
COMMITTEE	Finance, Policy and Resources Committee
DATE	19 th April 2016
DIRECTOR	Angela Scott/Richard Ellis
TITLE OF REPORT	Building a digital future – a new web Content Management System to offer residents a digital choice
REPORT NUMBER	OCE/16/013
CHECKLIST COMPLETED	Yes

1. PURPOSE OF REPORT

To support the implementation of the Council's vision for digital delivery as set out in the Strategic Business Plan, Committee is presented with a proposal to improve and then renew the council's website and intranet for the benefit of residents, stakeholders and staff.

This will also allow the council to host improved Performance Management information on the website as identified by Audit Scotland's assessment of the Council's Public Performance Reporting (PPR) requirement (CG/15/111, Sept. 2015).

2. RECOMMENDATION(S)

That the Committee:

- (a) Approve the procurement and implementation of a new Content Management System (CMS) for the website and intranet that supports the aims of the Council's plans for Digital Delivery as set out in the refreshed Strategic Business Plan;
- (b) Approve the intention to consult and engage with the public and other key stakeholders during the design phase of the new CMS in accordance with the Government's (Digital) Design standards

3. FINANCIAL IMPLICATIONS

The steps outlined in this report will be funded via the £4.8Million set aside to support digital transformation in the March 2016 budget setting process.

The total capital cost is estimated at £200,000 spread over two years. Some of this work is vital to ensure the stability and security of our web systems and has already begun.

4. OTHER IMPLICATIONS

The CMS will need to support delivery of the council's digital ambitions as set out in the Strategic Business Plan. For that reason the selected system will need to be highly flexible and be open to integration with a range of different ICT systems.

5. BACKGROUND/MAIN ISSUES

The Council's main website is now very out of date and is in urgent need of an upgrade in terms of the software used, the hardware on which it runs, in terms of the design and navigation and in terms of the content - some of which is out of date.

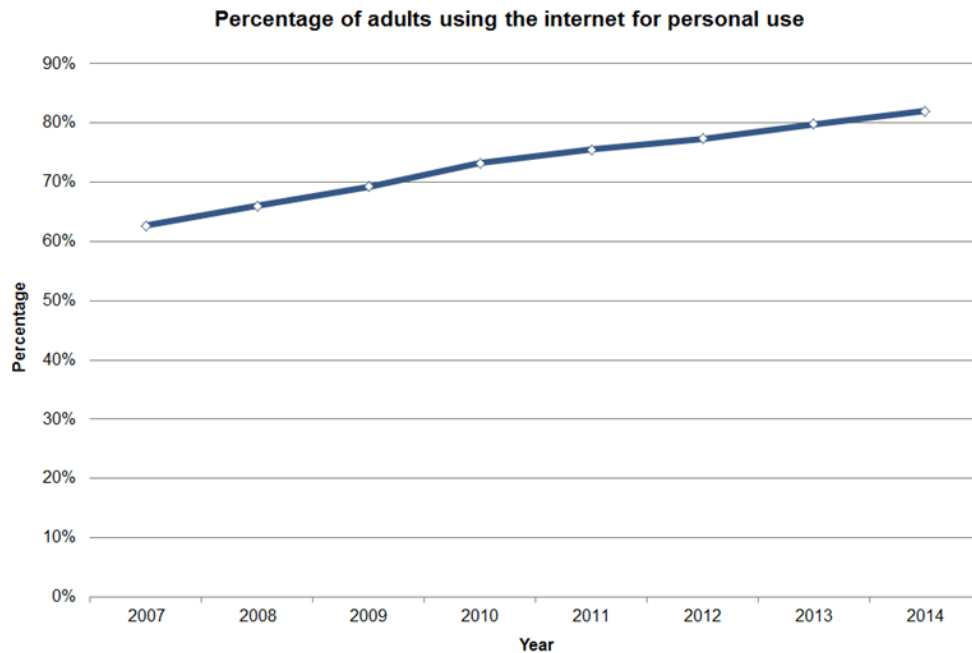
5.1 Internet usage in the UK

Internet usage is now deeply embedded into the everyday lives of residents as data from the Scottish Household survey clearly shows. Since 2007, the percentage of adults using the internet for personal use has increased for seven consecutive years. The figure of 82 per cent for 2014 is up by 2.2 percentage points from 2013. Over the period 2007 to 2014 internet usage as measured has increased by 19.3 percentage points.

Evidence from the most popular public sector sites shows that this appetite does translate to government sites when convenient online services are provided alongside engaging content. One of the most celebrated examples is the online car tax service provided by .Gov which in June 2015 managed 3.9 million unique page views. The wider .Gov site itself clocked up 48 million unique page views in the same month.

Other good reference sites where channel shift has been successful include the three London Boroughs of Camden, Harrow and Barking and Dagenham, Brighton and Hove Council and Bristol City Council.

Table 1: Scottish Household survey August 2015



5.2 The Council's Strategic Business Plan

The Council's refreshed Business Plan talks extensively about the need to improve Customer Experience. One of the key strands of this area of improvement is the need to embrace digital transformation and offer the council's customers a 'digital choice' of how they access council information and services.

To facilitate digital delivery and digital by default requires a fundamental transformation of the council's systems and processes. Public services across the United Kingdom are experiencing the same challenge and there is a great deal of shared experience to draw upon – both from the UK and Scottish government levels.

In essence drawing upon the experience of other organisations, public bodies wishing to transform themselves will need to deliver the following:-

- Integrate systems to make it easier to service customers, help customers to serve themselves and identify customer needs.
- Offer a single view of the customer so that all data is aggregated so future customer interactions can be better targeted
- Move towards the introduction of the My Account system so that customers can use a single authenticated portal to access all council services using online self-service.

In addition the council has a clear place making role in supporting tourism and inward investment to play our part in ensuring the objectives contained within the *Regional Economic Strategy* becomes a reality. This means there is an opportunity for web based tools to be a window on the opportunities offered by our City and Region – as well

as providing self-service opportunities such as for managing council tax accounts, resident parking permits and make rent payments.

In a March 2016 report (*Connected Councils – A digital vision of local government in 2025*) the charity Nesta talks about Council websites of the near future as offering almost all data driven council services online as well as providing connections to other sources of local, community and public service information. Their vision for 2025 is to provide a highly personalised digital experience that is dynamic and interactive to move away from the current model of a two-dimensional website.

To effect this type of transformation at Aberdeen City Council would require the integration of ‘back-end’ systems and databases. This work is complex and will be the subject of separate reports to Committee.

However in the meantime it is possible to take a significant step to enable this digital vision by firstly improving the current website and secondly by procuring a new web Content Management System (CMS) that is able to facilitate and host the delivery of our digital ambitions to meet the expectations of our residents and wider stakeholders.

This report sets what is required to be done to make those improvements as well as the broad case for doing so.

5.3 The existing website

The current Content Management System – ActivEdition – was procured in 2005, initially to build TheZone. It is not a well-known product and is used by a small number of organisations. There is only one other deployment of ActivEdition by a UK council.

ActivEdition was then used to build a new council website with a fresh design, which was launched in 2006. In 2008 version 4.0 of the CMS software was deployed and it has not been updated since. This means it is now no longer fully compatible with modern systems.

Additionally, several other ACC-related websites were launched in ActivEdition and hosted on our web server. These sites are listed in section 5.8.

A redesign of the website and a content review took place in 2011 and this has been the most recent update to both design and content. This work included some improvements to enable the view from a mobile device (responsive design).

The key limitations of the current website are not just restricted to issues relating to user accessibility, integration and functionality but relate to the ease with which large numbers of users within Aberdeen

City Council can manage significant quantities of content. The CMS is difficult to use when compared to modern websites which use a 'What You See Is What You Get' interface (WYSIWYG) making it very intuitive with limited training to manage large numbers of pages. Modern sites also include workflow tools, approval processes, digital and document asset libraries, content scheduling, device detection, forms and top tasks amongst other useful tools.

New versions of ActiveEdition were installed to some websites (not the main ACC site) during this period and the decision was taken to redevelop the custom applications running in the CMS in ASP.NET and to separate them from the CMS. New versions of the ActiveEdition CMS are more intuitive but they still lack some important functionality.

All development is now done in ASP.NET and most custom applications have been redeveloped, but a small number still need to be rewritten.

In general terms this will make it easier to transfer to a new Content Management System as the systems are mostly independent of the website.

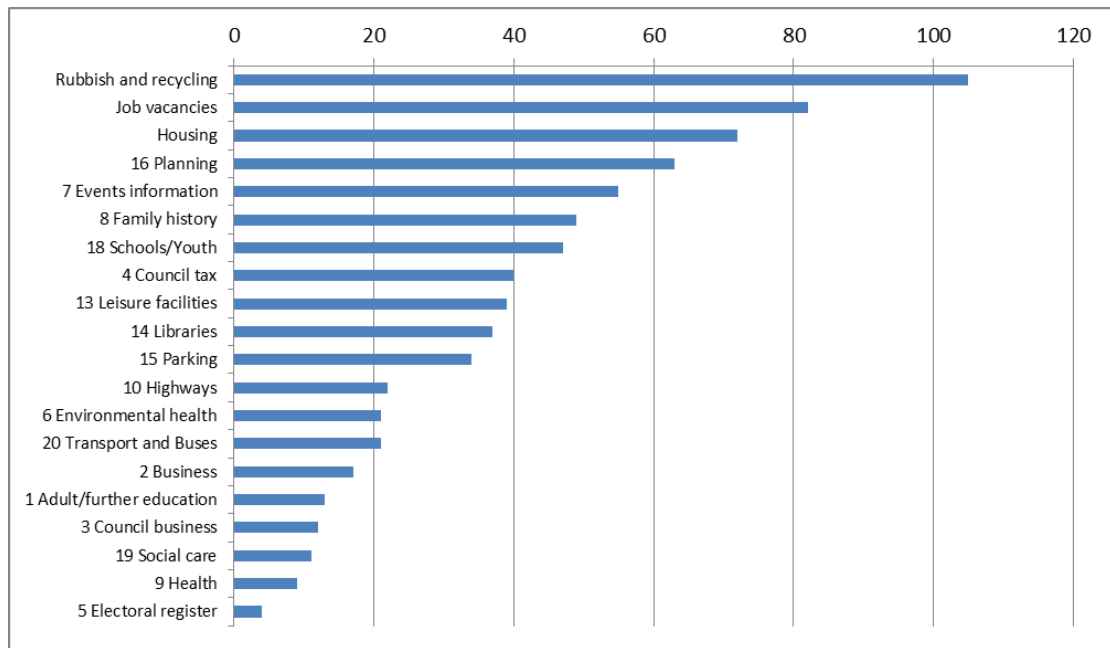
5.4 Our website in numbers

There is a raft of useful analytics available to ACC on the current website, its functionality, reliability and relevance of content. Analysis of this can help with the development of and approach to a new website using a new CMS.

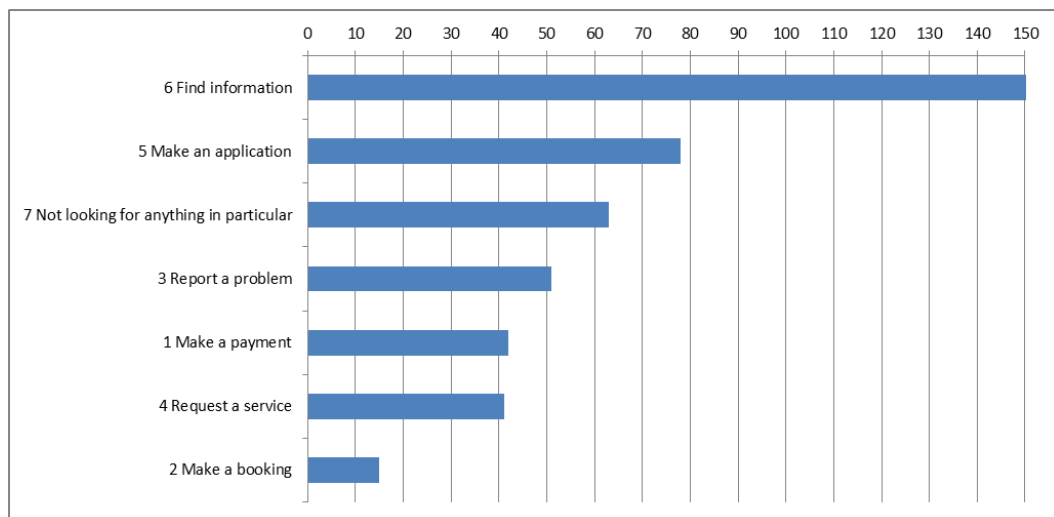
Sources for the data include a range of external providers including SOCITM reports, Google Analytics and Sitemorse amongst others.

Overall, the ACC website has a 2 star (out of 4) SOCITM rating for 2015.

- Total unique visitors are averaging 121,000 per month
- Desktop traffic is averaging 88,000 unique visitors per month
- Mobile traffic is averaging 33,100 unique visitors per month
- The website meets a range of purposes as is demonstrated by the most common service areas utilised (chart a) and the most common reasons for visiting (chart b):

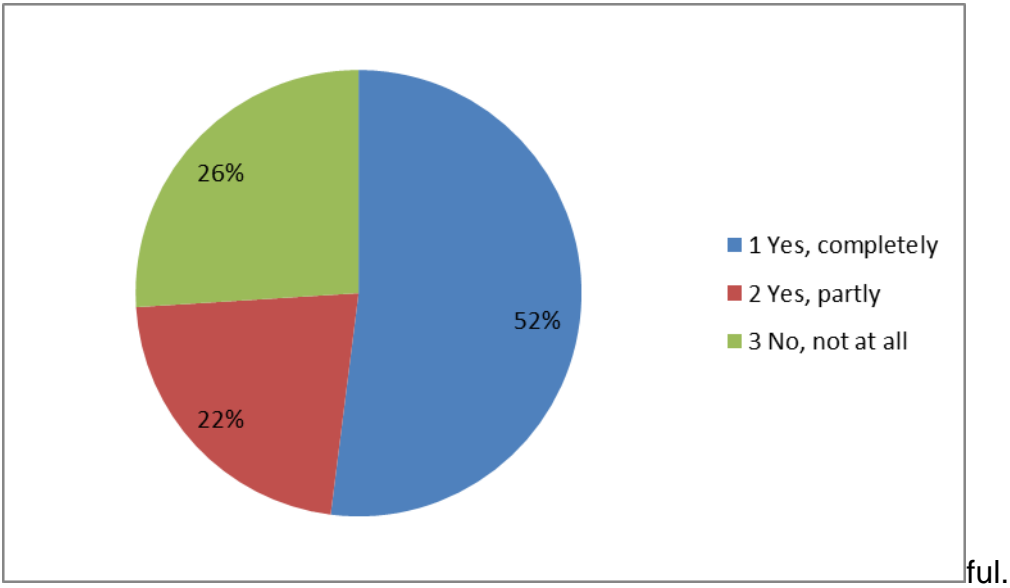


(chart a)



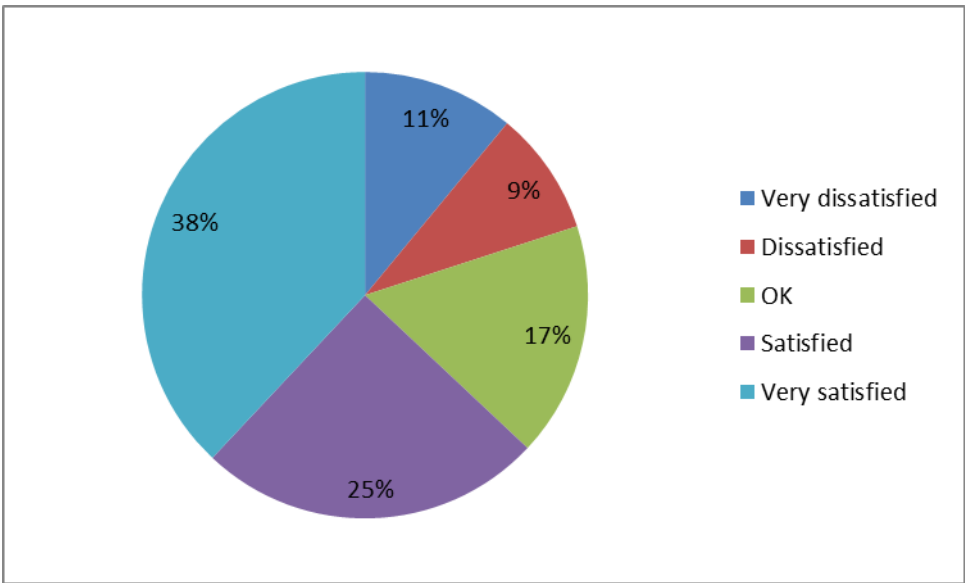
(chart b)

The 'success' of visits to the website are average (see chart c) but it is reassuring that half of visitors regard their visit as a success but is equally frustrating that same amount are only partly or not at all success













(chart c)

Overall satisfaction levels (based on specific criteria used by SOCITM) are much the same as success 'ratings' (see chart d below).

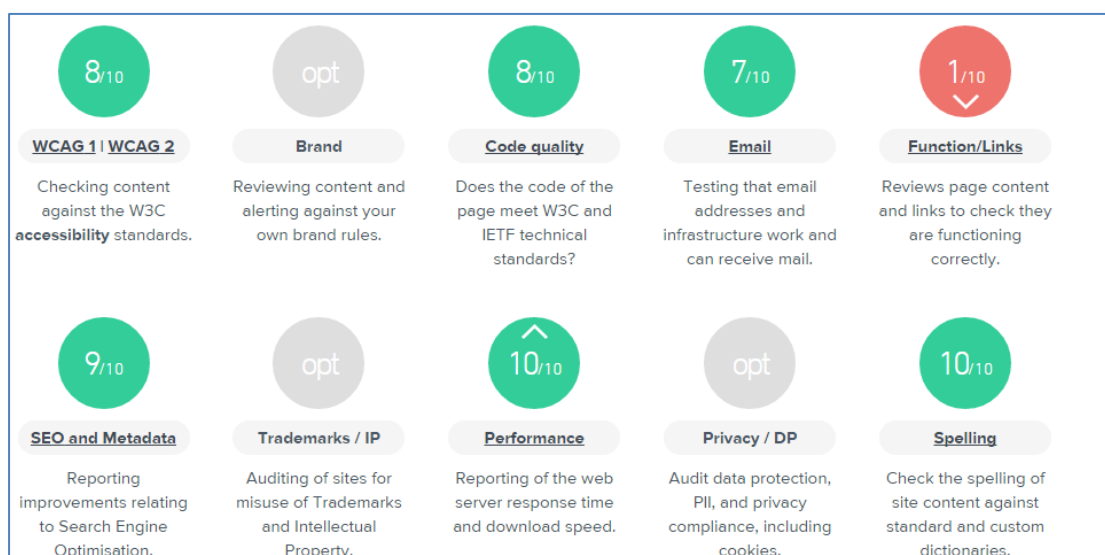


The bounce rate for this period is 54% (see chart e). This means that these visitors did not engage any further than the homepage or landing page. In some respects this is a missed opportunity as we should seek to draw users attention to other relevant content.

1.	/home/home.asp		478,372 (22.35%)	Bounce Rate ?
2.	/xwc_webcam.asp		90,552 (4.23%)	53.61% Avg for View: 53.61% (0.00%)
3.	/services/JobsOnline/Default.aspx		68,515 (3.20%)	40.30%
4.	/education_learning/schools/scc_schoolhols.asp		54,388 (2.54%)	80.74%
5.	/xev_Event.asp		52,601 (2.46%)	10.77%
6.	/libraries/		43,206 (2.02%)	88.84%
7.	/education_learning/schools/scc_SchoolHols.asp		33,732 (1.58%)	52.78%
8.	/home/pay_it.asp		31,945 (1.49%)	48.57%
9.	/Library/library_menu.asp		31,068 (1.45%)	88.92%
10.	/council_government/about_us/cma_PublicHolidays.asp		28,999 (1.35%)	77.69%
				54.82%
				86.04%

(chart e)

Sitemorse provide regular reports on the resilience and availability of the website. Current performance rates 5.8 out of 10 (**see chart f below**). This rating is down to two main causes – broken links and site availability.



There is much to build on, in terms of improving the user experience and improving the resilience and capability of our site. Our website exists for a range of purposes and as we move towards implementation of a digital

platform, greater transactional capability and higher levels of 'self-service' for our users, a better, stronger, more flexible structure, design and technology are essential.

5.5 Short term improvements to the current website

Following staff consultation in October 2015 it is clear that some basic changes could be made to the existing website to improve navigation, design and content. Given that implementation of a completely new website could take 18 months it is proposed to replace the existing style sheets and templates on the website (16 in total) with a fresh design which could be used to seek public views on what they want.

In addition there will need to be a desktop and testing exercise to ensure that the application of new templates would not distort the existing content.

Changes from this process will not resolve the fundamental weaknesses of the site so for instance it will not improve the content management processes and workflow. However a short term refresh would have the following objectives:

- improve some aspects of the navigation around the site by if possible using 'breadcrumb' trails;
- improving the service templates and editing the text on the most visited pages;
- make it easier to view performance information which at this stage would be manually input and updated on the most popular service pages;
- consolidate all the existing consultations on one page and offer a new 'best in class' engagement tool as a 'bolt-on'. No more standalone survey monkey surveys means users input their details once;
- build an e-mail shot capability by consolidating existing email lists and using a 'best in class' service as a bolt on.

5.6 A strategy for the intranet

Councils provide a large number of services in sometimes heavily regulated and governed areas. This means staff need to be able to access the information and online services they need quickly and with the confidence that the information is accurate. The recent best value report conducted by Audit Scotland makes clear the importance of embedding the values and principles of the organisation. A good intranet can be a supportive engagement space to help drive those values and principles.

As reported earlier our intranet has not been redesigned in many years and a number of bolt on products have grown up around it. This means it is hard to navigate and locate what is needed

It is therefore proposed to take the same approach with the intranet by refreshing the design where we can whilst working towards a full clean installation of a new CMS for the intranet.

The following steps are proposed:-

- Refresh for phase 1 to include template redesign and an analysis of content that could be published on the website instead
- Phase 2 will look to build an engagement, collaboration and innovation space that will recognise the user and offer personalised information (top tasks and news filtered by corporate, directorate and team) via integration with Active Directory
- An internal community of intranet authors will be developed who will also help drive the design, development and maintenance of the new site.

5.7 Approach to design and build of the new CMS

The council's in house web developers will be fully engaged for the next three months in upgrading the council's web servers from Windows 2003 to 2012.

For that reason it is proposed to work with external suppliers who will support the design, build and implementation of the web and intranet sites. Following this they will then train our web developers in the new system.

Our agile approach will allow us to compress 5 years of in-house work into an 18 month process. This follows the model outlined in the Government (digital) Service Design Manual which sees a project moving along four key phases:- discovery (refinement of requirements), alpha (testing and feedback), beta (live testing), Live (full working version).

5.8 Website strategy and consolidation

There are a significant number of council owned websites which could be consolidated under one site – even if they keep a separate web address (URL). There may well be governance issues connected with consolidation but the research and consultation should be done to see if the user experience can be improved, duplication avoided and costs saved.

The sites below are hosted by AAC but not all are maintained and updated to the same standards:

- AAGM

- Aberdeen Music School
- ILV
- Aberdeen Ships
- abzre
- Accord Aberdeen
- Child Protection Partnership
- Hytrec
- Lowcap
- Sustainable Fringes
- <http://www.aberdeenquest.com/Discover/Discover.asp>

5.9 Requirements

Design principles

The Government Digital Service Design Principles support the creation of good digital services that meet customer needs.

Design should begin by identifying user needs through research and analysis, to ensure the right solution is built. It should make use of resources that exist elsewhere, to keep focus and efforts on a core purpose. In return, code, designs, successes and failures should be shared with others.

Available data (analytics) should be used to drive informed decision making, rather than guesswork. Time and effort should be invested to make the end result as easy as possible for the customer, not the other way round, however difficult. Developments should be tested and tested again, incorporating feedback along the way.

Accessible and flexible design is also key - everything designed should be as inclusive, legible and readable as possible, to suit customer needs not the organisation's. Devices and locations used by customers should be considered so that design can adapt to suit their needs. Consistent design will also help customers become familiar with a range of services.

Ultimately, design is about services, not websites. The digital world has to connect to the real world so all aspects of a service should be thought about, including the web access, to make sure they add up to something that meets user needs.

<https://www.gov.uk/service-manual/digital-by-default>

W3 standards

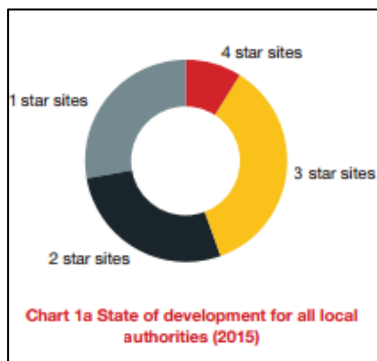
Overall web standards - technical specifications and guidelines - that ACC should be meeting (or at least aiming to meet) are those set by W3.

These standards cover areas such as:

- web design and applications
- web of devices (technologies that enable Web access anywhere, anytime, using any device)
- web architecture
- semantic web (technologies that enable people to create data stores on the Web, build vocabularies, and write rules for handling data).

SOCITM standards

The main survey for the SOCITM Better Connected report 2015 provides benchmarking and 'star ratings' for local authority websites across the UK. Sites are assessed against Better Connected standards for tasks and usability and are tested from mobile devices, to see if they meet the Better Connected mobile standard. Achievement of these standards is the main element of the star ranking given to each website. ACC is currently **2 star** rated but should be aiming to meet the higher 3 and 4 star standards set by SOCITM.



Accessibility

SOCITM also assess local authority websites for how well accessibility standards are met. ACC website currently has 'pass' rating.

There are also standards set by government and outlined in legislation. While ACC website may meet the minimum required for 'pass' ratings, it is important that the website is inclusive and user-friendly for all stakeholder groups. The future website should aim for more than a 'pass' by adopting best practice and adhering to a wide range of standards.

Following consultation with staff in October 2015 a list of draft requirements for a new website is attached at **Appendix [1]**. Note that most modern open source products will now deliver the bulk of these requirements.

5.10 Choosing a new CMS: Open source vs proprietary CMS products

At **Appendix [2]** is a list of Scottish Councils and the CMS products upon which their websites are built. In parallel with the UK government and councils in England there has been a substantial move towards open source systems meaning that there are limited licencing issues to consider.

Open source vs Proprietary:

Content management systems fall into two camps – open source or proprietary (closed source). There are pros and cons for both and some of the main ones for consideration are listed below:

	Advantages	Disadvantages
Open source	Large developer base	Temperamental nature of community
	Regularly updated code	Plan required to capture software updates and bug fixes
	Easy future adaptation	Support and upgrades are not automatic
	Portability	Design can be restricted – access to source code but not design
	Control over custom functionality	
Proprietary	Software updates, security and bug fixes available through agreement	‘Tie-in’ with specific company
	Up to date technology	Issues of ownership if we move Limited influence over software enhancements and customisation

The council will need to adopt a CMS that can ‘fit’ with our Microsoft environment, or be hosted externally and one that is complementary to the digital platform implementation.

5.11 Curating and managing our content

In consultation with organisation wide content creators a full content management strategy and action plan will need to be developed. In essence content will need to be curated and managed.

In some organisations web content authors are automatically prompted to review content every six months and if after a year there is no response the page will be archived or even deleted.

Support will be provided to each service by the Communications and Promotion service such that the content will need to mirror the agreed communications priorities for the year ahead.

5.12 Interdependencies

There are a number of interdependencies between CMS implementation and website redevelopment and other major projects:

Being Digital

Of major relevance is the 'Being Digital' approach. The approach outlines steps that will be taken to maximise the digital readiness of Aberdeen and its citizens. A new CMS and website specifically support the aim of 'giving our customers a digital choice'. A responsive, dynamic and interactive website (through an improved CMS and revised content) will enable customers to do business with the council in a manner they choose and at a time of their choosing. An improved website and the technical environment this sits within will provide the foundations for improved customer experience, online customer interaction, take up of online services and greater customer engagement.

Digital Platform

The procurement and implementation of a new digital platform would go hand in hand with the capabilities of a new CMS and website. Improved transactional capabilities for customers and staff will be facilitated through the partnership of both systems. Regardless of the platform supplier(s) chosen, the key to successful implementation will be working together to ensure seamless integration.

Public Performance Reporting (PPR)

There is a continual cycle of demand, provision and engagement which links what stakeholders ask ACC for, the information ACC provides on its services (performance information) and what stakeholders then understand and use the information for. The main 'tool' for PPR is the ACC website and improvements in both areas are dependent upon each other.

An improved website and supporting technical capabilities would enable ACC to proactively provide more contextual, narrative and visual information to support an improved PPR programme. Proactive publication of information about ACC's services, decision-making and financial spend would enable ACC to be more open, transparent and accountable,

Web content

While improved technical solutions (new CMS) will help improve the website, full success is fundamentally dependent upon the quality of content. An allied project will be established to review the content management process for both the website and the intranet (The Zone). Governance arrangements and a content management strategy and guidelines will be created for the review of existing information and the production of future content.

Master Data management

New web technologies will enable user authentication, for example through the MyGov.scot MyAccount, and single user identification. The CMS will support MDM by providing an effective point of access for users to ACC services that are tailored to the individual using clear, up to date and accurate records.

5.13 Moving towards a single account to access core online services

Discussions have recently been held with the Improvement Service about utilising their MyAccount service which already contains details of many thousands of Aberdeen residents.

The data held uses 24 user characteristics which will be extremely in tailoring personalised content as well as supporting authentication to secure standards.

Ahead of developing single sign on for all online council services it is proposed that a pilot list of early adopter services is drawn up with services, ICT and Customer Services to trail single sign on with a basket of online services.

Camden Council took this approach and placed 12 services into this single sign on early adopter phase.

5.14 A phased approach

ACC is poised to adopt a fundamental change in the way we manage, procure and use data to help deliver services and analyse performance. With circa 450 databases it will require considerable effort to build that platform.

In essence a good CMS solution is designed to effectively present and manage information and should not hinder access to other more transactional services. Work completed at phase one can be re-used for the full implementation phase.

Phase	Action and timeline	Interdependencies	Estimated costs
Phase 1a	Improve existing website design, navigation and some content (12-14 weeks)	<p>Move the current websites to Windows Server 2012</p> <p>Check new templates will not impact on page alignment</p> <p>E-mailshot capability</p> <p>Consultation and engagement tools</p>	<p>£21k</p> <p>£20k</p> <p>£16k</p> <p>£10k</p>
Phase 1b	Commence work on a web Content Management Strategy	<ul style="list-style-type: none"> - MDM - Information management strategies - PPR 	None – staff time
Phase 1c	Improving existing intranet (12-14weeks)	<ul style="list-style-type: none"> - Staff voice - Innovation network - CG blogsite and magazine - Communication with non-desk based staff including schools 	£20k
Phase 2a: Website	<p>Conclude development of specification (May 2016)</p> <p>Appoint chosen provider (August 2016)</p> <p>18 months in total</p>	<ul style="list-style-type: none"> - CRM - Channel shift and service planning - Digital platform development (i.e. Master Data Management) - Audit Scotland and PPB - Identify savings from website consolidation - Understanding of timescale of single sign on capability - My Account integration 	<p>Up to £100k</p> <p>(developer rates approx. 1k per day)</p> <p>Contingency of £13k</p>
Phase 2b: intranet	Commence development of specification and align with internal cultural change goals		Subsumed into main CMS procurement

6. IMPACT

Improving Customer Experience –

A more up to date and flexible CMS will enable ACC to have a more dynamic, responsive and user-friendly website. This will provide our customers with easier access to our information and services through our website.

It will allow for greater development of online services, in partnership with Customer Services and other parts of ACC, meaning customers can access ACC services when they want, using whatever device they want (PC, laptop, tablet, mobile phone) through responsive design.

Services like Single Sign On will be developed to sit within an improved website and supporting technology, allowing customers to 'register' with ACC for tailored services and information and providing for a full customer history in one place.

Improving Staff Experience –

The staff experience will be enhanced through use of a more modern and user-friendly tool to publish information externally and internally. A new CMS will be significantly less labour-intensive for content authors to use.

The content management strategy will form a content and publishing approach for the organisation, to guide staff on what to publish, how to publish and when.

A new CMS will also provide us with better metrics and analysis, which can be used in conjunction with analytics tools such as Google Analytics to analyse usage of the website and intranet and enable improvement and development work to be targeted and prioritised.

Improving our use of Resources –

The current CMS requires a large degree of developer support to enable the functionality that supports the demand for online services. A new, more modern CMS, while requiring early stage developer support, will be less resource intensive once in place. This will allow for developer skills to be refocused on improving services and 'developing' rather than maintenance.

It will also allow ACC to offer increased online access/contact for customers, with this method being significantly more economic than face to face or telephone contact. However, choice is key and that choice of access will remain for all customers while at the same time encouraging and enabling those who wish to use digital services to do so.

7. MANAGEMENT OF RISK

The current website is now out of date and no further updates will be produced .

8. BACKGROUND PAPERS

<https://www.gov.uk/service-manual>

<http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr14/scotland/>

<http://www.gov.scot/About/Performance/scotPerforms/indicator/internet>

<http://stakeholders.ofcom.org.uk/market-data-research/internet/internet-use-and-attitudes/>
<http://thezone/nmsruntime/saveasdialog.asp?IID=36800&sID=11943>

9. REPORT AUTHOR DETAILS

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References

<https://www.gov.uk/service-manual>

<https://spacecraft.digital/>

<https://www.google.co.uk/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#safe=active&q=digital+usage+statistics+Scotland>

(<http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr14/scotland/>)

<http://www.gov.scot/About/Performance/scotPerforms/indicator/internet>

<http://stakeholders.ofcom.org.uk/market-data-research/internet/internet-use-and-attitudes/>