



Date Friday, 23/09/2016

Time 2.00-4.00pm

Location Huntingdon Room, Roger Needham Building

Subject User Needs Committee

Ref UNC.2016-09-23 Agenda

User Needs Committee

Dr Rachael Padman (Chair), Mr Andrew Aldridge, Dr Martin Bellamy, Prof Alan Blackwell, Prof P John Clarkson, Mr Amatey Doku, Mr Chris Edwards, Mr John Norman, Ms Emma Rampton

In attendance: Dr Mark Ferrar (Chief Architect, UIS), Dr Ian Cooper (Secretary)

Apologies:

AGENDA

1. Welcome, apologies for absence

- (a) Welcome
- (b) Apologies were received from

2. Minutes

- (a) The unconfirmed minutes of the meeting held on 17 May 2016 were circulated (UNC-21)

3. Actions from previous meetings

4. Development of the Information Services Strategy for the University

Dr Mark Ferrar will outline progress on the development of the Information Services Strategy for the University and End User Computing.

5. Establishing minimum standards (UNC-22)

A discussion to enable the Committee to come to consensus on its position for establishing minimum standards of IT for the University, and how actions will be delivered.

6. User needs in project governance and delivery (UNC-23)

Mr Edwards will present a paper to enable the Committee to discuss how user needs should be considered throughout project lifetime and how this might be achieved..

7. User-centric design events (UNC-24)

Members are asked to consider how a programme of user-centric design events might be developed and delivered.

8. Any Other Business



Dates of future meetings

All meetings will be held in the Huntingdon Room at the Roger Needham Building unless otherwise indicated:

- Wednesday, 26 October 2016, 2.30-4.30pm
- Tuesday, 13 December 2016, 2.30-4.30pm
- Thursday, 16 February 2017, 2.30-4.30pm
- Wednesday, 5 April 2017, 2.30-4.30pm
- Tuesday, 23 May 2017, 2.30-4.30pm



Tuesday 17 May 2016, 2.15pm General Board Office, Old Schools

Present: Dr Rachael Padman (Chair), Mr Andrew Aldridge, Prof Alan Blackwell, Prof P John Clarkson, Mr Chris Edwards, Mr John Norman, Ms Emma Rampton

Apologies: Dr Martin Bellamy, Ms Priscilla Mensah

In Attendance: Dr Mark Ferrar, Dr Ian Cooper (secretary)

USER NEEDS COMMITTEE

1. Welcome and apologies

Dr Padman welcomed Ms Rampton to her first meeting of the Committee, and Dr Ferrar who was primarily in attendance for item 6 on the agenda. Apologies had been received from Dr Bellamy and Ms Mensah.

2. Minutes of previous meeting

The minutes of the meeting held on 8 February 2016 (UNC-17) were accepted subject to correction of Prof Blackwell's title.

3. Actions and matters arising

Action point 1.6 – next steps on User Experience Portal (on hold)

Dr Ferrar commented that he anticipated that the information gleaned from developing the Information Services Strategy would assist in this area and that some form of cohesion around the services for students in particular would be helpful. The action point would be retained to ensure that Committee was reminded to return to the point at a later date.

Action point 2.2 – review experience gained from finance system work in addressing user needs (ongoing)

Mr Edwards reminded members of the scope of work regarding problems users had reported with extracting information and reports from the finance system. The first phase of work to improve finance reporting had completed at the end of April 2016 and feedback on these tools was being assessed. Mr Edwards was asked to provide a write up for the next meeting.

Action point 2.4 – Circulate PD33 for user experience specialist to Committee (ongoing)

The 2015 Planning Round had upset expectations but there was expectation of progress in the next few weeks; the work had passed from Mr Edwards to Mr Norman and the PD33 would be circulated to members between meetings. Whilst an individual had not been recruited resources had been brought in to provide assistance on individual pieces of work.



Action point 2.5 – Provide an update on the library of resources for user centric design (ongoing)

Mr Edwards reported that some progress had been made and that the work was now ongoing.

Action point 4.1 – Include the Committee in redevelopment of documentation on project board constitution (ongoing; on agenda)

An update on activity was included under item 4 of the agenda.

Action points 4.2 & 5.1 – Committee membership (closed)

Following the meeting on 8 February Prof Prager had had to retract his offer to serve on the Committee, leading to a vacancy under Class ii of the Committee's membership. Potential membership from arts and humanities or social sciences was discussed; Ms Rampton commented that she had received some concerns from School Secretaries. The benefit of an additional member of the ISC sitting on the Committee was raised. Dr Padman and Ms Rampton agreed to discuss the action offline

Action point 6.1 – RP & ER

Action point 4.6 – Chair to discuss the formation of a Digital Advisory Board with the Registry (ongoing)

Dr Padman reported the discussion was ongoing but not a high priority.

Action point 5.2 – List of services into which the simple user feedback question could be inserted (ongoing)

Mr Norman reported that there had been less progress than hoped in testing the system in order to capture immediate sentiment via Net Promoter Score. Work on a proof of concept had been shared but further work was required to identify where it was possible to embed it within the enterprise systems. The topic was discussed further under item 7 on the agenda.

Action point 5.3 – Discuss planned survey work with JSCS to identify commonality (completed)

Mr Norman had spoken with Mr Bartlett at the JSCS. The work they had undertaken was helpful to discuss but not the same scope being considered by the Committee. The topic was discussed further under item 7 on the agenda.

4. Considering user needs in project activity

This matter had first been discussed a year previously, though the original action was to re-write the existing advice endorsed by the ISSS. Mr Edwards reported that the work had grown into something more useful, covering the full needs of engagement to ensure all appropriate groups were considered when setting up projects. Work had been delayed somewhat due to the recruitment of the Head of Programme and Project Office, which was filled by Chris MacLeod in February 2016. Revised guidelines and templates were now being put in place and the work, led by Mr MacLeod, was about halfway to completion. Mr Edwards reported that feedback from recent projects had been good.

Ms Rampton referred to the case of the re-implementation of the PeopleSoft 9.2 governance. A steering committee had been established with strong user representation (Ms Rampton confirmed after the meeting that this included student representation). There had been frustration with



paperwork, which had been redesigned by Ms Rampton and others to help ensure that user needs were heard by the board. The recommendation was for UIS to mandate how IT related projects are run and to establish a suite of “non-negotiable” paperwork. This was in line with Mr Edwards’ expectations.

The issue of needs of the relatively small number of heavy users vs. the needs of the large volume of infrequent users was raised. Mr Norman outlined work his area would be investigating (in Moodle, in the first instance, but CamSIS could be reviewed in the future) by examining system log files to try and understand what activities users were undertaking.

Members asked for this item to be reviewed again at its next meeting and asked for the UIS user-centred design staff to review the proposed materials. Existing materials, including the project board recommendations should be reviewed by the BSSC and ISC; Dr Padman requested that Members had an opportunity to see the materials prior to such review.

5. Review of UNC activity (UNC-18)

Dr Padman outlined that the agenda item was motivated by the need to provide the ISC with an annual report of the Committee’s activity but also as an opportunity to take stock of what had been discussed in the Committee’s first year of work. The supporting paper was an attempt to map out the items discussed at each meeting against the Committee’s Terms of Reference.

It was agreed that the Committee had an interest in all IT-related projects across the University, not just those run by the UIS. There was usually UIS representation on large-scale IT projects elsewhere, and many services were ultimately hosted by UIS. Appropriate project board constitution was considered important to ensure that all IT projects considered user needs.

A discussion on the membership or attendance by other major providers of IT services within the Collegiate University took place. It was considered more likely that there should be a programme of discussions in the Committee’s meetings, to which the major providers should be invited to attend. The question of College representation at the Committee had arisen elsewhere and it was felt that the most appropriate role for this would be the Chair of the CITMG. Dr Padman and the Secretary would discuss the matter in advance of the Committee’s next meeting.

Action point 6.2 – RP & IC

Considering the balance of work brought to, and considered by, the Committee there was a perception that the best was being done with the limited resources available to UIS. However, to fully meet the aspirations of the IT Review further investment would be required. Dr Padman requested that the UIS should keep the Committee involved in matters relating to funding addressing user needs in order that it can help ensure a strong application to the 2016 Planning Round.

6. Progress on addressing “minimum standards of IT” from the IT Review (UNC-19)

Dr Padman introduced the discussion, which had been prompted by work in the Clinical School. Dr Ferrar suggested that there would be problems in attempting to define “minimum standards” (which would also require continual update). The work to assemble the Information Services



Strategy was expected to contribute to an understanding of requirements, and a maturity model could be developed to assist institutions to understand where their systems sat on that maturity scale. There was concern that a model might not in itself be sufficient and that there were some institutions which would struggle while others, with the money to invest, would find it easier.

The group discussed principles A3 and A4 from the IT Review and felt that with hindsight, despite the best intentions when written, these might now be difficult to unpack into useful work.

Mr Edwards believed that a useful starting point would be the articulation of service levels for UIS services and confirmed that he would speak about the matter with Dr Bellamy.

Action point 6.3 – CE

Dr Ferrar also stated that work on the end user computing strategy and identity & authentication areas would feed into the definition of a set of core principles – a set of expectations that were the very minimum for a user’s experience at Cambridge. There should be tangible progress in October 2016. Prof Blackwell also recommended that further guidance on user experience design should be provided, so that there was an aspiration for excellence in the design of new systems.

7. Progress report on survey activity (UNC-20)

Mr Norman outlined the context of work being considered. There were insufficient staff available to meet individual users to conduct face-to-face interviews, so an online survey had been considered. Responses from an initial sample of users indicated a promising response rate, though when the process was expanded to a wider group (who had not been notified in advance) the response rate dropped significantly. The responses provided gleaned some interesting data, which was included in the report.

A survey of the satisfaction of UAS with their IT provision was due to take place shortly Mr Norman would review whether it was possible to add a “pain point” question to the existing survey.

Action point 6.2 – JN

The University of Oxford had expressed interest in adopting or adapting an IT survey run by Yale, and similarly this was being considered as a candidate for Cambridge. The survey would be reviewed to determine whether appropriate user needs questions could be added. The timing of the survey would also need to be considered.

8. Any other business

Future meetings

The Committee had been scheduled to meet twice each term but it was observed that one meeting per term had often been cancelled due to the lack of business. It was felt useful to retain the current frequency of meetings in the diary. Where possible an indication of which of the two meetings was likely to be cancelled would be helpful.

Dates of future meetings

The Secretary would circulate options for dates to meet in the 2016/17 academic year.

Unconfirmed



Forward look

- Michaelmas Term 2016
 - Report from CE on the improvements to reports from the finance system derived through improved engagement with users.
 - Project board constitution and ensuring user needs are addressed in project activities.
 - Report from UIS (Dr Ferrar) on findings from IS Strategy development work, guiding “minimum standards of IT”.



Summary of action points

Ref.	Action	Who	Status
Actions from previous meetings			
1.6	Determine appropriate next steps for the User Experience Portal – assigned to Dr Ferrar, Chief Architect	MB	On hold
2.2	Review benefit of engagement with users of the finance system in designing a system considering users' needs	CE	Ongoing
2.4	Draft PD33 for the user experience specialist to be provided to the Committee prior to being raised and advertised	JN	Ongoing
2.5	Provide a paper to the Committee to give an update on the library of resources, and data-driven design, being developed within the UIS	CE, JN	Ongoing
4.1	Include the Committee in consultation while UIS reviews and revises project board constitution documentation	CE	Ongoing
4.2	Identify an appropriate individual to serve on the Committee under Class ii following Prof Leslie's term	RP, GV	Closed
4.3	Identify a schedule and scope for user centric design events and the facilitation resource required to plan and book them	MB JN	Ongoing
4.4	Table a paper with proposals on an initial user survey	JN	Closed
4.5	Circulate proposed initial survey questions to the committee by correspondence and identify one college and one department to pilot the initial survey	JN	Closed
4.6	Discuss the proposed formation of a Digital Advisory Board with the Registry	RP	Ongoing
5.1	Ask ISC to consider nominations of Prof Prager and Ms Rampton under Class ii	IC	Closed
5.2	Provide the list of services on which the feedback question can be inserted	JN	Ongoing
5.3	Share planned user survey work with the JSCS to identify any lessons learned or commonality	JN	Complete
New actions from 8 February 2016 meeting			
6.1	Discuss Committee membership, the potential for a further ISC Member to participate, and comments received from School Secretaries	RP & ER	
6.2	Consider representation on the Committee and a programme of major IT service providers across the Collegiate University to join discussions	RP & IC	



Ref.	Action	Who	Status
6.3	Discuss the definition of service levels for UIS services with the Director, to address some of the elements of setting minimum standards of IT	CE	
6.4	Review whether a "pain point" question can be added to the UAS IT satisfaction survey	JN	

Establishing minimum standards of IT provision

Author(s): Ian Cooper

Date: 21 September 2016 Version 1.0

1 Background

At its meeting in May 2016 the Committee held a discussion, prompted by work in the School of Clinical Medicine. From the minutes of that meeting:

Dr Ferrar suggested that there would be problems in attempting to define “minimum standards” (which would also require continual update). The work to assemble the Information Services Strategy was expected to contribute to an understanding of requirements, and a maturity model could be developed to assist institutions to understand where their systems sat on that maturity scale. There was concern that a model might not in itself be sufficient and that there were some institutions which would struggle while others, with the money to invest, would find it easier.

The group discussed principles A3 and A4 from the IT Review and felt that with hindsight, despite the best intentions when written, these might now be difficult to unpack into useful work. Mr Edwards believed that a useful starting point would be the articulation of service levels for UIS services and confirmed that he would speak about the matter with Dr Bellamy.

Dr Ferrar also stated that work on the end user computing strategy and identity & authentication areas would feed into the definition of a set of core principles – a set of expectations that were the very minimum for a user’s experience at Cambridge. There should be tangible progress in October 2016. Prof Blackwell also recommended that further guidance on user experience design should be provided, so that there was an aspiration for excellence in the design of new systems.

From the IT Review, Principle **A3** reads:

Every member of staff whose role requires access to information technology should have, at minimum, access to a system providing an appropriate level of service.

Principle **A4** reads:

Every student should have access to the computing facilities and network services necessary for their course.

2 Discussion

Members are provided an opportunity to discuss how, in partnership with UIS, the Committee can create actionable work to establish minimum standards of IT for the University. Potential areas for consideration are:

- emerging requirements from the development of the Information Services Strategy
- selection of appropriate maturity scales
- how the diverse Schools are able to invest in technology upgrades to meet appropriate levels of IT maturity
- how service levels can be defined, and monitored, to ensure that they meet defined minimal levels of service
- how user experience design can contribute

September 16, 2016

A discussion paper on the role of user needs within project governance and delivery

Why is there a need for this discussion paper?

The purpose of this paper is to provide some insights into the topic of user needs, with the primary intention of providing a starting point for promoting productive debate on the subject. The content of the paper is not the result of extensive analysis on the subject, but rather a summation of the current situation, based on an understanding gained from a number of documents, conversations and committee actions associated with the subject. As such, the content is very much offered up to be challenged and enhanced, in order to arrive at a consensus view of both the current situation and potential actions required to enhance the commitment to user needs in the future.

Who are the user communities?

The UIS primarily delivers IT services to two distinct user communities within the University – administrators and academics/researchers (students can be considered as a third group, but share some characteristics with both groups, in terms of their requirement for, and usage of UIS services.). Although each community has a critical role to play in sustaining the University's global reputation, typically, they each have distinct needs and characteristics in their requirements for IT services.

The University's administrative functions are heavily reliant upon IT services that are specifically designed to support well defined day-to-day operational roles and processes, for example HR, Payroll and Finance. These roles and processes are relatively static in nature, changing slowly and incrementally over time. The typical characteristic of such services are based upon high-frequency of use and a high level of familiarity and expertise with the associated information system. In some situations, expertise in the systems becomes the core-skill, rather than an understanding of the underlying processes and services themselves. Without access to these core information systems, delivery of the administration function becomes very difficult for any extended period of time.

The academic and research communities have a higher reliance on information systems that can be considered to be tools used to aid the ongoing delivery of fluid, wide ranging and rapidly changing subject areas. The nature of such information systems, means that usage may be infrequent, (in some cases, once per year), placing much higher emphasis on information systems that require minimal familiarity and are simple to use.

In an ideal world, the distinction between each of these communities would adhere to clear rules of demarcation. However, in reality, many of the information systems supported by UIS jointly service both communities, resulting in any number of hybrid user groups. Typically, such hybrid groups will be comprised of primary users (the majority) and secondary users (the minority). In such circumstances, the needs of the primary users tend to take priority, which can lead to feelings of dissatisfaction and alienation for the secondary users. Any future emphasis on user needs must give appropriate levels of consideration to all impacted user groups.

What are user needs?

Though many of the principles and techniques associated with the analysis and delivery of user needs have been around for many years, their widespread adoption and prominence throughout the

IT service delivery community is relatively recent. An internet search of the term 'user needs' quickly establishes that there is no accepted 'standardised' definition and there is little evidence of a codified method for placing user needs front-and-centre of the IT Services delivery process¹.

Irrespective of which definition of user needs is adopted, there are clear principles that should be followed when creating user needs statements for any given situation;

- a user need must describe a real-world problem for a representative group of users
- user needs must be described using language that defines the problem to be solved and not as a solution to the problem
- the problem must relate to the role undertaken by the user group
- it must demonstrate a clear understanding of why there is a need for a solution to the problem
- It must identify the specific circumstances that trigger the problem
- reference should be made to any constraints associated with the user need.

Within the context of the IT services delivery processes, it is important that user requirements are not mistaken for user needs. Requirements definition is dependent upon there being a clear understanding of the user needs and they describe the specific characteristics that are desirable when defining a solution to them.

Why are user needs important?

A comprehensive and unambiguous statement of user needs not only provides justification for investment, it can also act as a readily accessible and testable reality check that helps to ensure more detailed delivery activity retains the correct focus. Within the current UIS services portfolio there are examples that can be used to illustrate the importance of user needs in facilitating successful service delivery outcomes.

Since its introduction the i-procurement solution has been the subject of consistently high levels of dissatisfaction, from a wide range of user groups. Almost without exception, people find the system complicated and confusing to use. Instead of making the procurement process quick and simple, the system is actually time consuming to use and makes the process disjointed and complex.

This is an example of how the solution selection process would appear to have taken a requirements driven approach, where the product was primarily evaluated for the degree of fit to a pre-defined set of functional requirements, and failed to give full consideration to the usability aspects of the system.

The X5 Research Grant Administration system serves two distinct user communities, Research Office administrators and academic researchers across the University, prompting two very different views of user satisfaction. The research community are infrequent users of the system and find it quite complicated to use. A common complaint from the research community is that each time they come to use the system, they have to spend valuable time re-learning how to do things, with little help provided by the system itself. Conversely, for the administrators, the system is a core part of their

¹ Agile methods are often cited as user needs-centric approaches but, historically, such methods are predicated upon user engagement and involvement, not necessarily user needs.

day-to-day responsibilities and the high-frequency of usage enables them to develop a level of familiarity with the system that mitigates any inherent complexities.

This is an example of a situation where the needs of one group of users have taken precedence, at the expense of the needs of a second group of users.

Some recent projects have adopted a more Agile based approach, where user involvement and user needs have been a central part of the project delivery approach. By considering user needs first-and-foremost and seeking user representation at all stages of the project, the Room Booking and Graduate Application Form projects have each delivered solutions that are well regarded and highly valued. By fully understanding the needs of their respective user groups, each project has delivered a solution that people find easy to use and that provides a value-added experience to the users.

When are user needs considered and who is responsible for them?

For any project concerned with delivering IT Services, a clear, unambiguous user needs statement is essential in providing an insight into what users of the service will value for any resulting solution. User needs should be defined before any project activity begins, forming an essential part of the initial concept and feasibility studies. Subsequently, they should be continually re-evaluated, at each stage of the project delivery life cycle, in order to ensure that the final deliverable will be responsive to such needs and results in a service that is valued by its users in real-life situations. For this reason, it is important that there is an appropriate level of user representation and validation throughout the end-to-end project delivery life cycle², helping to ensure that detailed solution decisions remain consistent with the overall user needs.

Although having user representation throughout the project delivery lifecycle may be considered to be an overhead, the payback is a much higher probability of delivering services that are right-first-time. This delivers a range of benefits, for both UIS and the University;

- user benefits are delivered earlier, resulting in quicker return on investment
- a reduction in the amount of rework that needs to be done enables skilled resources to be directed to more productive activities
- the subsequent higher availability of skilled resources enables the demand backlog to be reduced more quickly
- improved morale for administrative, academic and UIS staff.

At a detailed level, responsibility for user needs can be dictated by the approach used to deliver an IT service (strategic, tactical, waterfall, agile, commercial software selection, etc.). In an effort to cut-through the complexity of mapping out each approach, the following sections outline major stages at which the definition, transfer and ownership of user needs takes place.

Portfolio Governance

Before any project activity is initiated, the portfolio governance process is required to triage the demand backlog and validate that a compelling investment proposition exists. Without such validation, any justification for allocating limited IT budgets is questionable.

² From concept/feasibility through to post-deployment evaluation.

The route into the portfolio backlog is through the submission of a Work Request and this is the first opportunity to describe what is required by using user needs statements. Responsibility for defining the user needs may involve any, or all, of the following roles; the sponsor of the Work Request, UIS Relationship Manager, UIS Service Owner, UIS Service Manager.

Project Governance

Following approval of a Work Request, it becomes the responsibility of the Project Sponsor and Project Manager to ensure that the stated user needs are fully considered throughout all stages of the project delivery process. The primary project control artefacts used by the Project Sponsor and Project Manager are the project brief, project business case and project initiation document³ and these are currently undergoing a review to consider how they can be enhanced to incorporate explicit management of user needs.

Product Delivery or Selection

The primary purpose of this stage is to deliver a solution that facilitates the stated user needs, in a way that offers true value and usability to its intended user groups, when used in real-life situations. Too often, real-life experience is distilled into a series of systematic requirements statements that, both individually and collectively, manage to lose all context to real-life usage scenarios. This can result in the delivery of services that satisfy the stated requirements but, somehow, fails to provide a valued user experience.

Anecdotally, this may be considered the stage at which any failure to consider user needs has been most prevalent, leading directly to the raised awareness of the subject and the subsequent formation of the User Needs Committee.

A potential factor influencing the failure to consistently meet user needs is the number and diversity of the roles involved in this stage. Such diversity presents opportunities for user needs to be interpreted from the perspective of each role, rather than from the intended users view. There is a tendency for these roles to unconsciously act as a proxy for the user, believing that they know what the user wants and the solution that is required.

Nominally, any typical UIS project may include most, if not all, of the following roles; user representative, service owner, service manager, project manager, business analyst, requirements analyst, technical designer, solution designer, application developer and database analyst. Each of these roles has some degree of responsibility for ensuring user needs are delivered and that any solution they are working towards is fully conformant to them.

Primarily, overall responsibility rests with the Project Sponsor and Project Manager, who must ensure that appropriate user representation, and visibility and full understanding of user needs, is maintained throughout the service delivery process.

³ This is not intended to be a categorical list and the stated examples may not be relevant to all types of project delivery.

Testing & Quality Assurance

The primary responsibility of a testing stage is to ensure that any solution conforms to the stated requirements and is free from critical errors, prior to it becoming a production service. In most instances, testing staff are too far removed from user needs to have any meaningful role to play in validating their outcomes. For this reason, it may be considered that attempting to validate conformance to user needs at such a late stage, would demonstrate a severe lack of confidence that user needs have been correctly managed throughout all of the preceding stages.

QA does have a role to play in ensuring that any solution conforms to the stated user needs. User needs should be a major consideration of any quality criteria that are used to validate the user acceptance of any given solution. Conformance to the stated user needs is a measure of quality, in itself, and should be subjected to QA inspection and sign-off at all relevant checkpoints throughout the service delivery process.

Post Deployment

No matter how thoroughly the user needs have been championed and tested throughout the service delivery process, the real measure of success can only come from 'real life' experience. After a defined 'snagging' period, the opinions of each of the impacted user group should be sought and a true user satisfaction rating allocated to the service. As this is likely to be some time after any project activity has completed, the Project Sponsor and Service Owner would be prime candidates to take responsibility for such activity.

How does UIS currently address user needs?

Prior to the formation of UIS the majority of the University's shared IT services have been delivered by predominantly independent and autonomous development teams. Historically, each team evolved their own approaches to the end-to-end service delivery processes, largely influenced by the backgrounds, skills and experience of the individuals within each team. Such inconsistencies in approach has inevitably resulted in inconsistencies in the degree to which user needs have been considered when delivering IT service solutions. This, in turn, has resulted in a portfolio of IT services that have widely differing degrees of customer satisfaction associated with them.

Whilst there are a wide range of factors that have influenced how successfully each individual IT service has delivered a valued service to its respective user communities, the degree of emphasis placed on user needs can be seen as an important differentiator when considering their relative success or failure.

The UIS organisation has yet to fully complete the transformation into a unified IT service provider that uses consistently applied methods and approaches for all aspects of service delivery.

Consequently, across the UIS service delivery teams there are a number of approaches, tools and techniques in use that address the consideration of user needs in an 'informal' way. The deployment of these may vary, depending upon which project delivery approach is chosen (waterfall or agile), but the overall objectives are broadly similar.

Accepting that there is, as yet, no formalised UIS approach to user needs, there are genuine attempts made to understand and fulfil them, as part of the service delivery process. Some of the ways in which this is achieved is outlined in the following sections.

User Representation

Stakeholder analysis aims to ensure that the real-life users are involved and that there is a sufficiently broad range of representation to provide a full understand of the needs of all user groups. The UIS project governance process uses the Project Brief, PID and Requirements Definition documents to achieve this.

Understanding of the Current State

An important aspect of delivering user needs is gaining an understanding of the current state and the drivers for change. This is achieved by identifying any existing process issues, gaps in capability and any operational inefficiency these may cause. Information about the current state may be gathered through one-on-one interviews, workshops, questionnaires, job shadowing, and business documentation reviews. The findings from the analysis may be documented through the use of process flows, user stories, personas and use cases.

Future State and Delivery Options

The future state is most often defined through the use of user requirements, either documented in a report or contained in a requirements backlog. An assessment of these requirements is used to propose one, or more, solution options that outline the most favourable ways of delivering a solution to the stated requirements (e.g. proprietary software, bespoke development, etc.). These options are reviewed with the user representatives in order to gain agreement on a preferred solution. Once a solution has been agreed, commitment can be sought to the necessary budget and resource utilisation required to deliver it.

What are the existing project governance frameworks?

There are two main governance frameworks that need to be considered at this stage; the ISC Governance Framework and the UIS Project Governance Framework.

ISC Governance Framework

The current ISC project governance framework dates from 2009⁴ and clearly references its basis in the Prince2 project management method. The history of Prince2 has its origins in central government IT procurement and development projects. The method was developed in direct response to a consistent failure to deliver large, high-cost, high-profile government projects within their stated time and budget constraints. The main focus of the method is to facilitate senior-level command-and-control of complex projects, through the imposition of rigidly defined delivery stages. Each stage is governed by a formal stop-start checkpoint review process that assesses the continued viability of a project and delivers a go/no E go decision about the following stage. The heavy emphasis upon numerous highly detailed documents, together with the structure of the various roles and review bodies defined in the Prince2 method, are clearly influenced by the inherently

⁴ It has undergone some minor revisions in the intervening years, but the overall structure and focus has remained the same.

bureaucratic nature of large government departments. The method is highly focussed towards a sequential Waterfall approach to service delivery and its rigid structure creates difficulties when attempting to use the method for faster paced, experiential approaches, such as Agile. This has led to a recent extension to the Prince2 method, called Prince2 Agile, which aims to combine the flexibility and responsiveness of Agile with the rigidly defined framework of Prince2.

Whilst not rigidly adhering to Prince2, the ISC framework is clearly influenced by its core principles, processes and organisational constructs. The framework acknowledges the high levels of documentation and bureaucracy inherent in the Prince2 method, but simply advocates adopting a pragmatic approach to these, without ever being specific about which elements of the method provide true value.

The main body of the framework is heavily focussed towards outlining the various roles, boards and committees required to administer the project delivery process. Brief outlines of the main project delivery stages are included, but the framework falls short of defining the actual processes and deliverables expected within each stage.

Some mention is made of the importance of benefits to the governance process, but does not identify where, and how, benefits should be defined and monitored.

A very brief section on usability is included, almost as an adjunct to the framework, but fails to identify the project stages, roles and responsibilities involved in ensuring their successful delivery.

UIS Project Governance Framework

The UIS Project Governance Framework is not a replacement for the ISC Governance Framework but operates within its overall scope. It comes into effect once the high-level investment decisions have been taken and project delivery work has been sanctioned.

The UIS framework contains a range of artefacts, each designed to facilitate specific delivery approaches. For projects adopting a Waterfall based delivery approach, and for the selection, procurement and implementation of proprietary solutions, these artefacts are largely based on Prince2 principles. For projects adopting an Agile based delivery approach, these artefacts are largely based on DSDM⁵ principles.

Guidance is provided on which artefacts should be adopted by individual projects, based on a range of key project influencers (e.g. scale, budget, risk exposure, etc.).

How effective are the existing project governance frameworks?

The ISC framework specifically states that its primary purpose is for use in governing large projects⁶. The expectation stated within the framework, is that smaller scale projects would adopt a 'scaled down' governance approach, but offers no guidance as to what form that may take. The framework significantly pre-dates the formation of the UIS and it is questionable how relevant it remains, given the broader scope of the UIS service delivery portfolio. Such a one-size-fits-all framework becomes

⁵ Dynamic Systems Development Method - Atern

⁶ Referring to projects where the total cost of ownership over the development period, or the first three years, exceeds £2M.

increasingly difficult to support when it fails to account for a diverse range of influencing factors, for example;

- the adopted IT Services delivery method (waterfall, agile, hybrid)
- the required IT Services delivery approach (vendor purchase, in-house development, hybrid)
- whether a service is strategic or tactical
- the type of service being delivered (infrastructure, ERP transaction processing, user interface, etc.)
- the scale of the budget
- the degree of risk exposure.

Much of the ISC framework would appear to be predicated upon the formation of a central Project Office, under the control of a Project Governance Officer. The project office was expected to be responsible for defining and overseeing the tools, methods, standards and quality assurance aspects of all projects. The Project Office was also expected to perform a central role in the management of project boards and committees. Given that the proposed Project Office failed to be established, it is questionable as to how successful the framework has been in delivering its intended outcomes.

Despite the existence of the ISC framework, it is questionable as to how often it is actually referenced and used. Because the framework is not adopted as the de-facto standard for all projects, there is a degree of confusion about what is the actual process for project governance. Following a review of the ISC framework, as part of the formation of the CamSIS Improvement Project, the Academic Secretary considered it to be outdated and no longer fit-for-purpose.

From the specific viewpoint of user needs, neither of the current frameworks provides explicit references or guidance on the subject. As discussed earlier in this paper, the UIS framework is currently undergoing a review to consider how it can be enhanced to provide a formalised approach to the identification and management of user needs.

To-date, the UIS framework has been used to support the delivery of over 140 projects of varying size, complexity and delivery approach.

How is a project governance framework relevant to user needs?

Traditionally, the success or failure of a project has been measured using three baseline criteria; time, cost and quality. Given the historical basis of project governance frameworks originating from the commercial sector, it should be no surprise that their primary objective is to support executive control of the two most commercially critical criteria, time and cost. The less definitively quantifiable nature of quality means it is seldom a core focus of project governance frameworks and is traditionally considered as more of a project management responsibility.

Accepting that most measures of satisfying user needs will be qualitative in nature, there may be an argument for stating that user needs are not relevant within the context of a traditional project governance framework. However, if it is considered that such frameworks should not only be concerned with controlling cost and time, but should be a central part of helping to ensure the achievement of successful project outcomes, then user needs become very relevant.

The ISC framework follows the traditional cost and time based model, making only brief reference to the need to consider the usability of delivered services. In order to make it more relevant to the current situation, the same level of importance needs to be placed on the delivery of successful user needs outcomes, as that given to the control of cost and time.

What does all of this mean?

Although very brief in nature, this investigation into the subject of user needs has quickly identified a number of factors that have either a direct or indirect effect on the delivery of successful user needs outcomes. Consequently, it is unlikely that concentrating on one factor would achieve the desired result of raising the profile of user needs throughout the end-to-end service delivery process.

Some of the more immediately apparent factors that have an impact upon the delivery of successful user needs outcomes are;

- an IT service delivery culture that has evolved from a background of delivering technical excellence, and which will need a significant business change focus in order to raise the delivery of successful user outcomes to the same level of excellence
- an outdated and inflexible ISC governance framework that has failed to keep pace with the rapidly changing needs, methods and approaches required to support the delivery of a diverse portfolio of IT services
- an ISC governance framework that has a basis in an historical need to control the scope and budgets of large-scale IT projects, rather than a focus on supporting successful project outcomes, for all project types
- a general lack of appropriate levels of stakeholder analysis, resulting in a consistent failure to address the needs of all impacted user groups
- an inconsistent approach to establishing and maintaining appropriate engagement of key stakeholders throughout the end-to-end project delivery process
- a tendency to consider only the needs of a primary user group, rather than all user groups
- a consistent inability to demonstrate how user needs have been identified and managed through to successful delivery
- a lack of consistency in what/how/when detailed user needs analysis techniques are deployed (e.g. user stories, personas, etc.)
- an inconsistent approach to the understanding of how user needs are managed in different delivery methods (waterfall, agile, hybrid).

Whilst the factors listed above highlight a number of areas that need further development, it is clear that the desire to identify and manage user needs is becoming increasingly significant for the more recently initiated projects. The fact that this is being achieved without the direct guidance of formalised project governance controls, demonstrates that there is a general acceptance of the importance of user needs and a willingness to work towards the goal of delivering successful user outcomes for all projects.

What can be done to remedy the situation?

It is recommended that consideration be given to initiating and resourcing a broader exercise, tasked with delivering flexible project governance frameworks and service delivery frameworks that are

user needs centric in their approach. The actual definition of such an initiative will need to be formally established, but the following objectives are suggested as a starting point;

- define the various types of IT Services delivery approaches to be included within the scope of the framework
- create a flexible project governance framework that establishes guidance for each of the IT Services delivery approaches defined within the scope
- agree key stakeholders (University and UIS) and define their roles and responsibilities within the framework
- define the governance processes
- develop supporting materials and tools
- develop and deliver communications and training
- transition the delivered governance processes and supporting materials into a cycle of review and continuous improvement.

User-centric design events

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1 Background

The Committee first discussed the promotion of design seminars at its meeting in June 2016, seeing these as a way “to spread expertise among the IT developer community across the University”, anticipating that it would sponsor the events and that they should be held once per term.

The proposal to hold an event in Michaelmas Term 2015 was successfully completed with a well-attended colloquium being held on 4 December 2015, when Tom Loosemore (formerly of the Government Digital Service) attended.

The Committee subsequently noted at its February 2016 meeting that:

“a lecture series model appeared appropriate, helping internal work by exposing good and best practice from other areas. Members agreed that the activity should proceed with one event per term. Expenses of around £1,000 per speaker were considered appropriate, which would come from Mr Norman’s budget if required. Members agreed that it was important to gain the maximum benefit from any visits.”

There were no large scale events in Lent or Easter Terms but a series of primarily internal seminars were run within UIS by Paul Heath of Modern Human.

2 Discussion

Members are asked to discuss how a programme of user-centric design events might be developed and delivered, potentially considering:

- sponsorship
- promotion to appropriate audiences within the University, including interaction with TechLinks
- frequency
- suggested speakers and topics
- responsibility for arrangements

