The Influence of Progressing Social Technology on Strategic Decision Making

by

Colonel Lucas A.W. Schreurs
Royal Netherlands Army

Under the Direction of:
Colonel Benjamin M. Nutt

United States Army War College
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14. ABSTRACT

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Abstract

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The Influence of Progressing Social Technology on Strategic Decision Making

> The influence of the great intellectual qualities is felt chiefly in the higher ranks, and increases as one goes up the ladder. It is the primary cause for the diversity of roads to the goal and the disproportionate part assigned to the play of probability and chance in determining the course of events.
>
> —Carl von Clausewitz[1]

The 21st Century development will be characterized by expected tremendous changes and development, not only in the field of science and technology, but also in trade globalization, growth of population leading to further urbanization with related environmental challenges, and gradual growth of global economy. Meanwhile we will see a developing information revolution which all will influence the way we learn and the way we lead. We will see revolutionary advances in how we acquire, store and analyze information, along with a dramatic increase of computer processing power, which are likely to give us the ability to predict accurately a wide range of phenomena.[2] The world is changing faster and more dramatically now than at any time in human history.

Smartphones have only existed since 2007 and besides their capacity, which is higher than a super computer in the seventies, they are now replacing other devices like cameras, calculators, game computers, media players, and so on. Next to technology the smart phone influences our lives and everybody is always connected. For instance within the Netherlands approximately 94% of its citizens use internet, static or mobile.[3] That changes the way we are informed, as everybody can upload short clips making everybody a reporter of news. Via internet everybody is always connected, not only with other human beings but also with one's house, car, fridge and office.

The Law of Moore based on sixty years of technological development claims that the performance of computers will double every eighteen months.[4] Computers will

become faster stronger and capable of processing and generating more data every iteration. Information and information technology will increase the pace of everything. Decision cycles, along with technology like Artificial Intelligence, nanotechnology, and 3D printing are developing so rapidly that technology becomes disruptive and transforms life. Technology makes high tech cheap, the advanced Reaper costs about $64M, an average high capable drone costs now approximately $1500.[5] Information technology makes everything measurable and everything is to be known to everybody.

It is fair to state that computers caused a shift in paradigm. Not everybody survived that shift. Kodak, Polaroid, once great companies did not survive. Nokia, once leading edge in technology, now only provides semi manufactured products.[6] Although the Department of Defense will likely not become extinct, a modern military organization cannot afford to be misaligned with modern developments. Information is spread around so quickly that not only do public statements in media have to be made more swiftly, but our adversaries also use this technology shift as well, demanding more swift decision making processes. Military organizations must remain competitive on the job-market to obtain future talent which is used to work with modern Information Communication Technology (ICT). None of us can afford to be left behind. Although future warfare will use high tech weapon systems, it will still be based on human decision making. Connectivity based on the newest ICT provides chances of new, creative ways of sharing information, and can support decision making. An electronic device puts us in touch with a keyboard, the heart of the enterprise remains rooted in personal collaborative relationships, albeit networked by the new information technologies.[7]

Modern technology changes the world, providing opportunities and challenges, while requiring, almost enforcing, a change of organizational behavior. How can military organizations best benefit from new social technology? How can it be used to improve strategic decision making? Can it add decision making speed, can it create better understanding of wicked problems, can it provide more broad, diverse options, leading to the best possible solution?

In 2014 Salim Ismail, Michael S. Malone, and Yuri Van Geest developed a model, based on extensive research, to provide a vision for organizations on how to be successful in the modern world of exponential technological development.[8] Before applying this model and examining its four aspects and consequences to the military organization, I will first explain the nature military organizations and strategic decision making. Before presenting my conclusion, I will discuss the applicability of this model and define proposals on how to apply Ismail, Malone, and Van Geest's knowledge to strategic decision making.[9]

Organizational Structure

Organizations exist to achieve goals.[10] For the military these are generically survival of the nation, support of government on domestic crises and support national interests across the globe. In its strategy the organization decides how to use its various resources in order to achieve its goals and is designed to work as efficiently and effectively as possible.[11] In the last twenty years, organizations have predominantly used ICT as a way to increase their internal efficiency, and cut costs by reducing personnel numbers.[12] Whereas today ICT provides ways to improve effectiveness, not by just accelerating processes but by improving quality and providing opportunities like the use of a new kind of organizational approach, a combination of a centralized and a

decentralized approach.[13] Using the benefits from a centralized management and control from a distance, responding when necessary, and decentralized execution which provides adaptivity to local circumstances.[14] Modern ICT creates numerous innovations in network relations, which have to be managed, and provides new levels of knowledge management to share and develop the expertise of individual members to the benefit of the organization.

Organizations like the military are generally described, using Mintzberg's configurations, as a machine bureaucracy.[15] A large (pyramid shaped) organization, with an extensive staff and technology structure, a dominating management, characterized by relatively routine work following standardized processes carried out by operational cores.[16] There is little change in products and services provided. The flow of communication is top-down and fairly procedural, and internal communication via informal channels focuses on "running smoothly." The organizational culture is focused on people, with a group culture based on values and norms, as members identify themselves with their profession and stress the importance of professionalism.[17] These types of organizations are hierarchical and have many rules and procedures, leading to an ICT structure which is usually formal and standardized.[18] Although new ways to communicate are often given a warm welcome, they also will be considered a threat for making work more impersonal and thereby less enjoyable.

Strategic decision making within large organization like the military, as it is influenced by its structure, depends on three factors; the levels of centralization, formalization, and complexity.[19] Strategic decision making within a machine bureaucracy is in the hands of a very few people, the top management. Although

centralization ensures that decisions are tightly coordinated, the risk is present that stimuli for change of strategy are not adequately responded to because aggregated data must pass multiple levels in the organization. Intended to be a Rational Actor Model, whereas the ends are to be defined before the means for achieving them are evaluated, decision making in a machine bureaucracy depends often on Homo Bureaucraticus.[20] Information might be presented in accordance with different roles people have in this strategic decision making process. Division of labor manifest in complex organizations and formalized roles have an impact due to participants gathering information based to the interests of their department or unit. Intended to maximize results based on rationality, decisions can end up being the last common denominator. Overall, these factors lead to a reactive process with goals more likely to be incremental remedial corrections of the present state and not positive future intended states.[21]

Although Implementation of modern technology will have all sorts off effects, changes might occur, and the introduction will not automatically lead towards all positive effects of that technology. Modern ICT can provide new solutions because it is about the interaction of technology and the organization. Network technology can aggregate and assess data, can make knowledge more accessible throughout organizations, and builds connectivity between members, driving towards rational actor behavior. Although survival of the military organization is not at stake because its existence and legitimacy are anchored in the constitution, military organizations have to align and connect with their "'trinity' partners," public government and society.[22] Military organizations can benefit from new technology making its decision making process faster, and broader

orientated while decisions are more effectively communicated throughout the organization and its environment.

Strategic Decision Making

Strategic decisions are non-routine and involve both the art of leadership and the science of management.[23] Strategic decisions determine the direction of a company and its viability in the light of known and unknown changes that occur in the environment.[24] Different decision making theories exist and help top management to come to strategic decisions in complex, volatile, uncertain, complex and ambiguous (VUCA) environments. Strategic decision making is a process which generally consist of four phases; defining the problem and end state, creating and considering many options, refining selected options, deciding what option to take and adding resources to achieve the objectives.[25] Modern companies operate in high-velocity environments that make considerable demands about the speed of strategic choices.[26] Not only are globalism and rapid technological change drivers of this competitive environment, but continuous political and media pressure also forces decision makers to accelerate their decision making process. Therefore, timely decisions are needed for a competitive advantage. Although some strategic decisions can take long periods of time depending on the issue, in modern highly dynamic VUCA environments, delays in decision making can be detrimental especially when national interests or, in the end, lives are at stake.[27]

In their study Campos et al., found a positive correlation between increased strategic decision making speed and the performance of companies, while mediating the relation of uncertainty and dynamism with firm performance.[28] They found that this positive correlation was based on personal, organizational and environmental variables.[29] On the organizational part they found that a centralized decision making

model positively affected strategic decision making depending on the organization's capability of effective information processing. In earlier studies O'Reilly et al., found that effective involvement of people in this process is key.[30] Companies which have systems to make use of the intellectual capital of all its people perform significantly better. Not only by tapping ideas, involvement of people in this process attributed to experienced responsibility and commitment. In a mere military way, these companies engaged the hearts and minds of their people, unleashing energy and skills that lead to improved overall performance. As Ismail, Malone and Van Geest described in their model, via modern technology all companies have these opportunities if they are able to access their crowd.[31]

<div align="center">Model Ismail, Malone and Van Geest</div>

In 2014 Ismail, Malone and Van Geest developed a model of successful organizations in the era of information.[32] They analyzed success and failures of companies who survived or did not survive the ever faster growing accessibility of information and development of technology. They developed the model for exponential organizations (ExO), organizations who were able to enlarge, sometimes even ten times, their output by making use of new organizational structures based on the use of new technology.[33] Their model is displayed like the human brain, the left half representing structure, control, stability, represented by the acronym IDEAS (Interfaces, Dashboards, Experimentation, Autonomy, and Social), whereas the right half represents creativity, growth and insecurity, represented by the acronym SCALE (Staff on demand, Community and Crowd, Algorithms, Leveraged assets, and Engagement).[34] Ismael, Malone and Van Geest state that "every company needs a massive transformative purpose (MTP), a vision which generates a power of pull."[35] People feel attracted

towards the organization and want to be a part of the community around the ExO. Think about hypes around Apple and TED. With a little imagination you could see the military as a major player in an ecosystem on national security. Even without the hypes, people want to contribute if they are inspired to do so. It attracts talent but leaders must be role models. The military has the power to inspire people and has an intrinsic value to democratic societies. In the words of General van Uhm, Chief of Defense of the Netherlands, "The reason I picked up the rifle was not to shoot, not to kill, no to destroy, but to stop those who bring evil, to protect the innocent, to defend our democratic values, to stand up for our freedom and to make this world a better place."[36]

The acronym SCALE stands for Staff on demand, Community and Crowd, Algorithms, Leveraged assets, and Engagement. Staff on Demand means that an organization can scale its staff.[37] A staff does not consist entirely of fulltime workers but can be scaled depending on demand and necessary capabilities. It provides flexibility, creates diversity, improves agility, makes use of collective intelligence and makes use of worldwide talent. In terms of Community and Crowd, Chris Anderson discovered that people wanted to participate in product development and that they wanted to help solving problems within his company.[38] Using modern technology these communities are now global. Algorithms stands for analyses of (big) data which helps organizations to optimize their performance (logistics) and using deep learning patterns of behavior can be discovered. Predictability will increase because computers are nowadays capable of processing so many variables and data that gut feeling can be (almost) ruled out. Levered Assets is about the hiring or sharing of assets when scarcity is not an issue. Clever asset management reduces costs, increases agility and reduces

overhead. Engagement creates social enhancement, connection to the organization, as on the inside (employees) as on the outside (customers, general public, stakeholders). Engagement is also about clever marketing, gaming and awards stimulate creativity, loyalty and building community.

The acronym IDEAS stands for Interfaces, Dashboards, Experimentation, Autonomy, and Social. Interfaces are processes (i.e., automatic workflows based on algorithms) with filters which bridge information from external SCALE dimensions on time towards the right people within the organization.[39] Dashboards provide real-time information necessary to support management decision making. More objective bottom-up Objectives and Key Results (OKR) systems replace traditional vanity metrics like a Key Performance Indicator.[40] The OKR measure real-time achievements related to objectives.[41] Experimentation is about testing assumptions and continues experimentation in a controlled environment, so called garage boxes. Main goals are learning, and development by experimentation. Failures have to be regarded as experiences which requires cultural acceptance. Autonomy is about self-controlling multidisciplinary teams who perform under a decentralized authority, a so called holacracy. Responsibility is organized on lower levels within organizations as well as resources. This results in advanced agility, shorter responds, improved mental strength. Social is about intelligent sharing of information via social technology, making connections, sharing information, trust and engagement. Employees are more connected to their jobs/organizations because they have quicker access to more data and can see what is expected.

Ismail, Malone and Van Geest provide ten potential aspects in their model to focus on.[42] The focus of this thesis will be on four of the elements of the model. Based on the conclusions on the organizational structure, and strategic decision making process of the current military organization, the following four aspects might have the most short term impact by focusing on organizational aspects without going in to the weeds of data processing technology, in order to make the organization more adaptive to future developments and thereby contributing to enhanced strategic decision making.

Experiment

The essence of experimentation is the challenge of an organizational mindset. Big organizations, like human beings, feel comfortable in a status quo. In the current environment of fast changing technological innovation, organizations themselves have to change or they will be changed from outside. Modern technology leads to a paradigm shift which will influence the way of doing business. In the words of Marc Zuckerberg, "In a rapid changing world the biggest risk is not taking risk."[43] Continuous experimentation and adapting processes is the only way to reduce risk. Experimentation is about testing assumptions and continuing experimentation in a controlled environment, so called garage boxes. This technique called "Lean Startup" was developed by Eric Ries is based on Toyota's continuous development bead on elimination of non-essential processes.[44] Although this technique, sometimes called open-innovation, is often linked to small high innovative start-up businesses, it has benefits to larger companies or organizations. The underlying idea is to create in a controlled environment a minimum viable product and start learning from it. It is essential is to generate metrics in order to measure chances on success. Main goals include learning and development by experimentation. Once assessed to be successful,

the new product or new developed strategy will be implemented in the larger environment or the organization. Using a contained environment provides quick reaction to new changing factors or rising threats and provides faster deployment because it enhances faster learning processes. Essential for success of this method, besides registration and measurements of these experiments, is acceptance of failure. Failures have to be regarded as experiences which require cultural acceptance within the organization. In the military a widespread expression is "failure is not an option" or "there is no second place on the battlefield." Experimentation as technique is almost naturally the opposite as failures will happen and will cost money. Spending tax-payers money on failures in a public organization like the military something is, although beneficial overall, something to be carefully considered.

Although a focus on high tech is expected, social innovation is also absolutely necessary. Society is connected in another way and request new rules to the game. The job market has changed and the military is involved in a "War of Talent."[45] New strategies like cyber warfare request different kinds of approaches. Continuous experimentation in a controlled environment provide strategic leaders opportunities to test ideas before implementing them successfully on a larger scale. Although war gaming and testing equipment within units are existing concepts, the crucial difference with previous methodologies of endless studies before implementation is a hands-on approach, development by experimentation. Modern technology and computer simulated environments testing implications of decisions made, can now quickly assess chances on success based on big data metrics.

Of course criticism arises in these methods. Too much innovation will wear your organization out, testing too many ideas too quickly will hamper learning, and approximately 70% of all test objects are not going to make a big difference.[46] Again, critical thinking is key. Think before you try, experimentation is not a goal in itself, nevertheless, experimentation leads to concrete results. Critical to that success is a mindset to embrace possible failure as learning experiences.

<center>Autonomy</center>

As previously stated, autonomy is about self-controlling multidisciplinary teams who perform under a decentralized authority, a so called holacracy. In extremis this is referring to self-organizing interdisciplinary teams with a decentralized authority providing flexibility and focus on results instead of struggle on procedures and interests.[47] Trust and clear guidelines are the principle drivers within companies, which structure is based on autonomy. In a less extreme form, autonomy is about decentralization. Modern organizations are gradually replacing traditional structures towards self-organizing, interdisciplinary teams with a decentralized authority instead of traditional divisions and layered structures of middle management.[48] The current structure within the military organization is best to be described, in Mintzberg's typologies, as a machine bureaucracy, focusing on procedures and interests.[49] Change comes via interim management and reorganization, and strategy development is top-down, whereas more autonomous organized organizations provide more agility, responsibility on lower levels and improved mental resilience.

The military organization does not lack these factors. For instance, when commandos raided Osama Bin Laden's compound one of the helicopters crashed, but that didn´t cause the mission to be aborted. The commandos improvised and adapted.

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Paratroopers are trained to continue their mission even with without major leadership which might be crashed or dropped wrong. Their missions continue because their operations are planned on a commander´s intent. Mintzberg calls that an emergent strategy, in the military this refers to mission command.[50] Although very present in the operating environment of the Army, it is apparently not driving peacetime military bureaucracy. Stanley McCrystal described his changing leadership style as "leading like a gardener."[51] Instead of behaving like a micro-managing chess master he had to transform towards a gardener due to the increasing complexity of the modern world. He learned to delegate decisions to subordinates, decisions he could easily have made himself. Tending the garden, shaping an ecosystem by constantly pruning and shaping our network, became his primary responsibility, articulating priorities by constant talking about them, providing (written) guidance, and leading by example. It is about enabling rather than directing. As a strategic leader making strategic decisions, Stanley Mc Chrystal clearly understands the importance of mission command. Important to mission command is a contact of trust. The superior trusts his subordinate to act, to act within the commander's intent, and to act sensibly in the circumstances he finds himself.[52] Autonomy on lower levels, decentralization, provides local understanding and flexibility. Local decision makers, commanders, can build their understanding based upon their connections. Not only to actors as local policy makers, present non-governmental organizations, but also to peers working on comparable issues. Today, commanders on all levels use social technology to share best practices and ideas, but also for imminent situations.

Although Campos et al., found centralized decision making most effective and efficient in times of crises increasing decision making speed, mission command or autonomy provides better execution of decisions, thereby contributing to successful outcomes of strategic decision making processes.[53] Modern, social, technology supports mission command by better connectivity throughout the military organization, horizontally and vertically, internally as well externally. Instead of long and detailed orders, strategic leaders can focus on the actual decision making, leaving room for execution to their subordinates and thereby increasing tempo.

Staff on Demand

The essence of Staff on Demand is scalability of an organization's staff capacity. If an organization has staff capacity on demand, the staff does not consist entirely of fulltime workers but can be scaled with external personnel depending on demand and necessary capabilities. By using external resources when necessary an organization creates flexibility and agility within its organization. The bigger benefit is an opportunity to better use collective intelligence by making use of worldwide talent, creating diversity in thought and output.[54] Thereby indirectly contributing to a more agile strategic decision making process. In the current military organization, with decreasing numbers of troops, staff capacity is relatively growing. Staff on demand can contribute to "more Army out of the Army."[55]

Another perspective on staff work is to consider staff work as a bundle of tasks. Almost nobody has just a single task, it is foremost a combination of tasks. A comparative assessment of production costs and coordination costs can lead to a decision to bundle tasks and outsource these tasks, especially if these tasks are temporary.[56] Depending on the level of embeddedness of these tasks, an additional

assessment on control and transaction of costs has to be made. If beneficial, these tasks can be transferred to temporary staff personal on demand. Often these tasks will not be related to the core processes of an organization. For a military organization, tasks involving classification cannot easily be transferred to staff on demand personnel, unless they are previously screened like reserve or National Guard personnel working in a civil environment. However a lot of work is not, or does not have to be, classified like logistical or staff support tasks. Especially in the field of project based work which is often an add-on for staff personnel, at the expense of their regular tasks.

Another opportunity modern technology based social networks provide is the possibility for strategic leaders to identify employees with the most appropriate skills and to assign these employees to the projects for which they are best suited. Less formal connection to staff divisions and more relation to project based division of labor might create staff on demand within the organization, creating an atmosphere of people working on the right and desired jobs. Significant correlations are found between portfolio management based on competencies combined with experiences within a networked organization and improvement of quality and quantity of work.[57] With a little imagination one can think of internal company LinkedIn- like systems or Wiki-s creating these opportunities. Staff on Demand tailors an organization's staff capacity to the desired outcome, which might make an organization more agile, flexible, effective and more efficient.

Community and Crowd

Through the history of mankind, predominantly geography and religion were responsible for the development of communities, but was gradually replaced by national states. In the last ten years we saw the rise of internet based communities. Due to

modern technology, communities no longer depended on physical proximity. Discussions for an on all sorts of topics are now global, which provides rich resources of diversity of ideas which companies and organizations can benefit from. For organizations or companies, a community is built in several layers. The core exists of team members with an internal network, successive layers are, alumni and customers, suppliers and partners, staff on demand, and all other (interested), the so called crowd.[58]

Today, network technology facilitates creating of ad-hoc groups striving for a specific purpose or goal. They form new types of communities, virtual community networks, which reinforce or supplement "organic' communities."[59] For instance, people demonstrating against laws raising support for their point of view. Often these groups dissemble after achieving their specific goal. But also, groups of patients which are discussing therapies or medication, and companies involving their customers to improve their products. To establish an enduring valuable community Ismael, Malone and van Geest recommend three steps.[60] First step, use your MTP to attract people and involve them in your product.[61] Second step, cherish your community. Provide feedback and communicate on-going.[62] Nowadays we often see military leaders posting on social media but never react to responses. That kind of behavior is more short term marketing. Communities are a strategic investment for the long term. Third step, create a platform where community members can assess and comment on each other's contributions.[63] As mentioned before, a community requires an investment.

Someone who transparently rules the community, active attention to cherish your community and provide feedback. Due to easy accessibility, companies' benefits might

be involvement in product development, finance (crowdfunding), distribution and sales. For organizations like the military revenues can be creative ideas and solutions, but most of all, participation creates public involvement. In the current situation, we have a shrinking military population, and with a shrinking recruiting basis where "military business becomes family business," thereby reducing involvement of the "outer world."[64]

The military must be careful not to evolve into an organization which, although highly appreciated, lives behind barbed wire and is not a part of public discourse. Risk appears as only politicians, alumni and a few strategic decision makers discuss high level security topics via specialist journals. Public involvement generates support, enduring legitimacy, and embeds the military into society. Using Clausewitz' ideas on the remarkable trinity, people are an essential part of the trinity, if popular support is lost, the overall support for the military is lost.[65] A crowd might be hard to build, it is certainly not a quick win, it brings diversity but lacks cohesiveness, and an informed crowd can not only contribute ideas based on varied skills, experience and perspectives, its predominant effect is to keep the military at all time a part of public discourse.[66]

The strategic context of social network ties, not simply the number of ties, is an important influence on corporate government.[67] Quality prevails quantity. Especially for strategic leaders careful development of their "crowd" helps them in making strategic decisions. Criteria must be met. Members of their network must not only bring information, but must have adequate strategic knowledge and perspective to make meaningful contributions to strategic decision making. In turbulent times strategic leaders can directly benefit from interlocks that expose them, almost real time, to

possible strategic alternatives. In civil companies, directors will bring experiences from other boards and fields of expertise. In the military organization, directors will bring different expertise, but are raised and taught from within the same system. A strategic leader must therefore build an optimal portfolio of 'outsiders' to provide other expertise, knowledge and approaches. Diversity is essential to develop broad understanding, different approaches and can help to prevent groupthink.

<center>Discussion</center>

Are social technologies the "holy grail" towards increased swiftness of strategic decision making? Social technologies come and go, new systems rise and others fade away. Some companies seem to profit, others do not. But many believe that if organizational barriers to use social technologies diminish, they could form the core of entirely new business processes that radically improve performance.[68] Bughin, Byers and Chui found the highest improvements in benefits in internally networked organizations from interactions with employees, at externally networked organizations from interactions with customers, partners and suppliers, and at fully networked report greater benefits from both internal and external interactions.[69] What built their success? These organizations used social tools to scan external environments, they used social tools to match employees to tasks, helping project leaders to identify employees best suited for projects. However in increasing numbers, only very few large companies use these technologies today to full extent.

Connectivity in general provides multiple connections and access to new and other ideas, thereby increasing access to information, improving decision making speed and preventing groupthink. Indeed, research shows that mangers are influenced by their connections, especially in smaller teams, decision makers depend on who they are

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connected to and interact during their decision making process.[70] Although expected

purely positive due to better situational understanding and new, broader ideas,

connectivity can be a hindrance to decision effectiveness. Connections might not be

able to assess the actual risk as compared to the decision maker himself. To what

extent are these connections able to identify and integrate relevant issues about the

specific decision, or to what extent can they provide information that can enrich their

understanding of the decision and its context?[71] This implies that decision makers who

take this influence for granted will have a higher proportion of poor to suboptimal

decisions than decision makers who stop and raise questions about the

appropriateness of the influence of their connections. Critical thinking is required.

Overall, a network based on quality must prevail over quantity. When critically applied,

connections and connectivity will lead to broader understanding and better decision

making, Decision makers must actively consider their connections to allow them to have

beneficial and complementary influence on their decisions.

This leads to the question in which phases of strategic decision making external

influence is applicable. Strategic decision making is an iterative process.[72] Although

every iteration provides new insights, they are predominantly the phases involving

creation of understanding, development and consideration of options, who should have

external influences providing broad knowledge and ideas. Strategic leaders must not

have their final decisions on how to achieve the objectives and assignment of resources

influenced by their "crowd." Their connections will not have the shared assessment of

involved risk and oversee all relevant aspects about the specific decision. Following the

crowd's opinion leads to populism and faulty decision making.

As mentioned before, introducing new technology which will change the way of doing business within organizations will hit cultural barriers. Norms, values and underlying assumptions become involved. Group equity is more valued than individual equity, both elements of institutional collectivism, one of Hofstede's GLOBE (Global Leadership and Organizational Behavior Effectiveness) dimensions.[73] A change from the existing institutional egalitarism, which provides an inclusive culture, development towards a more individual approach using knowledge and skills as discriminative criteria, internal and external the military organization, will cause resistance as it is contradictive with old and long established values.

Another GLOBE dimension is power distance. Power distance is the degree to which members of an organization expect power to be distributed equally.[74] Some degree of power distance is necessary within the military, but shifting towards more individual based portfolio management instead of rank based skills requires a lesser degree of power distance, this also might cause resistance. Schein states that culture change in a matured organization, like the military, is extremely hard, however change is possible through embedded and reinforcing mechanisms.[75] Embedding mechanisms show how organizations perceive and behave, reinforcement mechanisms support the embedded mechanisms. Therefore the need exists to use embedding mechanisms like allocation of resources, acting as role model and allocating rewards to avoid potential traps and decrease closed-mindedness. Leadership has to use reinforcing mechanisms like telling stories about their use of new technology based networks, accessing knowledge and ideas from outside the organization, reinforcing success and adapting organizational systems and procedures to prevent systems of denial.

Development towards a mere knowledge based organization requires cooperation, internal and external organizations, as well as horizontal and vertical within organizations. Employees must share information instead of regarding possession of information as a mechanism of power. Employees must focus on common goals and maintain continuously informal contact. Organizations are built on trust and offer reflection. Taking a risk is acceptable and mistakes are to be learned from and should provide new insights, rather than being reckoned with. In an open organizational culture deviations of standard procedures will get room to develop as long as they are focused towards overall objectives. Strategic leaders are drivers for innovation and change. They must sense and seek anomalies, they must need to imagine if they would change their minds, and above all, they must challenge the status quo.[76] Organizations with these types of cultures and leaders often have an advantage over competitors because they are more agile and flexible, perhaps a winning difference.

Conclusion

Albert Einstein ones said: "If I had an hour to solve a problem I'd spend fifty-five minutes thinking about the problem and five minutes thinking about solutions."[77] These days Albert Einstein would probably spend a few minutes uploading his problem, spend fifteen minutes on assessing responses and then come to his final analysis and solutions. Organizations can benefit from modern, social technology providing connections and connectivity surpassing Einstein's phenomenal brain capacity and making global knowledge available to everybody. Modern ICT provides ways to improve strategic decision making, not by just accelerating processes, but by improving quality on understanding and broad approaches to problem solving. It can bring approaches to

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a new kind of organizational approach, a combination of a centralized and a decentralized approach.

Experimentation is essential to continuously challenge the status quo and will lead to concrete results, essential to continuously adapt in an ever faster developing global environment. However, experimentation is not a goal in itself, it is about the critical, challenging mindset and the will to embrace possible failures as learning experiences. Autonomy, or its military equivalent mission command, provides better execution of decisions, contributing to successful outcomes of strategic decision making processes. Modern, social, technology supports mission command by better connectivity throughout the organization. Instead of long and detailed orders strategic leaders can focus on the actual decision making, leaving room for execution to their subordinates and thereby increasing tempo.

Integrating social technology into workflow and using them to optimize internal and external processes will provide additional competitive benefits. Staff on demand provides an opportunity to better use collective intelligence by making use of worldwide talent, creating diversity in thought and output. By using external resources when necessary, an organization creates flexibility and agility within its organization. Routine tasks can be transferred to temporary staff personal on demand, providing 'more army out of the army'. Also an internal system of staff personal on demand assigning employees with the most appropriate skills and to assign these employees to the projects for which they are best suited improves quality and quantity of staff work.

Due to modern technology, well maintained crowd-based communities no longer depend on physical proximity. Revenues can be creative ideas, solutions, and it

anchors military organizations in public discourse. Strategic leaders must carefully develop their personal "crowd" which helps them in making strategic decisions. Quality prevails quantity and members must not only bring information, but must have adequate strategic knowledge and perspective to make meaningful contributions to strategic decision making. Strategic leaders have to think critically and strategically how social technologies can support their organization, but overall, strategic leaders are the drivers for innovation and change, and above all, they must continuously challenge the status quo to lead their organization in to the future. An organizational culture open for change and new approaches to tackle future developments is key. Organizations with these cultures and strategic leaders have a winning advantage over competitors. "Who dares wins."[78]

<div align="center">Recommendation</div>

Strategic leaders are drivers for change. Therefore to implement social technology successfully in military organizations, strategic, and future strategic, leaders should be educated, trained and coached on usage of social technology within the military organization. Understanding of social network technology, its possibilities, benefits and dangers should be part of their education and training throughout their careers in order to stay up-to-date with this ever faster developing technology. Essential lessons on creation and maintenance of quality social networks, like storytelling, exploiting knowledge from peers within their virtual networks, usage of wikis, flexible use of capacities in and outside of the organization, should be part of their curricula. Regular training will provide strategic leaders capabilities to fully exploit the benefits of social technology, leading to better understanding, increased decision making speed, diversity of options, and better decision making.

Organizational structures and procedures ought to be amended to implement functional social networks which support and reinforce strategic decision making. Development and maintenance of high quality social networks including actors from other departments, private sector, diplomatic corps, and former employees, are proven beneficial to deepen understanding, support development of multi-view approaches, and will test in an early stage if options are feasible, also politically. In order to achieve potential outcomes, these networks must be carefully developed and maintained, which will require dedicated capacity.

Risk of not implementing, or better use of social technology will lead to a military organization left behind in society as Ismael and Van Geest described. Although the military organization is not threatened with extinction as it is firmly embedded within the constitution, its effectiveness can be severely hampered. Connections with future talent will be lost, or at least challenged, as competing employers heavily invest in, and exploit digital approaches to new talent, leading to decreased recruitment and enlisting rates. Reduced digital outreach might lead to a society within a society if the trend of familiar relations within the armed services increases, a situation which is unfavorable in democratic societies. Modern organizations must have to maintain their roots also in the digital society, whether liked or not, it is modern reality.

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