Social Knowledge Management: Use of Social Media for Disseminating Informal Wisdom of Elderly to the Youth

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ABSTTRACT With the growing popularity of 'Social Media' and 'Web 2.0', the concept of 'Knowledge Management 2.0' has evolved that allows individuals to create and modify content collaboratively. The objective of this paper is to propose a framework for a social knowledge management platform that provides a set of social media tools like blogs, video chats, wikis, podcasting, social networking, etc, to capture and disseminate informal wisdom of the elderly for societal benefits. Elderly citizens can play a critical role in shaping up a future if they choose not to withdraw as they age, but to nurture themselves and the community as active elders. Apart from formal knowledge acquired from formal institutions, the young generation must learn from the informal wisdom of the "age", wisdom acquired from the school of life itself. Use of web-enabled and social media tools can help us to redefine the role of elderly in today's global society for educating the youth more effectively.

Keywords: Web 2.0, Social Knowledge, Social Media, Wisdom, Knowledge Management 2.0

Introduction

Social knowledge management can be defined as to identify, share, document, transfer, develop, use or evaluate knowledge using social media in the knowledge management context. Another definition of social knowledge management is the management of *social knowledge* where the aim is more towards social development - not only promoting competitive advantages for companies (Laszlo, 2002). Examples are the UN's STDev Net (Science and Technology for Development Network) and the WB's GDLN (Global Development Learning Network). The traditional approach to *knowledge management* focused on a model in which organizational members consumed knowledge that was pushed to them in a top-down fashion. With growing popularity of the "Social Media" and "Web 2.0", the concept of "Enterprise 2.0" has evolved (McAfee, 2009) that allows individuals to create and modify content col-

laboratively. This has created an opportunity for organizations to adapt these tools into their knowledge management approach, empowering all organizational members with the ability to continually create and modify the organization's collective knowledge base. However, the challenges faced by the contemporary global societies, from human conflicts to environmental degradation, calls for an expanded research agenda in the field of knowledge management. In a highly interconnected world, the field of knowledge management faces the challenge of making concrete and relevant contributions for the betterment of society (Laszlo, 2002).

The objective of this paper is to propose a framework for a social knowledge management platform that provides a set of social media tools like blogs, video chats, wikis, podcasting, social networking, etc, to capture and disseminate informal wisdom of the elderly for societal benefits. Elderly citizens can play a critical role in shaping a future if they choose not to withdraw as they age, but to nurture themselves and the communities as active elders (Thomas, 2004; Granny, 2011). It is a fact that conventional abilities and achievements are not enough for professional success as well as a meaningful life. The elderly people can teach us wisdom to demonstrate how wisdom is critical for a life that makes a positive difference to the world (Sternberg, 2009). So, apart from formal knowledge acquired from formal institutions, the young generation must learn from the informal wisdom of the "age", wisdom acquired from the school of life itself. Knowledge is merely having clarity of facts and truths while wisdom is the practical ability to make consistently good decisions in life.

Throughout the last century, mainstream visions of aging have largely seen the senior years as a time for withdrawing from making contribution to the larger community, a time for winding down. However, history tells us that, until the Industrial Revolution, elders had had honoured roles in the society that were defined and supported. Elders have been the nurturers of the community, the spiritual leaders, and the guardians of the traditions, the teachers, mentors and initiators of the young (Penny, 2010). Use of web-enabled and social media tools can help us to redefine the roles of elderly in today's global society for educating the youth more effectively.

Wisdom

According to Sternberg's balance theory of wisdom (Sternberg, 1998b, 2001), wisdom is defined as the application of intelligence, creativity, and knowledge as mediated by positive ethical values toward the achievement of a common good through a balance among (a) intrapersonal, (b) interpersonal, and (c) extra-personal interests. Wisdom is not just about maximizing one's own or someone else's self-interest, but about balancing various self-interests (intrapersonal) with the interests of others (interpersonal) and of other aspects of the context in which one lives (extra-personal), such as one's city or country or environment (Sternberg, 2009).

Conventional abilities and achievements are not enough for professional success as well as a meaningful life. The teacher who teaches wisdom needs to demonstrate how wisdom is critical for a life that makes a positive difference to the world (Sternberg, 2009). Intelligence can lead one to wisdom through continual acquisition of relevant knowledge and applying it to solve a problem in hand. However, in order to be wise, it is not enough for an individual or a group of individuals (say a committee or a government), to have access to and master the relevant knowledge. In addition, one must be able to evaluate the individual facts and their significance for the problem under discussion, and also be able to blend the various aspects of this knowledge together, a process that is value-dependent (Gustafsson, 2010).

Elders have more life experience and have seen things come up and go down (Bassett, 2009). We have seen the consequences of certain actions and know that some choices usually end up better than the others. Elders have been through phases of life that we are yet to encounter, therefore they know more about the world than us. As they have had a long life, they have much knowledge, and if they don't transfer it to others it will disappear or die with them. They can be role models and guide the younger generation in many aspects of life. Elder knowledge is best understood within an indigenous context of learning and knowledge acquisition. Indigenous Elder knowledge sharing traditions have the potential to inform and address some of the mentoring and knowledge transfer needs within a community. Specifically, knowledge transfer through the sharing of stories is a long-standing Indigenous tradition (Kawalilak, 2004).

So managing this highly precious elderly wisdom is indeed very important for all of us and for the coming generations, as correctly quoted by Oscar Wilde, "with age comes wisdom". Wisdom really does come with age, as indicated in a study (Jeste, 2010) that shows older people make better decisions than young adults who are too impulsive. This research proves that wisdom develops with aging, and that wisdom is the result of the brain slowing down and the resulting decrease in impulsivity. According to Professor Dilip Jeste of the University of California, San Diego, who led this research study, "Older people are less likely to respond thoughtlessly to negative emotional stimuli because their brains have slowed down compared to younger people. This, in fact is what we call wisdom" and this is exactly why wisdom is so very important and should be harnessed.

The accumulation of life experiences does not automatically activate wisdom in adulthood. Instead, wisdom may depend on an individual's ability to integrate experiences across time and utilize these experiences in a reflective manner (Baltes & Staudinger, 2000). Thus, the wise person realizes that possessing knowledge is not enough; they also realize how and when an application of such knowledge is necessary. This suggests that individuals must have both the cognitive capacity and personal insight to contextualize the circumstances surrounding a problem, appropriately integrate prior and current knowledge, as well as to understand how the application of such knowledge may potentially impact future outcomes (Parisi, 2009).

In general, older individuals can be a good source of advice for younger people, particularly in the areas of relationships and in cases of uncertainty. This is consistent with Erikson's 'theory of generativity' in which psychological maturity is marked by an interest in contributing to the society and leaving a legacy for future generations. While many fulfil their generative desires through procreation and childrearing, generativity also includes mentoring, creation of new products or ideas, and similar activities that contribute to the betterment of society for the next generation (Parisi, 2009).

The growth of wisdom may be nurtured across the lifespan through intergenerational interactions (Parisi, 2009). Unfortunately, as a society, we do not readily afford cross-generational opportunities for such social interactions and mutual growth. Removing existing structural age barriers (e.g., providing role opportunities in education, work, and leisure across all ages) and increasing exchanges between generations may allow us to move towards a more age-integrated society (Riley & Riley, 1994, 2000). Therefore, if we are concerned with generating wisdom we also need to make concerted efforts to provide generative opportunities that facilitate its development, while expanding societal benefits. Use of Web 2.0 may be a meaningful move in that direction.

Web 2.0 and Knowledge Management 2.0

The notion of "KM 2.0" is a natural consequence of "Web 2.0" that describes a collection of IT applications called social software. These applications first included blogs, wikis, social network analysis, social networking applications, collaborative content tagging, folksonomies, community support/collaboration software, and project collaboration software. But as time passed, the category also included many web services applications, "mashups," digital videos, podcasts, social bookmarking, news aggregation, and virtual environments (Firestone, 2008).

KM 2.0 refers to a type of KM which acts to enable self-organization by people by introducing appropriate Web 2.0 tools. In other words, KM 2.0 is introducing social media tools to improve connectivity, resulting in building relationships and trust, resulting in better communications and knowledge transfer. Social computing tools will provide more success in knowledge sharing than previous KM efforts that did not use social computing have delivered (Semple, 2012).

As a general matter of social theory, increased connectivity doesn't always serve to build relationships and trust, even if higher quality collaborations and communications can emerge as a result of interventions employing Web 2.0. The reason why not, is that knowledge workers may end up with improved information sharing rather than knowledge sharing, unless the usage of new tools allow a distinction to be made, and measured, between these two outcomes (Firestone, 2008).

Social Knowledge Management: Knowledge based Development

The initial and obvious implication of knowledge management was that it was a source for competitive advantage of firms: "Knowledge management provides the means to generate, distribute, and use knowledge in ways that add value to business activity and provide new opportunities for enterprise" (Clarke, 2001). Both the industrial revolution – triggered by the extension of physical powers—and the post-industrial revolution – triggered by the extension of cognitive powers – made of the 20th century one of growth, unrestricted exploitation of natural resources, and further marginalization of already marginalized peoples (Laszlo, 2006). So, in a highly interconnected world, the field of knowledge management faces the challenge of making concrete and relevant contributions for the betterment of society (Laszlo, 2002).

Knowledge based development (KBD) is an expansion of the KM agenda. Carrillo (2004) defines knowledge citizens as a better educated (formally or informally), critical and informed population that is ready to participate in civic life, is politically active, is interested in a better quality of life for itself and the next generation, including concern for healthy lifestyles and less dependent on consumption, is appreciative of artistic expression and cultural activities, and is more competent in human relations. Knowledge citizens make possible a learning society, where emphasis is more on the process of acquisition and creation of knowledge rather than on knowledge as the product or objective of such a process.

The objective of this paper is to propose a framework for a social knowledge management platform that provides a set of social media tools like blogs, video chats, wikis, podcasting, social networking, etc, to capture and disseminate informal wisdom of the elderly for societal benefits. Elderly citizens can play a critical role in shaping a future if they choose not to withdraw as they age, but to nurture themselves and the communities as active elders (Thomas,

2004; Granny, 2011). Apart from formal knowledge acquired from formal institutions, the young generation must learn from the informal wisdom of the "age", wisdom acquired from the school of life itself.

The Proposed Framework

Our focus is to harness the 'elderly wisdom' as there is an unmapped volume of wisdom that goes waste because we fail to realize the sheer potential of it. The very absence of a medium that can both extract as well as disseminate elderly knowledge is responsible for this quintessential resource getting unnoticed.

We henceforth look forward towards developing a web 2.0 based social media tools which would not only capture the elderly wisdom but would also act as a platform where this resource can be globally accessible for nurturing and developing the society we live in.

The objectives of our social knowledge management framework are:

- i) Creating an environment where we get an opportunity to acquire wisdom.
- ii) Lending a new dimension to the lives of our elders by helping them to share the knowledge that they have acquired with age.

The components of our technology that would help us realize these objectives are:-

- Disseminating formal and informal education on-line: We would like to make provisions such that our elders who are willing to come forward to address a group of enthusiasts wanting to assimilate the knowledge on a subject that our elders want to impart is provided for. We may also schedule an appointment with a 'teacher/ mentor' (competent elderly persons) where we can virtually speak to them in person (one-to-one basis) and gather wisdom through social web. The online rating of teachers by the students, as is done in the context of many social web applications, can ensure the quality of teaching.
- **Grand parenting:** In the era of nuclear families, even when children live with their parents, they may be deprived of affection because of parental rejection, neglect, or mistreatment due to stressful professional involvement of the parents (Hurlock, 1997). However, the kids can receive the affection, guidance and care that they deserve from their grandparents. To fill in this void we would like to cultivate an environment where the kids can get all that they are deprived of from our 'Global Virtual Grandparents'. This can help in create an atmosphere where our culture and ethics can be instilled in our younger generation.
- Discussion Forum: We want to create an arena where both the elders of our society and the
 younger generation can have a healthy discussion and they can exchange ideas thus helping in creating
 a nexus of differentiated ideas of the two generations.

Prior to designing this framework, we interviewed a large number of elderly people in order to study their lifestyle, to know that what we could offer to them to improve their lives and as to whether they were willing to participate actively to share their wisdom with the world. 'Mr. Kanad Kanti Pal, 76 years, Mechanical Engineer' says, "I don't have a good rapport with my family member, relatives and friends. I am almost alone". From this statement of his we could conclude the widespread loneliness in the lives of a large number of senior educated members of our society and that our role in providing them with a reason to live (Chalise, 2010; Davis, 2007).

On being asked, "Are you satisfied with life"? Mr. Samaresh Bandhopahyay, 73 years, said, "I am more than satisfied with life but there is just one disappointment. I haven't passed on to the youngsters whatever I have learnt from life". This was very evident of the fact that there are elder members in our society who are willing to contribute by sharing their wisdom. Most of those interviewed said that they spend almost all their time at home therefore get bored in the process. We thereby look forward in developing such a system which can both provide our elders with a better life as well as cater to their

want to do something for the society.

Social interaction is an innermost human need at any age. However, especially elderly people often have to suffer in isolation since family and relatives do not have enough time to care. In addition, the closest of friends is getting smaller with increasing age and if the partner dies prematurely, it lacks the elderly to increase social reference persons. Due to global demographic changes, the situation will increasingly exacerbate.

The web 2.0 tools is a way to enlarge the existing social contacts and making it more accessible for older people. Common phenomenon, such as the inability to build sufficient trust to peers and the difficulty to find new contacts are consequences of the decreasing social contact rate per week with an increase age. Most of the interviewee pinpointed the desire for more frequent direct interaction. One should also keep in mind that a small interaction bias might occur, since the participants of these surveys are considerably more socially active and seek for new contacts instead of disconnecting from the society. With regard to the interaction with others, the results are as expected. A majority desires a simplification for making contacts. Since the same majority of participants also want to have more contact with non-family members (peers), we conclude that the missing mobility and the decrease in real-world offerings hinder many fruitful contacts, which could be established electronically. Thus, one of the hurdles for an interaction arises from missing interfaces to get in touch with each other.

Our primary aim is to bring the elderly people into the mainstream. They are themselves unaware of the potential of the wisdom they bear. We want to unravel this wisdom by acting as a medium between the elderly people and the progressive global circuit. To help the society do better by being exposed to wisdom such that they don't inadvertently commit the same mistakes that our elder had made and they implement those fundamentals and principles that had brought our elders success.

The reason why 'elderly wisdom' is not effectively utilised is that majority of our elder are not well versed with technology. In the era of technical dominance, the web can help us reach the entire global platform. Since most of our elders are unable to make the best of what our technology has to offer, we are developing a system which is free of all complexities. This system is being developed with an eye towards making the interface very simplified such that it can be handled without any prior knowledge about computers.

Technical Details

In recent time, it has been pointed out by several researchers that Tablet PCs are more friendly devices for elderly people. "A tablet is the best device for elderly people", explains Bartolomé, who is the man behind Eldersarea (Eldersarea, 2012), a platform for tablets designed specifically for assisting elderly people. Based on Android, it has big buttons and simple functionalities and it's designed to videoconference and share photos, videos and music. The University of Melbourne's Institute for a Broadband-Enabled Society has recently released a white paper on improving social inclusion for older people through the use of iPads and a custom-made iPad app (Vetere, 2012). The user friendly, "Enmesh" (Engagement through Media Sharing) iPad app has been designed to allow people to share photos taken with the iPad along with any captions or messages. These photos and messages could then be shared to Enmesh's interactive shared display that shows content from all the Enmesh users. One great feature of the shared display is that content can be interacted with (rotated, resized) with changes shown in real-time to other viewers. Our objective is to make an elderly-friendly interface for a tablet PC, enabling the elderly to socialize.

The Methodology

To realize the above mentioned goal of ours we are developing a couple of software for Android devices. One of these would be installed into the device and would act as the default system software, i.e. it would open up by default when we power on the device. The Server will hold the website that will be accessed by those who want to communicate with our elderly members. A Media Server will store all the shows that will be relayed over the internet at a specific time. This will be used to imple-

ment the feature 'general addressing'. It will also help us implement video based interactions such as 'grand parenting' and 'one to one interactions'. Chat Server will implement features like 'discussion forum' and 'one to one chat' we will require it (figure 1).

Numerous discussion forums are available over the web. But the structure of the available discussion forums is very flat where there is no distinctive and comprehensive flow of knowledge. The knowledge accumulated on a given platform is not getting properly managed thereby conjuring a potential loss. Moreover our elderly race is not able to contribute effectively due to their unfamiliarity towards technology. To overcome these drawbacks, we look forward towards developing a discussion forum (as a part of the entire software package) where the participants would be broadly categorised into two categories, i.e. elderly or young. We aim at providing a medium where a healthy discussion could be supported and the two different generations can come forwards and exchange ideas and share views. We would like to use this platform to manage elderly wisdom by ensuring that there is an effective flow of wisdom from the elderly people to young people. The knowledge that the elderly people share over the discussion forum can help in modifying people's thoughts and beliefs.

Just as discussion forums there are a number of websites that provide chat based services. Most of the chat services available over the web are designed with the intent to provide leisure and entertainment. We are thereby building a chatting service that gives the society way more than mere reasons to amuse themselves. We will provide for a mechanism where the younger generation can come in direct contact with our elderly generation (text/video chat). Based on what are younger generation is seeking for our elder can empower, motivate, assist as well as educate our younger generation with the rich source of wisdom they have. I would like to seek a few examples as to how this thing might work: Supposedly, if a student of *Chemical Engineering* is working on a Research and Development project and is stuck up somewhere, he might request for a personal session over the web with an elderly member of our 'social media' who might have had given his entire life to the subject. The student can learn from the vast knowledge that the elderly member might have accumulated by working in this field throughout his life. So the elderly member can act as a mentor who may not just help the student in accomplishing his project but also assist the young student to increase his knowledge in this field by having an opportunity to interact and learn from him.

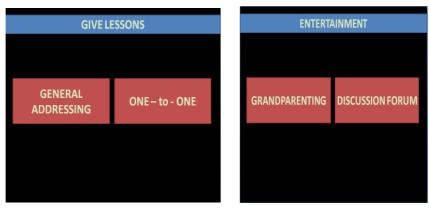


Figure 1: Customised Initial Screens on a Tablet PC

Conclusion

There are a large number of elderly members in our society who lead a reclusive life because the circumstances force them to rather than by choice. There is a predominant loneliness in their lives that may even force them to the state of depression which is a serious social concern that we intend to deal away with. At the same time, there is an unmapped volume of elderly wisdom that goes waste because we fail to realize the sheer potential of it. Older individuals can be a good source of advice for younger people, particularly in the areas of relationships and in cases of uncertainty, thereby providing a valu-

able contribution to society that is qualitatively different than that offered by any other age group.

The social media tools that we intend to provide may help in lending a reason for our elderly members to live. The virtual components that may add a zing to their lives are as follows:

- The younger generation is generally very lively and enthusiastic. The elder members of our social media can come in contact with them and in the processes of nurturing and educating them they may themselves feel the zing that the younger generation bears. Our elder who lead a reclusive life want to be heard, they want get respected and they want the world to know about their knowledge and accomplishments. In this process of providing a life to our elder members we are ensuring that the wisdom that they have is effectively utilised and globally managed thereby ensuring a wholesome social solution. By the means of technology we want to instil the 'want to live' in our elder members where they would eagerly wait for the next sunrise.
- We want to create the concept of 'Global Grandparents' where our elderly members cater to the needs of the kids around the world, especially those who don't have grandparents or rather don't stay with their grandparents. In the process of looking after the kids around the globe the elderly members of our social media may find a reason to live and a reason to smile. The kids on the other hand would get the privilege of getting all that they should have got from their own grandparents.

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