COIT20248 – Information Systems Analysis & Design (Term 1, 2017)
Case Study For Assignment 1 & Assignment 2

The Case: Data Science School

"Data Science School" (DSS) is a private Registered Training Organisation (RTO) operated and owned by Mr John Smith and close family members. The RTO specialises in IT & Business courses for international and domestic students.

The RTO started a few years back after John Smith was made redundant from Department of Education & Training. In-order to utilise his skills and experience John decided to setup an RTO and in this process he was helped by his wife who was a retired school teacher.

The RTO started with just John and his wife, however as they started to add more students, additional staff were hired. Initially all information regarding students, staff, agents, admissions, enrolments etc. was maintained using paper based files. All processes and systems within the RTO were manual; however these have started taking their toll on John and his retired wife. As the RTO grew the compliance requirements increased and accurate capturing and reporting of data became extremely critical. As the RTO grew in popularity John decided to expand operation to Gold Coast, Sunshine Coast and in Brisbane.

Current Manual Process

Student approaches DSS directly or via an agent to discuss admission options and provides bio demo information, contact details, copies of passport, visa status, English language proficiency results and previous qualifications.

DSS staff prepare offer letter depending upon the program and campus selected by the student and send this to the student or agent requesting the offer letter. If the student accepts the offer then fees is collected and a COE (Confirmation of Enrolment) is issued to the student / agent concerned. The student then arrives at DSS and their enrolment is completed and they start their program by attending face to face classes. Attendance of students is tracked during their study. Subsequently as students' progress through the program their grades are recorded for each course. Once the student finishes all required courses they can apply to graduate.

The recruitment agents are paid commission for recruiting students for the RTO. The agents are required to submit invoices for the students they have recruited. The RTO checks these invoices for accuracy and invoices are paid past the census date.

Details that are currently manually recorded are:-

- Student name, address, contacts details (phone, mobile, email)
- Visa & Passport Details
- Details of offers applied, received
- Details of Fees paid by student to the RTO
- Details of COE issued like COE Number, COE Date, COE Duration & Fees
- Student previous educational documents
- Student English Proficiency Results (Like IELTS or PTE or OET Exam results)
- Visit & Call Notes of all interactions with students

- Reminders set by staff to follow-up offers, COE or payments
- List of agents
- Students referred / recruited by each agent.
- List of students enrolled and the courses they are enrolled in
- Student grades
- Student completion and graduation
- Student attendance
- Agent commissions and payments

Accounting

All invoices are processed manually using pen and paper and outstanding commission payments from agents are tracked using excel sheets and by setting reminders in Microsoft Outlook. This is often causing duplicate payments or over payment of agent commissions.

Problems with the Current System

1. Only one staff member can access important information at a time which causes bottlenecks especially if staff are away
2. There is some duplication with paper and excel records
3. Records are held in computer applications plus in paper form
4. The system does not provide an effective means for keeping deadline details

Due to these problems, student's data and agent commission's data are not being properly captured or tracked and the accrediting body has expressed concerns.

Desired System

John wants to have a system so that students can lodge online applications for admissions, and the system can be accessed by DSS's recruitment agents as well. Agents must be able to log into the system to lodge online applications, attach documents, track status of applications and lodge online claims for commissions.

John decides to engage you as a software consultant. He has hired your company, Global Business Systems as consultants to carry out analysis and develop the specifications for an automated Student Management System (SMS) that covers all aspects from prospecting, admission, enrolment to graduation. The system also must cater for agents to lodge online applications, lodge and track agent commission claims.

John has earmarked a budget of $150,000 for this project with a discount rate of 5%. He estimates that the new system will help in reducing staff cost by $2,500 per month and save overpaid agent commissions by at least another $4,000 per month thus increasing overall profitability by $6,500 per month. Maintenance cost could be estimated at around $500 per month.