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## **Monitoring social media and networks; identifying keys to unlock collaboration and innovation**

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Biography: <http://www.cstoneglobal.com/assets/files/CS%20Bio%20AF.pdf>

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### **Summary**

Faced with complex problems, limited resources, and an increasingly 'small world' many private and public sector organisations are seeking to unlock their innovative potential through collaboration.<sup>i</sup> Finding the keys to unlock innovation in an organisation, however, may be easier said than done<sup>ii</sup>

**One key to unlocking the potential of a collaborative strategy is to approach objectives from a network perspective. This is particularly the case when using social media. Social media strategies for large organizations can not only benefit from, but in fact need this sort of collaboration to achieve the maximum potential of using social media.**

One key finding is the value of the edge: **for an organisation to be dynamic, it needs to be able to integrate a core of strong links with a large heterogeneous periphery of weaker ties. This network architecture allows the organisation to draw on the strengths of both core and periphery to drive innovation.**

### **Collaborative networks**

Collaboration draws on the exchange of information and the interaction between individuals – ultimately the creation of an effective network capable of delivering results.<sup>iii</sup> Technological innovations which lowered the cost of long distance and mass communication intensify the potential for collaboration in a small world. This optimistic view is captured in the urban legend 'the six degrees of separation', where anyone can reach anyone else in the world through a series of six connections between people already known to each other.<sup>iv</sup> A 'small world' appears to present the prospect of a vast range of potential collaborators all connected by a short series of personal introductions.<sup>v</sup> This has a number of positive and negative implications in areas of human interaction including the spread of infectious disease and potential innovation to face the risks created by a 'small world'.<sup>vi</sup>

The first experiments to test the 'small world problem' produced anecdotal evidence with one

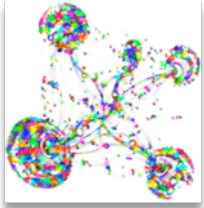


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'chain-letter' arriving in just four days with only two people connecting the start of the chains in Kansas and the target recipient in Cambridge.vii However, archival research has found that only 5% of chains in the famous experiment were ever completed.viii Recent studies that attempted to replicate this experiment with the benefit of email found similar results with completed chains accounting for only 1.6 to 3% of those started.<sup>ix</sup>



The difficulty here is not the notion itself but the detail. Specifically, the level of knowledge required for an individual to make the 'best' introduction. This is unlikely as participants would require perfect knowledge of all their friends' friends, their friends' friends' friends and so on to be able to plot the most efficient route to the target and therefore make the 'best' introduction. It may be that given perfect knowledge it would be possible to identify the six degrees of separation between any two people, but this level of data is impractical in nearly all real world scenarios. However, the increasing use of digital media and the creation of more powerful computers provide the potential to build large network maps which can represent and analyse relationships between tens if not hundreds of thousands of individuals.

What does a 1960s experiment have to do with 21<sup>st</sup> century collaboration? Collaboration requires structures and practices which facilitate the flow of information between those that have it and those that can use it.x In addition, organisations require evaluation and personal assessment practices which recognise the importance of collaboration.xi As a result, identifying how networks form and how innovation unfolds through them is a key part of unlocking successful collaboration.

## Connectivity

The link between two nodes in a network is often known as an 'edge'. These connections and the level of connectivity are central parts of collaboration, changes in human behaviour and achieving particular economic goals. For example, research has demonstrated the importance of social networks in finding a new career opportunity.<sup>xii</sup> Equally, interpersonal communication has also been demonstrated to be an important influence on the adoption of new behaviours in areas such as risk reduction for cardiovascular disease, family planning, and AIDS /HIV prevention.<sup>xiii</sup> The sense of relatedness is also recognised as an important part of human motivation and behaviour change.<sup>xiv</sup>

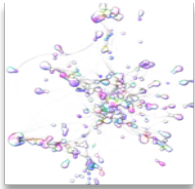
While having more connections does increase the chance of gaining an advantage through collaboration, having ever more connections is not the only factor; network position is also an important factor.<sup>xv</sup> As Krebs and Holley put it, while "communities are built on connections. Better connections usually provide better opportunities."<sup>xvi</sup> The form, cohesion, and the position of an individual in a network are also important.<sup>xvii</sup> The ability to bring others together can provide that person, 'the network weaver', with great influence as well as the ability to support the development of a more sustainable network.<sup>xviii</sup> This 'weaving' can lead to the development of an increasingly density *within* a network where existing members create increasing numbers of connections with other existing network members. In other instances



the network weaving can create links *between* networks.

## Periphery

To be on the periphery in colloquial usage, is to be on the edge of something – less important than those at the core. However, in seeking to gain an advantage through collaboration this emphasis may need to be reversed. Building collaboration in most cases results from finding a means of bridging between one network and another. This relies on the ‘strength of weak ties’; that those with strong ties (at the core of the network) tend to be exposed to the same influences and information.<sup>xxix</sup> In contrast those with weaker ties are more likely to come into contact with different types of information, ideas or skills. The weak ties are between those who spend less time within the same network; in simple terms it means these nodes are likely to be on the periphery of the networks of which they are members. These weak links are often the bridges between networks through which diffusion of information can occur. As a result being ‘peripheral’ or ‘weak’ has great importance and impact for those seeking innovation through collaboration. Dynamic innovation and knowledge diffusion come from the combination of strong and weak ties.<sup>xx</sup>



Having an innovation alone, in many instances, is not enough for an organisation to gain an edge. Knowledge and adoption of the innovation must diffuse through that organisation or amongst a wider potential user community. The connections provide the bridges for this innovation diffusion to occur.<sup>xxi</sup> However, “as many studies ... have shown, it is not opinion leaders who are early adopters, but instead marginals or individuals who are bridges to other networks who first adopt an innovation”.<sup>xxii</sup> As a result, the periphery is “where inflows and outflows of knowledge and innovations occur”.<sup>xxiii</sup> This creates a dichotomy for those seeking to encourage collaboration and the diffusion of the resulting innovation; those on the periphery are more likely to bridge between networks and be early adaptors of innovation. In contrast those at the core may be best placed to disseminate innovation and embed it in an organisation or network.<sup>xxiv</sup> For an organisation to be dynamic, it needs to be able to integrate a core of strong links with a large heterogeneous periphery of weaker ties.<sup>xxv</sup> This network architecture allows the organisation to draw on the strengths of both core and periphery to drive innovation.

## Application

**Identifying the edge, in all the meanings of the word, has great potential to support collaboration and innovation.** One area where networks are most commonly identified in



daily life is new media, particularly social networking platforms. Users have become increasingly accustomed to identifying new connections, creating links and exploring, for example, ‘friends in common’.<sup>xxvi</sup> Visualisation can be used, for example, to show whether my friends on Facebook know each other. Through data mapping techniques clusters can be seen, those friends from



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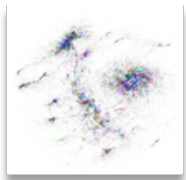
different stages of life – whether school, university, or work.

**Most organisations will be less interested in Facebook friends but the same techniques can be used to map the use of email by an organisation to show the clusters of contact between different parts of that organisation. It can show whether an organisation has integrated after a merger or where structural holes exist which may limit potential innovation.**

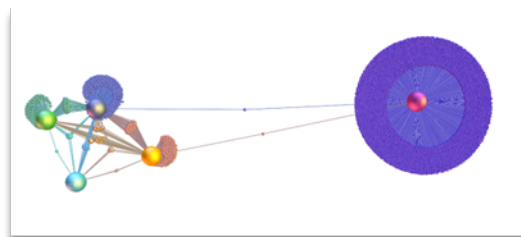
Furthermore, analysing connections is equally relevant to identifying the response to particular news events, mapping the networks messages sent during protests, such as in Iran, and to understanding key coordination points around which 'buzz' about a brand or product.<sup>xxvii</sup>

## Conclusion: Humans Huddle

Examining a network in fine detail can highlight the nature or strength of connection between individuals. Taking an overview can demonstrate the wider shape of the network, whether an individual is at the core or periphery, and whether there are individuals creating bridges between different clusters in the network. At this wider level it becomes clear that humans "huddle" around particular points, ideas, spaces or places. Often good ideas are in the hands of those who have connections which span structural holes in organisational networks. This creates the imperative to identify areas where connectivity is high but also where it is lacking so that steps can be taken at all levels of an organisation to engage a change process designed to drive innovation and collaboration.



Keys which can unlock successful innovation are the identification of coordination points, flow of information and ideas between the resulting network clusters, and to organisational approaches which facilitate and reward innovation diffusion within and between organisations.



## Why Cornerstone Global Associates

Cornerstone Global Associates has extensive experience in providing strategy and management consulting, and offers capability building using social media and networks as part of collaborative and holistic approaches to problem-solving.

Besides Dr Ali Fisher, Cornerstone draws on the experience of Dr Sue Black, Senior Consultant. Sue is a pioneer in the practical and strategic use of social media. She is widely recognized for



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her leadership, cutting-edge research and mastery of social media for catalyzing collaborative and pragmatic outcomes. Ali Fisher works with governments, charities, companies, and NGO on best practice for online engagement, network building and organisational change. He specialises in providing insight through network analysis to enhance organizational strategy and evaluation.

Both they and others with Cornerstone can ensure social media strategies are implemented in alignment with the overall corporate strategy.

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For further information about Cornerstone's services, please email Ghanem Nuseibeh [gn@cstoneglobal.com](mailto:gn@cstoneglobal.com)

## About Cornerstone Global Associates Ltd

Cornerstone Global Associates Ltd is a strategy and management consulting firm designed for the complexities of the 21st Century. With over 30 associates based in 18 countries, we provide our clients with cutting edge solutions tailored to fit their most complex challenges.

## Endnotes

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