Technology Report and Score Card

Mary K. French

University of Maryland College

630-9040 Emerging Technology Trends and Issues in Distance Education and E-learning

Professors Elaine Collins-Brown and John Woods

Abstract

In this technology driven-age, it is important to know which technologies are viable, user-friendly, and cost effective. This report shows a list of seventeen commonly used technologies, a score card with ratings and categories and conclusions about similarities and dissimilarities in the various applications.

Keywords: technology, scorecard, apps, user-friendly, OERs

Technology Report and Score Card

A score card is a way to identify useful web 2.0 tools at a glance. In today's world of technology, there are new apps popping up each day. Tim O'Reilly (2005) compares web 2.0 "as a set of principles and practices" that bring many applications together in a type of software 'solar-system' network (para. 6). In addition, web 2.0 tools provide a service and encourage the user to share. They also utilize a sense of user community and participation (Budd, n.d.). Tools or apps need to serve a distinct purpose. An Argentine entrepreneur and co-founder of Livra, a leading online survey company in Latin America, claims that an app should focus on one thing. This one application must be very well designed. If the tool is accessible, has responsive design (can be accessed from a laptop, desktop, iPhone, or Android) the app is on its pathway to success (Lazideh, 2013). This report will rate seventeen technologies based on eight criteria and give reasons why user-friendly, purpose-driven and no-cost applications are amongst the best choices for consumers.

Scorecard Categories

The first category listed, does the app solve a problem, is the most defining rating. There are approximately 15,000 new apps released each week per Shelly Freierman (2011) of the New York Times. If it is hard to determine what the purpose is for a tool, most likely it is a waste of time and energy. One more reason many apps exist is the huge consumer market that can download and successfully utilize these tools. It is estimated that 95% of Americans use cell phones (Pew Research Center, 2017). With this number of users, it is no wonder that there are apps for virtually any subject available.

Built-in virality is the next criteria. This category translates into a tool or app having the ability to attract other consumers. It means the app is more appealing when users ask others to join. Facebook, twitter, Instagram, Flickr, all the apps listed in the scorecard had built-in virality (Lazideh, 2013).

Personal experience was rated third in the category list. Each of these tools was experimented with either over a longer period time or within the confines of the week where the discussions took place. Often, how an app is perceived by the user is the most important factor in whether the app is used frequently and shared with friends and family. Lifelong learning is a force behind ubiquitous social apps or tools that allow people to connect to others who can help learning continue outside the formalized educational sphere (Anonymous, 2008).

Ease of use and skills are probably one of the reasons, apps such as Facebook and Twitter are still used for communication. Instant messaging is a main way for business people to communicate, professors to communicate with students, students to communicate with students. According to Thrift (2011), feedback to students is expected to be rapid, almost instant. Technology such as iPads, iPhones and other mobile devices make grading on the go possible. LMSs that offer cloud-based grading, and easy means to leave feedback will be those LMSs that remain in the future for secondary and k-12 education (Chang, 2016).

Features such as security and support are important to user satisfaction. Many apps store sensitive personal information that users need to know is secure. In addition, there are considerations concerning k-12 education. One important reminder as that individual companies can make internet access on devices and tools compliant with the Children's Internet Protection Act across various wireless networks (Ramasubbu & Wilcox, 2009).

Responsive design implies that design and development should react to the "user's behavior and environment based on screen size, platform and orientation" (Smashing Newsletter Team, 2011, para. 3). These are important aspects of user-friendly design; flexibility is key.

Easy access and cost is the last criteria. Accessibility is important as anything too difficult to use, most likely will not be an asset and therefore not used. Open educational resources make it possible to lessen the cost of education. Tools make learning more flexible and can address many different learning styles. Educators can also take advantage of free tools to expand their learning environments (Seven things you should know, 2011).

Technology Scorecard

Categories

Table 1

Categories	**Explanation**
Does the technology solve a problem?	The technology solves a problem and has a significant reason for existing.
Built-in virality	The technology has a built-in share methodology.
My experience with the technology	This is a subjective category based on my own personal feelings and experiences with the technology.
Ease of use	Was the technology easy to use and intuitive?
Security and support	Could the technology protect my identity and was there ample support to assist with issues.
Responsive Design	Easy reading and navigation with a minimum of resizing, panning, and scrolling—across a wide range of devices (from desktop computer monitors to mobile phones).
Accessibility	Did the technology lend itself to good ADA practices and was it adaptable for any user regardless of age?
Cost	Was the technology free or were there costs associated with it? This report gave anything with a price tag a lower rating.

Technologies and Rating Categories

Table 2

Technologies	Does the technology solve a problem?	Built-in Virality	My experience with the technology	Ease of use	Security and support	Responsive Design	Accessibility	Cost	**Total Tech Rate**
Facebook	5	5	5	5	3	5	5	5	**38**
Flickr	5	5	5	5	5	5	5	5	**40**
Voice Thread	5	5	4	4	5	4	5	2	**34**
Music Theory	5	5	4	5	5	5	5	5	**39**
Flat	5	5	5	4	5	5	5	3	**37**
Voice Recorder	5	5	5	5	5	3	5	5	**38**
Quizlet	5	5	5	5	5	5	5	3	**38**
Pininterest	5	4	4	5	3	5	5	5	**36**
Twitter	5	5	4	4	5	5	5	5	**38**
Study Blue	5	3	2	2	5	2	1	5	**25**
Friendsee	5	5	2	2	2	3	1	5	**25**
Guess Song	4	5	3	3	5	3	1	5	**30**
Yokee	5	5	5	5	5	5	5	2	**37**
Coursera/Web Development MOOC	5	3	4	2	3	3	5	5	**30**
Blackboard LMS	5	5	5	5	5	5	5	1	**36**
Skype for Business	5	5	5	3	5	5	5	5	**38**
Skype	5	5	4	4	5	5	5	5	**38**

Rating (scoring) 1, not at all compliant; 2, somewhat compliant; 3, mostly compliant; 4, very compliant; 5, beyond compliant

Note. This score card was adapted from DMI (2015, August 13). Scorecard for choosing mobile technology. Retrieved from https://dminc.com/blog/scorecard-for-choosing-mobile-technology/.

Results of the Scorecard

Commonalities Found in the Scorecard

As seen in table 2, the first category, does the tool solve a problem, most technologies received the highest rating. Each of these tools solve a problem or fulfill a purpose whether educational or recreational. Tim O'Reilly (2005) states the first purpose of the web 2.0 boom is the "service" (p. 5). Each tool delivers a service to the consumer.

The second commonality, where 14 out of 17 tools received a score of five, was the built-in virality of the application. Most technologies are based on connecting with other human-beings and this is one of their prime directives as is the case with Facebook, Skype, Skype for Business and Voice Thread amongst others. In fact, for web developers this type of capability serves the highest goal. There is nothing better than word-of-mouth recommendations and shares between users (White, 2013).

Access received 15 out of 17 fives. Most of the tools were accessible as downloads either on a mobile device, laptop, or via the internet. The Department of Justice changed the Americans with Disabilities Act (ADA) mandating that all apps be adapted for disabilities. In other words, the apps must be easy to use, intuitive, and provide transcripts for multimedia as an example of one modification (LaGreca, 2017). This is most likely the reason that most tools, tested received the highest score.

Another common characteristic was security and support. Thirteen out of 17 tools received a five, Pininterest and Facebook received a three, and the Web Development course a two. Facebook is often confronted with security issues where accounts are sabotaged and false postings are sent (CBS News, 2010). Many have chosen not to post personal pictures of their children for fear they may fall into the wrong hands. Most apps had built in protection features that assured identity and any confidential information was secure and protected. In addition, elaborate support systems under ‘help’ or ‘support’ were readily available. Facebook has been called the ‘google’ of social media by many and continues to improve its security measures; however, personal experience has taught that caution is required when posting personal information (O’Donnell, 2016).

Dissimilarities in the Scorecard

The categories, my experience with these tools (8 fives, 6 fours, 1 three, 2 twos), ease of use and skills (8 fives,4 fours, two threes, and 3 twos), received the most varying scores. Study Blue was a website much like Quizlet introduced through the discussion board. The website didn't allow logons for entities other than institutes of higher learning or public schools. There was a way to by-pass this issue but it took too long to figure out; therefore, it received a two. Friendsee is a new social live video network where friends can share live broadcasts. It integrates with Facebook, but was difficult to manage and use so it received a two. The Coursera course, "Web Development" was hard to navigate through. Since, there are so many courses one can easily sign onto in Coursera, it can be difficult to find the way back to a chosen class. This fact earned the MOOC a two for ease of use and skills. Both Friendsee and Study Blue also received low scores as they were too difficult to figure out compared to the other apps that were user-friendly.

The other category, cost, earned the following low scores: Blackboard, Voice Thread, Yokee and Guest Sing. Blackboard is a LMS that most have access to if their employer or school owns a license. Costs are astronomical for private individuals. The other apps, Voice Thread, Yokee and Guest Sing had very limited capabilities without paying a monthly or yearly fee. Open educational resources (OER)s are the future. Many educators, administrators, philosophers, governments and businesses feel basic human rights demand open access to higher education (OER Commons, n.d.). Facebook has found a way around monthly or yearly fees; these other technologies could learn from its lasting stay in the market of social media applications.

Conclusion

The twenty-first century is an age of technology, the internet, and ongoing invention. For web tools to survive they need to be easy to use, versatile across various platforms, free of charge, and serve a distinct purpose. Flickr and Music Theory applications received the highest tech rating for these reasons; they are free yet user-friendly and serve a distinct purpose. Web developers are constantly looking at these issues when they develop new technologies and in the end, it will be the consumer who decides which tool survives and which becomes extinct. This report should serve to help those seeking advice on which technologies to choose.

References

Anonymous. (2008). Debating Online Social Networks. *The Chronicle of Higher Education*. http://chronicle.com/article/Debating-Online-Social-Netw/44077/

Budd, A. (n.d.). What is Web 2.0 [Presentation]. Retrieved from http://www.andybudd.com/presentations/dcontruct05/

CBS News (2010, May 8). Five hidden dangers of Facebook. Retrieved from http://www.cbsnews.com/news/five-hidden-dangers-of-facebook/

Chang (2016). Technavio announces top 4 emerging trends in LMS - https://thejournal.com/articles/2016/07/11/technavio-announces-top-four-emerging-trends-in-lms.aspx

Edutech Wiki. (2015). Learning object review instrument. Retrieved from http://edutechwiki.unige.ch/en/Learning_Object_Review_Instrument

Freierman, S. (2011, December 11). One million mobile apps, and counting at a fast pace. *The New York Times*. Retrieved from http://www.nytimes.com/2011/12/12/technology/one-million-apps-and-counting.html

LaGreca, K. (2017). Are your mobile apps ADA compliant: Adhering to accessibility regulations [Blog post]. Retrieved from https://www.npgroup.net/blog/are-your-mobile-apps-ada-compliant-adhering-to-accessibility-regulations/

Lazideh, A. (2013, July 19). Eight tips for a successful app. *Forbes*. Retrieved from https://www.forbes.com/sites/avidlarizadeh/2013/07/19/eight-tips-for-a-successful-app/#5f500e4753e5

O'Donnell, A. (2016, October 31). Five things you should never post on Facebook. *Lifewire*. Retrieved from https://www.lifewire.com/things-you-should-never-post-on-facebook-2487417

OER Commons (n.d.). Frequently asked questions: OER for k-12 educators. Retrieved from https://www.oercommons.org/static/staticpages/documents/FAQ-OER-K-12.pdf

O'Reilly, T. (2005, September 30). What is web 2.0: Design patterns and business models for the next generation of software. Retrieved from http://www.oreilly.com/pub/a//web2/archive/what-is-web-20.html

Pew Research Center (2017, January 12). Mobile fact sheet. Retrieved from http://www.pewinternet.org/fact-sheet/mobile/

Ramasubbu, S. & Wilcox, B. (2009). Mobile learning in classrooms of the future: Converge, http://www.convergemag.com/edtech/Mobile-Learning-in-Classrooms-of-the-Future.html

Reilly, T. (2005). What is 2.0: Design patterns and business models for the next generation of software. Retrieved from http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=5

Seven things you should know about OERs. (2010, June). *Educause*. Retrieved from http://net.educause.edu/ir/library/pdf/ELi7061.pdf

Smashing Newsletter Team (2011, January 12). Responsive web design: What it is and how to use it. *Smashing Magazine*. Retrieved from https://www.smashingmagazine.com/2011/01/guidelines-for-responsive-web-design/

Thrift, N. (2011) Blackberrys and beyond: Technology and global higher education. *The Chronicle of Higher Education*. Retrieved

from http://chronicle.com/blogs/worldwise/blackberry-and-beyond-technology-and-global-higher-education/28592?sid=wc&utm_source=wc&utm_medium=en

White, C. (2013, August 19). Key ingredients to make your app go viral. *Smashing Magazine*. Retrieved from https://www.smashingmagazine.com/2013/08/key-ingredients-to-make-your-app-go-viral/