providing a secure environment for its business to carry on all of its operations, business processes, and tactical procedures and to successful compete in the distribution industry. The scope of the assessment is outlined below:

Security surveys repeatedly report that most security incidents are caused by insiders (numbers ranging from 60 to 80 percent) and that the monetary damages are significant (often millions of dollars). The question should be – where are these vulnerabilities and what is driving the costs? The purpose of a security assessment should be to identify these vulnerabilities to a company's information infrastructure as well as appropriate countermeasures and remediation steps. Often, however, security assessments deliver scathing indictments of company's IT departments practices without ever actually addressing the source of the loss – quantifying how it did (or could) occur, the potential for system or data compromise, the business loss (which can be in dollars, reputation, productivity, or continuity in operations), and how such losses can be prevented.

By understanding the business loss potential, pragmatic decisions can be made about "how to invest" in security improvements or fixes. In contrast, most of these assessments provide reports on poor passwords for operating systems, network configuration problems, and server configuration problems. The resulting report typically consists of lists of denial of service attacks or misuse of resources via broken passwords and the actions system and network administrators need to take to fix them. Some security assessments include penetration tests with comparable results – bad passwords, operating system patches, and network holes. Occasionally, these reports will provide information on misconfigured applications (mail servers, web servers, and occasionally database servers).

While all of this information is useful and important, the question remains – is this where the losses come from? Qazztek's motto "We Provide Peace of Mind" captures the essence of the company's security strategy for our customers. Qazztek uses its business information technology security assessment methodology to help its customers identify where security vulnerabilities are, what is their business impact, and what should be done. Qazztek's business information technology security engineering and implementation solutions consist of more than simply selling products or services, but rather helping our customers to integrate IT security into their business operations – protecting current revenues and opening new opportunities. Qazztek is uniquely positioned to provide security support for the full range of business IT security needs through our wide range of vendor products, access to numerous service providers, and unique ability to assess and secure custom, high-end enterprise and operations applications.

The network infrastructure and informational assets of Qazztek, as provided to the project team in the past few months is in its initial development stage. It is anticipated that Qazztek employees will spend some time writing, communicating, analyzing, building, buying, selling, and reporting with computers, laptops, cell phones, PDAs, servers, mainframes and special purpose devices. In our correspondence, it was mentioned that Qazztek uses primarily Microsoft products, cloud services from GoDaddy and other opens source solutions.   With this use of different platforms, and adoption of varying software products (most commonly used for messaging, project planning, billing, information sharing and reporting), the key corporate data and business processes have moved from file cabinets and locked up data centers onto every desktop in Qazztek.

Security assessment must be tied to the business value of the IT components. During our assessment, the vulnerabilities were individually identified and evaluated. Just as companies have separate insurance coverage for fire vs. theft vs. liability, so a security assessment should keep separate track of Internet vandalism, denial of service, loss of business, and compromise of sensitive information. In order to maximize the value of this security assessment and recommendations, the IT components of a business must be well integrated with their respective business functions.

Security expertise is a scarce commodity and is often overlooked by business and they build infrastructure and support various business processes. The project team worked with Qazztek to determine the appropriate model for Business IT security. As part of this effort, we requested information on the existing Qazztek workforce (staff skills and quantity), and outside resources (in use or planned).

A technology security assessment encompasses Qazztek's operations as well as its computers. By looking at the objectives of the firm as well as its information technology resources, the project team can identify where the bottom line value lies with Qazztek's IT assets. The project team has worked with IT and business managers to determine the firm's business security strategy. By combining deep expertise in security with a wide range of business experience, our team delivers security solutions that deliver on the company's bottom line. Our assessment methodology will identify whether key corporate resources are held in a spreadsheet, database, or in a custom application – and concentrate security measures to protect those assets.

This report and effort do not include port scans or other active testing being performed on site. The project team has not reviewed any logs or reports from such scans, but we believe that the on-going vulnerability tests (port scans, version or configuration testing, password checking tools) should be an on-going activity of the Qazztek IT department. This assessment report will be delivered in hardcopy volume and electronically. It can be augmented by a wrap-up meeting with Qazztek senior management if requested.

As a result of our security assessment, the project team with the help of Qazztek has provided a set of recommendations to design and implement various security solutions. The project team can take an implementation role that best meets Qazztek's requirements – from program management, engineering advice, and independent validation and verification to hands on implementation, integration, and development. With detailed knowledge of cryptography, security protocols, and system engineering, we have the skills to implement virtually any of our recommended security solutions.

Secure operations are the essence of a successful IT security strategy. The project team can provide training and support to ensure that Qazztek's business can be IT security self-sufficient. The project team can also provide auditing and retained security services for those clients that want or need ongoing external security. The full Security Assessment is shown in the appendix.

EXECUTION OF BUSINESS PLAN
With the systems in place, the project team assisted Qazztek in the initial stages of executing the business plan. This assistance included four main areas, (i) Products Acquisition and Delivery, (ii) Policies, Procedures, and Services, (iii) Sales and Marketing, and (iv) Relationships and Outsourcing. Each of these areas is briefly discussed below:

PRODUCT ACQUISITION AND DELIVERY
Qazztek will offer a variety of security products, including surveillance equipment installed throughout the client's property, hardware such as firewalls and honeypot machines, and software such as packet sniffers. This will provide a one-stop shop for our clients, which will make things easy and convenient for them. These products will all be available on our website and initially will be obtained from third party distributors. These products will be able to come in a customized package to meet each client's needs. We realize that the needs of each company are different, which compels us to be flexible.

Initially all the product offered and sold by Qazztek will come from distributors who can drop ship directly to the customer. All sales will be made on credit cards or through PayPal and no billing will be necessary. The Qazztek website is fully e-commerce enabled. Qazztek already has a relationship with the world's largest technology distributor, Ingram Micro, and will add other distributors over time as product sales increase. Eventually, Qazztek would like to source many of its products directly from manufacturers and produce some specialty products in house.

POLICIES, PROCEDURES AND SERVICES

Qazztek plans on providing its customers with the security solutions they need. Qazztek will provide a comprehensive range of services that its clients are looking for. These services will be customized to the needs of each client, big or small.

Security Consulting: Qazztek plans to assist existing businesses that would like to have their current security processes evaluated and make recommendations on how to protect sensitive information and assets. This will become a major part of Qazztek's future business because company representatives will meet face to face with both current and potential clients. Qazztek will help these businesses improve the security of systems and data at the pace in which the client can grow.

Auditing: Qazztek will have a team of qualified Security Consultants that will be able to do external penetration testing for any given company. This will allow for a detailed outcome of what needs to be tightened down or upgraded for a system or policy. This will give Qazztek's clients a better idea of where they stand and how they can better defend themselves against attacks. The audits provided by Qazztek will evaluate both physical security for its clients' locations and logical security for data centers, servers, and network infrastructure components. Qazztek will look at processes and procedures, as well as company policies to better help clients protect themselves from attackers. Initially much of the auditing services may be outsourced to other firms on a referral basis. Qazztek is currently discussing opportunities with various other security auditing companies.

Training: Qazztek will offer a variety of courses and training materials in order to educate clients' employees on matters of security. These courses will teach employees best practices regarding passwords, workstation etiquette, and office security. Qazztek will be able to train existing IT departments how to perform internal audits and how to use the results of those audits to their advantage. The ability to train clients will set Qazztek apart from its competitors because most security companies do not train on the "whys" of security. Most security companies give their recommendations, which usually means that they tell people "No, you can't do that" without an explanation. This will allow clients to trust Qazztek over the competitors, and that trust will allow Qazztek to grow.

Certification: Qazztek has developed and will provide certifications for the following standards:
- Sarbane/Oxley COSO requirement
- ISO/IEC 27000
- CobiT
- Physical Security
- Various System Platforms

Qazztek will also facilitate certification exams to businesses and individuals who would like to be certified with these standards. These certifications will allow greater confidence in the security practices of certified individuals.

Policies and Procedures: Qazztek will provide companies with a comprehensive package of security policies and procedures that they can use to manage and organize their companies in a safe and prudent manner and protect valuable assets from potential theft, vandalism or destruction.

SALES AND MARKETING
Sales Strategies
Entering the world of security consulting can be daunting, especially during a time where the economy hasn't quite rebounded from its earlier struggles. Qazztek plans to target small and medium sized businesses around the Salt Lake Valley to gain a client base and develop good relationships with local business owners. Particularly, local dentist, doctors and other medical operations will be targeted where there is a specific need for the type of services that we want to offer. As the world becomes more technologically advanced the threats and malicious software out there become even more of an issue.

Value Proposition
Our intention is to provide hosted and managed services like our fellow competitors but also to integrate those services with security advisory services. We want to educate businesses on the potential threats to their information systems and provide them with a solution to protect those assets. We want to offer a comprehensive solution that will be affordable, reliable, and allow us to continue to develop a professional relationship which is the foundation of our business.

Strategy Pyramid
At Qazztek, we have consulted with many professionals and advisors in the industry and our marketing strategy will include the following:

- **Networking and Referrals** – Many of the core members of Qazztek have been working locally for several years and we plan on using those relationships that have been developed over the years. We want to work with not only people that we know we can trust but that also have confidence in us and have already established a relationship with. Initially we plan to network with fellow co-workers, colleagues, businessmen and students in order to find small businesses that are in need of security assistance. As with job hunting, networking is the best way to find new clientele. We plan to use the current relationships we have to develop a strong and professional relationship with small business owners in order to help meet their security needs in an effective and efficient manner.

- **Web-Site Marketing** – We will create a website which will display the services which we offer and also explain to the customer why they are important to us and our core values and principles. Websites are a great way for new and established businesses to advertise their product and get the word out on what exactly they offer. We will be getting our website and name of our company out in the community and encouraging people to visit our site to get to know more about our company and services we can provide. This website will provide potential customers a summary of the services and products that we offer and a way for them to contact us and request more information.

After they have submitted their information we will be able to contact them and tailor advertising and promotional messages to their specific needs.

- **Traditional Advertising** – Generally, any publicity is good publicity. At Qazztek we plan on getting our name out into the community in every positive way, shape, and form. We want people to know that we eager to gain their trust and business and we are here to stay. We plan to take advantage of traditional local advertising venues. We want to advertise in the yellow pages, on local news websites, and billboards. There are many small business magazines that are local to Utah. These magazines are focused on the small to medium sized business and entrepreneurs. We plan on taking ads out in these magazines advertising our services and the products we offer. This will reach many businesses very quickly and will help get our name in people's heads.

- **Social Media** - Social media sites are becoming huge these days. They are a very cheap and inexpensive way of reaching many people quickly. We will encourage people to become fans of our business and get them to spread the word for us.

- **Build a relationship business** – Good business is all about partnerships built on a foundation of trust. We don't want to just have customers but clients. We want them to feel like they are valued and important to us. Additionally, in order to gain peoples trust and develop a good reputation we plan on partnering with other security-centric companies like Microsoft, Cisco, and Netgear. These relationships will not only let us sell their products and offer them a wide variety of solutions but will also establish us as a competitor in the valley. These strategic partnerships will allow us to offer the best products and services at the best price.

Sales Strategy

As we try to maximize the production from our marketing strategy we plan to implement the following sales strategies in order to gain customers quickly and develop a reputation within the community.

- **High-Profile Company**: To help get our name out and give us some clout within the local community we plan on targeting a high profile company that is known through the valley and offer a bundle of initial services for free. This will serve a two-fold purpose. We will gain our first client and be able to show them what we have to offer and we will be able to share with future customers the partnership we have developed with this company and that we are respected within the community.

- **Sales Force:** We plan to hire a few security consultants who not only can advise the potential customers on the services we offer, but who are able to instantly connect with them and identify their needs. This will ensure that a strong relationship has been initialized and will have a good foundation moving forward. These consultants will also approach small business owners around the valley on cold calls looking to bring in new business and customers. These consultants will be hard working and proven professionals with a successful background.

- **Customer Centric Culture** – We want our customers to feel like they are getting their money's worth and we plan on putting customer satisfaction first. If we can take care of our existing customers and make sure they are happy customers they will stick around and bring in referrals.

RELATIONSHIPS AND OUTSOURCING

We will facilitate continued security by providing outsourced resources for systems monitoring, email, cloud computing, physical security such as guards, etc. This will allow us to continue to service our clients by going beyond the limited resources that we will have when the company begins operations. Over time, those services, which become more central to our strategy and competitive advantages, will be taken in-house.

Qazztek wants to be the single point of contact for its customers. By facilitating the outsourcing of these services, clients will be able to do more with their business, without having a long contact list. This will help with client retention because they can count on us to do the leg work for them. As Qazztek grows more services will be brought in-house based upon the ROI of each particular service offering.

SUMMARY

This project has been a great learning experience for each member of the team and an opportunity to launch a new enterprise. The team has used concepts from nearly every class offered in the MSIS program as part of this project and we expect to continue to use the insights, knowledge and experience throughout our careers.

LIST OF APPENDICES

THE UNIVERSITY OF UTAH