
December 2021

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Paul Hegarty Lt Cdr
Irish Defence Forces, phegarty326@gmail.com

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Recommended Citation

Hegarty, Paul Lt Cdr (2021) "Change Management in the Irish Defence Forces during Technological Change," *Irish Business Journal*: Vol. 13 : No. 1 , Article 5.

DOI: 10.34719/BQR8-3529

Available at: <https://sword.cit.ie/irishbusinessjournal/vol13/iss1/5>

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Change Management in the Irish Defence Forces during Technological Change

Lt Cdr Paul Hegarty, PhD – Irish Defence Forces

Abstract

Extant literature fails to address change management in the military during technological change. Few researchers have examined how military organisations, undergo change and what, if any, processes do they use to manage this change. As such, whether change management processes are found to have a positive impact on military organisations or not, the extant literature in the sociology and military domains are being added to by the findings of this research.

The aim of this paper is to determine if the Irish Defence Forces would benefit from the introduction of change management processes when implementing new technological systems. The extant theory has neglected to examine the application of change management processes in military organisations, a shortcoming this paper addresses. The research draws on semi-structured interviews undertaken with military and civil servant professionals from the Irish Defence Forces and the Department of Defence.

A primary outcome identified the urgent need for the Irish Defence Forces to develop and implement a change management process for managing technological change. The current 'ad-hoc approach' which relies on key personnel highlights the lack of competence which exists at the leadership level and is further exacerbated by the personnel rotation policy currently used in the Irish Defence Forces, thereby having a detrimental impact on organisational efficiency.

The study is significant as it informs theoretical understanding of change management processes by introducing a focus on the Irish Defence Forces, hitherto lacking, and informs the understanding of organisational change in a military organisation. Finally, the combination of the theoretical and empirical research contributes to the extant body of knowledge.

Key Words – Change Management, technology, military, Irish Defence Forces

Introduction

Holmberg and Alvinus (2019) contend that the need for transformation in the military domain has been understood in a broad manner, incorporating different trends and major reforms that can be said to incorporate pressures for change. Militaries continue to face political pressure to improve efficiency, to identify the resources associated with different levels of readiness, and to become more accountable for the use of public resources (Chenhall *et al.* 2007). Change for any organisation is arduous, but, as argued by Rosen (1994, p.2), military organisations, have difficulty changing, because ‘they are designed not to change’ as they are fundamentally designed to perform established tasks with uniformity and regularity.

Schousboe (2019) highlights that the impact of modern technology on warfare has always been a central concern within military science particularly as technological innovation continues to increase in relevance. While these developments may be incremental, or revolutionary in nature, there remains doubt about how military organisations seek to utilise and implement such technologies (MacGregor and Williamson, 2001). Cohen and Gooch (2006) further posit that most modern militaries have struggled with this challenge and have failed on occasion to anticipate, learn and adapt to changes in their nature of work. Cohen (2004) previously noted that causes for change stem from fundamental changes in international politics and the continuing maturation of the informational technologies which will drive the strategic and technological change. Galli (2018) acknowledged that strategic and operational change is a constant concern in order to remain relevant and competitive, and reflects the maxim of Clausewitz (1976, p.88), who noted that while the ‘nature of war remains constant, its character is constantly changing’. Consequently, strategic leaders in the military should have an interest in understanding the reasoning behind why their respective organisations will be required to change and evolve, both now, and into the future, and why they, as leaders, should understand the need to manage such change.

The primary research question, therefore, examined if change management processes enhance the Irish Defence Forces ability to identify and implement new technologies? The specific objectives of this paper are to determine if change management processes are suitable for the Irish Defence Forces, and if the members of the Irish Defence Forces believe that change management processes will benefit their organisation. The research question evolved from the author’s experience in managing various technological changes in the Irish Defence Forces and the observation that the Irish Defence Forces did not appear to have any established strategic

planning process, or change management system for identifying and implementing new technological systems, such as ships' digital navigation systems, and the Irish Defence Forces Information and Knowledge Online (IKON) SharePoint system. The author interviewed individuals who had significant experience in project managing technological projects in the Irish Defence Forces and covered a wide range of specialist areas, thereby providing a rich data source. The projects referenced in the interviews were delivered between 2014 and 2016, and were projects that impacted either the entire Irish Defence Forces, or specific services, such as the Naval Service and Air Corps.

This paper is timely, as it offers new perspectives on how the Irish Defence Forces can manage change to better embrace the challenges associated with technological change. The findings will provide a new insight for the Irish Defence Forces. First, an introduction to the context and review the literature pertaining to change management and technology is provided. Next, the methodology used to conduct the study is addressed, before presenting the research findings. Finally, a conclusion and consideration of the need for a change management process during technological change in the Irish Defence Forces is argued.

A Brief Review of the Extant Literature

We live in a world that is full of change and how organisations manage change is a key competency if organisations want to develop and grow, and to be able to take advantage of new challenges (Vedenik and Leber, 2015). One of the most important lessons in the history of military revolution is that organisational dynamics will determine the setting in which technological innovation will either succeed or fail (Evans, 2000). Change is a ubiquitous notion that fascinates and frustrates (Chia 2014) and it has to be carefully managed because it is something made to happen, to or within, an organisation. It can be viewed as a general feature of organisations imprinted in the process of constant reproduction (Chia and Tsoukas, 1991), as a simple rhetorical means to decouple an organisation from its dynamic environment, or as a social technology concealing capitalistic logics in modern management (Alvesson, 2011).

Technology in the Military

Military organisations, since the time of antiquity, have continuously sought to leverage technologies that provide advantage against their prospective adversaries on the battlefield (Regens *et al.* 2020). Becker (2010) highlights that the introduction of new technologies into organisations continues to be a challenge for managers and change practitioners alike, and the requirement to effectively handle such technological change does not appear likely to diminish in the near future. The development of technologies is important for military practice, because it contributes in defining future military capabilities for the military (Fedorchak, 2018). Lasswell (1997) identified this development and his research identified the rise of the ‘peacetime military’ and the need for the military to invest in new technologies in order to remain capable of operating in any future conflict.

When reviewing how military organisations seek to integrate new technologies, Thomas (1998) made five conclusions that should be considered when contemplating the introduction of new technological systems. First, developing technologies help in improving military capabilities, but their subsequent correct application requires appropriate doctrine. Second, emerging technologies are derived from the private sector and present militaries with challenges, such as security breaches and information espionage. Third, new technologies must be tested. Fourth, while the competitive advantages of a new technology are not long-term and the competitive advantages for militaries are seldom calculated, appropriate doctrine with a long-term evaluation is of note. Finally, any emerging technology must be financially sustainable. Analysis of Thomas’s research omits a key factor, that of the cause-effect correlation. Fedorchak (2018) argues that doctrinal requirements can speed up certain tendencies in technological development, particularly as emerging technologies might force changes in doctrine. While doctrine is not one of the objectives associated with this paper, it is pertinent to understand its role in how military strategic leaders view technology, as doctrinal relevance is important, particularly when assessing how capability development is to be enhanced and modernised.

Technology in the military continues to evolve and develop at an exponential rate, low-tech to high-tech, yet research has highlighted that military organisations do not necessarily evolve as rapidly in order to support new systems (Chamayou and Lloyd, 2015). One of the most important lessons in the history of military revolution is that organisational dynamics will determine the setting in which technological innovation will either succeed or fail (Evans,

2000). This is significant as the role of technology is important to future military capability, yet it is the military itself that could potentially hamper its own sustainability and capability development if it is unable to successfully implement the new technology. Gilchrist (2018) critically posits that an issue prevalent in the military is where technological equipment is often bought before the full challenge of integrating it is understood or planned for. Such criticism highlights the previous caution espoused by Evans (2000) in which he identified that technological superiority means little without organisational effectiveness during the change process. Therefore, analysis of the literature highlights it is those military forces that succeed in integrating a reformed organisation with new technology through a coherent strategic change framework that are successful.

Change Management

When seeking to introduce change, research has shown that the more successful cases of change management projects are those that accept that the change process goes through a series of phases that, in total, usually require a considerable length of time (Kotter, 2007). It is, therefore, necessary to understand the levels at which technological change can affect the organisation. Armstrong (2009) observed that change management covers two distinct areas, that of strategic change, and that of operational change. Armstrong (2020, p.26) further elaborates on both levels, and defines strategic change as ‘that which deals with the broad, long-term and organisation-wide issues’, while operational change relates to ‘new systems, procedures, structures or technology which will have an immediate effect on working arrangements within part of the organisation’. This clear distinction is key to the objectives of this paper, as the following analysis will focus on both strategic and operational change.

Defining change management, therefore, is a complex and difficult process, as it consists of three layers; organisations, people and projects (Galli, 2018). Creasy (2018, np) defines change management as: ‘the application of a structured process and set of tools for leading the people side of change to achieve a desired business outcome; it is both a process and a competency’. This definition assumes that the change being introduced adheres to a structured process that is understood by all individuals within the organisation. Creasy’s definition will be used in this paper as it identifies that change management requires a process to manage the change being implemented, and more importantly, it acknowledges the role of competence and the need for leaders to understand that change affects the organisation across three core layers, namely; the

organisation itself, the people within the organisation and the projects being implemented. Analysis of the current literature demonstrates that change management as a concept is both widely understood and utilised, yet each contributor to the extant literature provides minor variances on how they define change management. The following section will examine change in the military and outline its relevance for this study.

Change in the Military

Military change, or stasis is the result of, at its most general and basic, three main factors: the existence of an external threat, the culture of the state/government that controls the military, and the state of technology, in short: threat, culture, and technology (Davidson, 2011; Kier, 1997; Rosen, 1991; Posen, 1984). Barbaroux (2011) observed that the most common failure related to military organisations, was the inability to develop and implement coherent change programs for current and more importantly, future operations. This observation was surmised by Howard (1974, p.5), 'with the inadequate thinking about operational requirements, the best of technology and the biggest budget in the world will only produce vast quantities of obsolete equipment'. This highlights the applicability of Creasy's definition to this paper and further emphasises that change requires process and competency.

Research by Scarborough (1993) illustrated that the military context should provide a rich empirical terrain from which to investigate organising phenomena and address the underlying principles supporting organisational change management, however, this has not always been the case. Kurt Lang (2013[1965], p.839) identified that 'modern military establishments qualify as complex organisations irrespective of size (...) As a consequence, military organisations share many of the problems of other organisations of comparable complexity'. Lang further argued that, 'except on a theoretical level, there are few systematic comparisons of military organisations with civilian bureaucracies of comparable size and complexity'. These observations highlight the need for greater understanding of how military organisations manage change and as echoed by Roxborough (2000, p.367): 'sociologists interested in organisational dynamics have tended to ignore military organisations, leaving these to political scientists and historians to study. This is a pity, since military organisations often serve as extreme cases of processes that occur in other kinds of organisations, thereby providing useful tenets of sociological propositions'.

Thiele (2006, p.7) further developed this concept when he observed that ‘the higher the speed of change and the more complex the organisation, the more important is appropriate support to commanders by means of up-to-date management methods and communication’. Therein, lies the dichotomy for military organisations, how do they advance as an organisation when their internal processes are seen as inherently conservative, as compared to other organisations? (Lang, 2013 [1965]). Liddell-Hart (1954, p.v) surmised this conundrum when he observed through his now famous aphorism, ‘that the only thing harder than getting a new idea into the military mind is to get an old one out’. Therefore, in order to survive, military organisations must develop the ability to change continuously in a fundamental manner (Burnes, 2004).

Change Management Theories and Models

Thévenet (1988) highlights that change itself has the ability to both benefit and destabilise organisations. Burnes (2011, p.447) proposes that the key requirements for a model of organisational change are: reliable performance indicators that can be used to assess if a change project is succeeding or failing, and, relevant project characteristics that impact on project success, and these need to form the core of an organisational model. Conversely, Vedenik and Leber (2015) posit that change management approaches have two main objectives: to assist the organisation in achieving its goals, which cannot be attained with the existing organisational structure, functioning, and client servicing, and, to minimise the adverse effects of any changes made. Table 1 provides an analysis of some of the various extant planned organisational change management models by identifying key core themes.

Differentiating Planned Organisational Change Models by Type	
As continuous or stepped change	(Maimone and Sinclair, 2014; Dunphy <i>et al.</i> 2007; Cook <i>et al.</i> 2004; Tsoukas and Chia, 2002; Pettigrew <i>et al.</i> 2001; Romaelli and Tushman, 1994)
Change in the context of its impetus, being planned or emergent	(Chia, 2014; Burke, 2013; Luecke, 2003; Beer and Nohria, 2000; Kotter, 1996; Porras and Silvers, 1991)

Change in terms of its organisational origins, namely top-down or bottom-up	(Smith and Graetz, 2011; Beer and Nohria, 2000)
Change in terms of its size and impact, identifying the transformational and incremental elements and the necessary steps in achieving such change	(Malhotra and Hinings, 2012; Sutherland and Smith, 2011; Dunphy <i>et al.</i> 2007; Taffinder, 1998)

Table 1 – Differentiating Planned Organisational Change Models by Type

Source: Adapted by the author

It is notable that a defining element in each of the models is the absence of mutual exclusivity between them, such that overlap occurs at intersections between type, impetus, origin and size/impact at different points along the change continuum. Rosenbaum *et al.* (2018) interestingly observe that all models are essentially based on the seminal three-stage process as espoused by Lewin (1947), and that Lewin’s change model was not a one-dimensional linear process as previously espoused, but a dynamic model that relied on external enablers. Moreover, it is critical that the selected change management model reinforces change and is linked to a successful and sustainable implementation (Holloway, 2015), as failure to effectively understand and manage the model contributes to why change initiatives are branded as nebulous and trivial undertakings.

Inherent, therefore, are the challenges that will accompany any organisational change project, which means that the military organisation must address these challenges if it wants to stop the change from failing (Holmberg and Alvinus, 2019). Galli (2018) concurs with this deduction and critically posits that the basic concept of organisational change models is starting at the current state and realising the need for change, entering the transition phase, implementing the change, and then getting to the desired state. Analysis of the literature acknowledges that organisations undergoing change will experience discomfort and/or resistance as they transition from the old way to the new way and understanding how the Irish Defence Forces manages technological change will add to the current literature for military organisations. Moreover, each of the models includes unique characteristics that may benefit military organisations, thus highlighting that there no ideal model, but more a realisation of the need to identify the right model for the organisational change being undertaken at a particular time.

Reflecting on Table 1, an additional development in the study of change management models has focussed on developing a ‘new normal’ approach, and associate model, to change whilst remaining cognisant of the ‘old normal’ (Worley and Mohrman, 2014, p.215). The ‘old normal’ outlined that within and across industries, periodic transformational episodes challenges organisations to develop new capabilities, ways of doing work, managing people and organising. The ‘new normal’ as argued by Worley and Mohrman (2014) identified that ‘organisations need to move from one fundamental change to another, continuously incorporating new capabilities in response to the complexity of their environments’. Their observations (2014, p.216) identified four key tenets that organisations are being asked to do: ‘firstly, drive performance today while changing their business models for tomorrow; secondly, leverage their current advantaged capabilities and build whole new capability sets; thirdly, optimise their current product/service portfolios and offer customised solutions; and finally, minimise their current carbon footprint and adopt sustainable practices by making existing process more efficient by introducing disruptive innovations and fundamentally different ways of operating’. To assist in representing these four key tenets, Worley and Mohrman (2014) developed the ‘Engage and Learn Model’ as shown in Figure 1.

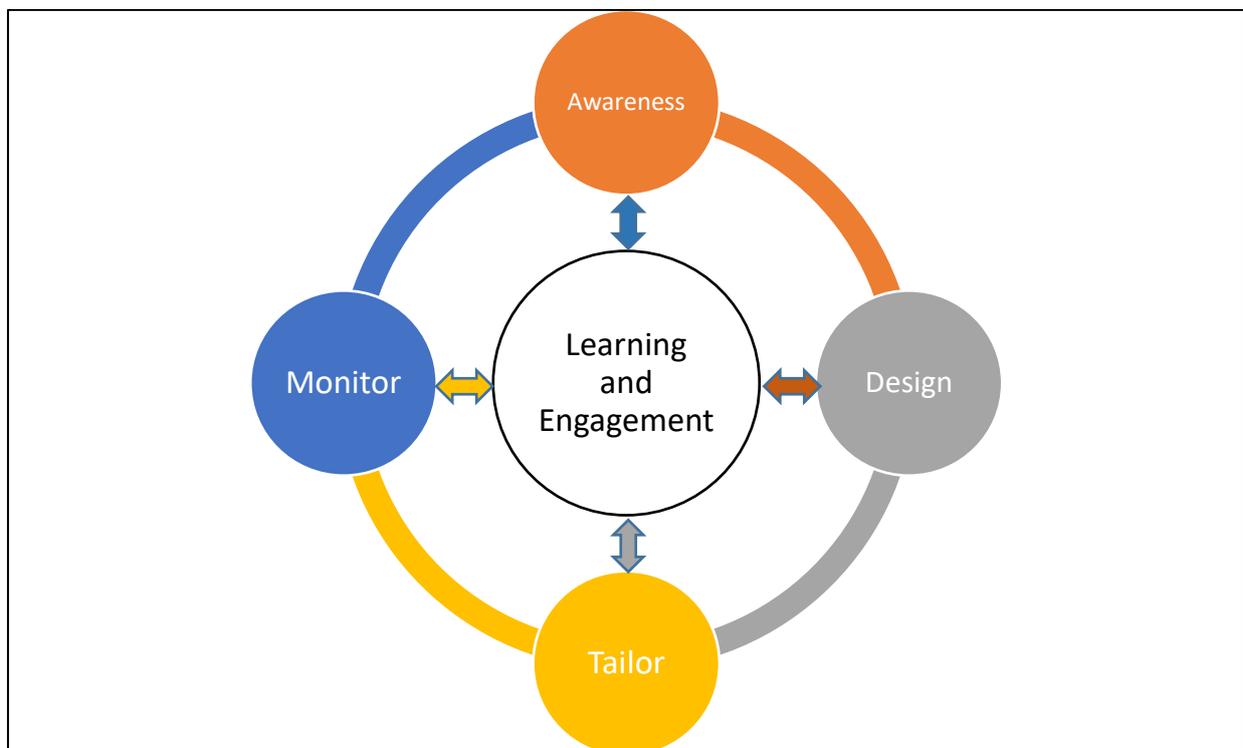


Figure 1 – The Engage and Learn Model.

Source: Adapted and taken from Worley and Mohrman, (2014, p. 217)

The model proposed in Figure 1 is a descriptive model of changing with a set organisational change routine, the recurring processes that characterise an organisation and that allow an organisation to change itself continuously. It is notable that unlike the planned organisational change models presented earlier (Table 1), there is no prescribed sequence, or starting point. All these routines are happening at once, therefore, breaking from previous models, and providing a more intuitive model for managing change, thereby providing a transformative approach to the management of change in the Irish Defence Forces. The overall ideology of the Engage and Learn Model as the ‘new normal’ for change management is that fundamental change never ends and is better understood as something to be catalysed and steered, due to its heterogeneous nature (Worley and Mohrman, 2014). They further argue that change, therefore, should be viewed as a function of complexity, uncertainty, and learning, and not as a detailed plan. Their research cautions that the *old normal*, which consisted of the traditional change models do not adequately manage change, which is an interacting flow of routines and cycles that are constantly happening all the time, at different speeds and in different parts of the organisation.

Critically, the Engage and Learn Model acknowledges that change is an iterative and complex process and provides a mechanism that can meet the challenges associated with managing organisational change. This model aligns to Creasy’s definition of change management in that its approach acknowledges that change requires a structured process, provides a series of tools for leading the people side of change, and because it is an iterative learning process, it allows the organisation to learn and develop competency while simultaneously managing organisational change.

Analysis of the models in Table 1 and their associated methodologies identified an emergent gap in the literature, as these models have not been previously applied to military organisations undergoing technological change, which has major relevance for this paper. Thus, in light of the limited research, and as a development of the preceding literature, the aim of this research was to explore the need for a suitable change management model in the Irish Defence Forces.

Methodology

The purpose of this study was to explore change management in the Irish Defence Forces. The research utilized grounded theory as the qualitative approach as there is little known about the phenomenon being explored. Creswell (2007) views grounded theory as a powerful tool when

researching a broad theory or explanation of a phenomenon, and further posited that the emerging theory from this approach is 'grounded' in the data, thus providing a more sophisticated explanation than a theory derived from other studies. In terms of the practical application of grounded theory, Douglas (2006) believes the process of theory generation, whilst grounded in a substantive inquiry, has the capacity to generate further research and tentative explanations at higher levels of understanding. Goulding (1998) agrees, stating that grounded theory, if applied in its true sense, has scope and potential for the study of behaviour and experiences given its emphasis on context, theoretical emergence and the social construction of realities. Grounded theory, was selected as the qualitative approach for this research as there is little known about the phenomenon being explored. Semi-structured interviews were considered the most effective method to capture perceptions of change management. Khan (2014) acknowledges that semi-structured interviews can be used to obtain data, with an objective to explore the antecedents and factors associated with the phenomenon of the study according to the employees' perception, which is one of the research aims and objectives of this paper.

Research Sample, Data Collection, and Analysis

The research used purposive sampling to identify suitable interviewees. A total of 31 interviewees took place. The criteria for inclusion in the study was: interviewees must be a senior manager with at least two years' experience, must be in a management position, and must have experience of technological projects. A direct approach was used in establishing contact. The breakdown of the respondents by organisation was as follows:

- Naval Service 51.61%.
- Army 32.25%.
- Air Corps 9.67%.
- Department of Defence 6.47%.

The gender of the interviewees (16.10% female and 83.90% male), and their length of service, which indicates their experience level within their respective organisations (median = 24.00 years). The interviews took place between April and August 2016, and August 2020.

The interviews were conducted at the participants workplaces and lasted between 25 and 65 minutes. They were recorded digitally and transcribed in full text format. Due to the military

having a hierarchical system it was pertinent to ensure the correct level of formality and informality with all interviewees. The researchers were aware of the potential impact the employer-employee relationship may have and remained conscious of the risks that are associated with being insider researcher, as one of the researchers is an inside researcher. Brannick and Coghlan (2007) contest that insider research, in whatever research approach it is undertaken, is not only valid and useful, but also provides important knowledge about what organisations are really like, which traditional approaches may not be able to uncover.

Thematic analysis of the transcribed recordings allowed for the identification of patterns and themes within the data (McLellan *et al.* 2003). As this research is qualitative in nature, the content analysis will present the data in words and themes, which will make it possible to draw some interpretation of the results. The authors utilised a manifest analysis approach as the intent was to describe what the respondents observed during the semi-structured interviews, supplemented by contemporaneous notes. A general synopsis was compiled of the recurring themes and findings for each interview and for each company followed by a summary of common themes across all interviews (Miles and Huberman, 1984). Data quality processes were adhered to in all aspects of the research process to enhance the quality of the analysis findings (Lincoln and Guba, 1985).

The practical implications of the research are also be considered, and the researchers remain cognisant of the ethical aspects that must be taken to protect the respondents. The respondents were guaranteed confidentiality and informed that their participation was voluntary, and they could withdraw their data from the study at any time.

Findings

Technology is becoming central to the evolution of military organisations that want to evolve and stay abreast of the advancements made in the technological field. One of the primary objectives of this research was to investigate whether the Irish Defence Forces can utilise change management practices and processes when they introduce new technological systems and what meaning it has for its personnel. Cohen *et al.* (2006) contend that most modern militaries have struggled with this challenge and have failed on occasion to anticipate, learn, and adapt to changes in their nature of work. Investigating change management, with a particular focus on its use during the introduction of technological systems, is a current concern

within the military domain as military organisations are continually required to implement and adapt new technological systems. The findings provide context on how change management contributes to military organisations during change projects, as much uncertainty still exists about the relationship between military organisations and how they manage change. The findings are summarised over five sub-themes that emerged when exploring change management in the Irish Defence Forces, based on the data analysis.

Change Management and its Meaning for Irish Defence Forces Leaders

Military organisations now operate in a society that demands that its public organisations are modern and flexible and can function in an environment where they are expected to do more with less. Military leaders, therefore, need to understand what change is and must know how to manage it effectively, as noted by Cohen *et al.* (2006). All 31 respondents displayed an understanding and awareness of what change management was and the important role it contributes in developing the organisation:

For me it's about improving the capacity of the organisation to deliver what government requires of us, and adopting systems, networks, and technologies to do that. Whether that's increasing our linkages into other parts of government, etc., in terms of networks (people and technology), because that's how change is delivered, through people (Interviewee 31).

The respondents conveyed their understanding that having an organised and methodical approach would greatly assist in ensuring that the change project would be successfully implemented. Interestingly, the respondents realised the necessity for the change management process to be commenced before the change project was introduced and that the process should be pre-planned and not reactive. The findings of this research would indicate that the present level of understanding regarding the application of change management within the Irish Defence Forces is good, particularly, at this level of management within the Defence Forces organisation.

How Change is Managed within the Irish Defence Forces

Irrespective of the mechanism that initiates the change, there is still a requirement to manage the change. Managing change is a necessity in today's modern and evolving world and failure to utilise an efficient and effective change management system has the potential to have precarious consequences. The responses provided have indicated that 28 of the respondents believe that change within the Irish Defence Forces is either, not managed well, can be negatively influenced by key personalities within the organisation, can be forced upon the organisation, or is influenced by the lack of interoperability or cohesiveness within the Irish Defence Forces. The 28 respondents who believed that change was not managed well, focussed much of their attention around this core nucleus of what processes were used when managing the change:

Badly is the short answer. Change is implemented on a short-term individual basis to the point where as an organisation, we continuously reinvent the wheel, we continuously go back to procedures that we had decades ago and it becomes a cycle depending on the perception of individuals in key appointments at any given time (Interviewee 11)

I think that change management is done on an ad-hoc basis and it's not structured because we don't know what it is and we don't have a procedure for it and like everything in a military organisation, if you don't have a procedure it's generally not done (Interviewee 5).

I don't think it's managed and at a higher operational and strategic level, I don't think we manage change effectively as there's an unwillingness to engage in the process (Interviewee 13)

The consensus from the interviewees was that the management of change was not prominent on the organisational agenda. The respondents believed that because of the hierarchical nature of the Irish Defence Forces; change could be just forced through, irrespective of the organisational strategic objectives and change processes of the organisation, which is lacking at present. Where there have been positive outcomes, there was agreement that this was primarily based on luck, and having the right person to manage the change:

It depends very much in terms of the 'buy-in' and I think it's 'a la carte' as to how it's managed. I think it all depends on the individual who's driving the change initiative

and it changes again in terms of the higher echelons of the organisation, but all depending on the initiative (Interviewee 26).

The corollary of this approach has been where individuals, acting under their own guidance have the ability to introduce change that has not been comprehensively developed or approved by command and has subsequently led to issues during the implementation process:

Sometimes change can be the tail wagging the dog in our organisation and that is an area that does give me cause for concern and I've seen it in the Naval Service, in the Air Corps where individuals who think that they have all the picture like to force change and change in this regard is not in the innovative or creative or in the correct manner and sometimes that is allowed to happen and it may not be in the best interests of the organisation because it's not aligned to the strategic objectives (Interviewee 4).

This observation reflects the concern the respondents had about change being initiated despite the lack of an overarching organisational strategy, and in some cases respondents raised their concerns in relation to how individuals within the Irish Defence Forces implemented change projects in a bid to improve or enhance their own career prospects:

Most change that is introduced, is introduced by individuals, for personal gain within the organisation (Interviewee 11).

How I see people managing change is that they look at their annual report (Interviewee 22).

Respondents referred to the belief that change within the context of the organisation should never be about the individual and while it is pertinent to have change agents and change champions, it is critical that they are working towards the strategic objectives of the organisation and not their own agenda. Moreover, the respondents further believed that, if an individual puts forward a change project for inclusion in the annual project plan and it is not in the strategic plan, then it should not be commenced until more adequate planning has been completed.

The respondents also referred to change projects that were enforced on the organisation from internal sources. A primary objective of this research was to determine how the change management process is implemented within the Irish Defence Forces, and this reflection by

Garden (2002) would induce that military organisations are therefore more open to change and should be more capable of reacting to it due to their unique and traditional structure. One respondent furthered this, and noted that:

Obviously because we are a military, we don't really have the opportunity to not buy in to the change either, as a lot of the time the change is driven down from command and you have to accept this (Interviewee 25).

Moreover, an additional five respondents also agreed with this concept and placed significant emphasis on the level of education military personnel have regarding change management and how to correctly implement change, highlighting that competence is an issue. Due to its hierarchical and unique nature, the Irish Defence Forces has traditionally been viewed as being non-resistant when change is being forced upon it. This observation raises a dichotomy, as the literature claims military organisations should be more open to change due to their structure, yet the findings of this sub-theme would indicate this is not the case, indicating that the internal culture of a military organisation can influence change initiatives.

Can the Culture of the Irish Defence Forces support Change Management Initiatives?

One of the objectives of this research was to determine how the change management process is implemented within the Irish Defence Forces, when introducing new technology, and what impact it had on the Irish Defence Forces organisational culture. Sixteen respondents believed that the current structures within the Irish Defence Forces were not suitable, and 12 respondents believed that the Irish Defence Forces structures were suitable for change management processes and cultural change. Of the 12 respondents who believed that the Irish Defence Forces structures were suitable for change management processes and cultural change, eight of the respondents further elaborated the requirement for caveats to be placed:

Most definitely, it's no different to anything else and at times we think that in the Defence Forces that we fall outside the literature and the examples that you find in the literature don't apply and look at organisational change theories and think that's business and nothing to do with the Defence Forces. When in actual fact, all the issues you see in organisational change theory out of previous examples and it's all applicable to the Defence Forces (Interviewee 21)

The respondents alluded to the knowledge gap that exists on change management within the Irish Defence Forces and noted that people are not properly educated on change processes. As elaborated on by one respondent:

I think that the structures are suitable. I think that the main problem is that we don't educate our people well enough in the way that change management needs to be implemented or the process of change managed (Interviewee 8).

Sixteen respondents believed that their organisations' structures were not suitable for change management processes and cultural change. The responses, which were varied, provided ample examples of why they believed that the military hierarchical structure was not suitable for supporting change management initiatives. One respondent from the Department of Defence noted that:

I do think that because of the silo-based system due to the service-based system, because people look at the technology within their own piece, I think there's probably been a lack of cross-cutting thinking by people coming from different services (Interviewee 31).

Other respondents referred to the impact the 'silo' or 'stovepipe' mind-set is having in the Defence Forces and further acknowledged that:

They make it difficult because of the hierarchical structure we have, and the fact that stovepipes exist doesn't help as this stops the sharing and dissemination of information. I think we have can have a lot of individuals who can be problematic when they choose to be, and this can cause a lot of unnecessary tension and conflict (Interviewee 20).

Additionally, the emergence of sub-cultures within the Defence Forces presented additional difficulties for adopting change management processes and respondents indicated that such structures created more 'roadblocks':

We need a cultural change in order to be able to manage the change and it'll be difficult because again, to try and get a cultural change from within an organisation, from within a culture, is always going to be difficult because it's comfortable. We're not set up to have the influence and someone coming in at the middle management

level with new experience and a new outlook, just because we take everyone in at the bottom and feed them through (Interviewee 19).

The representative examples above reflect on the current training process meaning that individuals are taken into the Irish Defence Forces and indoctrinated into the organisation at a relatively young age. It can be arduous to learn new systems and behaviours when an individual has been trained to operate and function in a set routine within a fixed and rigid hierarchical structure, highlighting that competence is a critical enabler when managing change.

Moreover, 16 respondents made reference to a champion/solo-run approach that exists within the Irish Defence Forces. They believed that this phenomenon was pertinent and had a consequential impact on the organisational culture during change initiatives. The overall belief held by the respondents was that it was individuals introduced change initiatives and the following quotations reflect this:

I think that for the foreseeable future we are going to need champions who are interested in a project and will drive it home and identify people to get that message out (Interviewee 20).

Solo-runs are definitely used in this organisation by some people and as long as it's not being used for careerism and for opportunistic reasons, then you do need people to take on projects and to run with them (Interviewee 10).

The division between the term solo-run and project champion is representative of this misunderstanding. The respondents did acknowledge that without informed individuals, there is a strong possibility that change projects would not happen within the Irish Defence Forces and that the organisational culture would not evolve, however it did induce risk. Moreover, the respondents also acknowledged that the individual who assumed this role must be the 'right fit' for the project and this is commented on below:

A lot of that has to do with the credibility of the person and the standing of the person within the organisation and people have faith in them and acknowledge that if they are doing it right then the project will be a success (Interviewee 5).

The reference by the respondents to the role played by a 'project champion' is noteworthy and highlights that core role played by motivated and knowledgeable individuals within military

organisations. Moreover, it can be posited that this action is a form of change facilitation, as the ‘project champion’ is the systemic force spurring change in the direction targeted by strategic objectives. The observations which emerged from this sub-theme contradict extant literature and highlight that military organisations do not necessarily benefit from having a hierarchical structure for managing change as this research has identified that an internal silo approach and organisational culture can be more influential.

Can the Irish Defence Forces benefit from Change Management Processes?

From the analysis, 28 of the respondents positively believed that the Irish Defence Forces would benefit from change management processes, with only 3 respondents providing negative responses. Of this cohort, 23 of the respondents made specific reference to the need for the Irish Defence Forces to embrace and instil change management processes within their organisation:

If we were better at change management and we had the proper processes it would benefit the organisation and it would need to be part of the culture of the organisation. If we did that then I would definitely see them as something that would be of huge benefit to the organisation (Interviewee 22).

I do, I think it's either that, or you're going to go stale. You must keep evolving and evolution requires change and change requires management (Interviewee 15).

However, contrary to the general observation that military organisations would benefit from change management processes and procedures, nine of the respondents did make reference to some anomalies that exist within the Irish Defence Forces when dealing with change management:

We have changed a huge amount during my time in the Defence Forces and the thing that I would say is that we are not good change managers, as we don't have enough knowledge in the area of how to change procedures and processes properly (Interviewee 8).

These sentiments reinforce the contention that the Irish Defence Forces experience difficulties with the management of change from a competence perspective. The lack of a dedicated

department, or dedicated change agents, to introduce and manage change is apparent and the lack of a provision for change management training has again been purported by the respondents.

While the general consensus among the respondents is that the Irish Defence Forces will benefit from the introduction of change management processes and procedures, there was one additional undercurrent issue that emerged and was referred to on numerous occasions by 18 of the respondents, including the civil servants. The respondents interestingly raised their Irish Defence Forces personnel rotation policy, as an issue that contributes the lack of proper change management, being used in their organisations and outlined the lack of planning that is present when deciding on project teams of change projects:

It is very difficult to try and implement change if that change is going to be greater than a two-year period or even a year-long period because by the time that one gets their feet under the table in the appointment and have identified something that needs to be changed and therefore gets it started and if it isn't finished by the time that they go back to sea in a year or a year and half's time then that project could be in jeopardy (Interviewee 8).

This sentiment was echoed by 15 of the interviewees and the responses garnered were expressed with frustration and annoyance. The respondents believed that the approach being taken, particularly when dealing with the delivery of technological projects, was not strategic and did not serve the best interests of the Defence Forces. As acknowledged by one of the civil servants:

I think that the short period of time that military personnel spend in appointments is an issue, I mean, I would say to most people on the civil side coming in to a job at the equivalent of OF-4/5 level, and it requires about 6 months for you to get your feet under the desk (Interviewee 31).

Building on this theme, another respondent raised concerns with this approach and expressed irritation in relation to why the delivery of change projects was not a priority and quoted:

In the Defence Forces we have an operational only focus and we have ignored much of the administrative requirement to ensure longevity of how change is properly implemented (Interviewee 11).

This strongly represented assertion about the lack of commitment towards completing projects was highlighted by another respondent who surmised that:

The Defence Forces senior management level does recognise that personnel at this level should be in their positions for a minimum duration of time to exploit and maximise the continuity and we have to move away from this mind-set of ticking boxes in various appointments, which is very dominant in the Army (Interviewee 4).

Alternatively, the civilian approach to staff rotation is notably different, as stated by one of the respondents:

Four years in a job is not actually that long and previously people would have spent longer in appointments. Part of the reason for that rotation policy was because of decentralisation, in that, we lost so many people and the corporate knowledge we had to move people, to get people around the system so we could rebuild and deepen the corporate knowledge base. So, for the first couple of years in Newbridge, we had lots of people for whom the lens through which they saw defence was the branch they happened to be in, whether that was about property branch, executive branch or contracts, because that's all they knew. So, we developed a policy of rotating people to expand the scope of their knowledge and understanding about defence, defence policy, defence administration and the Defence Forces (Interview 31).

The response above highlights how the civil element of the Department of Defence has realised the importance of having key staff complete long-term rotations in order to develop competence and enhance their organisational understanding. This approach, based on lessons learned is notable, and highlights an organisation that utilises a learning organisational culture, an approach not used by the Irish Defence Forces. Furthermore, the influence of the internal organisational culture remains a significant issue and indicates an internal resistance to embracing new concepts and processes, even when such processes have proven successful elsewhere.

Can the Irish Defence Forces Structures Adapt Civilian Change Management Practices for the Management of Change?

From the analysis, it was ascertained that 30 of the respondents believed that the Irish Defence Forces could benefit from adapting civilian change management practices:

Civilian practices are often related to private industry and when private industry wants to bring in the best way to adapt change management practices, whether it's to save money or increase efficiency, we can learn a lot from that and we should be looking at what's often referred to as best practice (Interviewee 15).

However, within this cohort there was a noticeable divergence as 15 of the respondents believed that the Irish Defence Forces would fully benefit from the introduction of civilian change management practices, while the remaining 15 respondents believed that while the Irish Defence Forces would benefit from the adaptation of civilian change management practices, they believed that the Irish Defence Forces hierarchical structure could be a significant obstacle that had to be overcome as part of the process.

For the Irish Defence Forces to remain competitive and responsive to the surrounding environment it needs to evolve, and a respondent, quoted below, noted:

I mean, no matter what happens we are going to have to change and we have to realise that we're going to evolve, so to evolve, you have to manage that evolution and you have to manage that change and the best way to do that is through a structured process (Interviewee 5).

Some respondents did urge caution and highlighted that:

I think that militaries can adopt those practices to projects but I'm not sure that the military wants to (Interviewee 22).

There's nothing to say that we can't do it, I just don't believe that we have the leadership that wants to. I think it is more leadership than structural (Interviewee 23).

The analysis provided above demonstrably shows that the respondents are aware of the merits of change management practices, the need for competence, and remain resolute in their belief that the Irish Defence Forces need to inculcate such practices. Notwithstanding, it is evident

that the internal organisational culture of the Irish Defence Forces is having a detrimental impact on the organisations' ability to evolve and accept that the ability to manage change is a necessity in today's complex and volatile environment.

Conclusions

Change is the only thing that remains constant in organisations, therefore, if change is a constant, then organisations should have plans and processes in place to deal with this change (Cohen *et al.* 2006). This observation is both applicable and relevant to the Irish Defence Forces as failure to provide adequate time and resources in order to implement and then inculcate a new technological system could have potentially significant negative consequences for both the project and the organisation. The basic tenets of change management permit the creation of a potential framework that can be used by modern military organisations. It is the responsibility of the organisation to develop and utilise a model that is both reflective and aligned to the organisations structures and culture. The findings of this research demonstrably show that the Irish Defence Forces does not operate in a holistic and reconciliatory manner as espoused by Castel *et al.* (2010) and Barbaroux (2011), and that this lack of integration does have an adverse impact on the Irish Defence Forces and its component services (Army, Naval Service and Air Corps).

The hierarchical structure of the Irish Defence Forces is a mechanism that is deeply rooted in traditional military culture. The respondents' referral to this structure, particularly when discussing the Irish Defence Forces inability to manage change is noteworthy and offers a new perspective on this field of study. This research demonstrates that there is an evident issue with the current structures of the Irish Defence Forces, and would contradict the observations of Garden (2002) who argued that the hierarchical military organisation provides an advantage to military organisations, particularly, when an organisation is looking at change as it can consult across the chain of command, with information moving up and down the organisation rapidly to the people who will be affected. The results of this study indicate the Irish Defence Forces must prioritise preparing the organisation for technological change management initiatives and developing competence in change management in order to successfully manage and develop the internal organisational culture and embrace a more holistic approach. Furthermore, the findings identified that the Department of Defence has minimised internal resistance by

developing sustainable change management practices within their structure, highlighting that change initiatives require time and competence in order to achieve a successful outcome.

While analysis of the literature highlights that change can occur in many forms, this paper contends that organisations must have suitable processes and procedures in place in order to deal with change and the respondents concurred with this concept. Burnes (2011) purports that change models are required to be capable of assessing the success or failure of a project against identified performance indicators and ascertain the key relevant characteristics that impact on the project's success. The suitability of the Engage and Learn Model arguably has resonance in the particular case of military organisations as it is an iterative model that does not necessitate a specific starting point, rather it is an adaptable model that can evolve to meet the particular project being implemented. Remaining cognisant that the Irish Defence Forces comprises three services, namely, the Army, Naval Service and Air Corps, the findings of this research recognise that technological projects can occur within each service, or across the entire Irish Defence Forces, highlighting the need for an iterative and adaptive change management model, that has commonality and applicability. The findings of this research provided numerous instances of the silo approach currently used within the Irish Defence Forces, and it is evident that a more consolidated approach would enhance organisational efficacy, particularly when implementing technological projects.

Several authors, such as (Vodonick, 2018; Smollan, 2012 and Burnes, 1990) have elaborated on the need of the organisation to involve those affected by the organisational change in the planning and execution of it. Indeed, the responses provided in this research would strongly concur with those findings and indicate that the Irish Defence Forces would benefit from inculcating change management processes and procedures. This research has raised concerns with respect to the cultural norm of the continuous rotation of personnel through key appointments and has recognised the detrimental impact this has on the success of change projects. Remaining cognisant of Creasy's definition on change management, which highlighted the core requirements of process and competency, it is evident that the Irish Defence Forces do not provide organisational leadership with the time to achieve competency, and there is no established change management process to support technological change. This observation may highlight that the Irish Defence Forces need to address internal organisational cultural issues when determining a suitable change management process.

Finally, the findings are from a small qualitative study exploring the suitability of change management processes in the Irish Defence Forces. The findings emanating from the empirical research undertaken for this study are such that they have enabled the compilation of factors contributing to the management of change in the Irish Defence Forces, which can be generalised for use, based on the extant literature, by other similar organisations, such as Irish public sector organisations, and potentially for other similar sized military organisations. This research highlighted how change management processes and associated theories have not traditionally been examined in military organisations. In addition, it was a strong contention among most respondents that change is not well managed in the Irish Defence Forces, and the lack of a coherent and established process, including training, was highlighted as a significant issue across senior management levels of the organisation. Furthermore, this research provided a novel approach by using a military context against which to examine the Engage and Learn model and highlights the model's suitability for military organisations during technological projects. To conclude, the findings suggest that the Irish Defence Forces urgently require a suitable change management process for managing technological change.

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