

Assignment 1

Services Company Migration to the Internet

Name: Beau Lebens

OLA Student Number: 69267

Unit Name: EBS11: Strategic E-Business

Study Period: Study Period 4, 2003

Email Address: beau@dentedreality.com.au

Date Submitted: (Due Dec 29)

Word Count: 2,694 (ex. Cover, ToC & References)

By submitting this assignment, I declare that I have retained a suitable copy of this assignment, have not previously submitted this work for assessment and have ensured that it complies with university and school regulations, especially concerning plagiarism and copyright.

1.0 Management Summary

This project aims to bring Faux Trading online, with an integrated trading facility, information library and two-way messaging service between staff and clients. The trading facility will be provided via an integrated system with E*Trade Australia's backend, allowing Faux to bypass heavy development processes in favour of supplementing the well-established service E*Trade offers with additional functionality.

The project is expected to take approximately 8 months to complete, assuming a smooth workflow and investment of a number of full-time resources. The budget for the project will be approximately \$115,000, which will include hosting of the service, recruitment of an additional staff member to provide ongoing support/development and staff training in the use of the new system.

The project will be approached under three broad categories, being: technical, business and education. Special considerations will be made concerning support of online users, staff buy-in and acceptance and security and privacy of information online.

Following is a short background on the company and the project being embarked upon, followed by a brief breakdown of the major processes involved in the project and an estimated timeline for completion. Included are some specific issues that will need to be addressed to ensure the success of the project, followed by a costs and timelines breakdown and a communication schedule.

Table of Contents

| | | |
|------------|--------------------------------------|-----------|
| 1.0 | Management Summary | 2 |
| 2.0 | Introduction | 4 |
| 3.0 | Project Overview | 6 |
| 3.1.0 | Technical Phase | 6 |
| 3.2.0 | Business Phase..... | 7 |
| 3.3.0 | Education Phase | 7 |
| 3.4.0 | Project Timeline..... | 9 |
| 4.0 | Important Issues | 10 |
| 4.1.0 | Correct Support of Online Users..... | 10 |
| 4.2.0 | Staff Buy-In and Acceptance | 10 |
| 4.3.0 | Security and Privacy Concerns..... | 11 |
| 5.0 | Costs and Timeframes | 12 |
| 6.0 | Regular Communications | 13 |
| 7.0 | Conclusion | 13 |
| 8.0 | References | 15 |

2.0 Introduction

Faux Trading is a traditional stock and options trading group operating on the Australian Stock Exchange (ASX), with 6 offices around Australia, currently in Perth, Melbourne, Sydney, Brisbane, Adelaide and Coffs Harbour. Each office houses between 5 and 15 staff members. Faux provides a trading facility to clients, as well as providing well-researched stock tips, advanced offers on IPOs and a variety of other value-added services to those interested in the share market.

Management firmly believes that the 6 offices need to have joint access to a shared, online trading facility, and to begin cooperating via the Internet, to capitalise on new opportunities which have arisen from such online trading facilities as E*Trade Australia (<https://www.etradeaustralia.com.au/>) and CommSec (the Commonwealth Bank's broker arm) (<https://www.comsec.com.au/>). This move will also ensure that existing (and potential) clients of Faux Trading do not stray towards day-trading or 'solo-trading' via these facilities, causing a loss in revenue for the company. Faux will integrate their 'to-be-developed' trading system with the E*Trade trading backend to reduce the amount of development time and resources required to get online.

Operating online is expected to bring about the following advantages for Faux:

- Streamline trading operations for staff trading on behalf of clients, and allow clients to trade for themselves
- Capture traders who may otherwise venture into "solo-trading"
- Improve the transfer of information between offices, making for a more efficient and professional image
- Improve the facilities available to each office for research (via shared information and resources)

The expenses involved in operating online are expected to be significantly outweighed by the benefits gained through improved trading efficiency, higher levels of accountability in customer service and improved service over-all. Online operations are not intended to immediately replace the existing functions of Faux Trading; they are to provide an attractive supplement, which will better suit a segment of the target market, while freeing

up staff to better service clients who prefer face-to-face interaction. Faux's existing IT infrastructure (Internet access, desktop workstations, workgroup servers) will be used to support the implementation of the online trading system and to give all current staff immediate access to it.

3.0 Project Overview

Faux Trading is embarking upon a project to develop an integrated trading and information platform for their staff and clients. The major technological changes to take place are:

1. Development and implementation of an online trading system with direct client access.
2. Integrated research library via online information provision (both for staff use and client use).
3. Introduction of online messaging via the trading system directly between staff, as well as between staff and clients.

This project is to be approached from a number of different angles, falling into the following major sections/categories:

- Technical Phase
- Business Phase
- Education Phase (for both staff and clients)

Although elements of the education process can take place in line with the other two stages, the project will mainly consist of a joint technology/business development phase, followed by a comprehensive education/implementation phase.

3.1.0 *Technical Phase*

The technical phase will require the following major tasks to be completed before the system can be integrated in business workflows:

- Specification of the online system to be developed, including the following elements
 - a. Integration with trading provider (E*Trade).
 - b. Operational flows within the system.
 - c. Support facilities for users (clients).
 - d. Internal workflows to support business workflow for staff (see [Business Phase](#)).
 - e. Safeguards for data security and privacy, including financial transactions in particular.

- Web hosting arrangements for the system
 - a. Suggest dedicated server, hosted in an offsite hosting facility with complete backup, redundancy and security measures in place.
 - b. Disaster Recovery planning should be part of this stage, covering emergency recovery from backups, on existing or new machines.
 - c. Secure transactions (via SSL-encryption) needs to be enabled on the live server to protect sensitive information.
- Contract with potential external developers of the system, or recruitment of appropriate in-house personnel to support future developments, repairs and normal maintenance.

3.2.0 Business Phase

Apart from the obvious requirement for technical development and related tasks, there is a direct need to make modifications to business processes, work flows and allocated work for some, if not all, staff. The major areas that will need to be considered from a business perspective, in relation to the implementation of online trading are:

- Legal considerations in online business
 - a. Online trading.
 - b. Privacy.
 - c. Security requirements.
- Allocation of online customer support.
- Provision of online informational services.
- AUP (crosses over into Technical Phase considerations) covering the use of new systems for things like official, internal communications, personal use etc.
- Revision of any internal phone scripts etc to take into account new, online options for any affected customer interactions.

3.3.0 Education Phase

Educating both the clients and staff of Faux Trading will be a very important stage of the project, ensuring that the new systems are used properly, accepted by clients and are allowed to have their full, positive impact on business processes. Education will involve at least the following elements:

- Training staff in the operation of the new online systems.
- Training in new business processes that have come about as a result of the implementation of the new systems.
- Informational/instructional materials for existing and new clients regarding the new online trading facilities.
- Advertising to introduce people to the new system (and gain new clients).
- Information for clients relating to the benefits they will see with the new facilities, the improved security of their information, options available to them, quality of service etc.

It is expected that the business and technical phases of the project will be completed in direct relation to each other, with the education phase following them to introduce both staff and clients to the new systems. It should be stressed that although the bulk of the development work and actual changes will take place in the business/technical phases, the education phase is of critical importance to ensure the proper acceptance and success of the overall project.

Within this framework, the technical phase will involve the greatest costs, with a significant budgeted outlay on development fees for the trading system, hosting charges for the web server, and either in-house staff or support consultants in the long-term (See [Costs and Timeframes](#) for more detail). Education may also form a large portion of expenses, depending upon the avenues selected for promoting and advertising the new system to customers, and the printing/production options selected for staff training materials.

The business phase will involve mainly internal (staff-based) expenses relating to time taken out from normal duties to rework business processes and workflows to suit new systems. There is additional potential for further cost through the employment of consultants to advise on best practices relating to working with IT systems.

4.0 Important Issues

Following are brief analyses of 3 issues that will need special consideration during the implementation of Faux's online presence and operations. The factors must be dealt with to ensure a smooth transition into an augmented approach (on and offline) to trading on behalf of clients.

4.1.0 Correct Support of Online Users

Apart from the obvious requirements to ensure that users of the new online systems can complete the tasks that they want to complete on a technical level, there are also business process considerations that must be made. It must be ensured that staff are available to support online clients, and that if there are online support avenues which clients may approach, that they are properly supported by staff within Faux Trading.

It would be a grave mistake to make to assumption that once the online system is built, it will entirely take care of itself and that clients will become 100% "self-service". Clients will still need assistance in completing certain tasks, and some of their operations will still need manual finalisation and integration with other systems (i.e. external recording of IPO acceptance details, banking details etc).

Ideally, all systems will be fully integrated and there will be little or no need for transcription of details, transfer of information or intervention by staff. In reality, it is likely that there will be a heavy requirement for information processing, even after the completion of this project. Staff will also need to ensure that they maintain an appropriate "online presence" towards clients via email, instant messaging, or other adopted communications methods (as per company policy outlined in the [Business Phase](#)).

4.2.0 Staff Buy-In and Acceptance

It is widely accepted that without the appropriate buy-in and cooperation of staff, very few projects will be successful. If staff do not support the intended outcomes of a project, then they will most likely fall short of fully supporting its initial implementation and may well bring about a project's failure. To avoid this situation, there are a number of approaches the Project Manager may take:

1. Involve staff in the implementation of as much as possible of the project. This creates a sense of ownership and a shared desire for success.
2. Keep staff informed of progress and expectations.
3. Ensure that staff are appropriately trained and introduced to new systems to avoid feelings of isolation or inadequacy with new technology and a changing workplace.
4. Accept suggestions and ideas from staff relating to the features and functionality for the systems being implemented: remember that they will work with it every day, so it needs to work *for* them, not *against* them.
5. Above all, remember that the success of a project hinges on **people** and that to keep them moving towards a common goal, you need **communication**.

It is important to create a sense of ownership and involvement for staff, which will assist in getting them to work towards a successful implementation. Keep staff involved and try to avoid alienating them even if they are not directly involved in the immediate project work, as they will be involved in the following integration/acceptance of the project deliverables either way.

4.3.0 Security and Privacy Concerns

Online systems always raise concerns relating to privacy and security, with any financially-based systems being particularly prone to scrutiny and customer paranoia. Faux Trading will need to be stringent in their security considerations, and ensure that all relevant privacy laws and regulation are followed (such as the Privacy Act 1988).

SSL encryption should be enabled and publicised during any web-based transactions to help allay any customer fears relating to performing financial transactions online, and all data stored in Faux's database should be carefully secured and encrypted where possible. Hosting web servers in a shared facility means that a higher level of security is available at a lower cost, since there are economies of scale available for the hosting company hosting hundreds or thousands of servers in a secured location, rather than only hosting a handful.

Security should be approached from the traditional triangle approach in IT (as detailed at <http://www.e-government.govt.nz/docs/see-pki-cert-policy-v2/chapter5.html>), covering:

- Physical Security (biometric access to servers, locks on server racks, security surveillance of premises etc)
- Procedural Security (strong passwords, data encryption)
- Personnel Security (reduce number of people with access to information, background checks on personnel with access etc).

Privacy issues should be handled according to appropriate laws (Australia's Privacy Act 1988), which include, amongst other things, specifications for:

- Storage of Information
- Access to Information (by both staff and the clients it relates to)
- Modification and Deletion of Information

5.0 Costs and Timeframes

Following is a breakdown of the major tasks involved in the migration project, their expected durations and costs.

| # | Task | Approx Duration | Approx Cost |
|------------------------|--|-----------------|--|
| Technical Phase | | | |
| 1 | Negotiation and implementation of web hosting arrangements (inc. Disaster Recovery plan, rate from personal contact with Chris Jester at http://www.splitinfinity.net/) | 2 weeks | \$USD1500 upfront, \$USD 500 per month |
| 2 | Design and specification of the web-based trading and information system (staff and client components) | 2 months | \$32,000 |
| 3 | Development and testing of complete web-based trading system | 3 months | \$48,000 |
| 4 | Recruitment of in-house technical staff for ongoing technical support and maintenance of web-based trading system | 2 weeks | \$1,000 in man-hours, plus approx \$40,000 p.a. salary |
| Business Phase | | | |
| 5 | Review existing workflows and business processes in relation to new systems | 3 weeks | \$3,000 |
| 6 | Creation and approval of new processes, integrating with expected functionality of online systems | 1 month | \$4,000 |
| 7 | Legal consultation regarding online trading and information privacy/security | 2 weeks | \$2,000 |
| Education Phase | | | |
| 8 | Design and production of advertising material for promoting new systems to clients | 3 weeks | \$10,000 |
| 9 | Staff training in new, system-specific procedures | 1 month | \$5,000 |
| 10 | Creation of informational material for clients | Ongoing, | \$5,000 |

| | | | |
|---------------|--------------------------------|-------------------|-----------------------------------|
| | (brochures, website pages etc) | 1 month initially | |
| TOTALS | | | |
| | | TOTALS | 11 months |
| | | | Upfront: Approx \$115,000 |
| | | | Ongoing: Approx \$4,500 per month |
| | | | |

NOTE: Most costs have been estimated based on relevant skills **not** being available internally, and external consultants being required. Have also assumed that there is sufficient existing office infrastructure to support the required levels of Internet/web access for all staff members of the 6 offices. Design/development of the trading system is assumed to be by 2 developers, paid approx \$2,000 each, per week for the 5-month duration.

6.0 Regular Communications

It is critical to the success of the project that all major stakeholders are kept informed of progress during execution. The following table outlines the expected communication schedule during the project timeline.

| # | Description | Recipient(s) | Frequency |
|---|---|---|---------------------------------|
| 1 | Exception Report: detailing significant obstacles to the success of the project. | All Major Stakeholders. | As Required |
| 2 | Regular Update: Short report summarising work completed, progress made and possible obstacles to project completion. | Project Manager, Stakeholders on request. | Weekly |
| 3 | Milestone Report: Delivered at the end of significant milestones, detailing delivered outcomes from that block of work, summarising the deliverables for the next block. | All Major Stakeholders. | Milestones |
| 4 | Information Sheet: High-level progress report and summary of upcoming work and its direct effects on staff. | All Staff. | Approx Monthly, or as required. |
| | | | |

7.0 Conclusion

Developing an online trading system to support the operations of Faux Trading is expected to bring about increased revenue from trading and broaden the client-base of the company across the country. Although the project is scheduled to take a good percentage of a year to complete, and would cost over \$100,000 to develop and implement, the returns are

expected to quickly offset initial costs, and cater for the ongoing costs involved in supporting the system.

Without implementation of some sort of thorough online presence, Faux runs the risk of being swallowed by competition such as E*Trade's public trading facilities, CommSec's similar facilities, and other trading groups who are already online. It is believed that this combination of trading system and informational service with complete staff support will be a successful model for the future.

8.0 References

Privacy Act 1988. (1988). Retrieved online 22 December 2003, from <http://scaleplus.law.gov.au/html/pasteact/0/157/top.htm>

S.E.E. PKI Certificate Policy Version 2.0, Chapter 5. New Zealand Treasury and State Services Commission. Retrieved online 23 Dec 2003, from <http://www.e-government.govt.nz/docs/see-pki-cert-policy-v2/chapter5.html>