Committee:	Date:
Information Systems Sub Committee	18 June 2013
Subject:	Public
Internet Project – Web Lessons Learned	
Report of:	For Information
Chamberlain	

<u>Summary</u>

The City of London Corporation's new website launched in July 2012, later than the planned launch date of June 2012, but still in time to meet the Olympic deadline that had been set.

With the site approaching its first anniversary, the Deputy Town Clerk commissioned a 'lessons learned exercise' to provide insight into Phase 1 of the Project and review deliverables against the project objectives.

There were eight objectives for the re-launched site based on business and user needs. These were to:

- have a user driven content strategy,
- offer significant improvement to navigation,
- offer significant improvement to search,
- have a world class, 'slick' design,
- credit the breadth and depth of our offer,
- establish a robust technology platform for the future,
- assist in change management cultural change/up-skilling staff,
- launch before the Olympics.

The re-launched site meets these objectives and marks a transformational change, which includes a radical re-design and a comprehensive content audit and analysis, resulting in a 50% reduction in pages that were either obsolete or duplicate. New quality assurance processes for content and publishing, including individual content ownership for each page were put in place. The site also grouped content into clusters based on user feedback, integrated social media, optimised content for mobile devices and delivered a new and improved set of online transactions.

This Lessons Learned report is grouped into three key areas: user and industry feedback; best practice transferable models; and high risk areas/issues, listing the causes of these and the action being taken to address them.

User and industry feedback

a. Users

Pre and post launch qualitative and quantitative user feedback (customer satisfaction) has been used to benchmark the new site against the previous one and the project objectives. Overall feedback to the design, content and navigation has been positive.

Pre-launch users described the site as 'old fashioned, clunky and dull', post-launch this changed to 'modern, useful, inspirational and relevant'.

Pre-launch 1% of users felt the design showcased the content and range of services we offered, post-launch this changed to 98% of users.

Pre-launch 9% of users could find the content they were searching for, post-launch this changed to 76%.

Although this is a considerable improvement further enhancements are required to meet the user expectations around search.

b. Industry

Global and national industry feedback has also been positive. The new site received an Official Honouree distinction for design from the Webby Awards in May 2013 (global digital awards run by the International Academy of Digital Arts & Sciences) for the category of 'Government'. Entries came from 60 different countries and the City of London was the only site short-listed in this category from the UK.

Nationally the site has been awarded three stars and an 'm '(mobile) rating by SOCITM (the national association for government ICT professionals). This was an increase from last year when the site was awarded two stars. In addition, the City of London Corporation is one of only four London boroughs to get the mobile rating.

Best practice models

The project successfully introduced a range of industry standard publishing systems and processes to drive quality standards. These included an in-depth content audit and analysis, devolved content ownership, a two-step approval process, tagging and classification of content.

The project also successfully established cross department working and project wide interactive communication that involved staff in the decision making process. The 'Show and Tell' content and design communication events enabled staff to have 'their voice heard' and influence decisions.

High risk/issues/areas

The main issues arising from the project can be traced back to the quality and robustness of our project management, a conclusion supported by a broader review of projects that has identified similar failings across the portfolio of IS enabled change projects.

Immediate steps have been taken to address these issues and ensure efficient delivery of projects. The previous IS Project and Programmes function has been replaced by temporary contracting resource, while the IS Reorganisation (due to complete in July) will deliver a permanent solution using a new Programme Management Office.

Other key areas identified include:

- Contract management
- Testing, deployment and training
- Technical skills
- Project specification

Conclusions

The conclusions section of this report compares project delivery against the project objectives (appendix 1). Based on these and user feedback the project has delivered seven of the eight identified objectives and a plan is in place to address the remaining objective by improving the search function.

The key reasons for the issues around the delivery of this project have been identified and temporary resources have been put in place to improve the areas of concern. A permanent fix is in hand through a reorganisation in the IS Department which will address the identified areas.

Recommendations

The Information Systems Sub Committee and Projects Sub Committee are asked to receive this report.

Background

The previous City of London website launched in 2002 and was pioneering and market-leading at that time. However, over the 10 years of its life, there has been significant design, navigation, content and technical developments and the site was looking 'clunky, old fashioned and dull'. It was also very slow and time consuming for users to find what they were looking for and particular areas of concern included:

- the disjointed user experience,
- unreliable search,
- clunky out-dated workflow,
- the volume of out of date, obsolete, duplicate content,
- the confusing navigation,
- the dull design that failed to show case the breadth and depth of our offer,
- the complicated, confusing transactions process,
- the lack of staff engagement and ownership of content.

The City of London Corporation's new website was designed to address these issues and a project was set up to deliver this before the London 2012 Olympics. This 'critical deadline' was achieved with the new website being delivered in July 2012, against an original project plan of June 2012. However, the project suffered from a number of significant technical, project management and reporting issues. These put the delivery of the project at risk and made it an exceptionally difficult exercise for all involved.

The Deputy Town Clerk commissioned a detailed lessons learned exercise to highlight best practice achieved by the project and examine the issues and the delivery of the project. The scope and purpose of the exercise was to:

- consult with the various members of the Website Decision Board and other key stakeholders, to gauge their views on what went right and wrong with this project,
- add this feedback to the results of a review of the project delivery,
- ensure that lessons learned contributed to a broader review of the delivery of 'change projects' and the IS Sourcing Review.

Main Report

1. Summary of user feedback

A core requirement for the site was to deliver a user-driven content strategy. At the start of the project limited user feedback existed so a key task that was successfully delivered was to create a user research and implementation plan. Qualitative and quantitative user research has been used extensively throughout the project to inform key content (e.g. the site map, cluster titles, user journeys) and design decisions (navigation, wire frames etc). The research included pre-and post-launch user feedback to benchmark customer satisfaction with the site.

1a. User findings (benchmarking customer satisfaction)

Pre-launch users described the site as 'old fashioned, clunky and dull'; post-launch this changed to 'modern, useful, inspirational and relevant'.

Pre-launch 1% of users felt the design showcased the content and range of services we offered; post-launch this changed to 98% of users.

Pre-launch 9% of users could find the content they were searching for; post-launch this changed to 76%.

Although this is a considerable improvement further enhancements are required to meet user expectations for search.

1b. Global and national industry recognition

The City of London's new website received an Official Honouree distinction for design from the Webby Awards in May 2013 (global digital awards run by the International Academy of Digital Arts & Sciences) for the category of 'Government'. Entries came from 60 different countries and the City of London was the only site short-listed in the Government category from the UK.

Nationally the site has been awarded three stars and an 'm '(mobile) rating by SOCITM (the national association for government ICT professionals). This was an increase from last year when the site was awarded two stars. In addition, the City of London Corporation is one of only four London boroughs to get a mobile rating.

2. Summary of best practice models

The project successfully introduced a range of industry standard publishing systems and processes to drive quality standards. It also successfully established cross department working and project wide interactive communication that actively engaged staff in the decision making process. The 'Show and Tell' content and design communication events enabled staff to have 'their voice heard' and influence decisions. Post-launch feedback sessions took place (Sept–Dec 2012) with staff across the organisation involved in the web project. The sessions were well attended (76% of staff, 160 people, involved in the project participated). The following provides a summary of the best practice models (with quotes from staff) introduced by the delivery of the project.

2a. Cascading content ownership

"Although this seemed daunting at first it was important to do as staff now have more responsibility and ownership. This provided more control and staff engagement"

2b. Content audit and analysis

"It provided an opportunity to review all existing content and really think about what our customers want". "We were made to review, up-date and consolidate content, which is a good thing"

2c. The cluster publishing structure

"The clusters worked". "The clusters successfully encouraged inter department cooperation". "The structure was able to handle issues despite all the technical difficulties". "The Cluster Composer is a very helpful and useful role"

2d. Communications/staff engagement

"People were involved from the very early stages for design and content, the Show and Tell events were really helpful"

2e. Up-skilling staff across the organisation

The digital content and publishing skills level of staff (200+) across the organisation has been significantly increased. Tailored, modular courses at different levels have been developed based on staff needs. Training has included social media, writing for the web, search engine optimisation, accessibility, photoshop and publishing using the new workflow.

"the tailored modular training courses have been really well thought through and helpful" the drop in workshops were extremely useful during the content migration period" to up-skill staff across the organisation.

3. Summary of high risk/major issues

Project Structure, Management & Reporting

- Working with technical partners proved more difficult culturally than was envisaged, despite best efforts on both sides.
- Project Management across the City Corporation and Infusion has not been strong enough to ensure smooth delivery of this project. Stronger discipline on both sides would also have helped delivery.
- The outcome based approach to specification has probably saved time and money, however the ability for technical challenge from within the City Corporation was lacking.

- The Website Decision Board sought and received assurances on the practicalities of delivery at the start of the project. However, this would have benefitted from a stronger internal technical support and challenge to simplify the work where possible.
- The timeliness, clarity and integrity/accuracy of information provided to the Board was not of sufficient quality to allow it to monitor the position of the project effectively.
- There was an underestimation of the budget, timelines and complexity of the project, both internally and externally.
- Roles and responsibilities across the internal and external technical team were not clear for the Board despite having spent a great deal of effort at the start designing how the reporting lines would work.

Financial Management

- The original contract for the development of the new site was set up as a fixed price and Fortune Cookie (design) and Infusion (technical solution) have been held to their budget costs.
- The internal spend on the project has been significantly over the original estimate: 1,500 days against an estimate of 815 days. This reflects a number of areas identified by the Lessons Learned exercise, including time taken to upskill staff, the resolution of technical problems and revisions of scope.
- In addition, further external spend of £32,832 has been incurred to assist in the resolution of the problems, largely with Microsoft and Infusion. This cost was covered from local IS risk budgets.
- A detailed breakdown of these costs is contained in Appendix B of this document.

Content workflow development and implementation

- The content workflow is an essential component of the site that allows Staff to add and update their own content.
- During the development phase a number of technical problems led to a delay in the completion of this workflow.
- This had a knock-on effect on the migrating of the content. The workflow delays condensed the time available by 50% and required additional PRO staff effort to create and approve the content in time for 'go live' of the site.
- Once live, the workflow has also suffered from serious performance issues, which has required considerable time and effort to resolve, combined with great inconvenience for staff managing the content. At launch, in order to provide a stable publishing experience, only one person could use the workflow at a time to publish content. January 2013 was the first full month all staff had access to the workflow.
- The cause of this slow performance was identified in November and related to an issue with database performance caused by misconfigured Anti Virus Software. In this case, the AV Software would scan database files, preventing

their use by SharePoint and slowing performance of the database. This type of issue should have been identified much more quickly.

Search

Search was identified by the Members and the City Corporation as a whole as a critical area and although this has been developed by the supplier to the specification, there are a number of areas of concern highlighted by users.

To some degree the implementation of a new search function takes time to bed in and be tuned to return the desired results. However, although this is the cause of some of the issues, work is required to further improve search to the satisfaction of the Members and the business.

Work to address search issues is currently being agreed with the Website Decision Board.

Conclusions

What was successful?

- The project was set up with clear objectives and an understanding of the product and what we wanted from it.
- Seven of the eight project objectives have been delivered and a plan is in place to deliver the outstanding enhancements to the search function.
- The re-launched site, focused on audience needs, has received positive feedback from users and global and national recognition from industry.
- Models for best practice have been established and embedded within the organisation e.g. systems and standards for creating and publishing quality content.
- Staff across the organisation have been involved and engaged in the project e.g. contributing to the decision making process.
- The digital content and publishing skills level of staff across the organisation has significantly increased.

Issues arising/what needs to be improved?

- The organisation recognised that it did not have the skills in-house to do this project and procured external experts to lead on our behalf.
- Despite the project being set up with clear roles and accountability a number of these roles where not performed to an acceptable standard, which hindered effective governance and decision-making

- Project management was weak, lacking project controls and effective planning, budgeting and resource across Infusion and the City Corporation.
- Ineffective project management led to a failure to report issues and risks which led to the inability of the Board to perform its roles.
- Ineffective management of staff capacity and poor resource allocation across the range of projects and activities in IS resulted in staff having multiple commitments and unclear priorities.
- Ineffective 'team' make up (i.e. lack of technical skills and management skills on the project team) led to delays in the delivery or required increased capacity to meet needs. Business-led projects need to have a strong, skilled technical expert offering advice, challenge and assurance.
- Ineffective technical 'partnering' and provider management, resulted in a lack of clarity over roles and responsibilities. Too much trust and responsibility was placed onto the technical supplier without having the in-house skills to challenge and manage them effectively
- On this and other projects, there has been a lack communication and engagement for technology delivery, leading to changes being delivered in an unstructured way and challenges being experienced in the management of business stakeholders through these changes.
- Technical testing and deployment has not had sufficient rigour applied, which has led to avoidable problems and delays, including the Anti-Virus configuration which caused the workflow performance issue.

Overall Conclusions

Despite all the 'behind the scenes' technical and project management difficulties universal feedback to the re-launched site has been very positive.

- 1. The project review in IS and the detailed lessons learned activity from the internet project commissioned by the Deputy Town Clerk have highlighted a range of models of best practice and endemic issues across the project management activity in IS
- 2. Remedial action has already been taken to address remaining technical and project issues within the Internet project and to build improved practices for the subsequent phases of this work.
- 3. Action is also being taken to correct and improve the issues highlighted in skills, capacity and process across remaining projects.

- 4. Work is also underway to develop a prioritised 'pipeline' of new/proposed work across business as usual and projects.
- 5. With increasing demand from services and the transformation agenda, additional capacity will be brought in to support the delivery of IS Portfolio projects, defining the 'pipeline' work and the development of the IS Programme Management Office.
- 6. These tactical changes and improvements will run in parallel to the more strategic improvements to be delivered through the IS Reorganisation and the Sourcing Review. Both of which will begin their implementation from July 2013.

Appendix and tables

Appendix A - delivery against project objectives

Project Objectives	Delivery
User driven content	Extensive consultation and feedback has taken place with users throughout the project. The post-launch feedback has been very positive with users describing the content on the site as 'modern, useful, inspirational and relevant'.
Significant improvement to navigation	User and industry feedback to navigation has been positive. Nationally the site has been awarded three stars by SOCITM (the national association for all ICT professionals) and successfully passed their navigation standards.
Significant improvement to search	Although considerable improvements have been made to search further enhancements are required to meet user expectations.
World Class design 'slick' web site	The site has received global recognition for the standard of web design receiving an Official Honouree distinction for design from the Webby Awards in May 2013
Credit for the breadth and depth of our offer	Post-launch user feedback, 98% of users felt the re-launched site show cased the breadth and depth of the corporation's offer
Robust technology platform for the future	The site is now based on Microsoft SharePoint technology and hosted at a third party facility and taken together these provide a reasonable degree of robustness. There are still a number of inconsistencies in the platform, which are a legacy of the project issues and can particularly impact changes, these are being identified and removed. Going forward the Sourcing Review contractor will take on the provision of the Internet site and this will provide further improvements in the robustness of the solution.
Change management – up- skilling staff	The project successfully introduced a range of industry standard publishing systems and processes to drive quality standards. The digital content and publishing skills level of staff (200+) across the organisation has been significantly increased. Tailored, modular courses at different levels have been developed based on staff needs. Training has included social media, writing for the web, search engine optimisation, accessibility, photoshop and publishing using the new workflow.

Launch before the	The site was launched on the 16 July, which was later than the
Olympics	original launch date in June but before the Olympics in August .

Table 1: - Actions Complete, Underway and Planned.

The following table details the actions underway to address the issues highlighted by the Lessons Learned Exercise.

In an and an an	Work completed and yn demysay	Diamad actions
Improvement areas	Work completed and underway	Planned actions
Project Management and reporting (This	Changes to the IS PMO to increase its	A review of the outcomes of the
lies at the heart of issues affecting the	priority and standing within IS including	improvements undertaken will be
project)	- The current IS reorganisation will put a	evaluated and reported.
- Clear governance and lines of	senior post in that reports directly into	
accountability need to be	the CIO. This is currently being	IS will work with the Corporate PMO to
implemented	temporarily covered through Interim	include all IS projects in Project Vision.
- Reporting that provides a clear	arrangements.	
picture of the status of a project	- Recruitment of interim resources	
across planning, budget, resources,	including Programme Manager	
risks and issues	(Warren Strother) and PMO Manager	
- Effective prioritisation and problem	(Sorabh Arora) to implement	
solving	improvement programme	
- Professional standards of project	- The new structure reflects these	
management adhered to	positions with the introduction of a	
- Engagement and communications	PMO function that will continue the	
plans need to be developed and	work on standards and best practice in	
implemented	programme management.	
x	- The new structure also includes 4	
	senior posts of Programme Lead. They	
	will be accountable for a set projects	
	and programmes and ensure standards	
	are adhered to, including effective	
	programme governance.	
	r-origination Boltomation	
	IS Governance strategy been signed off	
	and has been implemented including the	
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	development of IS stage gates that are	
	integrated with the corporate gateways	
	Updating all project documentation to ensure it meets Prince 2 best practice and fits with the COL Corporate Programme Office standards. Project managers to develop skills to use this approach and apply the documentation and approach for each project current and new project. Establishment of new reporting for Committees, Boards and stakeholder groups to meet requirements of clearer	
	communication.	
	Engagement and Communication Plans are now being put in place for all projects in IS	
	Web project recruited an external	
	contractor with appropriate skills and	
	experience to manage the web project	
	Consolidation and rationalisation of current projects within IS	
Contract Management	For the web project, robust contract	A review of current projects that include a
- Stronger contract and supplier	management has been undertaken with the	procurement stage or a third party supplier
management	third party supplier, Infusion to deliver project objectives.	

- Appropriate contracts established to deliver projects		Contract management skills to be developed as appropriate within IS The new structure includes roles specifically dedicated to the management of supplier performance and working with CLPS to ensure effective contracts are put in place for IS projects as well as operational delivery.
 Testing, Deployment, Training Implement formal testing scripts and procedures to ensure the business and technical signoff are obtained before go lives Implement formal procedures to ensure the availability of all systems and these should be ITIL based as best practice. Ensure that training is focussed on both business and users 	A new managed deployment approach has been agreed and signed off by the Website Decision Board. This includes additional time for testing (including full testing before go live), improved load testing and additional time for training and deployments. This approach also means that there is no downtime for customers when website changes are made. The new structure will allow for additional testing resource to be allocated to projects. The sourcing review supplier will also work with us to ensure that the environments are updated and stable.	Formal deployment and testing policies and procedures developed and agreed Change control processes that include robust testing applied to business as usual IS activity
 Technical skills Ensuring that projects have the required skills and level of resources to deliver objectives 	Developing a resource management process within IS. The new structure has introduced a professional lead dimension to the new Application Development lead role. This will include managing professional and	Sourcing review and implementation - Provide a single supplier with responsibility across all systems

- Making sure the business has the required skills to meet current and future technical requirements	technical skills development in IS more actively. In addition we will work with our suppliers to build in capacity for niche or specialist skills as required.	Establishment of a training programme for IS staff including individual development plans Resource planning, management and prioritisation across IS for all BAU and project activities
 Specifications Should be technically and functionally challenged to ensure business requirements can be delivered 	Developing the skills and processes within the methodology to ensure there is a robust specification. The new structure combines a range of skills and functions that work directly with our customers to identify business requirements and turn these into technical specifications. The Development Lead role includes responsibility for providing assurance that a full range of scenarios have been considered in the technical specification.	

Appendix B Financial Summary

Internet : Technical Delivery - Project Costs

PHASE 1				
			Total Forecast	
Supplier	Area	Budget	spend	Variance
Fortune cookie	Design	£255,000	£255,000	£0
Infusion	Development	£506,000	£506,000	£0
SCC Change (2.25%)	Framework cost	£17,123	£17,123	£0
CRM Software licences	Licence	£40,000	£40,000	£0
Sub Total		£818,123	£818,123	£0
Unbudgeted Costs				
Infusion	Additional development cost, agreed by Board in March 2012 Additional Project Management,	£0	£14,000	£14,000
Infusion	agreed by the Board in March 2012	£0	£5,600	£5,600
Infusion	Fault fixing and Support	£0	£4,200	£4,200
Microsoft	Fault fixing	£0	£8,232	£8,232
Bramble	Fault fixing	£0	£800	£800
TOTALS		£818,123	£850,955	£32,832
Contingency	Managed by the Board	£50,000		

IS Development team	Area	Budget	Total Forecast	Variance
IS Internal resources	Development Days	815	1500	685

Note

- 1) The PRO incurred a cost of £36,000 to contract external resources to assist with web content creation and approvals due to the delay of the workflow
- £19,500 has been spent during the course of the project on load testing by Commissum, this was not included in part of the original project budget and has been covered by IS budget.
- 3) As part of the broader changes to the IS Project Management Office a number of contractors have been employed to improve the delivery of this and other projects. The costs attributable to the internet project for these resources are £46,750. This cost is covered within the IS budget.
- 4) The £32,832 unbudgeted costs were funded from local IS risk budgets.