<table>
<thead>
<tr>
<th>Title</th>
<th>Leveraging new opportunities from the use of web widgets in online Web 2.0 environments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Hynes, Michael</td>
</tr>
<tr>
<td>Publication Date</td>
<td>2010</td>
</tr>
<tr>
<td>Publisher</td>
<td>University of Western Australia</td>
</tr>
<tr>
<td>Link to publisher's version</td>
<td><a href="https://sites.google.com/site/journalofinternetbusiness/issues">https://sites.google.com/site/journalofinternetbusiness/issues</a></td>
</tr>
<tr>
<td>Item record</td>
<td><a href="http://hdl.handle.net/10379/5335">http://hdl.handle.net/10379/5335</a></td>
</tr>
</tbody>
</table>
Leveraging New Opportunities from the Use of Web Widgets in Online Web 2.0 Environments

Michael Hynes
Department of Information Technology
National University of Ireland Galway

About the Authors
Michael Hynes is a Doctoral Candidate in the School of Sociology and Political Science at the National University of Ireland Galway. His research interests are in the use of virtual mobility technologies and option to promote more sustainable consumption behaviour in transportation, as part of the wider ConsEnSus project (www.consensus.ie). This paper is a result of his previous work at NUIG, a module of his Masters Degree in Information Technology which he completed in 2009. He holds a first class Bachelor of Science Degree in Information Technology through OSCAIL, the Irish National Distance Education Centre at Dublin City University.

Corresponding Author Mailing Address, Phone and E-mail
Michael Hynes
Room 331, 2nd Floor
Áras Moyola
National University of Ireland Galway
Newcastle, Galway
Ireland
Phone: (353) 91 495 405
E-mail: m.hynes5@nuigalway.ie
Leveraging New Opportunities from the Use of Web Widgets in Online Web 2.0 Environments

Michael Hynes
National University of Ireland Galway

Abstract
Over the past two decades the world has experienced a phenomenal rise in popularity of new Internet technologies in the shape of innovative software, applications and services. Online social networking websites, blogging, Wikis and multimedia sharing have all become the mainstay of what we now describe as the World Wide Web, and all have the common function of allowing end-users customise and share information with others online. The old ways of understanding the Internet - one where content was in the hands of the few - is quickly fading into memory. People now build their personal profiles and share information with friends using freely available, easy-to-use social software on available platforms. With Internet activity rapidly evolving organisations are finding it increasingly difficult to remain successful doing business the old way. The traditional methods of reaching audiences have broken down and become critically fragmented. Business can no longer simply interrupt the dialogue occurring online with their message they must somehow become part of the discourse. Into this environment steps the web widget. Widgets are short software programs that display content in small screen format. At present they are largely seen as fun objects but with their ability to be virally syndicated across the network, and elsewhere, any message associated with the application will stealthy find its way into people’s private online space. This paper endeavours to demonstrate the advertising and marketing potential from the use of web widgets, particularly given modern web operating environments, by using an innovative methodology. The research sets out to reinforce the belief that online social networking, the main delivery vehicle for widgets, is a popular and growing mode of modern communication and, widgets are easy to use and virally distributed to a number of diverse platforms. In addition, the paper investigates how
people interact with these applications in a very practical manner, to further expand upon current understanding of the World Wide Web in these new emerging and challenging online environments.

Keywords: Web widgets, Internet, Web 2.0, marketing, advertising
Introduction

Change is inevitable and unavoidable and in business change is seen as fundamentally necessary and an integral part to maintaining and building successful organisations (Bokeno, 2008; Siegal, et al., 1996). With new Internet technologies change is all the more acute and time-critical due to the phenomenal rise in use and popularity of the World Wide Web¹ over the past two decades in Ireland (Commission for Communications Regulation, 2007). The Internet now gives business a greater understanding of their customers and the concept of self-service, and a new type of online activity is emerging, one where communities can develop, where information can be readily shared and, new ideas are spawned and evolve rapidly (Saran, 2006).

People who spend a lot of time online may have seen or heard about web widgets. They are small free software programs that can be grabbed and embedded into web pages, desktops, start-pages or mobile devices, offering everything from weather reports to sports results. Other terms used to describe widgets include; gadgets, apps, badges, modules, webjits, capsules, snippets, minis, sprouts and flakes (Virtual Sushi, 2009). ComScore² estimated almost 586 million individual Internet users viewed a piece of widget software in November 2007 alone, which was double their estimate for July that year (Ricadela, 2008). But as Alex Iskold, feature writer for ReadWriteWeb, maintains “everyone knows that widgets are the new black. They are cool, they are slick, and they are playful. Cool and fun is one thing, but business is another” (Iskold, 2007). Widgets can be a digital billboard where customised messages are embedded, a method of discrete product placement or a shop-front window for selling products or services online. It has led some technologists to conclude that these humble bits of code could turbo-charge a third phase in Internet development (Ante, et al., 2007). However, incompatibilities exist with some widget-related software and these affect distribution and deployment, accessibility, security, metadata, internationalisation and the device-independence of widgets themselves (Cáceres, 2007). It has been suggested that widget developers, social networking websites and publishers will soon get together to hammer out standards from something as simple as how to determine the appropriate pixel height and width of an in-widget advertisement

¹ The World Wide Web will be shortened to the web for the remainder of this paper.
² ComScore is an Internet marketing research company providing marketing data and services to many of the Internet’s large businesses and organisations.
to how to figure out when a widget is successful (Higginbotham, 2008). The trend for user online experience simplicity and functionality continues to grow and widgets will play an ever-increasing role allowing people share, store, and create information on the web (TechFAQ, 2008).

Widgets are defined and described using XML and HTML programming languages, the content is positioned and styled using Cascading Style Sheets (CSS) and the application logic is powered by ActiveX, JScript (essentially JavaScript without the Sun trademark), and VBScript (Kennedy, 2007). XmlDocument is the programming interface that can be used via JavaScript to transfer data over a standard web HTTP protocol, and update portions of the page. Scripting and data transfer via XML are the original key technologies in the term Ajax – Asynchronous Javascript and XML (Gibson, 2007). Widgets, once developed, are bundled and named with the extension .wdgt and are managed by the user as a single entity (Developer Connection, 2007). The portable chunk of code that makes up the widget is decoupled into a front and back-end. The back-end communicates with one, or more, third-part services such as RSS feeds, video streams, or other types of available media services. Depending upon the execution model the widget may be either; thin/light-weight (the front-end resides on the clients host with little processing power), or fat/heavy-weight (back-end resides on the server where all necessary computational resources are available for processing the business logic associated with functionality). Widgets predominately fall into one of three main categories; accessory e.g. clocks and calculators, application, e.g. music controllers and address books, and informational widgets, e.g. weather reports and sports results (Developer Connection, 2007).

Each web widget has a specific and unique lifecycle beginning with its creation and concluding with an online phase-out, or fading, of the application (Northover and Wilson, 2004; Sauer, 2009) and this is a fundamental aspect to understanding its propose and function (see Figure 1). The Beginning of Life (BOL) relates to conception and construction processes. This early stage is crucially important as developer/owners decide the content or service they wish to encapsulate. Online Life (OL) is the storage of the widget on a single online data server, which allows continuous modifications to the widget where necessary. The widget can be then
be viewed, grabbed and downloaded onto various target destinations straight from this server. Deployment is accelerated by viral distribution of the application. The End of Life (EOL) relates to the online dying-out of the widget. This phase represents the slowing down of viewing and deployment to a point where it is considered obsolete by the community of users. Each widget needs to be retired so its impact can be assessed to determine its success, or failure, and to learn for the future development of similar applications.

![The Widget Lifecycle](image)

**Figure 1 - The Widget Lifecycle**

**Related Work**

Very little investigation or research has been completed on the business potential of widgets, and any related studies focus primarily on their use with mobile devices. Jaokar & Fish (2006) discuss web widgets in the context of mobile Web 2.0 and the possibilities for AJAX development, while Lee (2009) contended that the use of mobile web applications and mobile widgets were extremely promising for exploring, prototyping and piloting mobile services. Raman (2009) asserted that mobile web widgets had much to offer in terms of mobile information access, communications and work by enabling specialised mash-ups. Kaar (2007) concluded that the elegance of widgets lie within their simplicity and orientation to a specific task, and due to the similarity to other web developments the widget developer base is deemed significant. Additional research presented the suggestion of using a mash-up approach for implementing semantic functionalities as web widgets, which can then be included in applications, such as adding concept search functionality to existing applications (Mäkelä, *et al.*, 2007). This paper seeks to expand upon the known research by empirically testing the potential of web widgets to generate enthusiasm amongst the community of online users, leading to increased business opportunities.
The Web has Evolved

The traditional view of the web was one of a static and rigid information retrieval instrument where the user entered a URL (Uniform Resource Locator) address and the browser retrieved webpage’s from various online storage servers. This was described as a *click, wait, and replace* model (Gibson, 2007). People viewed the web as a communication medium in which relatively few people published and most just browsed (Anderson, 2007). The end-user was a passive entity in the system. Web 2.0 is the term to describe new collaborative applications and services. The prime difference between the original web and Web 2.0 is greater end-user participation in developing and managing content, which directly changes the nature and value of information (Sendall, *et al.*, 2008). Examples of Web 2.0 applications and services include online social networking websites, blogging, Wikis, widgets, and other such collaborative tools and software platforms. The design and development of this next generation of the Internet is all about interacting, collaborating and networking. We have moved from seeing the web as a technology driving cultural change to seeing it as allowing cultural change to drive technology (Chestney, 2008). The success of Web 2.0 is not just about technological development and the network effect is not primarily coming from links between content and tags, rather given the prevalence of the social constructs within these successful environments the value of the network effect is coming from links between individual people themselves arising from their own connections and interactions (Hendler and Golbeck, 2008). More than just the latest technology buzzword Web 2.0 is effectively changing how we communicate online and is a transformative force propelling companies across all industries towards a new way of doing business (Musser and O'Reilly, 2006). Crowdsourcing (a play on the word outsourcing) seeks to takes advantage of this new expansive online networked informational resource to assist business (Howe, 2006). In a recent study it was found that the business health of an organisation can be damaged by not using these new technologies (Allen, 2008). The biggest challenge, argues Niall Cook, with this emerging new world of social software is “how well mangers and senior executives, and not just technologists and early adaptors, understand and apply it” (Cook, 2008: p16).

One of the difficulties faced by business today is conventional advertising delivery has dramatically changed and evolved over the past few years. Traditional media has become
fragmented and modern marketing campaigns need to include the visual, audio and electronic aspects of media to be appealing to a new generation. Whilst market research followed by segmentation is an agreed marketing principal (Sutherland and Canwell, 2004) the question now is how to get at particular online audiences. These are harder to identify and reach so traditional methods of marketing and advertising are proving less successful. Most young people have grown up with the Internet and spend hours communicating and making friends in their own private and personal online space. They have been heavily exposed to traditional methods of online advertising and no longer want to be bombarded with pop-up and banner ads, instead choosing to customise their own web space and allow interaction with only the chosen few. The challenge for business is how to reach this lucrative segment of the marketplace.

A widely distributed web widget can increase traffic to a website, boost search engine ranking or, provide exposure for an organisation or company (Briody, 2007). This unique word-of-mouth advertising is emerging because of the extensive availability of effective delivery tools in the form of the phenomena of online social software. Ivan Pope, the founder of Snipperoo, asserts that widgets can be extremely powerful when you have something of value you wish to distribute (Maven, 2007). He emphasises that marketers have always needed to reach specific groups of people online, but it is hard to get buy-in with online social communities. “What we are going to see emerge is a whole marketing discipline devoted to working out how to give value to people, by providing them with content objects they can use in their site. If you get that right, then the end-users will take your marketing message and distribute it far and wide in a very open and honest way. You become part of the community” (ibid). Building widgets can be done inexpensively and encapsulating useful content with the application and syndicating it across the web is a very innovative and economical way of getting a message across. However, this author claims that the key to the success of any such application is not just in the development, or indeed deployment, but rather in its usefulness and adoption by the recipient and end-user communities.
Research Objectives

Web widgets are not achieving their full potential as novel and exciting pieces of Internet software technology. Given the developmental background and growth of many recent and innovative social software technologies this research sets out to illustrate important similarities between those successful applications and web widgets. The fundamental parallel feature is simplicity, allowing users concentrate on content and service rather than the processes of design, development, implementation, deployment and instillation. This paper will contribute to the body of knowledge on current Web 2.0 online environments and introduce widgets as a powerful and underutilised online marketing tool. The research seeks to confirm the popularity of the most acknowledged available delivery platform for widgets, online social networking websites, suggesting an approach to quantify the prospective marketplace in Ireland for any such application (O1). The next objective assesses widget usability (O2). Usability refers to the ease-of-use and learnability of any software application, an essential ingredient to widget success and a necessary factor for examination. In addition, presenting widgets as software virally distributed across the various available platforms is another tenet of research (O3). The final objective gauges embedded content and service and its value to an online community (O4). By developing a unique experimental widget, with embedded content, this study will show that such an application is easy to use and will be viewed and accepted by a targeted community of users online. Four research objectives are outlined and listed in Table 1:

| O1  | Is online social networking popular in Ireland? |
| O2  | Are web widgets easy-to-use?                   |
| O3  | Are web widgets virally distributed to a range of delivery platforms, and |
| O4  | If relevant and useful content, or service, is provided will users interact, load and view the web widget frequently? |

Table 1 – Research Objectives

Methodology

The preliminary phase of research set about establishing the sum of online Internet users in Ireland; quantifying the potential overall marketplace, and then ascertaining the popularity of
online social networking websites. These sites are the most significant and popular delivery vehicles for widgets. In November 2007, nearly 148 million US Internet users viewed web widgets, representing 81 percent of the total audience, with MySpace having the largest audience (Meyer, 2008). To determine online networking website popularity one of the more widely quoted website ranking resources available, Alexa³, was selected. This resource was monitored weekly for a number of months to establish that these social networking and blogging sites were not just seasonal or short-term phenomenon. The monitoring commenced on the 7th July 2008 and continued until the 11th May 2009, a period of some nine months.

The next step was the design and development of an experimental web widget, with its exploitation being closely monitored during its deployment and distribution across various available platforms. The widget was created using the SproutBuilder⁴ development tool, which offered a hosting platform and analytical software for data collection. The widget was proposed as a Galway & District League widget, with soccer information for the city, county and general region of Galway, Ireland. The encapsulated information was made pertinent to people involved in the football life of Galway, but some general assumptions could be made about web widgets from data obtained. The application was designed, developed and loaded in late January 2009 and ran for a period of three month, after which time it was retired and the data analysed.

In addition to the development of the experimental widget end-user feedback on people’s widget experience was sought. This was made possible by manner of a questionnaire targeted directly at the experimental widget user. After exploring the application users were encouraged to complete the questionnaire and give relevant expression to their experience. The questionnaire consisted of eight questions, mostly closed. Many respondents to questionnaires have little patience for long drawn out questions that require considerable cognitive effort so this was an effort to obtain as many replies as possible, within the given timeframe. To supplement the questions on widget use some basic demographic inquiries were sought to build a user profile

⁴ Sprout Builder is available at http://sproutbuilder.com/.
and allow for focused conclusions and recommendations. The questionnaire was implemented online using the resource SurveyMonkey\(^5\).

*Alexa, a Website Ranking Resource*

Alexa is a California based subsidiary of Amazon, primarily known for its toolbar and website ranking service. Once installed on a user’s computer the toolbar collects data on browsing history and behaviour which is transmitted back to the Alexa website where it is stored and analysed. This provides the foundation for regular website ranking reports. In addition, Alexa continually crawls all publicly available sites to create a series of snapshots of the web. The company uses the aggregate data to create additional features and services, but also to correlate their website ranking information obtained from their toolbar. On the 31\(^{\text{st}}\) March 2009 Alexa received a complete redesign and new metrics such as page-views per user, bounce rates, time on site, as well as additional features such as demographics, click-stream and search traffic statistics were added (Alexa, 2009). There are some legitimate criticisms of the Alexa ranking service. The principal difficulty is that not every user has, or indeed will, install the Alexa toolbar and this leaves many site visits unmeasured (101 Best Websites, 2008). Sub-domains are not ranked separately, and neither are sub-pages within a domain as the overall traffic is calculated for top-level only. The toolbar had, until recently, another shortcoming in that it could not be installed on any browser other than Internet Explorer (Malda, 2007). The rankings, therefore, may be somewhat imprecise but it continues to remain a valuable tool for website popularity grading (Suarez, 2007). The service can also provide useful information for sites with very good traffic, since Alexa focuses more on the traffic that websites receive rather than on links to it. For many organisations seeking such information using Alexa ranking service is considered their best and only option (Avangate, 2007). This research seeks to use the monitoring of Alexa to confirm, or deny, the membership figures made available by two popular online social networking websites in Ireland.

---

\(^5\) The SurveyMonkey website is available at [www.surveymonkey.com/](http://www.surveymonkey.com/).
Delivering the Widget

The power of a web widget resides in its ability to be syndicated across the web, and other various available platforms, allowing developers and additional stakeholders access to a wide and varied online audience. One of the main delivery platforms for widgets is online social networking websites. The population of Ireland in the 2006 census stood at 4,239,848 (CSO, 2009) and almost 63 percent of households had an Internet connection (CSO, 2009). “Social network or blog sites are visited by three quarters of global consumers who go online, after the numbers of people visiting these sites increased by 24% over last year. The average visitor spends 66% more time on these sites than a year ago, almost 6 hours in April 2010 versus 3 hours, 31 minutes last year” (Neilsen, 2010). Facebook had 1.58 million monthly active users in Ireland (Facebook, 2010) while in 2007 Bebo maintained they have 1 million members in Ireland (Bebo, 2007; Kelly, 2007). To confirm the popularity of these sites a process of weekly monitoring was required. This was undertaken to authenticate, or refute, the claims of popularity made on these social networking sites. Alexa was checked each Monday morning over a nine month period to establish the status of online social networking in Ireland⁶ (see Figure 2). A number of self-imposed restrictions were placed on the data collection process prior to commencement including; prohibiting sites containing explicit sexual material, the exclusion of dating websites and the omission of video and file sharing sites such as YouTube.

![Figure 2 - Social Networking Websites Popularity in Ireland](image)

⁶ See Tables 1 and 2 in the appendix.
The most popular online social networking site in Ireland, over the period of data collection, was Bebo although this is closely followed, and sometimes overtaken, by Facebook. Google’s Orkut was also a popular site for the online networking community within the country. The Polish website Nasza-Klasa (Our Class) was consistently in the top 20, although it recently experienced a fall in popularity possibly reflecting the economic downturn and the departure of this immigrant grouping from the country, as borne out in media reports (Keenan, 2009). The phenomenon rise of Twitter in Ireland was evident with its rapid rise to number 27 by May 2009. Other features of the Irish marketplace was the steady ranking of blogging sites and the rise in popularity of the business networking site LinkedIn, once again a possible outcome of the recent economic downturn. These results correlate with an Irish survey which maintained that 90 percent of respondents claimed to regularly use social networking sites (IrishJobs, 2010).

The Web Widget Experiment

The experimental widget was designed, developed and loaded onto two uniquely targeted local websites. Using this approach it was possible to monitor how the widget was utilised, where it was deployed and, with the assistance of feedback from the questionnaire, obtain user’s response to a number of related questions with regards to the application and its operational environments. The widget was designed as a ‘Galway & District League Football Widget’ with relevant information and content targeted to the needs of Galway and District League participants, their families and, supporters. The audience for the application was predominantly people interested in football within Galway city and county region, and the widget was broken into six separate component parts, which are listed in Table 2:

1. The front introductory page
2. All the forthcoming fixtures
3. All the most recent results from the various leagues
4. Some football quotes
5. A Galway FA opinion poll
6. A relevant photograph or video clip.

Table 2 - The Pages of the Web Widget
Widget Components

The top of the front page introduced the widget as a ‘Galway FA Web Widget’. This text was hyperlinked to the official Galway FA website. It was subtitled ‘Get the most up-to-date fixtures & results direct to your social network space!’ The background was chosen to reflect the football theme and colours were selected on the basis of visibility and clarity. The next text line invited the user to explore the widget and return to the front page to complete the questionnaire. By clicking on HERE the user was taken, by hyperlink, to the online questionnaire location.

To open the deployment module and load the widget the Share button, on the bottom-right-hand corner, was left clicked with the mouse. A host of options appeared allowing users choose from some of the leading available online social networking websites, blogging services and accessible wireless appliances. In addition to posting the widget directly to one of these many established platforms the option to copy the widget code and post the application directly to a website (via a copy and paste action) was provided.
The second component was the provision of forthcoming fixtures for all the various competitions run by the league and the national organisation (Football Association of Ireland) involving local teams. This information was segmented into day, competition, teams involved, venue and, kickoff times. By vertically scrolling the full fixture schedule became visible. The list was up-dated with relevant changes on a daily basis, with time and date of the most recent amendment highlighted in red. The complete fixture list was loaded on Sunday evening for the following weeks/weekend’s games. At the base of the page a number of standard link buttons were provided to allow users navigate to other areas of the widget.

The following section provided users with the most recent results for all league teams in all their respective competitions, both local and national. It was deemed essential to keep this list accurate and up-to-date, and supply the exact time and day of the most recent revision. At the base of the page a selection of link buttons were again provided to allow users navigate to other sections of the widget. A conscious attempt was made to standardise all these buttons on the various pages to provide consistency of format throughout the web widget.

The next page of the widget provided light entertainment by presenting humorous football quotes attributed to leading personalities in the sport, both nationally & internationally.
These quotes were changed weekly to catch the attention of users who would revisit the widget regularly. Standardised navigation buttons were once again provided at the base.

The fifth element of the web widget was a brief poll, another effort to attract the continued attention and participation of users. Over the online lifetime of the widget two polls were conducted, both reflecting various aspects of organisation within the Galway & District League. The software used to design, develop and implement the polls was the free online service Polldaddy\(^7\). The first poll asked; \textit{when should football be played in the Galway and District League?} This elicited 72 responses. The second poll enquired; \textit{what is the best playing surface in the Galway & District League?} to which 28 responses were received\(^8\).

The final module of the widget was a photograph or video clip, changed weekly, relating to some sporting memory. The photograph was generally one of a local football team taken by the author to prevent any issue of copyright infringement. Video clips were obtained from online multimedia sources which provided the capability to embed such clips onto the widget. Only clips that had waved their copy-right entitlement were used. At the base of the page standard navigation buttons were again positioned.

\textit{The Preliminary Delivery Websites}

Two separate delivery platform websites were chosen for its primary deployment onto the Internet. The first of these was the Galway FA website\(^9\). This was an obvious choice as content and service, embedded in the widget, was appropriate to the day-to-day operation of that organisation. During the 2008/2009 season 72 adult teams and 144 underage teams, under jurisdiction of the Galway FA, competed in 59 local and national competitions. The official source for all fixtures, results, and league table information throughout the season was the Galway FA website. As the season progressed the impression rate for the website increased significantly hitting a high point in April 2009 of just over 113,000 (Galway FA, 2009). The

\(^7\) Polldaddy is available at \url{www.polldaddy.com}.
\(^8\) The results are provided in Tables 8-9 in the appendix.
\(^9\) The Galway & District League website is available at \url{www.galwayfa.net}.  

16
second delivery website was a football competition website developed by the author. NewFMC was a fundraising endeavour for two local sports clubs in Galway and the purpose of the site was to allow users chose a team of players from a list of English Premier League players and ‘manage’ this team throughout the season. Players received points for match appearances, goals, saves, and other such activities and lost points for conceding goals, being send-off, and other such negative football actions. The winner of the competition was the ‘manager’ with the highest number of points at the end of the season. Participants in this competition were predominantly people interested in football and from the Galway region.

Results of the Widget Experiment

The initial phase of experiment investigation sought to show how users explicitly interacted with the web widget. Sprout Builder provided analytical tools and software which allowed information on widget use to be determined, as outlined in Table 3:

- **Widget Views** – the number of times the web widget was viewed online
- **Posting Interface Loads** – the number of times the *share* button was clicked, which opened the deployment module
- **Widgets Posted** – the number of times the widget was inserted onto a website, social network domain, blogging site, or other delivery platform.

Table 3 - Widget Statistic Information

The first day the widget was made available online a promotional notice was e-mailed to a number of individuals associated with the Galway FA and participants in the football manager competition. The list mainly consisted of secretaries of each club affiliated to the Galway & District League. The notice served as a description and introduction to the application. As the experiment was setting out to research the potential of such an application and its viral nature this was the only occasion people were informed about the widget’s existence, and the service and content on offer. Continually prompting individuals to discover and interact with the widget

---

10 The Football Manager Competition website is available at [www.newfmc.com](http://www.newfmc.com).
would have been counter-productive to the fundamental nature of the experiment. The average views per-day for the widget, over 106 days of existence, was 15.35. The most significant day for posting interface loads was 3rd March with 15 attempts. On that day 64 views were recorded and 3 postings were also confirmed. There was no obvious rationale for this particular day’s activity. The average number of attempts at loading the widget over the lifetime of the application was 1.25 per day. In total the widget was posted on 16 different destination platforms, which included social networking sites and start-pages. This was an average of 0.15 per day. The range of platforms demonstrated the ability of the application to be viral in nature. Although predominately viewed from both the Galway FA and football manager website, the widget was also viewed from a number of additional platforms (see Figure 7). 30 percent of the platform views were undetermined by the Sprout Builder analytical tool.

![Figure 7 - Widget Postings](image)

**Data Analysis**

Following the monitoring of social network website ranking and the design, development, implementation and evaluation of the Galway FA web widget, considerable data had been collected and analysis began to formulate some conclusions and recommendations. The research confirmed media reports and website claims that online social networking was a popular mode of communication for a significant number of Irish online users. Some evidence of fluctuations in

---

11 The results can be found in Tables 10, 11 & 12 in the appendix.
popularity was observed, for example the exceptional recent rise of Twitter, but most social
networking sites had remained stable in terms of their popularity. In global rankings provided by
Alexa in June 2009 Facebook was placed fourth behind Google, Yahoo and YouTube, with
Blogger in eighth and MySpace in eleventh positions (Alexa, 2009). We can reasonably assume,
therefore, that social networking sites are an Irish, and worldwide phenomenon, in terms of
online communications and popularity.

The monitoring of widget syndication demonstrated it was viewed from a number of
diverse platforms. It was available for viewing from Facebook and Bebo pages, as well as from
start-page platforms iGoogle and Yahoo. 30 percent of the platforms were undetermined, which
is recorded as a deficiency in Sprout Builder monitoring and analysis software. Web widgets
are, therefore, virally distributed across many available delivery platforms.

The Galway FA widget was viewed, on average, over 15 times per day over its online
lifetime. When its creation was first announced this peaked at 121 views. In an effort to
illustrate the viral nature of the application no further prompting was undertaken and the
application was discovered by individuals by chance and in an arbitrary fashion. Figures did
take a significant jump on the 3rd March 2009 with no obvious explanation for this increase in
activity. We can reasonably assume that the viral nature of the widget becomes more apparent
on that particular day.

The widget was posted to delivery platforms on 16 occasions, and 144 posting interface
loads were recorded. This was not a significant number considering the service and content
provided, the three months that the widget was active and, the popularity of the Galway FA
website, so some examination and analysis of this issue needs to be undertaken. The majority of
secretaries of clubs that operate within the Galway & District League are parents and ex-players
who volunteer free-time in the service of the sport. They would have experience of
administrating football clubs and these positions require some maturity, significant fundraising
activity as well as general management skills. It is the author’s experience that the majority of
secretaries would be in their mid-thirties, or older, and this demographic was the main point of
contact for the promotion of the widget. Evidence from the questionnaire establishes that this particular audience did not, at that point of time, have the main delivery platform (social networking site) available for such an application. The author believes the demographic profile appropriate for the success of the widget would have been; underage players and young adults engaged in playing the sport in Galway and this were not reached during the experiment which ultimately led to low adoption rates.

Sixty one people completed the questionnaire\(^\text{12}\). The results of the first question, referring to the respondent’s use of online social networking sites, did not bear out previous data on the monitoring of such sites and their overall popularity. Only 18 percent responded positively to using online social sites on a weekly basis, with 23 percent having never used these sites. The reason for this anomaly, the author feels, lies in the promotion of the widget towards an inappropriate target audience. 91.7 percent of respondents were 22 years of age or older, 50 percent claiming to be 35 years of age or older. Bebo was consistently one of the more popular online social networking sites in Ireland. Demographic information released by Quantcast maintained 95 percent of Bebo users were under the age of 35 years of age, 54 percent 17 years of age or younger (Quantcast, 2009). In addition, 60 percent of Bebo members were female, whilst the questionnaire was answered by an overwhelming 91.5 percent male audience. Although the Galway FA administers ladies football their season begins in late June, after the experimental widget was retired. In this instance we can state that the widget was promoted inappropriately to an audience that does not typically utilise online social networking websites, nor generally interacts with such applications. The experiment would have been more successful if promoted to an audience; equally divided between male and female, between the ages of 13 and 22 years old and, participating or having a keen interest in football in Galway.

When asked had they seen or used a web widget in the past 42.6 percent answered negatively. This would indicate that close to half the people who filled in the questionnaire were not familiar with this new web technology from the outset, or appreciated its use and potential.

\(^{12}\) See tables 8 to 15 in the appendix for full results of the questionnaire.
The results of question three showed 93.2 percent of respondents found all the features of the web widget easy to locate. This would indicate users found the application itself easy to navigate and use. This evidence is further substantiated by the previous question where a sizeable number responded to having never seen or used a widget, while another 14.8 percent has viewed one but not interacted with it. A high percentage of the respondents had never experienced or interacted with a widget but found the application easy to use.

The next two issues dealt with content and service and its relevance to the user. While 77 percent of respondents found the information presented useful and interesting we also note the majority of users had never interacted with a widget. Close to 20 percent were undecided on this answer. While it is pleasing such large numbers were positive we must pragmatically maintain that as people’s experiences evolve and interaction with widgets becomes more frequent user’s taste and preferences for such applications will become more sophisticated. The content and service provided must keep pace with ever changing needs to remain relevant to requirements, and to remain a success in terms of any business potential. Of the twenty eight people who responded to question 5 ten answered negatively saying they could not think of anything extra to add to the content and service already provided. A number of respondents requested more focussed information, paying particular attention to individual clubs fixtures, results and league table positions. Two users requested tables be provided, covering all the various leagues being administered by the Galway & District League organisation. Other features requested are included in Table 4:

- Links to relevant or new soccer forum boards
- A link to a new blogging site covering all aspects of local football
- Important match reviews & reports, both local and national
- Pictures of the most attractive ladies in Galway soccer
- Club profiles
- Up-to-date coaching course information
- “Offer free beer!”

Table 4 – Additional Responses to Question 5
The demographic questions established the majority of respondents were male (91.5 percent), over the age of 22 years old (91.7 percent) and in employment (60.7 percent employees and 11.5 percent self-employed). This illustrates the target audience the widget actually reached and further exemplifies the point that more consideration and attention needs to be given to the promotion of widgets towards an appropriate audience in order for these applications to develop into successful business and Internet marketing tools.

**Limitations & Weaknesses of the Methodology**

Due to the low adoption rate the methodology employed for this research needs to be analysed and evaluated. The first issue of concern was the use of Alexa web service to rank popularity of social networking sites in Ireland. This resource has a number of functional deficiencies, and these were discussed earlier. Given the unregulated and often anonymous nature of the Internet we can say there was no definite comprehensive method of ranking the popularity of websites, during the research period. Using the Alexa website resource can be regarded as utilising a reputable, if not faultless, resource for the purpose of grading popularity.

The adoption of the widget by an unsuitable community of users was a deficiency in methodology employed. The users who participated in the experiment were not the category of people who regularly engage with online social networking sites, as borne out by results. It is feasible that people who answered the questionnaire had no interest, or use, for the application or information provided, or they were unfamiliar with widgets and how to interact with them in a very practical manner. The unique strength of a widget is inherent in allowing people interact in an autonomous and selective manner, and this proved to be the most implicit limitation of the methodology chosen. It was not possible to continually persuade people to view the application and people were free to use, or ignore, the widget provided. Users may also have found the information and service not relevant to their own specific individual needs and requirements, and some were just exclusively interested in specific club’s activities and found sifting-through all league fixtures and results troublesome. Finally, even when interacting with the widget there was no means of coercing users into completing the questionnaire comprehensively, or knowing if they have been truthful in their response to any particular question.
Conclusions & Recommendations

The business opportunities afforded by the use of web widgets is under-researched at present. Given the autonomous nature of the web it is difficult to correctly determine what a modern Internet user is doing online and what their specific requirements may be. This paper outlines a creative methodology to establish a pattern of use for web widgets in a practical and unobtrusive manner and thus explore the potential of such software to be utilised as a marketing, advertising or business tool in the future. It is an empirical attempt to understand how people use and exploit software on the web, while recognising the independent nature of online activity that is fundamental for the development and trust of the network. The research objectives set about determining the available marketplace for the expansion of the web widget base, the practical ease-of-use of such applications, the distribution nature of widgets and, provide some indication of possible content or service that is needed for such application success.

Online social networking websites, the main delivery vehicle for widgets, are a popular mode of communication in Ireland (O₁), and this marketplace continues to expand. Web widgets are easy to use (O₂) and the power and potential of such applications will continue to reside in this ease-of-use, and this is supported by the research findings. If we continue to allow people interact with such applications in an effortless manner we are dismantling one of the main barriers to adoption. Web widgets are virally distributed to a variety of online destination platforms (O₃). It emerged from our research that the audience for the Galway FA experimental web widget, although finding the service and content useful (O₄), did not have an available platform to store the application. More importantly, they failed to pass on information about the widget to individuals who may have an interest in such an application so the true viral nature of this particular experimental widget was not evident throughout its online lifespan. As a result we can come to some conclusions. For a web widget to be a success significant research and analysis needs to be undertaken with regards to the online audience before the applications initial design, development and deployment. While we could have reasonably determined the segmentation of the online audience the promotion of our widget proved inadequate when anonymity and privacy is such a central component of the modern Internet experience. This research allows recommendations be made on the developmental environment for web widget
and it is not simply sufficient to build a widget and ‘throw it out there’ without giving due consideration to the following issues and concerns, outlined in Table 5:

- Does the audience have the necessary access to hardware and competencies to interact with the technology in the first instance; PC, available Internet connection and, are they technically savvy enough for online interactions?
- Have the audience an available platform for such a widget; web-space, social network presence, a start-page or compatible mobile device?
- How likely are widget users to tell friends and online acquaintances about the application, and have it distributed accordingly?
- What precisely would the audience like the widget to contain; the service, information or content?

**Table 5 - Widget Initial Development Considerations**

While the overall experiment may not have emphatically proved the business potential the research has answered some important questions about its operating environment. The marketplace for new Internet technologies continues to develop and expand and many people find web widgets uncomplicated and easy to navigate. With both of these significant prerequisites in place the issues will continue to be; what is the exact audience we want to target, how do we get to them and, do we have the correct content or service embedded in the widget to appeal to this particular community of users?

Some areas of additional research are required. There is no available definite website ranking service, with most services relying on the use of toolbars and the response of selected individuals. Given the nature of the Internet it may never be absolutely possible to know the true rankings of any website, but an effort must be made to offer a form of legitimate and standard ranking service, and agreed by all the relevant agencies and stakeholders. Further investigation into how people of dissimilar age and gender interact with new web technologies is also recommended. The research also discovered reluctance on the part of social networking websites to publicly release demographic information about their community of users. Finally, research into a selection and grading mechanism for widgets is required or the environment for
these applications will quickly become saturated. There is a danger this new software will become ostracised by an overwhelmed and besieged online community before it has been given a chance to shine.
References


Chestney, R. (2008) 'Employee Communications are History: Social Media is the Future'. PR, Social Networking and Blogging in Practice, PR Week.
Commission for Communications Regulation (2007) *The Internet and Broadband Experience for Residential Users*. For: Commission for Communications Regulation, Dublin, Ireland, COMREG.


Appendix

*Red text signifies blogging websites.*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bebo</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Facebook</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Orkut</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Blogger*</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Myspace</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Flickr</td>
<td>38</td>
<td>41</td>
<td>39</td>
<td>40</td>
<td>33</td>
<td>33</td>
<td>31</td>
<td>30</td>
<td>27</td>
<td>26</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>Photobucket</td>
<td>45</td>
<td>48</td>
<td>53</td>
<td>51</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>51</td>
<td>51</td>
<td>51</td>
<td>51</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>WordPress</td>
<td>47</td>
<td>47</td>
<td>47</td>
<td>48</td>
<td>44</td>
<td>44</td>
<td>42</td>
<td>42</td>
<td>45</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Tagged</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>95</td>
</tr>
<tr>
<td>Friendster</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Hi5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97</td>
</tr>
<tr>
<td>Linkedin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>96</td>
</tr>
<tr>
<td>Twitter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 – The Popularity of Online Social Networking Website in Ireland I

<table>
<thead>
<tr>
<th>Site</th>
<th>15-Mar</th>
<th>16-Mar</th>
<th>21-Mar</th>
<th>22-Mar</th>
<th>23-Mar</th>
<th>02-Apr</th>
<th>03-Apr</th>
<th>28-Apr</th>
<th>29-Apr</th>
<th>30-Apr</th>
<th>06-May</th>
<th>07-May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bebo</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Facebook</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Orkut</td>
<td>16</td>
<td>16</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Nasza-Klasa</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>19</td>
<td>19</td>
<td>20</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Blogger*</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Myspace</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>18</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Flickr</td>
<td>26</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>23</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Photobucket</td>
<td>51</td>
<td>50</td>
<td>52</td>
<td>55</td>
<td>54</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>53</td>
<td>57</td>
<td>56</td>
</tr>
<tr>
<td>WordPress</td>
<td>35</td>
<td>35</td>
<td>36</td>
<td>38</td>
<td>40</td>
<td>42</td>
<td>39</td>
<td>37</td>
<td>35</td>
<td>34</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Tagged</td>
<td>60</td>
<td>59</td>
<td>59</td>
<td>59</td>
<td>56</td>
<td>56</td>
<td>56</td>
<td>55</td>
<td>58</td>
<td>59</td>
<td>55</td>
<td>49</td>
</tr>
<tr>
<td>Friendster</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hi5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linkedin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twitter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 - The Popularity of Online Social Networking Websites in Ireland I
### Table 3 - Poll One

<table>
<thead>
<tr>
<th>When should football be played in the Galway &amp; District League?</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>The season should remain the same</td>
<td>29%</td>
<td>21</td>
</tr>
<tr>
<td>Play in the summer months only</td>
<td>29%</td>
<td>21</td>
</tr>
<tr>
<td>Take a two month break at Christmas</td>
<td>29%</td>
<td>21</td>
</tr>
<tr>
<td>Play in the winter months only</td>
<td>13%</td>
<td>9</td>
</tr>
</tbody>
</table>

### Table 4 - Poll Two

<table>
<thead>
<tr>
<th>What is the best playing surface in the Galway &amp; District League?</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terryland</td>
<td>71%</td>
<td>20</td>
</tr>
<tr>
<td>Drom</td>
<td>11%</td>
<td>3</td>
</tr>
<tr>
<td>Oranmore</td>
<td>4%</td>
<td>1</td>
</tr>
<tr>
<td>Mervue</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 5 - Web Widget Views

<table>
<thead>
<tr>
<th>Widget Views</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of days the widget was viewable</td>
<td>106</td>
</tr>
<tr>
<td>Total number of views</td>
<td>1628</td>
</tr>
<tr>
<td>Average number of views per-day</td>
<td>15.35</td>
</tr>
</tbody>
</table>

### Table 6 - Posting Interface Loads

<table>
<thead>
<tr>
<th>Posting Interface Loads</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of attempts to load</td>
<td>144</td>
</tr>
<tr>
<td>Average number of attempts per-day</td>
<td>1.35</td>
</tr>
</tbody>
</table>

### Table 7 - Widgets Posted

<table>
<thead>
<tr>
<th>Widgets Posted</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of posts</td>
<td>16</td>
</tr>
<tr>
<td>Average number of posts per-day</td>
<td>0.15</td>
</tr>
</tbody>
</table>
1. Do you use social networking sites, e.g. Bebo, Facebook, MySpace, etc?

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least once a day</td>
<td>18%</td>
<td>11</td>
</tr>
<tr>
<td>About once a week</td>
<td>11.2%</td>
<td>7</td>
</tr>
<tr>
<td>Not very often</td>
<td>47.5%</td>
<td>29</td>
</tr>
<tr>
<td>Never</td>
<td>23%</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 8 - Question One

2. You have just used a web widget to get to this survey. Have you previously seen or used a web widget?

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I’ve previously seen and used a web widget</td>
<td>36.1%</td>
<td>22</td>
</tr>
<tr>
<td>I’ve seen one but never used it</td>
<td>14.8%</td>
<td>9</td>
</tr>
<tr>
<td>No, I’ve never seen or used one</td>
<td>42.6%</td>
<td>26</td>
</tr>
<tr>
<td>I’m still not sure what a web widget is</td>
<td>6.6%</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 9 - Question Two

3. The Galway FA web widget featured fixtures, some recent results, a poll, quotes, and picture or video clip. Did you find these easy to locate?

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>93.2%</td>
<td>55</td>
</tr>
<tr>
<td>No</td>
<td>3.4%</td>
<td>2</td>
</tr>
<tr>
<td>I’m undecided</td>
<td>3.4%</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 10 - Question Three

4. How useful or interesting did you find the content and service offered by the widget?

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful/interesting</td>
<td>77%</td>
<td>47</td>
</tr>
<tr>
<td>Of no use or value</td>
<td>3.3%</td>
<td>2</td>
</tr>
<tr>
<td>I’m undecided</td>
<td>19.7%</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 11 - Question Four
5. What feature or information would you like to see contained on the web widget? | Percent | Count  
---|---|---
Question answered | 45.9% | 28  
Question skipped | 54.1% | 33  

Table 12 - Question Five

6. What sex are you? | Percent | Count  
---|---|---
Male | 91.5% | 54  
Female | 8.5% | 5  

Table 13 - Question Six

7. What age group are you? | Percent | Count  
---|---|---
Under 13 years of age | 3.3% | 2  
14 to 21 years old | 5% | 3  
22 to 35 years old | 41.7% | 25  
Over 35 years old | 50% | 30  

Table 14 - Question Seven

8. What is your occupation? | Percent | Count  
---|---|---
Student | 21.3% | 13  
Employee | 60.7% | 37  
Self-employed | 11.5% | 7  
Not currently in employment | 6.6% | 4  
Retired | 0% | 0  

Table 15 - Question Eight