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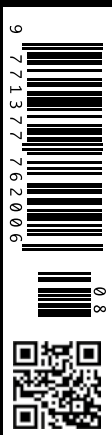
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Coping with Complexity

The Irish military on embracing leadership that promotes diversity, inclusion and reflection.



Mark Mellett

Vice Admiral
Chief of Staff
Irish Defence Forces
Ireland

mark.mellett@
defenceforces.ie

@DF_COS

military.ie

We live in a time of extraordinary change and complexity. This impacts on individuals, as well as the communities, organisations and institutions to which they belong. In examining the interlinkages between values, complexity, innovation and diversity, this reflection looks at the implications for leaders. These perspectives, while somewhat shaped by my military and academic experiences, have a broader relevance.

In democracies, militaries are key components of the security architecture. They are part of the bedrock which underpins sovereignty, contributing to a framework for civil society. Civil society institutions, built on shared values, are a human right, where people are free, the institutions of state function and where the vulnerable are protected. All over the world we see challenges to the shared values of civil society. Many have the characteristics of 'wicked problems', with extraordinary complexity, they may have multiple causes, crosscutting political, economic, societal/cultural and other perspectives (Rittel, Webber, 1973). They include, interstate and intrastate, hybrid and proxy wars, state competition, cyber warfare, terrorism and criminality. Other vectors like population increase and climate change feed this complexity. This challenges governance at international and national levels, as well as the nested arrangements for corporations, organisations and institutions, right down to individual interactions.

Positives which potentially mitigate the effects of complexity include the growth in technology, automation, robotics and perhaps the most exciting of all, the explosion in data. Data when codified becomes information with the potential to drive the creation of knowledge, which ultimately leads to greater understanding. The potential is such that Kurzweil, predicts a "singularity" around 2040 when artificial intelligence will exceed human intelligence (Kurzweil 2005).

Two things are clear. Firstly, if available data is properly leveraged, risk is mitigated and the prospect of an advantage is enhanced relative to competitors or enemies. Secondly, this growing pool of data, feeding knowledge, is driving new technologies and new ways of doing things worldwide. Consequently, while answers to complex problems exist, they may often lie outside organisational or indeed state boundaries. Creating the appropriate governance arrangements, conditions and structures to deal with this complexity requires wisdom.

Knowledge is a prerequisite for understanding and it is the application of understanding within the framework of shared values that leads to wisdom. In this world of complexity the absence of values and therefore wisdom

undermines the institutions of civil society, often resulting in populism, unilateralism, short-termism and selfishness. Shared values are the glue that bind states, organisations, institutions, and individuals together. In a world of increasing complexity this is why striving for multilateralism with shared goals is so important.

At an organisational level achieving congruence in the interplay between knowledge, understanding, values and wisdom requires innovation. Innovation is not just about creativity; it is a systematic change in individual mindset and culture that permeates entire organisations with internal and external dimensions. The world of complexity requires shifting from operating solely inside closed organisational boundaries, to open innovative structures, where creativity and knowledge-sharing is encouraged and nurtured. Open innovation is innovating with others through networks that facilitate the exchange of data, information, knowledge and understanding, where sensing and exploring new technologies and ways of doing things is facilitated and actively encouraged.

The more diversity stimulated in networks, the more potentially disruptive the innovation will be. Moving towards an innovation ecosystem, incorporating for example, state bodies, enterprise, academia and civil society actors, can lead to disruptive innovation. Networks leading to codified partnerships allow researchers to get a real world problem, the state body to get a new capability or technology and enterprise to generate jobs, while civil society benefits from an improved public good.

The collaborative arrangements between the Irish Defence Forces and Higher Education Institutes and other partners have delivered significant impacts. These innovation networks and partnerships are helping transform our force, enhancing personnel and capability development, driving enterprise, job creation, infrastructural development and new technologies. These collaborations are shifting partnership perspectives from being just cost centres towards investment centres with the potential for elements to be profit centres. The crucial driver and enabler to this process is leadership, while key prerequisites for such outcomes are shared values and principles. One of the fundamental principles for collaboration is trustworthiness. Trustworthiness is more than trust, where partners are worthy of the trust bestowed upon them. It is inextricably linked with the principle of reciprocity. Achieving congruence with multiple diverse partners and preventing free riding requires strong leadership.

Driving innovation necessitates that the status quo

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is challenged, that cultures are open and inclusive, that there is no room for egos and, importantly, that there is an acceptance that mistakes will happen. Driving innovation requires silos to be broken down and cross-cutting structures embraced. Silo mentalities undermine trust, efficiency and effectiveness and prevent the exchange of knowledge. Violations, which are unacceptable breaches of the rules, must be distinguished from errors or mistakes that will inevitably occur in complex dynamics.

In terms of organisational dynamics, driving diversity and inclusion is important. Spanning external and internal diversity requires an appreciation of the importance of science, technology, engineering, arts and mathematics. This has implications for organisational and people development. Investing in work-based learning and raising the scholarly standing facilitates diversity and inclusion. Training prepares for the predictable, while education prepares for the unpredictable scenarios, when a greater understanding of other perspectives is required.

Facilitating 'cross-cutting' structures requires highly-developed, receptive interpersonal skills which nurture and build collaborative networks and partnerships. Arts, encompassing the social and political sciences, enhance the knowledge that builds and connects institutions, organisations and people.

The future is about how collaboration and knowledge sharing is achieved, where ego is the enemy and empathy is the kingmaker. Einstein is credited with saying $ego=1/knowledge$ (Quotes 2017) the greater the knowledge, the lesser the ego. Bringing together diverse disciplines requires that an atmosphere of tolerance, which understands different perspectives, is nurtured, where the humanities mix with the sciences. The philosopher Theodore Zeldin has asked 'When will we make the same breakthroughs in the way we treat each other as we have made in technology' (Gurteen 2017). Quite often diversity requires institutionalising a Gender Perspective. That is organisations, have the ability to detect if and when an individual is being treated differently, based solely on their gender. An institutionalised gender perspective analyses a persons perceived value in a given context, their access to power, influence and resources and mitigates against societal inequalities and unconscious bias. Improvement in gender balance at all levels facilitates better decision-making and creative processes. Achieving greater gender balance is a societal issue. Studies show how women, for example, in many countries are socialised from a young age to fulfill certain

stereotypical 'feminine' roles such as caregivers and not to opt for careers such as in STEM and indeed, the military. Conversely, the socialisation of our young males, predisposes them to more 'masculine' pursuits.

Developing a diversity and inclusion strategy in all organisations, one which promotes equality, values, difference, and embraces LGBTQA and other communities is vital. Embracing diversity across perspectives such as culture, ethnicity, creed and generation is critical. Diversity and inclusion in all networks improves resilience and becomes an antidote for complexity.

In summary, dealing with complexity is a leadership issue. Leadership in government, market and civil society institutions, driving innovative multilateral arrangements can mitigate the effects of climate change and other challenges by progressing, for example, the UN 17 Sustainable Development Goals (United Nations 2016). Thirty years on from the Brundtland Commission Report (United Nations 1987), these goals and targets present a strategic roadmap towards normalising sustainability. Empowering innovation and dealing with the 'Push Back', is a leadership issue. Institutionalising a 'Gender Perspective' and embracing diversity and inclusion are all leadership issues. Leadership is about values - values such as the moral courage to do the right thing and the physical courage to persevere despite danger and adversity. It is also about a respect that treats others as they should be treated while giving sufficient autonomy to people to reach their full potential. Values encompass an integrity characterised by honesty, sincerity and reliability. Fostering and creating an environment of loyalty which encourages selflessness while putting service before individualism is important. Values, importantly, are also about accountability (Personal Communication July 2017).

A diverse, inclusive, reflective organisation characterised by strategic humility, will ensure the benefits of innovation are fully realised. It will attract the best of talent, facilitate employee voice and autonomy, driving improved performance and outcomes.

Leadership, like innovation, is also about accepting risk-taking and mistakes. Von Clausewitz said in war 'everything is simple, but even the simplest thing is difficult' (Von Clausewitz 1873). In a world of complexity inevitably mistakes will happen, but mistakes drive learning. Therefore be comforted by the words of George Bernard Shaw who said 'a life spent making mistakes is not only more honourable but more useful than a life spent doing nothing' (Shaw 1906). ■



REFERENCES

Rittel, H., Webber, M. (1973). Dilemmas in a General Theory of Planning [Accessed 8 Aug 2017] Available from <https://www.cc.gatech.edu/~ellendo/rittel/rittel-dilemma.pdf>

Quotes (2017). Ego = 1/ Knowledge: More the knowledge lesser the ego, lesser the knowledge more the ego [Accessed July 31, 2017] Available from <http://www.quotes.net/quote/52742>

Gurteen (2017). On breakthroughs in the way we treat each other by Theodore Zeldin [Accessed August 1, 2017] Available from <http://www.gurteen.com/gurteen/gurteen.nsf/id/on-breakthroughs-in-the-way-we-treat-each-other>

United Nations (2015). Sustainable Development Goals [Accessed July 31, 2017] Available from <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

United Nations (1987) Our Common Future - Brundtland Report. Oxford: Oxford University Press.

Von Clausewitz, C (1832). On War. Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press.

Shaw, G.B. (1906). The Doctor's Dilemma, Gutenberg. [Accessed July 31, 2017] Available from <http://www.gutenberg.org/files/5070/5070-h/5070-h.htm>