

The Internet, Facebook, Twitter and YouTube – What's the Future for my Business?



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Top Business Priorities

- Drive innovation – 38%
- Reduce cost – 36%
- Increase competitive advantage – 33%
- Already storing data in the Cloud – 49%



Facebook, Twitter, YouTube

Facebook

845 million users

500 million users signed up

250 million photos uploaded

Twitter

250 million monthly users

1 hour uploaded per sec

340 million tweets sent per day

YouTube

1 trillion views in 2011

2.7 billion comments per sec

3 billion hours watched per month



Internet and Web - 1

- Choice and sharing are increasing
- Cloud computing is changing the way companies do business
- Can enable companies to work together better
- 4 million businesses already using Google Apps
- Google Apps is now ISO 27001 certified.
http://en.wikipedia.org/wiki/ISO/IEC_27001
- Any screen will do (or will it? – size may matter)



Internet and Web - 2

- E-commerce becoming commerce
- Internet economy \sim 3-8% of GDP (UK – 8%)
- Companies using the web grow 4-8 times faster
- Transformational aspect



Internet and Web - 3

- By 2016, 50% of global 1000 companies will have stored customer sensitive information in the cloud
- 95% of smart phone users search for local information with 88% taking action in the same day on the information they find
- One in three of young professionals prioritise choice of devices, apps, and social tools above salary



Internet and Web - 4

2012

2 billion online

5 billion mobile

800 exbytes (times 10^{18})

Prediction for 2020

5 billion online

10 billion mobile

53 zettabytes (times
 10^{21})



Internet Matters - 1

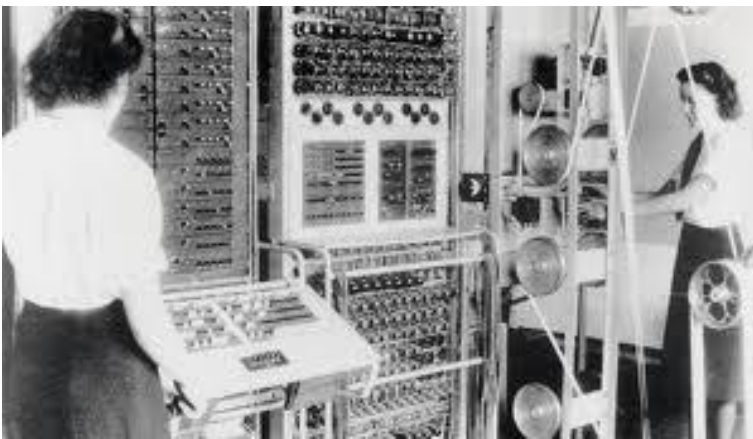
- McKinsey Global Institute – *"Internet Matters: the Net's sweeping impact on jobs, growth and prosperity"* (pp 70) – http://www.mckinsey.com/Insights/MGI/Research/Technology_and_Innovation/Internet_matters
- The Executive Summary (6 pages) contains the key points



Internet Matters - 2

- The Internet's impact on global growth is rising rapidly
- The Internet accounted for 21 percent of GDP growth over the last five years among the developed countries MGI studied, a sharp acceleration from the 10 percent contribution over 15 years
- Most of the economic value created by the Internet falls outside of the technology sector, with 75 percent of the benefits captured by companies in more traditional industries
- The Internet is also a catalyst for job creation. Among 4,800 small and medium-size enterprises surveyed, the Internet created 2.6 jobs for each lost to technology-related efficiencies

Case Study 1 – Bletchley Park





Bletchley Park - 2

- *"Thousands of people worked at Bletchley Park during World War Two to decode messages that the German forces transmitted, most notably by Hitler to the German high command. The cracking of the codes used, the use of the intelligence gained and the subsequent related actions of the Allies is said to have shortened World War Two by two years possibly saving 22 million lives. The critical importance of Bletchley Park in world history cannot be denied.*
- *Bletchley Park is also the birthplace of the computer. The world's first programmable, digital, electronic computer: Colossus was invented and built at Bletchley Park during World War Two to speed the reading of encrypted German messages.*

(cont)



Bletchley Park - 3

- *Bletchley Park is unique. It combines a key role in modern history along with being the birthplace of the computer. I cannot think of a place more worthy of our interest, our support and our government's support. Please join me in raising awareness of the fundamental importance of Bletchley Park and in saving Bletchley Park so that it will still be there for future generations to visit, appreciate and understand"*

- **Dr. Sue Black**

*Head of Department of Information and Software Systems,
University of Westminster*

<http://www.savingbletchleypark.org/> (2009)

Bletchley Park - 4



I think that I shall never see,
A place as curious as B/P.
A place called up at war's behest
And peopled by the strangely dressed
And what they do they may not say
Nor were with, till Judgment day.

For six long years we have been there
Subject to total scorn & stare,
We came, by transport or by train
The dull, the brilliantly insane
What were we for, what shall we be
When God at last redeems B/P?
Will Air force types that never fly
Soldiers who neither do nor die
Land lubbers, sailors, boards complete
Long haired civilians, men, of feeble
Such motley throng you'd only see
Within the precincts of B/P.
If I should die with this of me
I saved my country at B/P.
And should they ever ask "what did you
in the Home World War II?
Get my name in, do you'll fall
For a/ft all, B/P is tall! — (Toll fare of "True")

Bletchley Park - 5

- **Bletchley Park is saved!!**



- **IT IS OFFICIAL! BLETCHLEY PARK IS SAVED!!**



Bletchley Park - 6

- Stephen Fry - *#bpark You might want to sign the Save Bletchley Park petition. Read@Dr_Black's reasons why on <http://is.gd/ikEh> - BP won us the war! 2.11 am Feb 4th from web"*
- Milton Keynes Council offered to match-fund £300K for repairs
- In May 2009, Stephen Fry visited BP and tweeted the situation re Bletchley Park to his then 500,000 followers (currently he has over 1.3 million)
- In Sept 2009, UK Heritage Lottery Fund announced £465K for BP to become a world class heritage site and educational centre
- Twitter saved Bletchley Park



Bletchley Park - 7

- *"Google have made a really lovely, poignant film about Tommy Flowers and Colossus, I urge you all to watch it. It features several of the people that worked with him at the time and really evokes for me the same feelings that I get when I go to Bletchley Park. The people working there did such amazing things, shortening the war by 2 years and on the whole got no credit at all.*

- Film: <http://www.youtube.com/watch?v=knXWMjIA59c>

- Related blogpost: <http://googleblog.blogspot.com/2012/03/remembering-colossus-worlds-first.html>

- *While I'm on the subject of Bletchley.... The Turing exhibition was officially opened this week by James May of Top Gear fame. It is a lovely and interesting exhibition including Turing's school reports, Turing's teddy bear and a copy of a letter from our very own Professor Brian Randall to Turing's mother. If you get the opportunity please go to see it, and take your staff, and students, friends, neighbours etc. ;))*

(cont)



Bletchley Park - 8

- *Prof John Clark at York kindly invited me and the former and current CEOs of Bletchley Park (Iain Standen and Simon Greenish) to University of York last night to give a public lecture entitled: Did Twitter save Bletchley Park? About 200 people turned out on a windy night, they were a lovely audience :) When we asked them at the end of our talk to decide whether Twitter did save Bletchley Park they said YES! :) Slides from our talk are here:
<http://www.slideshare.net/blackse/did-twitter-save-bletchley-park>*
- *I can't remember if I told you all but Google gave Bletchley Park £500k at the end of last year, and I'm hoping that the relationship between them will carry on developing. I'm going to go to the US as part of a fundraising tour with Sir John Scarlett, new Bletchley Park Trust Chair, later this year which should be fun and will hopefully bring in new streams of revenue :))"*

Sue Black (March 2012)



Case Study 2 - Elections

- *"In US Presidential elections, the use of social media by presidential candidates has become a way for many voters to find out about candidates, as well as their beliefs and stances. Particularly younger voters, 18-24"*

<http://pol.illinoisstate.edu/current/conferences/2011/Hamilton%20Draft%20Thesis.pdf>



Elections - 2

- Social media fills the gap left by broadcast and cable news
- Internet – peer to peer
- Broadcast – gatekeepers and editorial bias influences what is broadcast in television networks and newspapers



Case Study 3 – Political Protest

- “Can Facebook win a revolution? The power of social media has been a hotly debated topic after the Arab Spring brought about regime change in multiple states. The 2009 Green Revolution in Iran may have been the first modern political insurrection to be chronicled on Twitter, but it did not bring down a government. Egypt’s Tahrir Square protest movement did just that. Some [previous research](#) has analyzed the use of social media at a more general level throughout the Arab world in early 2011, but the exact nature of the relationship between social networks and revolution is still being examined.

(cont)



Political Protest - 2

- A 2012 study from the University of North Carolina at Chapel Hill published in the *Journal of Communication*, "Social Media and the Decision to Participate in Political Protest: Observations From Tahrir Square," analyzed more than 1,000 interviews with protestors shortly after President Hosni Mubarak's resignation. The surveys asked more than 90 questions relating to issues such as how people first heard about the protests, and the interplay between protest activity and both social media usage and traditional media influence. The authors caution that the surveys were gathered during a *"tumultuous, violent time"* and do not necessarily constitute a representative sample of all Tahrir Square protestors.

(cont)



Political Protest - 3

The study's findings include:

- Three-quarters of the Tahrir Square protestors interviewed were male. The female protestors tended to be younger, better educated and were more likely to have Internet access on their phone and at their home than the men.
- Of those interviewed, 52% had a Facebook profile and almost all used it for communication about the protests; only 16% had a Twitter account.
- Nearly half of participants (48.4%) first heard about the protests from face-to-face communications. *"Traditional mass media were far less important for [informing] people about the protest than were more interpersonal means of communication (face-to-face, telephone, or Facebook)."*

(cont)



Political Protest - 4

- Nearly half of participants (48.2%) engaged in citizen journalism, sharing video or photos of the protests. *"The leading platform for producing and disseminating visuals was Facebook, used by about fully a quarter of the sample (25%), and phones were a distant second, used by 15%. These were not mutually exclusive options; many who used their phones also used Facebook (72% of those who used their phone also used Facebook), presumably uploading videos and pictures taken on their phones to Facebook. About 5% of the sample used Twitter."*
- The vast majority of protestors actively used email, but relatively few of them used it to communicate about the protests. By contrast, few people first heard about the protests by text, but nearly half used texting to share information.

(cont)

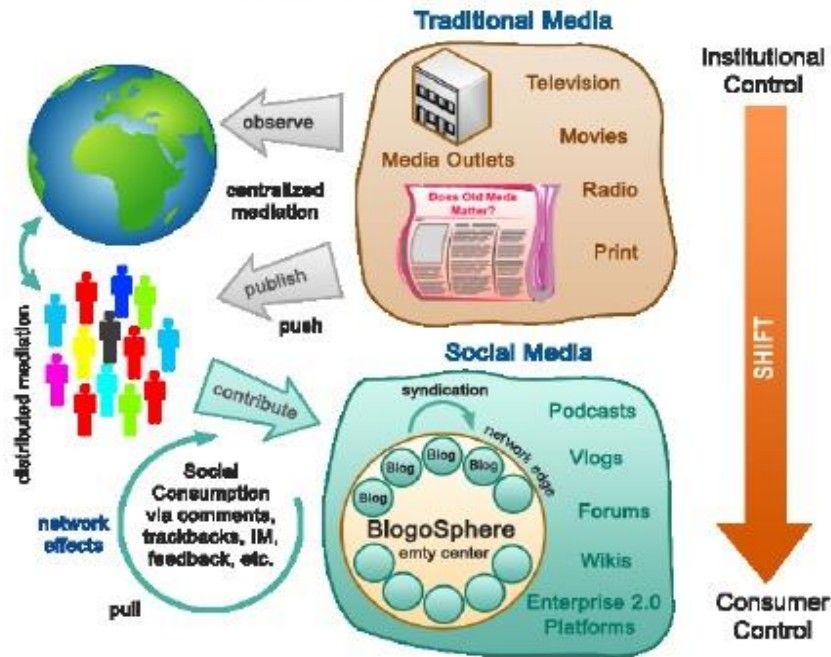


Political Protest - 5

- The authors conclude: *"In the case of protests in Egypt, it appears that social networks, often mediated through the new online platforms in the emergent networked public sphere, played a crucial role. The high level of production and dissemination of multimedia content, undertaken by about half the sample, shows that it became difficult to suppress information about protests. Approximately half of our respondents were actively documenting and sharing images of the protests. If that proportion was applied to even the most conservative estimates of total participation in the Tahrir Square demonstrations, it becomes apparent that at least tens, if not hundreds of thousands of people were documenting the protests — and were, de facto, functioning as citizen journalists."*

<http://journalistsresource.org/studies/government/international/social-media-protest-egypt-tahrir-square/>

The Emergence and Rise of Mass Social Media



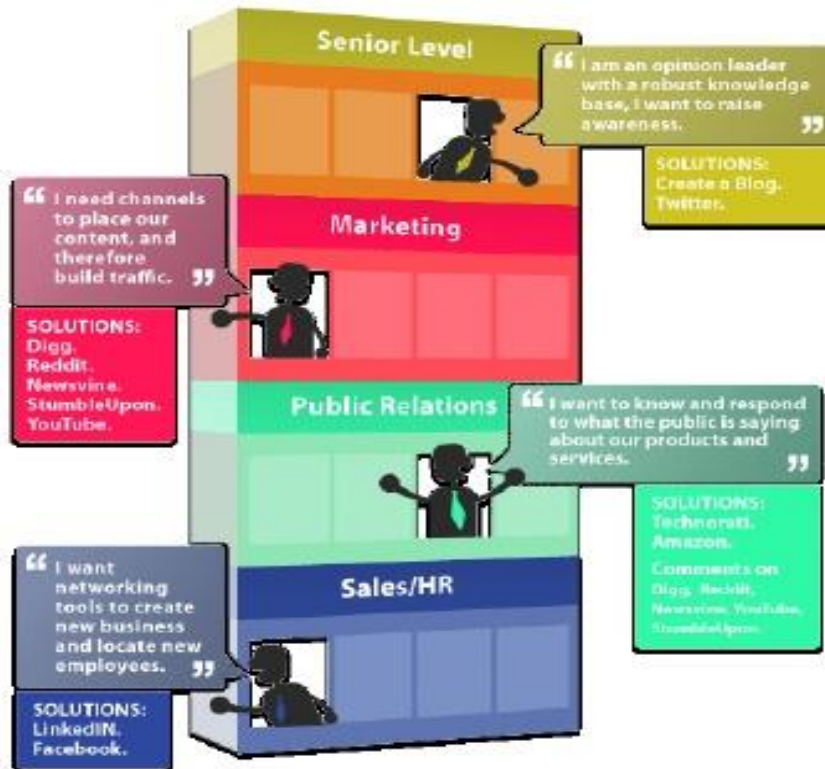
A popular type of mash-up cannibalizes different pieces of content, typically videos and music. Popular videos on YouTube can generate hundreds of imitations, homage's and (frequently) comic reinterpretations. In communities like this, the number of mash-ups a piece of content spawns is often an indicator of its popularity. Some marketers have cottoned on to the power of this and it makes it a point to encourage people to reinterpret their content.

How social networks work

Social networks on the web are like controlled versions of the extensive blog network. People joining a social network usually create a profile and then build a network by connecting to friends and contacts within the network, or by engaging real-world contacts and friends to join the social network.

These communities preserve the interest of their members by being useful to them and providing services that are pleasurable or help them to expand their networks. MySpace, for instance, allows its members to craft vibrant, chaotic home pages (they've been likened to the walls of a teenager's bedroom) to which they can upload images, videos and music.

Building a Company with Social Media



Reading blogs

The easiest way to read blogs is to subscribe to the ones you find interesting using the Bloglines, Rojo or Newsgator newsreader services. A newsreader is a website or piece of software where one can go to read a newsfeed that you are subscribed to via RSS. All blogs and most news websites have RSS feeds attached to them.

You can find blogs on topics that you're interested in by using search engines like Technorati or Google Blog Search. If you find a blog which is predominantly fascinating or pertinent to you, have a look for its 'blogroll' (list of recommended blogs) – it's a great way of exploring the networks of blogs.



How social media works

Now let's take a look at each of the main types of social media, and how they work. These explanations are calculatedly very general, because with social media every rule seems to have an exception. In fact, among the defining characteristics of social media are the blurring of definitions, rapid innovation, reinvention and mash-ups. Each explanation also has a section on how to try out that form of social media yourself, with pointers on both how to find social media that's significant to you and how you might go about creating it. If you want to really understand how social media works, there's no better way than to take part in it. Mash-ups: the combination of two or more pieces of content (or software, or websites) is one of the phenomena in social media that make it at once so exciting, dynamic and sometimes puzzling. Mash-ups are possible because of the openness of social media – many websites and software developers support people to play with their services and reinvent them.

There are literally hundreds of mash-ups of the Google Earth service, where people have

What does all this information mean?



- Elucidating key issues and trends in massive, real-time, datasets
- A good question for Google to answer!
- *"Social media generates more information in a short period of time than was previously available in the entire world a few generations ago. Making sense of it and understanding what it means for your business will require all new technologies and techniques, including the emerging field of big data"*

<http://www.zdnet.com/blog/hinchcliffe/how-social-media-and-big-data-will-unleash-what-we-know/1533>



Extracting Meaning from Social Media – Why?

- Spotting trends
- Know what's likely to happen before it happens
- Track the conversation to see where it might be going
- Allow intelligence to find you before you know you need it
- Business and commercial advantage



Extracting Meaning from Social Media – How?

- Analysing and mining large data sets
- Semantic analysis of different content types
- Handling unstructured natural language messages
- Issues of scale, complexity, and speed
- New approaches needed



Advanced Analytics

Battelle

- Hypothesis testing and predictive analysis to help foresee when or how often something is likely to happen
- Machine learning and natural language interfaces to improve productivity and ease of use
- Cloud architecture to support big data analysis
- Social network analysis to leverage social media content

<http://battelle.org/our-work/national-security/advanced-analytics>

<http://vis.pnnl.gov/>

- Research and Development

<http://vacommunity.org/item1>



Current Issues

- *"In this newsletter we look at the case of US company Phonedog, who is suing an ex-employee for keeping the Twitter followers he attracted while working as a blogger for the company.*

This landmark case has ignited many a debate about who actually 'owns' followers on a corporate Twitter account, are they a commodity that can actually be owned? Get in touch, we'd love to hear your thoughts. "

- Fresh Business Thinking, 9 July 2012



Conclusions

- Internet, Facebook, Twitter, YouTube
- Drive innovation – 38%
- Reduce cost – 36%
- Increase competitive advantage – 33%
- Use of the Cloud – 49%
- Companies using the web grow 4-8 times faster
- 95% of smart phone users act on information they find
- Job creation



Where can I get help?

- Centre for Creative Industries, Glyndwr University
- <http://www.glyndwr.ac.uk/en/campusesandfacilities/CentrefortheCreativeIndustries/>

Centre for Creative Industries





Centre for Creative Industries

- Video of opening

<http://www.bbc.co.uk/news/uk-wales-12924088>



Centre for Creative Industries

- £5m Centre for the Creative Industries is a modern environmentally-friendly building. It provides a focal point for creative industries activity, promoting greater interdisciplinary collaboration and involving subjects as diverse as art and design, computing and engineering.
- It provides a hub for the development of a creative industries culture and also provides a stimulus to the development of private and spin-out businesses associated with the creative industries. Within the university it helps curriculum development and the introduction of further innovative teaching methods.
- The centre was officially opened by Carwyn Jones, First Minister of Wales on Thursday, March 31 2011
- It has become the new home of BBC Cymru Wales in Wrexham, strengthening the BBC's presence in north east Wales and providing new production facilities for its staff, guests and contributors.
- The centre features state-of-the-art TV and radio studios, 3D workshops, design studios, IT suites, Apple training suites and post-production audio and visual facilities.
- By bringing together different disciplines associated with the creative industries it will provide innovative solutions to commercial problems as well as contributing to the growth of the creative industries in North East Wales.



Where can I get help?

- National Endowment for Science, Technology and the Arts (NESTA)

<http://www.nesta.org.uk/>

- Creative Industries Knowledge Transfer Network

<https://connect.innovateuk.org/web/creativektn/>

- Creative Industries in Wales

http://www.creativeskillset.org/uk/cymru/industry_sectors/