What's leading the development of computer technologies in the 21st Century: the 'SoMoClo' revolution

By Frank Owarish, Ph.D., Computer Science, Executive Director International Institute for Strategic Research and Training (thinktank) www.strategicresearch.info/default.aspx

Evolution of computer and telecommunication technologies

- For many years, they evolved separately (the former in digital mode and the latter in analog mode)
- Evolution of each rather slow albeit linear, 50s, 60s, 70s
- 70s things began to change

Quantum leap

- Main reason: convergence of computer technology (digital) and telecommunications technology (analog transformed into digital)
- The PC revolution
- Development of new form of networking
- Growth of the Internet; emergence of the World Wide Web and these two power tools working in conjunction

Internet

- Client server approach
- TCP/IP a big deal allowing the Internet to keep on growing
- User friendly: used at work and at home and for educational purposes

World Wide Web

- Powerful technology with tremendous growth; pervasive
- User friendly: used at work and at home and for educational purposes

Telephones

- From analog to digital
- From hard-wired to mobile
- Cell based to wireless based
- From a voice device to a multipurpose device including data and image
- Became microcomputers: so-called smart phones

Computers

- Supercomputers
- Mainframes
- Minicomputers transformed into servers
- Tremendous growth of PCs and laptops
- Emergence of tablets (portability factor)
- Phablets (phone+tablet functionalities)

The preceding developments led to

- The emergence of computer-based social networking
- The tremendous growth of wireless applications: mobile is the key technology
- Computer networking starts going to the 'clouds' (virtual locations going way beyond physical locations, in fact overcoming the limitations of physical locations)

SoMoClo

- **So**cial networking; **Mo**bile; **Clo**ud technologies working in conjunction.
- Each of these three technologies is powerful per se, but working in conjunction open up tremendous new possibilities, at work, at home and for educational purposes

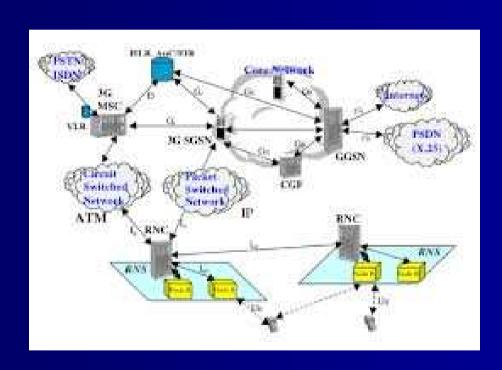
SoMoClo: definition

 SoMoClo (social, mobile and cloud) is the convergence of collaborative, onthe-go technologies that allow users to access data and applications from anywhere at any time

Social networking



Mobile



Cloud computing



SoMoClo: genesis

SoMoClo is a concept initiated by Aberdeen Group around three years back. Since then several start-ups have been launched and interesting solutions have been developed.

Read more:

http://forbesindia.com/blog/technology/som oclo-awakening-to-a-newbuzzword/#ixzz2omC19nlG

Aberdeen Group

■ Announced at the 2012 GSMA Mobile World Congress in Barcelona, the launch of its global SoMoClo™ research and executive education program.

Aberdeen SoMoClo Program

The objective of the program is to educate Chief Information Officers (CIOs), Chief Technology Officers (CTOs), and other Clevel executives, about the Aberdeen SoMoClo converged IT model and strategy that envisions social, mobile and cloud technologies as a single, interwoven platform to be considered and managed as a coherent entity, rather than three separate IT silos.

Aberdeen SoMoClo Research Reports

Complimentary copies of recently published SoMoClo research reports include <u>SoMoClo</u> <u>at the Mobile Edge</u>, <u>Social Technology in the</u> <u>SoMoClo Era</u>, <u>Cloud Technology is the Core</u> <u>of SoMoClo</u>, and <u>Business Optimization</u> <u>through Integrated Communications: In the</u> <u>SoMoClo (Social, Mobile, Cloud) Era</u>.

www.aberdeen.com

Aberdeen Group academic and professional programs (The Vault)

Universities and business/professional libraries can have access to Aberdeen's full research library of technology and business related research documents.

http://www.aberdeen.com/press/univ-and38business-libraries-program.aspx

The Vault

provides access to more than 6,000 factbased research benchmark reports and research derivatives. Aberdeen's analysts incorporate real-world insight into technology market assessments and solution selection frameworks and business modeling tools to help leaders (present and future) determine strategies and practices best suited for their value chain goals.

The SoMoClo Stack Alignment Model

- Organizations are empowered to swiftly pivot business models and roll out new services to new markets — without having to rebuild or re-invent the underlying technology. Even large organizations can remain agile and responsive to rapidly evolving markets and business opportunities, an attribute no longer confined to start-ups and SMEs. - See more at:
- http://blogs.aberdeen.com/communications/uxd-wars-part-4-projectansibleand-the-somoclo-powerpivot/#sthash.Enoi4aCd.dpuf

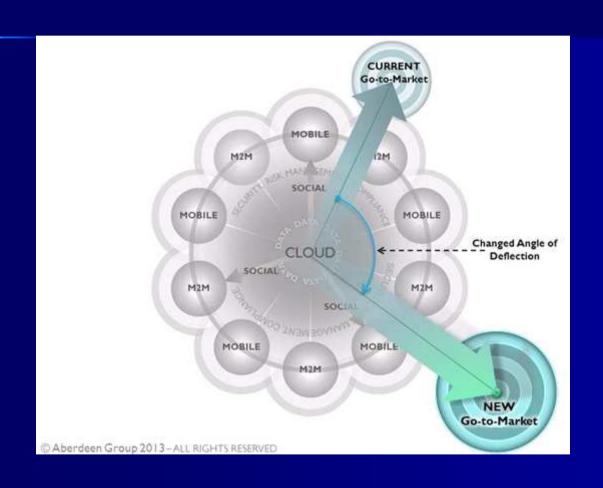
SoMoClo Power Pivot

By changing this "angle of deflection", organizations can utilize their existing Services Stack to attack a new market, or address their existing market in a new way. The core technology infrastructure itself doesn't need to change — and this advantage accrues to all adherents of 'the SoMoClo way', no matter what their size. Not to minimize the value of innovation and software implementation, which is where real competitive differentiation springs from — but the efficiencies of well-leveraged technology and back-end infrastructure are undeniable.

SoMoClo Power Pivot

■ The biggest challenge in a SoMoClo Power Pivot then becomes the redirection and effective execution of new marketing, messaging, and sales enablement initiatives. Be Brave says Aberdeen — it's a New World. Image next screen

http://blogs.aberdeen.com/communications/uxd-wars-part-4projectansible-and-the-somoclopowerpivot/#sthash.Enoi4aCd.dpuf



SoMoClo: simple every day life example

- A group is in a problematic situation, say an avalanche; those following the group in the social network know that the group is in trouble
- Mobile communication with those concerned in providing help
- Who make use of information available in the 'cloud': target location, terrain
- Assistance is provided as in 'surgical' intervention
- Feedback via mobile communication to the social network; everybody is relieved

SoMoClo: a business example

- A retailer wants to reach its new customers through mobile loyalty coupons and depending on how a group of friends buy or recommend products, wants to target specific loyalty coupons to their mobiles. Solution: a low cost and effective means of deploying the technological solution, cloud hosting or loyalty program available as a service on the cloud. Solution is cloud hosted, mobile delivered and contextually driven from social groups.
- Read more: http://forbesindia.com/blog/technology/somoclo-awakening-to-a-new-buzzword/#ixzz2omDNyXSU

SoMoClo: applications

- Running organizations (companies, government entities, nonprofit ventures)
- Medical
- Educational
- Military
- Disaster prevention and relief
- Entertainment
- "Endless?"

Leading an organization: metamorphosis

- Organization is a social network of employees in various locations, interacting through mobile apps and the cloud anywhere they are
- In turn the clients form part of various subsets of social networks with which the main social network of the org interact dynamically
- These social networks are constantly evolving

SoMoClo in the 'city of love'; Bangkok is known as such

- Instead of venturing into the unknown physical world out there, SoMoClo makes it possible to target a desired physical world
- Alternative is reaching out for the virtual world of love again using SoMoClo

Food for thought

■ The next time you switch off your washing machine remotely from your office, you can be elated that you have used SoMoClo and it is no more an abstract term!!!

Read more: http://forbesindia.com/blog/technology/somoclo-awakening-to-a-new-buzzword/#ixzz2omFFCAxQ

'Bring your own device' (BYOD)

■ In the <u>consumerization of IT</u>, BYOD is an approach which is used growingly referring to employees who bring and use their own computing devices — such as <u>smartphones</u>, <u>laptops</u> and tablets — to the workplace for use and connectivity on the corporate <u>network</u>, often operating in the 'cloud'; employees form part of a social network.

'Bring your own device'

- Private and public entities report that allowing employees to use their personal mobile devices to access company resources often results in increased employee productivity and job satisfaction.
- Breakthrough in educational institutions as well

BYOD: security

From the Federal information security perspective, devices must be configured and managed with information assurance controls commensurate with the sensitivity of the underlying data as part of an overall risk management framework.

BYOD in government

BYOD is about offering choice to customers. By embracing the consumerization of Information Technology (IT), the government addresses the personal preferences of its employees, offering them increased mobility and better integration of their personal and work lives. It also enables employees the flexibility to work in a way that optimizes their productivity.

Build your ownapplications' (BYOA)

- BYOA is a progressive shift in IT in which new software applications are built by regular users, rather than developers.
- In BYOA, developers create the tools, objects and environments enabling users to create applications they need without having to write a single line of code. The increasing consumerization of enterprise IT points to the trend of technology users creating apps to suit their specific needs.

Virtualization

the act of creating a virtual version of an entity, including but not limited to a virtual hardware platform, operating system, storage device, or network resources. ...

http://en.wikipedia.org/wiki/Virtualization

SoMoClo, virtualization, personalization

You should all go and see the movie "Her"

Conclusion

With SoMoClo, the 'sky' is the limit