North London University's Academic Research Administration System Case study for Information Systems and Databases – FT 2018-19 Semester 2

The School of Computing at North London University (NLU) wishes to set up a database to manage its academic research processes. This is all part of its overall aim of becoming one of the major research centres in the London, working in partnership with business and the local community.

At present the administration is in a bit of a mess and as the department grows, collecting information on research and its associated activities is becoming very difficult. There are a number of areas that need attention.

The school is engaged in a number of projects, each carried out by a team of academics, many of whom work in collaboration with academics from other universities, and/or specialists from commercial organisations. The team leaders are currently responsible for keeping the head of research (HoR) up to date on the progress of their projects. However, this is done in a rather haphazard way in ad hoc meetings with the HoR over a cup of coffee, or through emails. The HoR now wants a more formalised system that can show which projects are ongoing, what stage they are at, what the manpower for the project is (ie which academics, NLU and others, are working on the project? are there any organisation involved, and if so who are the contacts there?). Basic information such as the start date of the project, the estimated completion date for the project, the description of the project and the budget for the project need to be centrally recorded.

The project budgets also need to be more formally monitored. Each project has a budget which can be made up of funds from the university, external funding (eg from the EU, or from a business organisation) or a bit of both. One half of the budgeted amount is always earmarked for manpower resources and is fixed. The other is for miscellaneous expenses connected with the running of the project. These can include all kind of items such as conference registration costs, travel costs, subsistence costs while away, cost of acquiring specialist resources, etc, etc. There has been little monitoring of these costs. The Dean of the School has complained to the HoR that "money seems to be dolled out for any old reason. I think your researchers think that money grows on trees." He would like a more transparent system which can produce reports showing what kind of spending has been undertaken, and who has spent what. He is particularly concerned because some of the researchers have complained to him that the HoR seems to have his favourites who are able to get funding for conferences which they themselves are turned down for (often in exotic locations!). Overall there needs to be some idea of what costs have been incurred against the overall budget so that budgets can be monitored more effectively.

For me to study Another area that needs attention is the dissemination of research. The school needs to publish as many academic papers as possible in order to attract external funding to support further research. Each project should be able to generate a number of academic papers and the school is pushing for more. It needs to set up a central repository showing which papers have been published by whom, and for which project. Papers are rarely written by a single academic, but are usually written by a team of authors, one of whom is designated the 'lead' researcher in the paper. Papers can be published in a range of journals which are ranked according to their quality from 1 star through to 4 star. The Dean of the School has remarked that too many papers are being published in 2 star and 3 star papers, and he wants more 4 star articles to raise the overall profile of the research in the school. To this end, he has asked for a system that will be able to monitor the articles that have been published, which project they relate to, where they've been published, by whom, etc etc.

For me to study The school would also like to engage with students and local businesses to encourage more research ideas and to that end the research department has been asked to arrange a programme of guest lectures to promote a research-led ethos in the school. Each researcher is expected to deliver at least one lecture on his/her research interest/research project, and if possible to encourage external speakers to the university. (The HoR has hinted that promotions or the availability of funding may be impacted if this requirement is taken lightly!) So, there needs to be some way of keeping track of who is delivering what and when (the Dean of the school has said he wants a regular report!). A timetable of lectures needs to be set up for each semester and made available to students.

Attendance at each lecture will be monitored, and feedback obtained from students to see which lectures are the most popular and might be repeated.

All in all, the administration system is a mess, and you have been called in to sort it out. The above description is just a basic outline of some of the issues and problems. You can make any sensible assumptions to 'fill in the gaps'.

Note this work MUST be completed in your designated groups. Work will not be accepted from anyone who submits an individual piece of work.

Groups will be set up on Blackboard and <u>evidence of all group interactions must be submitted</u>
<u>through this group</u>. This includes minutes of all meetings. You will need to timetable a regular ONE
HOUR weekly slot for a physical meeting of the group, in addition to any 'online' meetings.