Enterprise Architecture Exercise 1: DCU Incorporation Project

The DCU Incorporation Programme is the planned coming together of St Patrick’s College, Drumcondra, Mater Dei Institute of Education and Church of Ireland College of Education with Dublin City University – the New DCU. The President of DCU has articulated a Business Vision that a student or staff member of any campus should be able to access facilities of all campuses in a transparent manner.

This is quite a complicated and ambitious integration project, involving as it does the sharing of data related to staff, students, modules and resources such as lecture theatres, laboratories, car parks etc. It has been decided, in view of the complexity of the project, to develop an enterprise architecture (EA) to take into consideration all aspects of the problem.

Taking the EA aspect purely from the data point of view (i.e. Sharing of Information) as a blueprint:

1. Document three stakeholders and their roles (e.g. user, owner etc),
   Stakeholders could be the students, academic staff, admin staff and security

2. Outline two specific issues of each stakeholder and their vision for the Incorporation Project for this issue
   a. Students could have the following issues:
      i. their own ease of access to their data in all campuses (i.e. their cards would be recognised), [data issue-sharing/merging of databases, business issue better use of resources & potentially more revenue],
      ii. security of their data (i.e. that third parties not be allowed access to their emails) [business issue-fines, litigation, data issue-secure views of data] and
      iii. its integrity¹(i.e. data changes would not be undertaken unknown to them),
   b. Admin Staff could require
      i. central timetabling of lecture theatres, modules, [data issue-DB creation/sharing/migration, business issue-better use of scarce (people, rooms) resources, cost saving, improved QoL for stressed staff, less turnover]
      ii. capture and sharing of student data (for enrolment, graduation etc.) in an organised/efficient/flexible way, data issue-DB creation/sharing/migration, business issue-better use of scarce (people, rooms) resources, cost saving
   c. All categories of Staff could require
      i. Sharing of bank data for timely payment of salaries [data issue-sharing/merging of staff bank details with special security considerations, Business issue-fewer steps in BP gives fewer errors],
      ii. (Teaching etc.) staff to have combined panels/committees to facilitate best practice in Teaching across Campuses. [data issue-sharing of details on people across ctees, business issue-teaching quality gives better ranking]
   d. Management could require
      i. sharing of modules/labs etc. to facilitate advent of true Semesterisation & Modularisation for students’ benefit [data issue-business issue-more students, better experience=more revenue]

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¹ Data integrity refers to the accuracy and consistency of data stored in a database
ii. shared prices for goods/services to facilitate best value in procurement
[**data issue**-shared list of suppliers/service providers, **business issue**- common SC gives better value for govt. stakeholders]

3. The following is a tool to develop an Architectural Vision for the Incorporation Project. Complete the table below, documenting, for one issue per stakeholder why this is an issue, the data involved and what could be done to fix it.

4. For one of these outline solutions, draw a BPMN diagram of the Solution Architectural Vision?

<table>
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<tr>
<th>Stakeholder</th>
<th>Issue</th>
<th>Business Impact</th>
<th>Data Involved</th>
<th>Outline Solution</th>
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