# WDC website new CMS - business case

# Contents



## Revision history

| Version | Completed | Revised | Changes |
|---|---|---|---|
| 0.1 draft | 03/2012 | MB | Draft version. Ty Walter and Susie Drummond consulted. |
| 0.2 draft | 13/06/2012 | MB | Incorporated comments from Susie Drummond |
| 0.3 draft | 25/06/2012 | MB | Amended section 7 following comments from Fiona Clark |
| 0.4 draft | 03/07/2012 | MB | Added 1.6 following comments from Andy Jones |
| 0.5 draft | 08/08/2012 | MB | Sections 1.1 and 6.1 updated |
| 1.0 | 06/09/2012 | MB | Amendment and sign off by ICT Steering Group |
| 1.1 | 01/10/2012 | MB | 2012 data added to tables |

## Introduction

This document is the initial business case for updating the technology behind the current Warwick District Council website www.warwickdc.gov.uk. This document will require expanding and updating should the project move to the next phase.

## Background

The number of visitors to the WDC website has risen rapidly from around 10,000 visitors per month in 2004 to 100,000 per month in 2012. It is the most widely used customer service channel that we have. The website is currently highly ranked when benchmarked against other authorities for customer success rates, performs well in the annual SOCITM survey of authority sites and is accredited by the Digital Accessibility Centre as being accessible to disabled users and accredited by the Campaign for Plain English.

The site was restructured to meet customer needs in 2009, work which led to increased usage and increased customer success and satisfaction rates at a time of rising expectations among online customers. The primary goal of this work in 2009 was to make the website easier to use.

The website has used the existing Microsoft Content Management System (CMS) since it was built in 2004. This technology will no longer be supported by Microsoft beyond April 2014. The age of the technology is leading to security vulnerabilities and is impacting on the amount of support required to maintain it. It is also having an impact on the amount of improvements that can be carried out and ultimately the customer.

We propose purchasing a new CMS, migrating the existing website content and structure and incorporating some specific improvements to design that meet customer and business needs.

The following are reasons why the website would benefit from a new technological platform. There is more than one option but without investment we run the considerable risks of security vulnerability and failing to meet the public and corporate demand for a modern, flexible, useful and usable website.

# 1 Reasons

### 1.1 ICT Support

The council currently uses Microsoft's Content Management Server 2002 (CMS) for the delivery of the council's corporate website. The CMS technology is no longer available from Microsoft and has been replaced by a new Microsoft technology called SharePoint. As a consequence, Microsoft no longer develops the functionality of the product.

The age of the product results in significant service constraints due to the pace of change in the web environment e.g. we cannot update the 'live' website quickly, a basic requirement in 2012.

Of greater immediate concern is the fact that Microsoft will only supply security patches for the product until 8th April 2014.

In parallel, and also due to the age of the product, ICT Services is unable to patch the underlying technologies which support the website; the Operating System (OS) and Database. (The latest patches for the underlying technology may prevent the CMS system from operating). Furthermore, some of the underlying technologies themselves will no longer be supported in 2013.

At best the current position leaves the council's website vulnerable to attack from external parties. At worst, the vulnerabilities may provide a platform to launch a more significant attack against the council's corporate network.

## 1.2 Continuous improvement

Good websites adopt a strategy of continuous improvement based on testing with and data from customers. WDC has a website improvement plan aimed at meeting the needs of our customers and the business, and a Channel Strategy which drives ongoing improvement.

Some improvement work has been halted due to the age of the technology. Any development to the CMS now would have a limited lifespan and would not be worth the cost. We need to update the technology in order to continue improving the site e.g. testing shows that our homepage can be improved to help customers complete tasks; the leisure section requires some enhancements to meet the demands of the business as it aims to promote its service to get more customers through the door.

As part of a CMS replacement we would request that such priority developments, which have been placed on hold, are carried out.

Websites are never finished. The culture of daily continuous improvement drives everything and at the moment we are limited in terms of what we can improve.

We can measure whether we are improving using many indicators as we gather a lot of data from customers. The following are seen as particularly key (average for all councils in brackets).

| Key indicator | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 (to end September) |
|---|---|---|---|---|---|---|
| Visits | 585,417 | 821,817 | 952,599 | 1,031,517 | 1,095,673 | 992,370 |
| Success of visit | 82% (79%) | 84% (81%) | 82% (80%) | 84% (80%) | 84% (80%) | 84% (80%) |
| Overall customer satisfaction | 83% (84%) | 83% (82%) | 80% (81%) | 82% (80%) | 82% (80%) | 82% (79%) |

## 1.3 Mobile web

More and more customers are accessing our services on mobile technologies. Usage rates have risen sharply and continue to do so.

**Visits to WDC website by mobile device**

| Device | 2010 | 2011 | % increase | 2012 (to end September) |
|---|---|---|---|---|
| iPhone | 18,930 | 46,763 | 147% | 71,514 |
| iPad | 2,509 | 21,731 | 766% | 64,821 |
| Android | 2,903 | 18,580 | 540% | 38,215 |
| iPod | 3,302 | 4,890 | 48% | 4,464 |
| Blackberry | 1,605 | 3,695 | 130% | 7,159 |
| Nokia | 101 | 352 | 248% | 214 |
| **All mobile devices** | **31,893** | **98,361** | **208%** | **188,954** |

A web visit is the equivalent to a phone call (i.e. the customer can make one request or several). To put the figure of 98,361 mobile visits in 2011 into perspective there were 191,528 phone calls to the Customer Contact Centre in the same period.

The current website is functional on a mobile device but the user experience could be improved significantly. The customer is presented with the same layout, design and content as a customer with a desktop computer.

A vital component of our 'continuous improvement' plan is to develop a usable mobile version of our website to increase its usage further. As with other developments this is on hold. As part of the CMS replacement we would request that a responsive mobile version of the site is delivered.

The alternative to a mobile website is to develop multiple apps. These are costly to develop as each mobile platform requires its own version of each app. For an organisation of our size, a single, responsive mobile website that is compatible with multiple devices would be a more cost effective solution and reach more of our customers.

According to research by ComTech, almost half of all mobile users in the UK now have smartphones and this number is rising. Seeing as mobile penetration is running at over 100% in the UK there is the potential to reach customers who may not have previously had access to the web – a group previously seen as digitally excluded.

## 1.4 Usage figures and cost prevention

Two-thirds of visitors to local authority websites are local residents. Currently we reach 24% of the local population with our website, the 5th highest figure for a district council of those surveyed (SOCITM Better Connected 2012). The highest is Chelmsford at 31%.

These visitors made over 1 million visits to the website in 2011. We know from our ongoing customer surveys that 45% of these visits would have resulted in phone calls were the information not available online, so the

website is preventing a potential 400,000+ phone calls per year to the council and the costs associated with meeting that demand. Our web visitors are task-driven – less than 2% are 'just browsing'.

It is well established that improved usability (demonstrated by user satisfaction data amongst other things) will lead to increased usage meaning those that have access to the web will use it before they use the phone. According to SOCITM the average cost of an enquiry to the council is as follows

- Face to Face £6.72
- Telephone £2.22
- Web £0.29

so making the site easier to use and more compelling will help shift some people from the more expensive phone and face to face channels to the web.

## 1.5 Corporate aims

Fit for the Future advocates taking the customer's perspective and delivering what matters to the customer. During 2012 over 70,000 customers have used the website every month, far more than use any other channel. It is reasonable to assume they want a usable, secure, robust website that delivers the information and services they want.

An accessible, usable, cost effective and secure website is central to the council's Channel Strategy which states

- "Competent online services are easy and quick to use, available whenever customers need them and have a relatively low administrative burden. Managed well, online access to services is a very effective channel with considerable benefits for customers and taxpayers."
- "Wherever possible and valuable for customers, move transactions and information to the web"
- "A key action is to optimise the website for mobile web access"

The strategy also references an equality impact assessment which will determine the ease/difficulty customers experience in contacting us through various channels.

According to research by SOCITM and Govmetric, customer satisfaction rates are lower for web customers than they are for other access channel customers. Web customers may have the advantage of 24/7 access but the standard of service they receive is lower than the levels phone customers or face to face customers receive. This suggests there is still significant room for improvement in the provision of online services and a new CMS will help us to continue that improvement.

## 1.6 Local government approaches to managing websites

- Government websites use a range of content management systems with many being proprietary.
- In Warwickshire, all 6 councils use proprietary CMS, with 1 planning to move to Open Source - developed, supported and maintained in-house.

- Rugby, North Warks and Nuneaton all have their own websites but use Jadu CMS as a partnership at discounted rates. Jadu have spoken to WDC about joining this partnership, but agree that our needs differ and that our website is at a different stage of development. We could lose many of the improvements, content reorganisation and developments of the past 4 years by adopting the out of the box solution used by the other authorities. Given the value of the work and noting that WDC were not part of the initial procurement of this partnership, the option of joining this consortium arrangement is not open to us at the present time. Jadu, like other suppliers, could still provide a modern CMS for WDC. See section 6.1.
- There are 2 main ways in which content is managed across local government. Devolved content management - where service areas directly enter information on to the website - and centralised content management where approved content is added by a team of web specialists. There is currently a trend towards the latter arrangement as it can lead to tighter controls, higher quality and better customer service. SOCITM say that 'current arrangements for extensive devolution of content management should be reviewed and responsibility brought under tighter central control supported by web specialists.'
- A 2011 survey of 42 local government web teams found that WDC has the 2nd lowest number of FTE staff working on its website and has the 2nd highest level of customer satisfaction.

# 2 Options

## 2.1 Purchase a new CMS – preferred option

We can replace our existing CMS developed and supported by Trinity Expert Systems with a new CMS developed and supported by a supplier chosen via a compliant procurement process.

Pros

- We get a modern, supported, stable technology meeting our security requirements
- We pay a fixed price for development and support
- We reduce the demand on ICT currently necessary to support an old technology
- We go to tender and get best value
- The implementation is carried out by a dedicated team of developers, designers and project managers alongside the WDC Website Manager and ICT
- We retain all of the successful features of the 2009 redesign and restructure
- A modern CMS allows in-house adaptations and developments
- We incorporate planned improvements that would meet customer and business needs – currently on hold
- We get a mobile version of the website
- We retain features of a CMS that are already established and known to staff working as web authors e.g. a workflow and approval process
- We get ongoing annual support, reducing the burden on our ICT department

- Out of hours support
- Our ICT department are familiar with proprietary CMS and depending on the one chosen, may already have the knowledge to support it

Cons

- Initial cost of development and implementation
- Training for authors required – but this is the case with any new technology and training for authors takes place any way

## 2.2 Develop a system in house with Open Source/share with WCC

There are various technologies available that are freely available for re-use and development – including website content management. Warwickshire County Council uses Wordpress on various areas of their site and plan to roll it out as a full content management system.

Pros

- The technology itself is free and there are no licence fees or annual support fees
- There is flexibility and control over what is developed
- Open source systems share many of the same features as proprietary systems
- There is a large user community who will share knowledge and resources for free
- WCC has gained experience in developing a website in Open Source
- You can purchase themes and extensions (at low cost) to enhance the system.

Cons

- Cost: Well qualified and experienced full time staff are required to build and project manage the implementation. Warwickshire County Council have recruited a full time .php web developer who also has web design skills. The costs themselves are difficult to predict.
- Ongoing support: The burden would fall on ICT to fully support a new, unknown technology after the initial implementation. There is currently no resource for this and further recruitment would be necessary.
- Ongoing development and improvements: Again this would require a WDC staff resource.
- No 24/7 support
- The WDC ICT Strategy states 'While the open source products are initially "free" for download, installation, and licensing, the costs in terms of skills and maintenance are estimated to be the same as for any proprietary product – and these costs are at least 80% of the entire equation.'
- Warwickshire County Council have encountered security issues whilst implementing their own open source software – a common problem with open source as everyone knows the code - and have spent considerable time making it secure

- There is a higher risk of project failure in building a content management system completely from scratch. We haven't done this before and would be heavily reliant on WCC.
- It is difficult to determine the length of time required to fully implement an open source content management system. Warwickshire County are developing a website using open source technologies (Wordpress). To date a developer has spent 6 weeks developing the news site and they estimate it will take 4 full time staff a month to migrate the remaining content.

### 2.3 Do nothing

Pros

- No cost
- We can continue with our current website and technology and make improvements when resources allow.

Cons

- By running unsupported software we leave the website vulnerable to attack from external parties. At worst, the vulnerabilities may provide a platform to launch a more significant attack against the council's corporate network.
- It is harder for ICT to support
- It is harder for improvements to be made to an old technology
- Higher risk of website becoming unavailable to customers

## 3 Benefits expected from preferred option

- Meet our own security requirements
- A website that meets our criteria – as measured against our specification document
- Reduced burden on ICT in terms of support
- New functionality will become available as part of the product's natural development and will be available to the council as part of its support and maintenance contract.
- Potential for shared services in the future; infrastructure, support, development, etc.
- Potential to share the cost for any bespoke developments with other product users.
- Increased website usage leading to ongoing reduction in avoidable phone calls
- Increased mobile usage

## 4 Risks of preferred option

- Cost of implementation increases
- Web content and usability doesn't improve so customers need to use other (more expensive) channels
- Web usage does not increase meaning customers are using other (more expensive) channels

- Number of phone calls does not fall meaning costs could increase
- New system does not meet all of our requirements; technical constraints, supplier over promises and under delivers
- Unable to secure on-going bespoke developments in acceptable timescales
- Functional duplication with future CRM products

# 5 Interfaces

The following issues all need to be noted before any project work begins

- WDC applications – any significant change to the website CMS will affect the many non-CMS web applications we have developed (e.g. planning application search, Homechoice bidding etc). We need to ensure consistency of style and structure across all of our online resources. Any project will need to factor in ICT time to update these applications. The scale of the development will depend entirely on the nature of the CMS development but as we do not currently envisage a complete redesign then the scale should be limited.
- The intranet is developed in Sharepoint.
- Forms are an important part of our website. Any forms not redeveloped and integrated with back office systems as part of separate projects will need to be redeveloped in the new CMS. This may require ICT resource, depending on the nature of the CMS.
- The Warwickshire Direct Partnership is looking at potential Customer Platform solutions to help our organisations focus on integrated service delivery. There is the potential that the solution may provide a web platform as a by-product and at reduced cost. There are companies in the market offering 'Customer Contact Platforms' that incorporate a range of technologies without the cost of a CRM – these include web technologies. A decision should be made in the next 18 months. It should be noted that there would be development costs on top of the cost of any web platform that was provided, and we might not have a choice of platform.
- Other Warwickshire authorities are a CMS (Jadu) and there are potential ongoing savings in joining them.

**It is a priority that any web platform would have to meet our requirements for a customer focussed website – first and foremost.**

# 6 Cost and timescale

It is difficult to give an indication of cost for this work as it can vary massively depending on our requirements. Until we go to tender with an exact specification we cannot get precise costs. At this stage companies are only willing to provide very rough figures.

## 6.1 CMS replacement

Based on investigations to date we can expect to receive figures in the range of £80,000 - £170,000 for a CMS replacement, should we go out to tender. This includes software licences, implementation, development and

training. In all cases any award is subject to procurement either by open tender or a mini-competition under a framework.

Jadu, a CMS supplier familiar with local government and Warwickshire councils, supplied an estimate for a CMS installation based on our basic requirements. This came to around £70,000 -£80,000. We can expect that this figure would increase once we finalise more detailed specifications but it is a useful guide and could potentially remain under £100,000. Such a purpose-built CMS would meet our needs.

Trinity Expert Systems, our current CMS supplier, provided a figure for redeveloping the website in Sharepoint in 2009. This is their preferred product and the one they have most experience of. The figure included work that we won't require this time (e.g. user testing and restructuring work) but didn't include work that we will require this time (e.g. mobile version, templates for Leisure departments). This figure did however include a full content migration which we require now and given that Trinity have a very good knowledge of our content and features, it is useful as a guide for a Sharepoint implementation. The total estimated figure was £165,000 - £170,000.

In both cases above, support costs would be in the region of £6000 per year, similar to what we pay now.

A hosted solution would cost an additional £9000 a year.

Based on previous experience, such projects would take in the region of 6-8 months from approval to completion.

### 6.2 Open source

The main costs for this option are employing permanent staff to implement and support the technology on an ongoing basis.

## 7 Investment appraisal and impact on Customer Services

### 7.1 Increased web usage and cost prevention

In 20011/12 there were 1,000,000 visits to the website. Over 75% of these would have resulted in contact with the council via another more expensive method (phone or face to face) if they failed online, according to data from customers.

Using staff costs at £13.13 an hour as WCC have (a low figure) and an average query time of 5 minutes this amounts to an overall cost prevention of over £800,000. It is unlikely that we would increase resources in the CSC, so realistically increased waiting times and abandoned rates would result.

In reality it is unlikely that an organisation in 2012 simply wouldn't have a website or that every visit would end in failure. However, the figure above highlights the overall importance of having a website that meets customer demands. Customers will try another more expensive channel, usually the

phone, if they fail online and this has a cost. The better the website the lower the failure demand and the more cost we prevent.

## 7.2 Impact on Customer Service Centre and other access channels

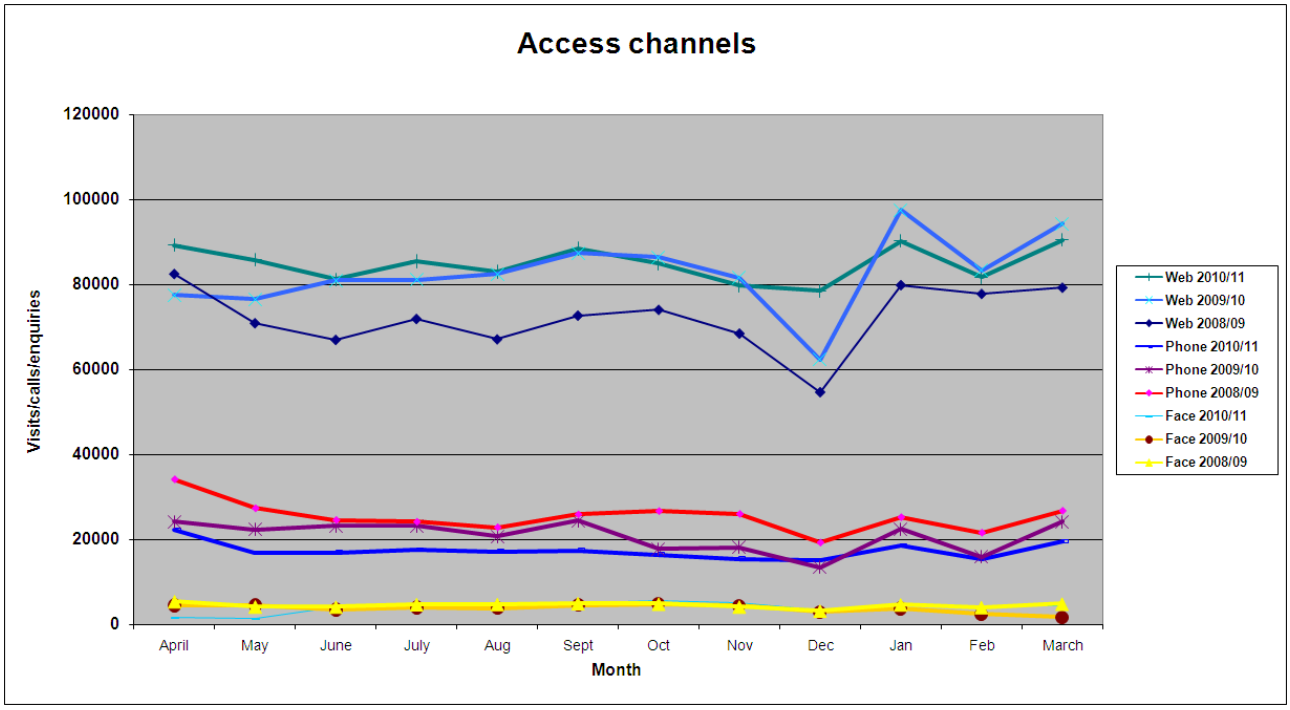
One of the primary reasons for driving website usage is to reduce the number of avoidable incoming phone calls (i.e. those calls from people with internet access where the information or service is readily available on the website). These can be first time calls or calls from people who have failed to find what they want on the website.

**We know from web feedback that around 15% of our web users completely fail to find the information that they want and that an additional 15% fail to find everything they want. That's a possible 30% of web users who then have to contact us via an alternative method.**

Over 75% of our web visitors say they would find an alternative access channel if they can't find the information on the website – over 45% by phone.

We have over 100,000 visits per month to the website so there is the potential for thousands of unnecessary follow up calls, visits or emails. Some won't bother to follow up an unsuccessful visit to the website but we have evidence that many people do.

**There is evidence that improving access to information and services on the website affects the number of phone calls we have to deal with. As web usage increases year on year, phone calls have decreased.**




**Total number of phone calls received per year**

| Year | Number of phone calls received | Number of calls answered | Grade of service (calls answered within 30 secs) |
|---|---|---|---|
| 2006 | 331264 | 228807 | 61% |
| 2007 | 344721 | 307874 | 66% |
| 2008 | 323257 | 275803 | 65% |
| 2009 | 260524 | 236784 | 64% |
| 2010* | 217436 | 161016 | 42% |
| 2011 | 191521 | 148705 | 45% |

*The figures from 2010 onwards do not include switchboard calls as these were merged with county council in November 2009. This accounts in part for the sharp drop in numbers – however the overall trend for falling numbers of incoming calls continues.

The calls answered and grade of service figures also demonstrate that demand remains high and that any additional demand (e.g. due to increased website failure) would create extra burden on the contact centre that would have to met unless we accept a reduction in customer service quality.

The website is preventing costs from rising in areas like the Customer Service Centre. By continuously improving the site and making it available to new customers (e.g. mobile users) we can continue to prevent the need to meet greater demand by phone.

### 7.3 Savings from the Looking Local service

By making our website mobile friendly we can consider ending our Looking Local TV/mobile service. This service has a very small audience and is aimed at those without internet access through a PC. It is increasingly aimed at the mobile phone audience which we could meet through a proper mobile website. This would make an annual saving of £12,000.

## 8 Evaluation

The forecast time, effort and costs associated with updating the website CMS are worth it because of the impact it will have on our customers and on WDC as a business, particularly the Customer Service Centre. It is also a necessary update due to the age and security issues with the existing technology. An improving website that is easier to use will lead to ongoing increased usage, particularly as new users arrive on mobile platforms. As we serve more customers online we can reduce avoidable contact by phone, an important cost prevention measure at a time of high demand on services.