///

Robert M. Mason The Information School, University of Washington, Seattle, WA 98195-2840

The Changing Face of Agility: the Challenge and Opportunity of Social Media

UDC: 005.591:005.21 ; 005.336.5:005.57 DOI: 10.7595/management.fon.2012.0009

XIII International Symposium SymOrg 2012, 05 - 09 June 2012, Zlatibor, Serbia

Organizations, especially organizations that are engaged in knowledge work – whose value added depends heavily on information – are facing 4 challenges. In this presentation, I want to illustrate why these challenges exist, what the consequences are of the trends that we see in today's economic and business environment, and how organizations can meet these challenges.

Keywords: Agility, social media, strategy, organization, innovation, millennial generation.

We are in a revolution, a period of profound change. Organizations and institutions must transform themselves if they are to survive and remain relevant; and we as researchers must critically examine our organizational models and assumptions.

The revolution is due to the confluence and interactions of 3 streams of change:

- Technology [Internet and connectivity, social media platforms]
- Demographics
- Values and social norms-societal and community behavior

The next few paragraphs review these three trends and describe how they affect how we work and live together, how they affect the process of innovation, and how we may need to revise our approaches to leadership and research on organizations. Whether we are practitioners or researchers, we have to take a critical approach to our past experiences and knowledge and our past assumptions about how we organize for knowledge work.

1. Technology and information flow

The first trend is the wave of social media platforms and services that have emerged and are attracting huge numbers of users (and investors: as I write this, Facebook's initial public offering valued the company at over \$100B, the largest ever IPO). The ubiquity of social media changes how people behave and changes societal norms. Here are some examples of what is "normal" with today's set of information and communications technologies

- Books delivered in seconds to hand-held tablets, which can hold trunk-loads of books
- Access to information is assumed; discussions of facts can be settled quickly; Wikipedia has consolidated the world of facts into a set of accessible resources-in multiple languages
- The old-fashioned 'sneaker-net' used to communicate by word of mouth among friends and colleagues is complemented by Internet platforms that enable information sharing with unprecedented speed and reach; an information event can go viral in days or even hours
- Personal information sharing continues to expand through an increasing number of social media platforms. While Facebook perhaps is the best known, with over 900 million active users, there are dozens of other platforms: Youtube, Twitter, Pinterest, ..., and new ones are being offered every day. It's unclear how many blogs exist, but the Technorati directory list over 1.3 million The result is an information ecosystem in which different platforms evolve and change and become differentiated over time.

 Information sharing has become big business. With a price of \$38/share, Facebook's initial public offering (IPO), which valued the company at over \$100 billion, which was the largest ever initial valuation for a public company. Even with the recent fluctuations in share price, the high valuation of the firm shows how much business interest exists in social media companies.

2. Demographics

If the technological changes taking place were not enough, we're seeing a major shift in the demographics of the world's population. The "Net Generation"–the generation that has grown up with the Internet–is entering the workplace as the "Baby Boomers" are entering retirement age. As shown in Table 1 (which shows U.S. figures, although the relative sizes of the generations for the world are comparable), the generation is the largest post World War II generation.

Generation	Birth Year	Age in 2000 Census	Current Age in 2012	Population Estimates *
Baby Boomers	1946-1964	36-54	48-66	82.8 million
Generation X	1965-1977	20-35	35-47	50.9 million
Digital Natives	1978-1994	6-22	18-34	69.1 million

Table 1. Population Estimates of Three Generations of Workers

The demographic shift is not just about numbers, however. Members of this generation bring into the workplace an ease with the new technologies of information and communication. Members of this generation have never known a world that does not have the Internet, mobile phones, laptop computers, and ready access to information. This generation has a different attitude about information and work. They have different expectations about their relationship to organizations for which they work and what they expect their efforts to produce. They do not see employers as safe economic havens and thus do not exhibit firm loyalty. They may choose companies based on the values of the company and the opportunity to have an impact on society; they want their work to "change the world." While not universal, there is a high percentage in this generation that has a heightened sense of social justice. They are concerned with the asymmetries in the world, both economic and information. Their sense of information differs from the older generation. As one NetGener expressed it in a symposium on innovation (as she was tweeting about what was being discussed), "An idea isn't real until I've shared it.").Table 2 summarizes some of the distinctions between the Baby Boomers and Net Generation.

For the most part, members of the Net Generation have been told by their parents that anything is possible, resulting in self-confidence and optimism in their capability to make a difference. [It is too early to tell if a protracted recession and economic downturn will affect this confidence.] Many in this generation start businesses or anticipate starting businesses, and many of the new businesses are related to information technology, information sharing, and social networking. The NetGeners see not only opportunities in the emergence of new technologies; they see opportunities with combining technologies (mashups).

Many NetGeners, even if they become entrepreneurs later, first go into established companies. When they do, the combination of their confidence with new forms of communication with their comfort with technologies often creates tensions with workers used to more established routines. These younger workers-and others who have embraced the newer technologies and work practices-seem to stand apart with their approach to work. They exhibit behaviors that often are inconsistent with the practices and expectations of their colleagues who prefer a different approach to information and work. As a consequence, leaders of organizations with a mix of ages and experience in their workforce face challenges that go beyond the expected challenges of organizations that have a more homogeneous workforce .

Values, Attitudes, and Styles	Digital Natives	Baby Boomers	
Work style	Multitasking	Time management	
Learning style	Learn from experience	Learn from instruction	
Collaboration	Collaborative	Independent	
Motivations	Positive reinforcement; competition for fun	Competition typically is zero-sum game	
View on authority	Respect for others is earned	Respect for authority	
Structure	Decentralized, nonhierarchical, inclusive	Centralized, hierarchical, exclusive	
Information access	Access for all	Access to those in power	

Table 2. Comparison of Working Styles of Digital Natives and Baby Boomers

[Adapted from(Barzilai-Nahon and Mason 2010) ; See also (Tapscott 2009a)]

3. Values and social norms

Technology, social norms of behavior, and enacted values coevolve . Community and societal values are expressed in social norms; a community's behavioral norms reflect the underlying values of that community. Technology does not cause changes but does facilitate the exploration of behavioral options, which may lead to changes in how fundamental values are manifest.

Consider, as an example, the concept of privacy. As software platforms enable merchants to offer benefits to buyers who share more information, people may decide the benefits outweigh the "cost" of giving up what can be private information. Similarly, users typically find that Facebook and Google provide sufficient benefits that they are willing to tolerate the collection of personal information in return for the convenience of use. As a consequence, previously accepted norms of privacy have been, in many observers' eyes, eroded. The result is that the very notion of privacy in today's world is undergoing change.

Other changes in behavioral norms are observed to varying degrees in different communities and corporate cultures:

- The availability of smartphones means that one may always be available, changing the expectations of
 responsiveness to questions and issues arising from coworkers
- The availability of location-based services, leading to a sense of "persistent presence" for one's friends, family, and coworkers
- As a consequence of the affordances of the technologies, knowledge workers experience less separation of "home life" and "work life." Social life, personal life, and work life become intermingled more than ever before
- Telecommuting is more accepted. Working from home is the norm for many workers whose jobs are based on coding and systems work. Many people can (and do) work without "an office" at the firm. Others may share workplaces at a central location.
- In most cases, teamwork is the norm. Work is accomplished by communities of practice where individuals are working interdependently to produce output more often than working independently on a Taylor-like decomposition of separable tasks.

4. Consequences

The coevolution of information technology (particularly social media) with social norms and values as the demographics of knowledge workers are shifting provides the fuel for this revolutionary period. This results in significant shifts and disruptions, and consequential challenges for practitioners and researchers.

However, in any revolution, some things remain unchanged, and we should examine what is unchanged in this period. We should examine what continues to be foundational whenever we face what appears to be a dynamic and rapidly changing environment. In today's setting, I would posit that one principle remains constant. This principle is that the primary driver of economic growth and development continues to be innovation, particularly technical innovation.

However, even as innovation remains a key to economic growth, the processes by which innovation occurs are changing. Innovation itself is affected by the confluence of technology, social norms, and demographics. A major shift in thinking has been the idea of crowdsourcing innovation.

The idea has been around for a decade, and the experience of major firms such as Procter & Gamble has shown the value of using networks of resources outside the firm to resolve issues associated with product and process innovation. What seems to be different is the rate of new venture formation by NetGeners (and others) based on the affordances of social media.

It should not be a surprise that Facebook was started by a NetGener, for example. Other examples may not be so obvious, but let's look at another entrepreneurial case, that of Quirky.

Quirky was formed in 2009 by Ben Kaufman when he was 23. Quirky illustrates the power of crowdsourcing, building on social media technologies, which provide the basis for many of the NetGeners' entrepreneurial efforts.

5. Quirky

Quirky is a company formed in 2009 that resulted from the vision of Ben Kaufman. As a self-identified poster child of young serial entrepreneurs, Kaufman (age 23) illustrates many of the characteristics we identify with NetGeners. His story demonstrates the creativity, desire, drive, and approach NetGeners take to having fun with innovation.

Quirky is Kaufman's third major launch. His first venture was mophie, begun when he was in high school. Mophie was formed to manufacture and sell retractable lanyard ear buds for the iPod Shuffle. The product succeeded, and mophie followed the lanyard with more add-ons for the iPod and Apple products. In 2006, two years after its formation, mophie's "Relo" product was another hit at the MacWorld expo. The next year at MacWorld, having succeeded in raising venture capital that enabled him to have a professionally designed booth, Kaufman threw it out–noting that he did not want to be 'just another successful company'–and used 2x4s to build a framed-in, wall-less room that metaphorically stated the unfinished nature of his business. He handed out 30,000 pads to MacWorld attendees with the message, "help us decide on and design our next product line." He discovered tens of thousands of people were willing to offer ideas, and he took on the challenge of doing a complete design within 72 hours. By the end of the show, mophie had prototyped and introduced three new products . The extraordinary success of this process of "crowdsourcing" new product development got Kaufman thinking about the process, not just the products.

Despite, or perhaps because of, the success of mophie, Kaufman realized he was bored. Three months after MacWorld 2006, he sold mophie (which he described as "making iPod condoms"). As he put it, "I sold the product but kept the process." He then devoted time to refining the idea of kluster, a collaborative decision making platform that would streamline the "crowdsourcing" of innovation that was done at MacWorld 2007. Kluster tracks the contributions each person makes to the design (e.g., color, name, or other characteristic that contributes to the product's success) and uses collaborative decision making on major design decisions. Kluster soon spun off namethis, a crowd-based approach to selecting names for products and product lines.

Management Journal for Theory and Practice Management

With kluster as the platform and an appreciation of the power of the crowdsourcing process, Kaufmanhas begun assembling a team that would form Quirky . After two years of research, team-building, and testing, Quirky emerged in June 2009.

Quirky provides a combination of platform and process (based on kluster) that streamlines the collaborative (crowdsourcing) approach to innovation and new product development. Quirky enables anyone to suggest a product idea, which is then submitted to the Quirky community for comments and feedback (including the demographics on those providing feedback). Each idea is considered for the next Quirky product, which means that the Quirky community focuses on evaluating and polishing an idea and turning it into a product. The Quirky process and platform enables anyone in the extensive network (the Quirky community) to submit ideas, contribute at each stage of the innovation process, and be rewarded for their contribution.

6. Other Examples

The idea of crowdsourcing and open innovation has become so popular that there is a website devoted to sharing information about the opportunities–a list of "open innovators". The list of almost 100 sites is wideranging–from early "peer production" represented by Linux, Yahoo Answers, WikiPedia–to 'freelance' platforms that match independent contractors with specific needs [e.g., Amazon Mechanical Turk; Human Grid]–to those more focused on creating new products [e.g., Quirky, Threadless and Spreadshirt (T-shirts and "hoodies"); Dream Heels (custom shoes)]. Not all are startups by NetGeners–established firms are represented in the list (e.g., Dell, Kraft, Sara Lee, Nokia, Starbucks, ...), showing that they are aware of the opportunities–but founders from the Net Generation are well represented in the list.

7. Implications for practice

The convergence of the above trends, and the crowdsourcing approaches to the innovation process, present organizational leaders with four challenges if their organizations are to remain agile.

Challenge 1: The Talent Life Cycle (or, the Five Forces Revisited)

In the past, competition and dynamism have been seen primarily as market and industry sector characteristics: competition for the customer and market share and defending against new entrants into the marketplace. In the 1990s, the competition was seen as the race ("war") to acquire and manage talent, and organizational agility was a key to attracting talent. In today's hypercompetitive economic environment, both dynamism in downstream (customer) and upstream (supplier) dimensions remain, but the competition for attracting talent per se is only the beginning step in a competition to effectively utilize this talent in an expanded talent cycle that extends beyond employment.

Young knowledge workers entering the workplace bring with them a new dimension of dynamics: they demand personal development through challenging tasks, job flexibility that is higher than what baby boomers would have preferred (and have accepted), participation in development towards objectives that matter to them, and flexibility in connecting and developing their own networks. Such preferences pose challenges to organizations to which our respondents provide different responses.

In a study of firms in Switzerland, which has one of the highest innovation scores in Europe, we interviewed C-level executives and asked how their firms were handling the changes in demographics (younger knowledge workers) and the prevalence of social media. The executives recognized that changes are needed in their approach to organizational structures and leadership. For example:

- ...young people who've grown up with games, these computer games, they don't do things the same way as we have done it...
- ... young people take over more responsibility [for] themselves and give less to an employer, which is certainly having advantages and disadvantages ...

These observations affirm that the resource-based view of the firm remains dominant. In the eyes of the executives, creative knowledge workers determine the competitive advantage of the firm and represent the

capabilities for continued learning. The executives recognize that knowledge and learning are not simply an individual capability but one that is manifest through work teams and the organization as a whole.

New Motivations and Values

As implied in Table 2, NetGeners do not adapt easily to the industrial ways of working, hierarchical organizations, and bureaucratic decision making–organizational models that have been accepted by baby boomers. NetGeners seek to make a difference; they like challenges. They want to continue to improve their skills and capabilities. These motivators, more than job stability and routine, stimulate this generation of workers. Our respondents recognize these values:

• ... there are more people who are looking to do something they like. And what they like is not only the career, like having a lot of money and the title and all that, that they start a career. They also want to do something which they have a passion for. And people who are driven also by passion not only by titles and by salary ...

• ... people have become more flexible because of the young people nowadays ... who, not all of them, but a lot of them,... have [their] own ideas of what they want ...

Our research and other studies of this generation show that NetGeners have high expectations about their career development. They frequently assume personal responsibility to make the best out of every job. They expect to continue professional development and want to see themselves progressing; they are dissatisfied with remaining in the same position for long. As a consequence, "career paths" for the new generation of knowledge workers are more dynamic and less predictable than they once were. The job stability preferred by the baby boomers is slowly being replaced by a desire for vigorous professional development. Executives recognize this:

• ... those newcomers really take more responsibility for themselves and for their career...

• ... these people are engaged and they do a job they want to do ...

Solution: Re-think the Management of Knowledge Workers

NetGeners require different leadership approaches, and the pioneering organizations recognize this. Executives who had been successful in attracting the brightest new workers acknowledged and promoted work practices such as the following in their organizations.

Engage the workers early. Many of the leading firms have expanded their internship, part-time, and summer employment possibilities for college students. This enables them to establish a relationship with potential employees early and provides a low-risk and relatively low-cost opportunity for both employee and firm to get acquainted. Each can learn from the other, and there is a greater likelihood of a good match in roles if the engagement turns into regular employment.

Search for challenging projects. For NetGeners, having fun while working and being a part of what 'changes the world' plays a crucial role in the work they do. Consulting and tourism firms have opened the social network sites for employees. Many said that an attitude of "work-life balance" is being replaced by an attitude of "work-life integration" for those who choose this approach. If employees work during their "non-working" hours, they can do private networking during their workday. The firms provided opportunities for flexible working environment (people can work from anywhere they want); home office opportunities (this is especially crucial for women with children); and interesting jobs that bring self-realization and self-satisfaction. Those firms emphasize that challenging projects in which employees can develop their own ideas and be creative provided more incentives to the digital natives than a higher salary.

Opportunities for development rather than promotion. People like to succeed, and the NetGeners are no exception. They demand more personal responsibility for what they do, but they want to be rewarded for their contributions and performance. Therefore, progressive companies encourage employees' learning and development as well as provide alternative reward paths. They organize seminars and conferences where employees can share their success stories and give advice to those who is still looking for new opportunities.

More personal responsibility. Telecommunication firms and attorneys long ago began building the relationships with their workers on results orientation and trust rather than on directing and controlling time



spent in the office. These firms trust the workers to be capable and do the work needed in the time framework required. To accomplish this, they ensure a dense communication pattern: they discuss with the employees what they expect and communicate the realistic goals to which they have agreed. These firms have concluded that it is not about controlling what employees do, but rather about prospering from the good results they achieve.

Reverse mentor programs and supervision modes. For the advanced firms, hierarchical structures and topdown control and supervision modes for knowledge workers were judged to be outmoded and ineffective. Employees were an essential component and contributor to a dynamic corporate strategy. Dynamic governance and flexible roles are replacing static reporting structures, enabling an integration of strategy formulation and execution. For example, tourism firms base their governance and decision structures on knowledge authority, such as processes of peer reviews, revisions, and collaborative strategy rather than following a top-down strategy. They engage knowledge workers in the decision making processes. For these firms, fewer rules, mutual learning and continuing dialogues are effective practices. If we pictured these organizations as hierarchical, we would say that the top-down supervision has been replaced by vertical (up and down) collaboration and more intense horizontal communications.

Solution: Resolving the Issue of Short Tenure

Executives have recognized the mobility and increased dynamism of the human resources. As long-life employment becomes rare, fewer young employees stay at the same work place for several years. They become nomadic workers not only in terms of work space flexibility and work from anywhere, but they desire flexibility in where they choose to work.

Executives in our study acknowledged that NetGeners felt they easily could move from company to company; they observed that there seemed to be little stress associated with losing one's job. Typical comments were:

- ... when I started to work 25 years ago, it looked like a lot of people chose an employer and they were loyal to their employer. That has changed ... Now young people choose something they like to do. They do something and if it's not what they like, they just move on and go somewhere else. And I think that has also forced us to think differently...
- ... most of them, they do not think that this is a problem. If they lose their job, they will go for the next one...

Approach: Create and invest in alumni networks. Several of the firms acknowledged that they never try to keep employees as long as possible. It simply does not work for the firm or the employee. What these firms do is accept when employees choose to leave, recognize their valued service, but engage them in alumni networks so they remain connected. These firms keep track of what their former employees do and where they work. They invite them to the annual Christmas dinners and keep them in their network of knowledge assets. This not only widens the company's network but gives young people the chance to come back to the firm when the good opportunity arises. This approach serves as a powerful resource for identifying new talent and maintaining an engaged network as a source of new ideas and learning.

Challenge 2: Core Resources-they're not just inside the organization

Our executives acknowledge their firms are part of a broader network built around individuals' social networks:

- ...it goes in this direction; above all, we will also have to look at these social networking sites, like Facebook or even in such a business network like XING, what is being talked about there. I think, this cannot be prevented, or how can one prevent that anyhow?
- ... the use of all of these new forms is important and I should say people establish their own networks out of the company, within the company, but this is not basically organized. That is done on individual ways. I mean people have this urge and this need to network and to stay on top of the development in their fields...

While we have known about this effect for a long time, it now becomes increasingly clear that firms acknowledge the importance of the networks and develop ways of building trust in them. The networks are about interactions that maintain the ties between individuals, but they also are about getting access to new knowledge and information embedded in these networks.

- ... I think the way people need to interact with each other, the way people start to work in groups, the way people interact has a different work style. There is something in it, there is a call in it which I would say is relevant probably trained, it's a relevant development that I'm also seeing out there...
- ... it depends on how you can link your private friends and working friends together. I think that one of the topic in the future that what the young people like to have. Then of course, the newest technology you should apply in your office. Social network for me is the topic, I think that's also for the working area important even it's now restricted. But we would like to motivate young people to use that...

The use of social media has made it possible for professionals around the globe to get advice from their colleagues and share experiences with a mouse click. Utilizing the vast amount of resources that are available online available tends to make *access* more valued than *self-creation*. As the technology makes this easier, the focus shifts from simple factual knowledge exchanges to enabling tacit exchanges and collaboration among trusted members of the network:

• ...it is less about just having access to study results and getting numbers. It is more and more also having access to the people who have experienced something similar and so on and so forth and having these types of networks in this dimension where the human interaction earns a great value...

Communities of practice (CoPs), as part of the knowledge management practices of the firm, are also undergoing significant changes due to the social media influence. The academic literature typically views CoPs as effective tools for tacit knowledge transfer within an organization; the presumption is that they are contained within the corporate borders. Our studies show they increasingly bridge organizational boundaries and may be formalized as independent entities.

Professional communities have long taken this approach to formal independent associations. Journalists, doctors, teachers, and lawyers extend linkages beyond organizational boundaries to preserve their professional ethics and enhance their learning in collaboration with other professionals. Prior studies have shown that members of the professional communities often feel a stronger identity with their profession than with the companies that employ them.

FLOSS (Free/Libre Open Source Software) and other open source software communities are examples of successful open knowledge creation communities in a free knowledge ecosystem. Many of them are operated by independent knowledge workers, but many larger firms explicitly or tacitly encourage their employees to support these FLOSS developments, as IBM and Oracle have done for the Linux and the OpenOffice software package.

Question of Control

The cross-boundary nature of the individual networks raises the question of how an organization can control the flow of information in these networks and what should be the role of management in this more open information environment. If individuals' loyalties shift away from their employer toward their personal network, how should executives approach this new environment? Although many organizations express concern over the risk of potential loss of proprietary knowledge, some executives in our study express optimism that the benefits outweigh the risks:

- ... we have a strong development to the new communication channels like instant messaging, Facebook, and LinkedIn, and we are also offering these products with certain services to our customers ...
- I am absolutely convinced that if companies make use of those features like Facebook or XING, they will gain a competitive advantage and if they don't do it at some point in time, they will actually lose people and they will lose the chance to realize on ideas that are in their company but they are not being found because they don't use these new tools ...

The key seems to be an organizational agility to embrace openness and the opportunities for learning through the individual networks. Corporations have used similar approaches before to build strategic partnerships between and among firms with whom they could cooperate. The difference now is that the networks are individual and potentially more collaborative.

Challenge 3: A New Communication Network Ecology

The early emphasis on the use of social media for marketing and HR purposes is diminishing as firms recognized the limitations of treating social media like other marketing channels. Collaboration platforms and shared workspaces enable more community-based communication and collective actions. Some firms have made a shift from physical meetings to virtual working environments, enabling project and human resource management, technical support, training, and networking to be accomplished from anywhere. The so-called *Enterprise Microblogging* (Twitter-like messaging on a firm's intranet) improves employees' visibility and provides new opportunities for knowledge management.

The variety of communication channels (SMS, twitter, email, phone, video-conference, shared workspace etc.) also increases contact with those outside the firm and blurs boundaries between customers and employees. Not all channels are the same, however, our respondents recognized that they need to make careful choices among communication channels to avoid loss of productivity.

The capabilities for virtual collaboration are enhanced with the wider range of opportunities for shared storage and even processing capacity in "the cloud," enabling greater organizational agility for knowledge work across boundaries. GoogleDocs and shared storage platforms such as Dropbox are just the beginning, and firms can expect to see additional cloud service options.

Solution: Getting Engaged

The more possibilities the firms provide to the employees to stay connected, the greater access they will have for new knowledge and ideas. Collaboration platforms, shared data storage, wikis, blogs, and forums-both inside and outside the firm-enlarge the range of resources available to the firm and leverage existing investments. The emerging network environment does preclude the loss of control but does require executives to rethink the means by which risk is managed. Only by remaining engaged with the emerging information ecology can firms maintain an awareness of the expanded opportunities for learning and creating value. Managing risks through limited experimentation and bounded engagement with the wider networks will be a better choice than staying on the sidelines. Engagement is a better choice than the certain risk of being left behind by the competition.

Challenge 4: Still no Consensus on a Single Model for New Ways of Work

The executives in our studies, even those that recognize the opportunities of this still emerging environment, still have widely divergent views on the most effective management models for realizing these opportunities. The differences can be attributed largely to the business sector (dynamism of the sector, characteristics of the customers and competition) and management philosophy. There is no single "right" way to engage the technologies.

- ...we have different systems, like iChat, Skype ...and, as we try to work together very quickly we are using these. This is a development which we have made by ourselves. We look what is completed or whether it is stuck...we are organized very well at this point...
- ...we don't even know how to competently decide whether we use iPhone, Smartphone, Blackberry or HTC. It's just a centralized competence which defines the standard. That's probably the reason why we are not proactive looking for different ways. We are quite limited in that...

What we see is that some companies have no restrictions on employee use of the Internet during working hours, allowing them to surf the Internet in search of new ideas and customers as well as linking to other individuals on social networks. Others are absolutely convinced that there is no direct linkage between social media and the work their employees are doing and consequently close all the social websites in an attempt to force their employees to "think only about work" in the working hours.

While we judge that the pioneering companies that are experimenting with, or even embracing, the affordances of social media will ultimately come out ahead, our studies can't say that the companies that take a more reactive tactic are misguided. Our studies do suggest that trying to change employee behavior and establish norms through only technical or policy barriers is limiting. As noted earlier, employee behavior, technology, and social norms (within the firm and in the larger community) are linked and coevolve An organization that attempts to change one without being aware of this coevolution process is likely to fail.

For most firms the experimentation will continue, with new work practices and organizational forms being tried, evaluated, and subsequently either adopted or discarded. These experiments are seen as part of the firms' overall adaptive and agile strategy.

• ... the evolution is still going on, so that the young generation entering the company has no trouble and we don't have trouble with them. So we try to evolve, be up-to-date with the technology, no need to make a special job for adaptation. It's an ongoing process...

8. Implications for research

The confluence of the three trends (demographics, social media technologies, and behavioral norms and values) provides a strong incentive for scholars to re-examine our models of organization and management. Perhaps what is in order is a critical review of the models that have become accepted as the norm, that are accepted as the bases for what we teach in management courses and what we accept as conventional wisdom. As noted above, it may be that some principles don't change, but how we articulate these principles in practice may need to be modified. Two examples of these include the following:

- Coase's concept of the nature of the firm , which argues that firms exist to reduce coordination costs, needs a close look in today's information ecosystem. Information exchange costs, necessary for coordination, have dropped to near zero with the Internet. The necessity to collocate work resources has been addressed with a flood of studies of "virtual organizations." However, at some point, the cost of sorting through the options for coordination channels may itself constrain the ideal of a totally distributed organization, but as a minimum scholars should critically examine the underlying assumptions in our management courses to detect the hidden assumptions based on Coase's nature of the firm.
- The Resource-based/Knowledge-based views of firm, which argue that firms are organized to exploit
 specialized knowledge, may still be valid. In today's information ecosystem, what is the resource? For
 firms that consider knowledge as the key resource (and it's hard to identify exceptions), the information
 ecosystem means that knowledge is less sticky and more leaky. The firm has less control over the
 critical knowledge (whether that knowledge is in tangible form or more tacit). Early critical reviews of
 organizational and knowledge management models appeared earlier this year; more work is warranted.

Conslusion

It has always been the case that technology presents society with challenges for which there are no templates, no precedents, and no guidelines for making decisions. Today, this remains true, only the technological changes are happening more rapidly, coevolving with society changes and even changes in community values-and these trends in many ways have become mutually reinforcing. Organizations confront significant challenges as they seek strategies that will enable them to take advantage of the opportunities inherent in this dynamic and emerging information ecosystem.

There is some evidence that the Net Generation, having grown up surrounded by these coevolving forces, see the opportunities more clearly than their counterparts who have been successful in earlier times. Established organizations that pursue agility and innovation will do well to engage this new generation; such engagement is both a serious challenge and the critical opportunity.

Acknowledgements

Thanks to colleagues and collaborators with whom I have worked in prior papers and articles that have informed the contents of this paper. These include, from the SoMeLab at the University of Washington (Seattle): Josef Eckert, Jeff Hemsley, Karine Nahon, and Shawn Walker; and from CeTIM (Munich and Leiden): Katerina Bondar and Bernhard Katzy.



REFERENCES (and further reading)

- [1] Anon. 2009. "Ben Kaufman of Quirky, Kluster, and Mophie Design Glut."
- http://www.designglut.com/2009/09/ben-kaufman-of-quirky-kluster-and-mophie/.
- [2] 2011. "IUS 2011 Dashboard." Pro Inno Europe. http://www.proinno-europe.eu/sites/default/files/innometrics/IUS2011.html.
- [3] "Key Facts Facebook Newsroom." http://newsroom.fb.com/content/default.aspx?NewsAreald=22.
- [4] "Blog Directory Technorati." Technorati. http://technorati.com/blogs/directory/.
- [5] Barney, Jay. 2001. "The Resource-based View of the Firm: Ten Years After 1991." Journal of Management 27 (6): 625–641.
- [6] Barney, Jay B. 1996. "The Resource-based Theory of the Firm." Organization Science 7 (5): 469.
- [7] Barzilai-Nahon, Karine, and Robert M. Mason. 2010. "How Executives Perceive the Net Generation." Information, Communication & Society 13 (3): 396–418. doi:10.1080/13691180903490578.
- [8] Coase, R. H. 1937. "The Nature of the Firm." Economica 4 (16). New Series (November 1): 386-405.
- [9] Hemsley, Jeff, and Robert M. Mason. 2012. "The Nature of Knowledge in the Social Media Age: Implications for Knowledge Management Models." In Proceedings of HICSS 45. Maui: IEEE.
- [10] Katzy, Bernhard, Kateryna Bondar, and Robert M Mason. 2012. "Knowledge-Based Theory of the Firm, Challenges by Social Media." In Maui: IEEE.
- [11] Kogut, B. 1996. "What Firms Do? Coordination, Identity, and Learning." Organization Science 7 (5): 502–518.
- [12] Quinn, J. B. 2000. "Outsourcing Innovation: The New Engine of Growth." Sloan Management Review 41, no. 4 (Summer): 13–28.
- [13] Raice, Shayndi. "Facebook Prices Its IPO at \$38 WSJ.com."
- http://online.wsj.com/article/SB10001424052702303448404577409923406193162.html. [14] Rao, L., and Nabil Sakkab. 2006. "Connect and Develop: Inside Procter & Gamble's New Model for
- [14] Rao, L., and Nabil Sakkab. 2006. "Connect and Develop: Inside Procter & Gamble's New Model for Innovation." Harvard Business Review 84 (3): 58–66.
- [15] De Ridder, Philippe. "List of Open Innovation & Crowdsourcing Examples Best Practices Open Innovation and Crowdsourcing." http://www.openinnovators.net/list-open-innovation-crowdsourcing-6examples/.
- [16] Tapscott, Don. 2009a. Grown up Digital: How the Net Generation Is Changing Your World. New York: McGraw-Hill.
- [17] 2009b. Grown up Digital: How the Net Generation Is Changing Your World. New York: McGraw-Hill.
- [18] Wenger, E. 1998.Communities of Practice: Learning, Meaning, and Identity. Cambridge Univ Pr.

Receieved: April 2012. Accepted: June 2012.

Robert M. Mason



The Information School, University of Washington, Seattle, WA 98195-2840 rmmason@uw.edu

Prof. Mason (Bob) is professor at the Information School of the University of Washington in Seattle. He has degrees from MIT and Georgia Tech and previously was on the faculty at Florida State University and Case Western Reserve University. His recent research examines the impact of social media on knowledge work and how organizations provide post-implementation support for enterprise systems. He is a founding member of the Social Media Lab @ UW (somelab.net) and is working with a team of students on information flows related to the Occupy movement.