MITS4001

Business Information Systems

Case Study and Presentation

March 2020

Case Study Report (Individual Assignment) - 10% (Due Session 5)

The assessment assess the following learning outcomes:

1. Adapt information systems to strategically achieve organisational goals and be able to design, develop and manage IT systems implementation to achieve Business IT Alignment.
2. Develop an IT Plan that designs, implements and manages the technology supporting these information systems including computing devices, storage and processing (both systems processing and application processing).
3. Identify, synthesize and model individual functions of a database system to be used for organization data management and decision making.

INSTRUCTIONS

For this component of assessment, you are to prepare a report based on the case study below and the tasks that follow it. Your report should be limited to approx. 1400 words (not including references). Use 1.5 spacing with a 12 point Times New Roman font. You should include references in your report and these and must be in the IEEE style.

Submission Guidelines

All submissions are to be submitted through turn-it-in. Drop-boxes linked to turn-it-in will be set up in the Unit of Study Moodle account. Assignments not submitted through these drop-boxes will not be considered.
Submissions must be made by the due date and time (which will be in the session detailed above) and determined by the Unit facilitator. Submissions made after the due date and time will be penalized at the rate of 10% per day (including weekend days).

The turn-it-in similarity score will be used in determining the level if any of plagiarism. ***Turn-it-in will check conference web-sites, Journal articles, the Web and your own class member submissions for plagiarism***. You can see your turn-it-in similarity score when you submit your assignment to the appropriate drop-box. If this is a concern you will have a chance to change your assignment and re-submit. ***However, re-submission is only allowed prior to the submission due date and time***. After the due date and time have elapsed you cannot make re-submissions and you will have to live with the similarity score as there will be no chance for changing. Thus, plan early and submit early to take advantage of this feature. You can make multiple submissions, but please remember we only see the last submission, and the date and time you submitted will be taken from that submission.
Your document should be a single word or pdf document containing your report.

Case Study: United Kingdom Passport Agency

The United Kingdom Passport Agency was established as an Executive Agency of the Home Office in April 1991. Its main aim was to provide passport services for British nationals in the United Kingdom promptly and economically. In 1998–99, the Agency employed an average of almost 1,800 staff in its passport offices in Belfast, Glasgow, Liverpool, London, Newport and Peterborough. The Agency's financial objective is to recover, via the passport fee, the full cost of passport services; the full cost includes the cost of non-fee bearing consular services provided by the Foreign and Commonwealth Office to UK citizens abroad.

In July 1996 the United Kingdom Passport Agency decided to introduce the idea of digital passports in an attempt to minimise the risk of fraudulent use of passports. To do this the agency needed to replace its existing ICT system. It was envisaged that this would be done through a private finance initiative or outsourcing contract. The contractor bids were received in April 1997 and in June of that year a 10-year PFI contract was awarded to The Stationery Office (now Security Printing and Systems limited) for the printing and dispatching of digital passports, valued at 120 million GBP. In July of 1997 the Agency awarded a 10-year PFI contract for a similar value of 120 million GBP to Siemens Business Services for the collection, storage and transmission of passport application data. This included the development of a new ICT system for this purpose.

In April 1998 an announcement was made that from October of that year children not already on their parents' passport would require their own passports to travel abroad.

In October 1998 the new information system (ICT system and procedures, including those outsourced) were introduced in the Agency's Liverpool office. One hundred Agency staff transferred over to Siemens. In November of the same year the new information system was rolled-out at the Newport office. Ninety-six staff transferred over to Siemens at this office.

During the following summer of 1999 a number of problems were experienced by the Passport Agency. Over a half a million British citizens were less than happy to discover that their new passports could not be issued on time for them to take their holiday. In June 1999, processing times for passport applications were taking up to 50 working days. Emergency measures were introduced by the Home Office in July 1999 – including free two-year extensions to passports. Coupled with a downturn in applications, these measures helped bring maximum processing times back within the Agency's 10 working day target by the end of August. However, the Home Office had to pay millions in compensation to citizens and in staff overtime required for managing the backlog of applications.

This information systems failure appears to have been due to a number of factors. The change in the law on child passports was introduced at roughly the same time as the introduction of the new information system.

The change in legislation caused a significant increase in the volume of applications for the Summer of 1999. In May of that year, monthly output was 619,000 compared to a peak of 564,000 in the previous year. By June, the Passport Agency had around 565,000 applications still awaiting processing.

The introduction of a new passport processing system in two of the Agency's six offices was exacerbated by a failure to assess and test adequately the time needed by staff to learn and work the new passport processing system. The new system involved changes in clerical and administrative processes as well as computerisation. A four-month delay before the start of testing the new system, and testing its impact on productivity was not completed before it went live in late 1998.

There was insufficient contingency planning in the event that implementation of the new system might not go according to plan. Despite the Passport Agency's experience of the flawed roll-out of its previous computer system in 1989, the agency launched the new system in its largest offices, Liverpool and Newport, which accounted for half its normal processing capacity.

The strategy adopted by the Agency in early 1999 to get through the busy season rested on its past experience that it would be able to increase output by increasing overtime and hiring casual staff. A recovery plan was agreed between the Agency and the Home Office in March, including the recruitment of extra staff. However, the Agency did not foresee the loss in public confidence, which led to a sharp increase in applications and enquiries about them, once the delays attracted publicity.

The agency was also criticised in its failure to communicate effectively with the public, both at a personal level in dealing with calls from the public to its telephone enquiry bureau, and more generally via the media.

A National Audit Office Inquiry (NAO, 1999) estimated that the cost of the additional measures taken by the Agency to deal with the failures during the year from October 1998 was around 12.6 million GBP, including 6 million GBP for additional staffing. The contract allowed Siemens to take responsibility for the risk associated with design and delivery of the system. However, the risk associated with business continuity remained with the Passport Agency. As a result the agency incurred extra costs of 12.6 million GBP, with Siemens paying just 2.45 million GBP, spread over several years.

Not surprisingly, the Inquiry highlighted a number of important lessons. First, the need for proper testing of new systems before committing to live operation. Second, for staff to be adequately trained in the use of new ICT systems and in new procedures required. Third, the need to have realistic contingency plans in place. Fourth, the need, when service delivery is threatened, to have the capability to keep the public well informed.

Tasks

- Elaborate the importance of business information systems, in achieving the goals of United Kingdom passport agency and address the issues, which may occur if the system was to be updated in 2020.
- Develop an upgrade plan of the business information system of the United Kingdom passport agency, considering the following key requirements:
    - Computational requirements
    - Processing requirements
- Using the internet as a resource, critically analayse the possible database systems, which could be employed by the agency for data management and decision making

Marking Guide: 50 Marks

Task	Description	Marks
Introduction	This section should include a few sentences which provide an outline of the assignment.	5
Report Layout	The report style, language and structure should be appropriate.	5
Elaborate	Elaborate the importance of business information systems, in achieving the goals of United Kingdom passport agency and address the issues, which may occur if the system was to be updated in 2020.	10
Develop	Develop an upgrade plan of the business information system of the United Kingdom passport agency, considering the following key requirements: • Computational requirements • Processing requirements	10
Critical Analysis	Using the internet as a resource, critically analayse the possible database systems, which could be employed by the agency for data management and decision making	10
Conclusion	Summary of the report.	5
References	Follow the IEEE style	5