Business Requirements

of the Website

For

Bazaar Ceramics

Addendum



Institute of Technology Australia

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# A site where ICT needs and strategic directions of the organisation are coordinated

The costs of running Bazaar Ceramics operation have been increasing in recent years, resulting in a drop in the company’s Return On Investment (ROI) despite sales figures keep raising.

* Increased cost of renting premises
* Increased cost of raw materials for production
* Increased marketing costs
  + Cost of printing and distributing brochures
  + Cost of dedicated space on sector publications

Another factor that negatively influences the ROI is represented by the indirect cost of poor sales reporting. Reports are often produced too late to be effectively used in the elaboration of a strategic plan.

* Marketing is not targeted
* Production of unsalable products

To properly assess the company’s situation and evaluate how the development of a web application can address the current shortcomings, a gap analysis has been conducted

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| **Gap analysis – Current state and goals** | | | |
| **Currently in place** | **Objective** | **Implications** | **Reccomendation** |
| Most sales are done in the gallery | Online shop | Current system targets effectively only the local market. | Develop e-commmerce website and appropriate IT infrastructure |
| Orders are processed manually by employees | Automated process | Manual processing is laborious and prone to human error | Sales and orders recording automated by an integrated system |
| Products from remote workers need double handling | Direct shipping process | Risks of breackage and augmented costs involved in double handling. | Web application accesible online from remote workers to access customer information relevant to direct shipping. |
| Increase in prodcution, legal and operational costs is causing decrease in profits | Reduction in operational costs | Paper based promotions, processes and record keeping unnecessarily bloat the cost of operations | Significantly reduce promotional and marketing costs by incresing online presence |
| Remote orders are submitted by email or fax | Automated ordering process | Remote client can be discouraged by a cumbersome ordering process | Orders placced directly from e-commerce website |
| There is no in-house technical staff | In house technical staff to handle the new technologization of the company | The company needs to rely on costly third party contractors. | Hire in-house IT professional |
| Showroom space is limited and insufficient | Online gallery | Only a limited amount of products can be displayed to a limited local audience | The current online gallery could be integrated with an e-commerce solution. |
| Production of redundant and obsolete items | Avoid production of un-saleable items | Money wasted in creating products that do not appeal to the market | Integrated application with real time data capture and creation of current sales statistics |
| The main advertizing channel is paper based (brochures, magazines) | Online gallery | Updating brochures or buying advertizing space on magazines is costly and reach a marginal part of the market | Integrate e-commerce solution and implement an online marketing campaign |
| Competitors are taking over the market due to better online presence | Increase online presence | Disadvantage compared to competitors and negative impact on company’s image | Integrate e-commerce solution and implement an online marketing campaign |

Conclusions of Gap Analysis

Of the four main areas of cost identified (premises rental, raw matierials, marketing and indirect costs), threewould be positively affected by the implementation of a modern ecommerce website.

Marketing costs and indirect costs would be the ones that would see the most obvious and dramatic improvement.

Marketing costs would be cut down, with the website absolving as online display and main marketing tool, allowing the savings to be invested in more modern and effective marketing strategies.

Reporting would be instantaneous, giving accurate and current sales figures, with a positive effect on marketing and production strategy.

Premises rental costs, although not directly influenced by the web application, could be potentially reduced if online sales would overtake local sales, making the need of big and costly premises redundant.

No effect on the cost af raw materials for production can be foreseen at this stage.

# Detailed information relating to a strategic organisation plan, objectives and direction

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| **Action Plan** | | | |
| **Goal:** Decrease operational costs and increase sales and profits of the company Bazaar Ceramics by developing an e-commerce website | | | |
| **Activities** | **Responsibilities** | **Resources** | **Timeline** |
| Hire technical staff   * Advertise job openings * Conduct interviews * Hire suitable candidates | Manager | Manager  Finances for new wages | 1 to 2 weeks |
| Switch to open source server technologies   * Consider switching * Compare services and features * Compare costs | IT staff | It staff | 1 week |
| Upgrade hardware   * Identify company’s needs * Research viable options * Acquire products | IT staff  Manager | IT staff  Manager  Finances for new hardware | 2 days |
| Hire external contractor for website development   * Contact software companies * Compare offers * Select company | Manager | Manager  Finances for new contractor | 2 days |
| Conduct marketing research for new website   * Research competitors websites * Propose questionnaires to existing customers * Identify desirable features * Identify webite appereance | Contractor  Management  Marketing | Contractor  Management  Marketing | 1 to 2 weeks |
| Develop website   * Identify website requirements * Create software design * Develop website and implement features required * Test website * Launch website * Maintain website | Company management  Company staff  Contractor  IT staff | Company management  Company staff  Contractor  IT staff | 1 week |
| Implement Change Mangement   * Train staff on new technologies * Revise processes and procedures * Conduct meetings with staff to ensure workforce participation and commitment | Management  Staff | Management  Staff | Ongoing |
| Promote company   * Research marketing options * Design marketing campaign * Leverage social media marketing | Marketing staff | Marketing staff | 1 to 2 weeks |
| Website update and maintenance   * Collect customers feedback * Review feedback and develop strategy * Implement changes in website * Maintain website | IT staff  Management  Marketing | IT staff  Management marketing | Ongoing |
| **Evidence of Success:** | * Reduction of costs related to running and promoting the company. * Higher sales figures, especially on the broader national and international market. | | |
| **Evaluation Process:** | The company will track expenditures and profit for a given timeframe.  At the end of that timeframe, costs annd expenditures will be compared to the previous recorded figures. | | |

Internal and external factors and constraints

There are some factors to be considered that could harm or prevent the successful implementation of the action plan.

* The budget dedicated for the development of the website could run out before the completion of the project.
* The product doesn’t reflect the client expectations or the requirements agreed upon.
* The product is developed according to client’s expectations and requirements, but the results don’t match the client’s expectation.
* Lack of communication between the client and the development team resultS in increased expenses and improperly defined requirements.
* Staff don’t adapt to the changes

Financial considerations

An initial investment for the development of the website and the hiring of new techical staff is required. A transition period to fully implement the changes is also expected. During this time the company can expect to see an increase in the costs for running normal operations, due to the need to keep the previous structure functional, on top of the new one. Eventually the full integration of the website in the company’s operations should organically replace the administration and marketing functions it proposes to implement.

In the best case scenario, the passage from the old to the new system should provide significant results in a matter of a few weeks, provided the website and the marketing both meet their goals and expectations.

The rainy day scenario, in which the project would be deemed a failure, the company would lose the initial investment and nothing more, especially if a recovery plan has been designed.

Legal considerations

The automation and transmission of customers sensitive information over the internet implies some legal implications in the treatment of data. These obligations include security of the data, their usage, distribution and storage. It is the management duty to ensure that the development team implement solution to deal with these issues according to the law.

Hiring an experienced and reputable developing team would most likely guarantee guarantee compliance with laws and regulations.

HR considerations

The introduction of new technologies and procedures in the company environment would have an impact in the way staff and management would conduct their jobs. With some of the processes being automated, part of the staff may see their hours reduced, or could be made entirely redundant. Proper consideration should be given to these issues.

Extensive training should be provided to ensure that everyone would feel comfortable with the new hardware and software.

In case hours or personnel has to be reduced, appropriate measures to ensure ethical treatment and to give everyone the opportunity to find other options and solutions should be implemented.

# Organisational policies and procedures relating to the implementation of ICT changes

Some difficulty in adapting to the new changes can be expected. In the following table are listed options to mitigate the negative impact these changes may have on the company’s environmet. Some can be considered transitionary and as an organic part of a company’s evolution, meaning they require little to no action to be assimilated by everyone, while others can disrupt the previous status quo considerably and should be addressed with consideration for their practical and ethical aspects.

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| **Change** | **Impact** | **Reccomendation** |
| New Hardware | Minimal | No measures are considered mandatory, but some training may be required for staff members that may not feel comfortable in dealing with the new products. |
| New software | High | Staff needs to be trained in the new procedures and needs a working knowledge of the product, including basic trouble shooting skills. |
| Administration | High | Automation would drastically change the way records are kept and reports produced. Human interaction for these processes would be far less needed, making admin position less required.  Resources can be redistributed in other sectors or cuts in personnel can be expected. |
| Marketing | High | Inefficient and cost ineffective paper based marketing will be replaced with an Internet based more modern approach. Marketing personnel will need to shift focus to the new technologies and platforms, such as google ads and social media marketing. |

Financial Considerations

The costs of developing and running a new e-commerce website are outweghted by the benefits it would introduce.

On top of attracting more customers and expanding the company’s reach, other financial advantages are represented by the money saved due to less human resources required for administrative tasks in the company, allowing management to divert those resources to marketing and production, activities more likely to generate profit.

# Individual superior in the organisation

The organisation has a light structure, with the business owner taking on the role and responsibilities of the project sponsor, main stakeholder and ultimately decision maker in the company and for this project.

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# Information on current ICT systems and practices in the organisation including operating systems, hardware, and security

Bazaar Ceramics IT infrastructure

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| **Company Intranet** | |
| **Item** | **Specifications** |
| LAN infrastructure | Ethernet (100BaseT)  16 port switch |
| WAN infrastracture | ADSL connection to Internet |
| Server(1) | Intel Pentium 4 3Ghz, 512 MB RAM, 80GB HDD, 10/100 Ethernet card |
| PCs (10) | Celeron 2.4Ghz, 256MB RAM, 40GB HDD, 10/100 Ethernet card |

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| **Server software** | |
| **Item** | **Specifications** |
| OS | MS Windows 2000 server |
| Web server | MS IIS |
| Email | Exchange |

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| **PC software** | |
| **Item** | **Specifications** |
| OS | MS Windows 10 |
| Web browser | Chrome |
| Email | Gmail |
| Virus checker | McAfee VirusScan |

Bazaar Ceramics online presence is currently represented by a brochure website. The website’s aesthetic and functionalities are outdated and fall short in fulfilling the company’s need.

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| **Brochure site functionality** |
| Display products images |
| Display product details |
| Contact form |
| Downloadable order form to be emaild (or faxed) back to the company |
| Downloadable account application form to be emailed (or faxed) back to the company |
| Customer feedback (votes and comments) |
| Possibility of joining mailing list |

Bazaar Ceramics currently doesn’t have in-house technical staff

# Meetings with client

During the meetings with the client many of the points included in the previous reports have been discussed and clarified.

The client understood the advantages and implications of a new e-commerce website, how it would affect the company and what measures should be considered to ensure that any negative effect would be mitigated.

Features and functionalities of the website have also been discussed. The client demonstrated more interest in exploring what could be done, how it would be done and various options available.

From the meetings the client came out with a better understanding of what to expect from the implementation of an e-commerce website and the developers with a better understanding of what the client’s requirements may be.

Minutes of Meetings

Following are the minutes of the meetings between the developer and the project sponsor

 **MINUTES OF MEETING**

Date: 01/03/2021

Time: 10.00 am

Location: Bazaar Ceramics

**Preliminary meeting**

Attendees

* Alessandro Ferro – Developer
* Kym Hayward – Client and Project Sponsor

Agenda

* Introduction of parties
* Reasons for the company to implement a website
* Expectations
* Conslusions

1. **Introduction**

* The developer started the meeting introducing himself and briefing the client on what services he can provide.
* The client introduced herself, the company and her role within it. Bazaar Ceramics is producer and seller of ceramics homeware and unique art pieces, successful on the local market and with an increasing presence at national and international level.

The organization is currently comprised by the finance manager, the gallery director who is also the marketing manager, the production manager, three in-house workers and three remote workers. The workers also cover the role of designers.

1. **Need for a website**

* The Developer asked why the client considered the implementation of a an ecommerce website
* The client explained the reaons that lead her to decide they need a website:
  + The increasing importance, or perceived increasing importance of having an online presence.
  + Competitors, ceramics journals and galleries all have a website.
  + The lack of a website would impact negatively the company, projecting the image of an old fashioned organization unable to keep up with modern time.
* The costs of marketing, especially related to updating, printing and distributing brochures to keep them up to the date with the catalogue, and the cost of advertising on magazines and journals is very high. The website would represent an efficient way to present the company’s catalogue in one place and always current.

1. **Company’s needs**

* The developer asked what are the expectations of the client regarding an ecommerce website and what the website should do to address the needs of the company.
* The cient listed a set of preliminary requirements. The website should
  + Showcase offers and upcoming events
  + Showcase the company’s catalogue
  + Provide details about the products, including designers, technical infomration, descriptions and so on
  + Display infomration abut the company
  + Give customers a way to directly contact the company
  + Give customer a way to create an account
* The developer asked what would be the client’s priorities
* The client said that promoting the company and simplyfing the purchasing process for remote customers are the current priorities.
* The developer asked how the process to purchase items remotely works at the moment
* The client explained that order forms are downloadede from the current website, are filled by the customers and are sent back to the company by fax or by email. This system is inefficient and may discourage customers from buying Bazaar Ceramics products.
* The develoepr asked about the company’s client base
* The client explained that most of the customer base is represented by people that visits the gallery or the showroom in person. Remote customers are either individual or corporations.
* The developer asked if there is any characteristic the cusomters share (age, economic status, etc.)
* The client said that their customers are people willing to pay a bit more to have a unique piece.

1. **Adjournment**

* The developer concluded saying that there is enough material to produce a prototype ad that he will be in touch with the client once the mock up will be ready
* The developer and the client agreed to have another meeting at a date to be determined to further discuss the details of the project.

Minutes Submitted by: Alessandro Ferro

Minutes approved by: Kym Hayward

 **MINUTES OF MEETING**

Date: 08/03/2021

Time: 10.00 am

Location: Bazaar Ceramics

**Prototype presentation and discussion**

Attendees

* Alessandro Ferro – Developer
* Kym Hayward – Client and Project Sponsor

Agenda

* Walkthrough of the prototype
* Feedback on prototype
* Modifications
* Conslusions

1. **Prototype Walkthrough**

* The developer showed the client, the hoome page of the home page, demonstrating how the design adapt to different screen sizes.
* The client approved the design, but asked the developer if more pictures could be used to give a more realistic feel (NOTE: the developer used of only two pictures reused throughout the prototype). The client also noted that the she likes how the special offers sections keeps the products aligned also on mobile.
* The developer showed the navigation bar at the top with company’s name incorporated, folowed by the menu.
* The client asked if the company’s logo could be implemented instead, or next to the company’s name.
* The developer modified the code to put include the company’s logo (downloaded as an image from the company’s brochure website).
* The client said that the previous version without logo was better.
* The developer removed the logo and showed the “about us” page
* The client said that the page, at the moment, was fine.
* The developer showed the “contact us” page
* The client asked if it was possible to add a map showing the location on the page.
* The developer said that a real map may take a long time to render, but that ih would have implemented, than showed the product page by selecting one of the two available category.
* The client was happy with the product page, but asked if there was a way to show more details about the products.
* The developer showed the product details page by clicking on one of the prducts
* The client was happy with the products details page.
* The developer showed the shopping cart page
* The client was happy with the shopping cart page.
* The developer showed the checkout page.
* The client said that she wasn’t convinced by having billing details and payment options on the same page but that she had to think about it.

1. **Prototype feedback**

* The developer asked if the client thought they were moving in the right direction.
* The client said that she was happy with the prototype so far, aside from the minor changes identified during the walkthrough.
* The developer asked if the client had anytihing to add or if the functionalities already included were sufficient.
* The client said if the website could implement a way to manage customers accounts and product inventory, because the current system relies on a mix of paper and computer based information processing mechanism that cause many error and time waste.
* The developer proposed to implement an administrator dashboard to manage customers and inventory and to automtically produce sales figures.
* The client said that she would like to see that implemented.

1. **Summary of changes**

* The developer briefly listed the modifications and additions requested by the client
  + Use of more pictures in the prototype
  + Inclusion of interactive map on the “contact us” page
  + Billing details form and payment on two different pages
  + Implementation of an admin dashboard.
* The client agreed and added that if something else would come to her mind she would contact the developer.

1. **Adjournment**

* The developer concluded saying that he will adjust the prototype to the client and will showcase it in the next meeting
* The developer and the client agreed to have another meeting at a date to be determined to further discuss the details of the project.

Minutes Submitted by: Alessandro Ferro

Minutes approved by: Kym Hayward

# Current business needs

Over the course of meetings between client and developer, the following business needs have emerged

* The clients needs a modern website to refresh the company image and not to “lose ground” to the competitors
* The client needs a website that is marketing tool to promote products, offers and events
* The client needs a website that implements ecommerce functionalities to allow customers to purchase products online.
* The client needs an automated system to track sales and inventory, to design appropriate strategies to cut costs and boost sales
* The client needs customers to be able to create an account on the website
* The clients needs to cut costs related to marketing
* The client needs to cut costs related to rental of premises

# Client expectations brief

The client expects

* The system to provide a digital location to showcase their production, offers and events.
* The system to be designed according to modern trends
* The system to be fully resposive
* The system to allow customers to register an account
* The system to allow customers to purchase products online
* The system to manage sales and inventory
* The system to produce sales figures
* To cut or redirect marketing costs
* The system to allow admininstrative staff to manage customers accounts and prodcuts inventory

# Business objectives

With the implementation of a new ecommerce website the client aims at reducing the ependitures caused by the current marketing practices and increasing their reach on national and international markets.

# Systems, data gathering and appropriate software products

The present document, together with the Business Requirements 1 document has been created using a variety of technicques and tools.

Data regarding the company and its needs comes from interviews with the business owner and from documentation provided by the company.

The **Job Profile document** outlines each employee role and responsibilities. It reflects a structure created to deal with the internal market and doesn’t make **any mention of international market** in any of the profiles.

Furthermore, some of the tasks mentioned in the job profiles could be automated, thus reducing the resources required for that task.

The **pricing structure document** describes the policies for prices modification of the objects and application of discounts by the manager of marketing and sales.

* **Products prices are dynamic**, which implies that:
  + Prices published are unreliable and becomme easily outdated
  + Keeping the publications up to date with the prices can be cumbersome and costly.

The **Strategic Direction Report** reinforce the information obtained in the interviews and add some new data.

* The recent focus on international ceramic art market gave positive results.
* High costs of maintaining the gallery and to market the product internationally, have a negative effect on the ROI.
* Local retail sales are the main source of revenue.
* Returning customer express the need for a website to streamilne and automate processes.
* Competitors are successfully pointing on the online market.
* **Greatest potential of growth is in the international art market**.

The **Strategic Plan** lists the strengths and the weaknesses of Bazaar Ceramics, and the opportunities available in the external environment. On top of the information reinforced in the document, new data are contained in the strategic plan.

* Bazaar ceramics currently cannot capture sales information
* There is a no better specified “IT infrastructure”
* No technical personnel emplyed by the company

The **Critical Issues and Strategic Objectives Report** mostly reiterate the same information outlined above. However a new piece of information emerges.

* A new shipping process directly from the remote workers should be implmeented to avoid double handling of the product.

The **Internal Memos** provide a more in depth insight of the company status, problems, opportunities and goals.

* ROI is decreasing despite sales are increasing
* In the last five years:
  + Counter sales have doubled
  + Phone/fax/email sales have grown more than three times (mostly international and interstate).
  + Account sales, which were implemented only in the last three years, have more than doubled.
* The markup on the sales for each type of customer is reducing by the year.
* The cost of goods has increased in the alst five years.
* Remote workers cause double handling of the product, but leave the workshop area free to display more products to the customers
* Sales report are slow to produce and result incomplete.
* Brochures and other publication are ineffective at showing the product and quickly outdated.
* Customers want access to product details.
* Customers are concerned about security.

**The forms used within the organization** show that process of collecting the information required to place and record orders could be easily automated, reducing the amount of work and the possibility of mistakes.

**The product information** are currently printed on magazines and brochure, which is very expensive. Some of the information are static and require little to no change over time. Other information, such as the price, are dynamic and more subject to change. Considering that it is not possible to change the print on a brochure, it would be better to have the information available on a website, where they would be available for every customer and could be redacted and modified without any additional cost.

The systems and software currently in use in the company have been collected from the **IT Infrastructure** document

The tool used to create this document include

* MS Word
* Lucidchart.com
* StarUml
* Xampp
* Visual Studio Code