

JESUS COLLEGE IT STRATEGIC FRAMEWORK

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A. IT Strategic Framework

1. The importance of an IT strategy in the academic, business and social roles of Jesus College is evident from the widespread use of systems and services employing these technologies. Almost all members of college use such systems, and many college functions are heavily dependent on them.
2. This Strategic Framework sets out the scope, intentions and requirements that must be embodied in an IT Strategy for delivery of Jesus College's IT mission. Target IT provision in the various layers of college are identified, as are the resources and mechanisms for achieving this.
3. Review of any such strategy must be an on-going process, driven by developments in technology as well as changes in user behaviour and expectations. Formal review and adoption of new recommendations will be carried out as required, but at least once every three years.
4. Our general IT strategy shall be to:
 - a. Ensure that IT needs arising from academic and business functions of Jesus College are taken into account in the distribution of resources, including provision for replacement;
 - b. Provide and maintain infrastructure within college and its remote sites, and also to ensure that there are adequate links between those sites;
 - c. Develop effective information systems including administrative and management information systems;
 - d. Encourage good practice and prevent misuse;
 - e. Provide support for college-managed IT systems and services;
 - f. Improve knowledge and effective use of IT systems and services through training;
 - g. Act consistently with relevant parts of the IT strategy for Oxford University.
5. The Governing Body of Jesus College supports this IT Strategic Framework.

B. Supporting Jesus College

1. Teaching, learning and research will be supported through:
 - a. Catering for the immediate needs arising from the pursuit of academic goals, additionally encouraging the development of transferable IT skills, and providing informal education on general IT matters;
 - b. Introducing new IT systems primarily to add quality to the learning and research experience, rather than as an objective in their own right;
 - c. (In development of B.1a) Providing core academic support in the form of the following systems and services: email account, computer workstations installed with generic software such as office tools and internet clients, telephone and network / internet access from all student, research and teaching rooms, clients suitable for accessing resources provided centrally by libraries, departments and other remote services, user-support for all such systems and services in so far as they are managed by Jesus College;
 - d. The promotion and support of effective use of IT in teaching and learning activities by all members of college;
 - e. The encouraging of wider IT initiatives, for example throughout Oxford University, where these are consistent with our other strategic targets.
2. Administration and business activities will be supported through:
 - a. The provision of appropriate IT systems to support the administration and other running of Jesus College. This will normally include computer workstations installed with office software and internet clients, an email account, telephone and network / internet access and user-support;

- b. The implementation of information management systems , with emphasis being placed on the integration and sharing of information – across departments within the college, other units of Oxford University, and external organisations – in order to improve efficiency and accuracy;
 - c. The provision of appropriate IT systems and services as part of college business packages such as conferences;
 - d. Consideration of IT issues in planning of all college works – including academic services, business processes and building programmes. Also assessment of opportunities for enhancement through the introduction of IT systems or services as an integral part of upgrade projects.
3. General support of college activities through IT will be achieved by:
- a. Using IT to reinforce and extend communication with college members, increasing discursive contact throughout the college and raising awareness of current issues and resources;
 - b. Providing a means for everyday involvement of college members who work remotely for extended periods, such as those researching abroad or where courses include a placement component.

C. Regulation and Policies

1. There shall be issued an enumeration of available IT systems and services, and who is entitled to use them. Systems and services which require prior authorisation of some form should be identified., and the method by which authorisation may be obtained should be described.
2. For various different groups of IT users there shall be issued a statement to distinguish between permitted and forbidden use of IT systems and services called the Acceptable Use Policy for each group. These policies should:
 - a. Exist as a refinement of such rules as are already binding by virtue of our organisational and legal position, including Oxford University rules of computer use, the JANET acceptable use policy and UK legislation;
 - b. Prescribe additional regulations that are designed to prevent misuse of IT systems and services within the specific local context of Jesus College;
 - c. Aim to outlaw activities that are likely to jeopardise or otherwise disrupt the reliable delivery of quality IT systems and services to users;
 - d. Be enforced equably and fairly. An Incident Investigation and Disciplinary Procedure shall be designed and followed so as to ensure this;
 - e. Be published clearly, with adequate notification to users, all of whom should be required to make a declaration of their intention to abide by them.
3. Backup procedures should be implemented where the college could suffer significant loss, including financial / intellectual losses or degradation of core services. A number of key objectives can be identified in this respect:
 - a. Relevant threats to IT systems and services should be assessed. Risk avoidance plans should be implemented, and emergency response plans should be devised in case such threats become manifest;
 - b. Critical data: such data may be generated by several core academic and administrative IT facilities within the college, and will typically be (i) crucial to an administrative process / research programme, and (ii) irreplaceable. Backup procedures should enable the restoration of this data if it were lost or corrupted.
 - c. System failure: IT systems and services are critical for some academic and administrative routines – both the everyday and those less frequent but needing to be carried out within a specific timeframe. Backup procedures should enable the timely restoration of such systems and services;
 - d. Staff / skills availability: technical procedures and knowledge of local IT systems will tend to reside with individual members of staff. Backup procedures should aim to centralise this intellectual property on-site, in order to minimise the impact of staff being unavailable through illness, career moves and so forth.

4. Safeguards relating to security and privacy will apply to all users, with additional requirements for system administrators. The following intentions should be incorporated:
 - a. Both stored and transient user data should be kept confidential. This will require an owner of such data to be identified;
 - b. System administrators will be able to, and reserve the right to gain access to data regardless of the provisions in 4(a). Users should be made aware of the conditions under which this right will be exercised, and controls should be put in place to ensure that this privileged level of access is not abused;
 - c. Further to 4(b) there should be a code of practise for system administrators to follow when monitoring and / or recording system usage, and when providing data and / or system usage information to third parties;
 - d. The diverse nature of work carried out at Jesus College may lead to a genuine academic need to access information or carry out procedures which would normally be forbidden by the relevant acceptable use policy. A procedure shall be declared by which special authorisation for this kind of activity can be requested, considered – including consultation with any parties whose regulations apply to our use of IT systems and services – and granted / revoked. Any dispensation made under this clause should be clearly documented and notified to other parties with whom consultation was made;
 - e. Measures should be taken to prevent unauthorised use of IT systems and services. These may include social and technical systems designed to reduce the vulnerability of college systems to unauthorised use, and minimise the impact of a security breach.
5. College IT systems shall only run properly licensed software.

D. Financial Resources

1. A significant proportion of the computing department's annual expenditure will be made in the acquisition of capital assets. In order to ensure that good value is obtained from this expenditure:
 - a. Replacement programmes for computer equipment will work on needs-based criteria to ensure that the maximum effective life is obtained from all equipment;
 - b. Where a system has become unusable due to component failure or unsuitability for a given task then replacement or upgrade of individual components will be preferred to replacement of the whole system where economically viable;
 - c. Cascading of replaced units to less demanding positions will be implemented;
2. Selection of new purchases will consider the consumable and maintenance costs associated with capital outlay. This should result in the minimisation of total cost of ownership over the projected service life of the equipment;
3. Records shall be kept of all capital assets pertaining to the computing department, including information regarding the disposal of unwanted equipment. Summarised extracts of this database will be produced annually for submission to the college insurers when our policy is reviewed.

E. Staffing and Organisation

1. The Computing Department shall consist of The Fellow Computing Officer and their staff. The staff shall consist of a full-time Information Technology Manager, full-time Information Systems Officer, full-time Computing Officer, a representative appointed by each of the GCR and JCR;
2. IT Advisors may augment the staff for specific projects or specific time periods;
3. Lines of management and authority:
 - a. JCR and GCR Computer Representatives shall be non-contractual appointments by the bodies from which they are drawn and as such shall do not fall under the management of the Computing Department. However, the IT Manager will be available as their point of contact;

- b. The Information Systems Officer, Computing Officer and any Advisors shall report to the IT Manager;
 - c. The IT Manager shall report to The Fellow Computing Officer;
- 4. In general, responsibility for fulfilling the Mission Statement of the Jesus College Computing Department lies with the IT Manager, in whose absence or by delegation the Information Systems Officer shall deputise. The IT Manager will consult the Fellow Computing Officer where appropriate. Several areas deserve particular note here, and some are deviations from the generality stated above:
 - a. Many aspects of the day to day running of IT systems and services, including user administration, IT support and stock control of consumable items, will normally be handled by the Computing Officer;
 - b. General maintenance of infrastructure (including the network and servers) will be shared between all Computing Staff, however significant changes should be overseen by the IT Manager;
 - c. From time to time it may be necessary to carry out reviews and prepare reports for presentation to the Governing Body, either at their request or in respect of a tabled motion. The IT Manager will normally submit reports to the Fellow Computing Officer for approval;
 - d. Planning and strategic decisions shall be made by the IT Manager, in consultation with the Fellow Computing Officer;
 - e. Purchase orders can be made by any full-time member of IT staff, provided that prior authorisation has been given by the Fellow Computing Officer, or for smaller purchases by the IT Manager;
 - f. The Incident Investigation and Disciplinary Procedure (C.2(d)) shall state clearly who has authority to make decisions regarding disciplinary action;
 - g. The IT Manager should liaise with other areas of University concerned with the provision of IT systems and services. This should include the Colleges IT Group, College IT Officers' Forum and IT Support Staff Group.
- 5. Frequent informal meetings will generally be preferred over periodic formal committees. This applies to discussions both internal to the Computing Department and also between Computing Staff and other areas of college. Occasional seated meetings may be convened when appropriate.

F. Standards of IT Facility Provision

1. The vast majority of systems and services to be made available are dependent on an underlying infrastructure. Such an infrastructure will be designed and provided to support the objectives detailed elsewhere in this framework. Individual elements of infrastructure may either be developed and maintained in-house, or provided through contracted services. In particular the infrastructure will include:
 - a. An Ethernet network installed into all college accommodation, teaching rooms and offices. This should include a link to the University network and thence the internet. There should be adequate bandwidth to avoid undue delay in access to network based resources, assuming that usage consists of academic and reasonable leisure use;
 - b. Support for network management services;
 - c. Servers providing the services required to deliver against clauses in section B, including email, central file storage, central printing and database management.
2. Systems will be provided in a variety of environments and for many different purposes. As such it is appropriate to define general requirements for certain types of hardware, whilst remaining aware that situations may arise where these are unrealistic.
 - a. Server implementations should include measures to reduce the impact of component failure, and to limit the dependence on environmental factors such as mains power quality and temperature. Arrangements will be made for rapid restoration of service in the event of a system failure;

- b. Workstations will provided for several groups of user at Jesus College. There will be a variety of roles, each involving the provision of different services and software, leading in turn to a demand for different types of hardware – both in terms of architecture and performance. Some workstations will be available for use only by a nominated individual, whilst others will be a central resource for use by various groups of user. Systems will be replaced so as to provide continuously adequate performance in the role for which they were deployed. In particular, the following provisions shall be made:
 - i. Central facilities equipped with workstations for use by students;
 - ii. Workstations should be provided for use exclusively by academic staff (Fellows and Lecturers of Jesus College). These should be located in the Fellows’ Resources Room;
 - iii. Workstations will be provided for all members of staff where this is seen as beneficial to the completion of their duties under college employment. Arrangements will be made to ensure rapid restoration of service in the event of system failure;
 - iv. Fellows of Jesus College will be provided with a personal research allowance that can be used for the purchase of IT equipment, and additional financial assistance will be available for this purpose in the form of a loan with preferential terms;
 - v. Junior Research Fellows and other such individuals as are nominated will generally be offered the loan of a college-owned computer for the duration of their work at Jesus College;
 - vi. Any person who lives in college accommodation and would normally be entitled to use college computers, but is unable to do so through disability, will be offered the provision of a suitable college-owned workstation in an accessible room;
 - c. The college data network will be provided through the use of repeaters, media conversion units and other sundries. Performance of these units will be selected so as to deliver under clause F.1. Spare units will be kept in stock for all key backbone components in order to facilitate replacement in the event of failure;
 - d. Printing facilities will be provided along similar lines to workstations. The cost of printer consumables and maintenance will be factored into the selection of equipment, and printers will be included in the standard scheme for equipment replacement and reuse. Printers will be provided in the following areas:
 - i. Central facilities for use by students;
 - ii. Shared facility for use exclusively by academic staff (in the Fellows Resources Room);
 - iii. Administrative staff offices;
 - iv. Special arrangements will be made to ensure that any person who has been offered a computer under clause F.2(b).v will have adequate access to printing facilities.
 - e. Other peripherals and equipment may be provided where this is likely to facilitate or enrich the experience of IT in college.
3. Software will be selected and installed on college systems in order to meet the demands arising from section B. The choice of software may be limited by the type of service to be provided; again there are general principals which will be met in selecting software:
- a. Software used at Jesus College should reasonably be expected to be maintained (in particular through the development and release of relevant security updates) for the intended period of use of the software;
 - b. Software should meet any relevant quality or usability policies defined in this document or other Jesus College IT policy;
 - c. Workstations intended for general use by college members shall run software (operating system and applications) which matches ‘industry standards’ so as to ensure that transferable skills are able to be both applied and learned;

- d. Workstations intended for general use by college members shall include at least the following application types:
 - i. Office suite (word processor, spreadsheet, database);
 - ii. Internet clients (web, email, file transfer);
 - iii. Basic image processor.
 - e. Workstations intended for general use by college members may include installations of other packages as required;
 - f. Workstations and software intended for use by college staff shall comply with the requirements set out above, but will additionally include such software as may be required for the efficient execution of their contractual duties. Training in the use of all software will be made available and encouraged.
4. Systems and services provided by Jesus College will be fully supported by college IT staff. In addition, IT staff will provide support in the forms of:
- a. Advice on all aspects of IT, including recommendations for the purchase of equipment and use of IT systems or services, in so far as local expertise is available;
 - b. Training on a diverse range of IT issues, with a focus on bespoke developments at Jesus College.
5. Charging for IT systems and services offered to college members will be limited to cost-recovery on consumables and administrative overhead. Pecuniary components of disciplinary action may reflect costs associated with the activities that led to disciplinary action being taken. Charges for IT system and services provided for conferences and other college business activities will be agreed with the relevant college department.

G. Document History

1. Draft document released: JCI, November 2004.