National Defence Défense nationale

Canadian Forces College

Collège des Forces Canadiennes

# High-Performing Teams: Trust in People First

**Lieutenant Commander Andrew Fielder**

## JCSP 48

## Exercise Solo Flight

**Disclaimer**

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.



## PCEMI 48

## Exercice Solo Flight

**Avertissement**

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.



Canada

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES

JCSP 48 – PCEMI 48
2021 – 2022

Exercise Solo Flight – Exercice Solo Flight

# High-Performing Teams: Trust in People First

**Lieutenant Commander Andrew Fielder**

# HIGH PERFORMING TEAMS: TRUST IN PEOPLE FIRST

## INTRODUCTION

The Royal Navy slogan in 2001 was "The Team Works." Teams are common to all aspects of life, but high performing teams are rare.[1] Both individual and team needs must be met if defence procurement project teams are to move up the 'performance curve.' High performing teams share a number of common characteristics. However, *trust* and *communication* enable true teamwork and are pivotal characteristics of *all* high performing teams.

### Project teams and people

Defence procurement projects seek to provide value for money, state of the art equipment, national autonomy and national economic value.[2] This results in tension stemming from "a state's desire to ensure security and sovereignty on the one hand, and to deploy its financial resources to greatest domestic effect on the other."[3] To deliver these often competing goals, project teams must trade between the three project management constraints of cost, time and quality (or performance).[4] As a result, "all

---

[1]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 34.

[2]John R. Deni and David J. Galbreath, *Routledge Handbook of Defence Studies* (Taylor and Francis, 2018), 74-75.

[3]*Ibid*, 76.

[4]John Rodney Turner, *The Handbook of Project-Based Management: Improving the Processes for Achieving Strategic Objectives* (Cambridge University Press, 1999), 8-9.

other considerations are often regarded as subordinate."[5] This includes consideration for the people within the project teams.

Organizations espouse people as the "most important asset" and teams "are at the centre of how work gets done in modern life."[6] In reality, however, both succumb to the political, economic and organizational pressures of delivering high profile defence procurement projects. This is counter intuitive given that "people are the initiators, developers and users of any project" and are often the bridge between the three competing constraints.[7]

Whilst there will always be compromise between cost, time and quality, focusing on people can positively affect project delivery.[8] Drawing on project management, team theory and human motivation literature, this comparative study places people and teams at the centre of the project management triangle as the referent object. The subtleties at organizational, team and individual levels provide a comparative method of analysis.

Figure 1 depicts an illustrative representation of 1(a) the comparative study space and 1(b) the project management triangle, with people and teams at the centre.

---

[5]Abdulaziz A. Bubshait and Gulam Farooq, *Team Building and Project Success* (Cost Engineering 41, no. 7, 1999), 34.

[6]Cameron Klein et al., *Does Team Building Work?* (Small Group Research 40, no. 2, 2009), 181.

[7]Abdulaziz A. Bubshait and Gulam Farooq, *Team Building and Project Success* (Cost Engineering 41, no. 7, 1999), 34.

[8]*Ibid*.

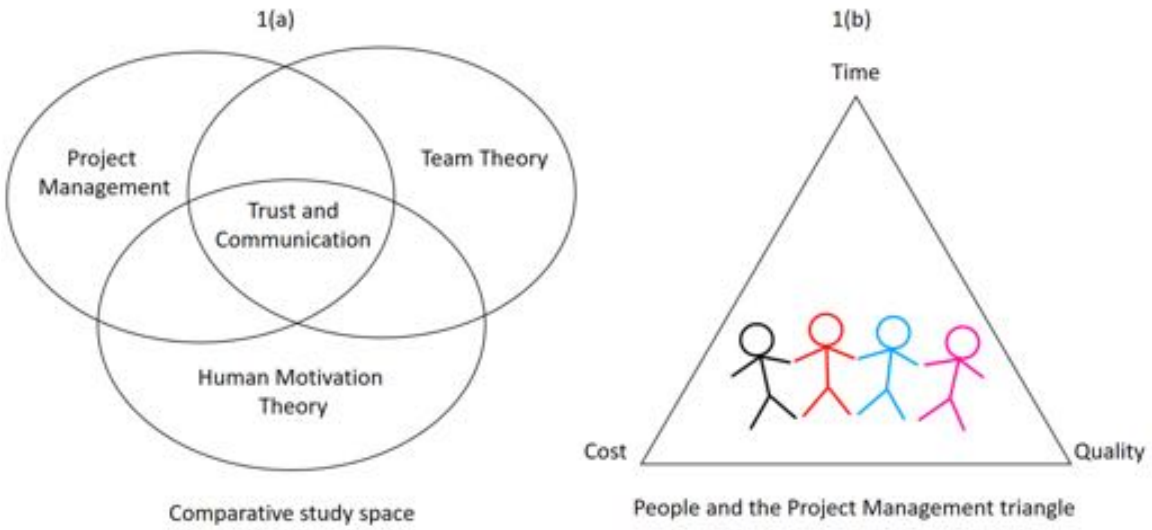


**Figure 1 - The study space and the Project Management triangle**

**Bounding the study**

In addition to project management principles, team theory and human motivation literature, the study draws on the author's personal experience as a team member within a major procurement project. Although any multi-billion dollar, multinational program could be seen as unique, the construct and organization of the project team remained largely consistent with any major defence project. Similarly, the project was susceptible to familiar challenges such as significant financial scrutiny, political pressure and personnel resource constraints. It is worth noting that minor defence projects collectively add up to significant sums of money, but they rarely attract the same level of scrutiny as major projects.[9] While the concepts discussed are also applicable to smaller defence

[9]HM Government, Major Projects Authority, last accessed 1 May 2022. Major Projects Authority - GOV.UK (www.gov.uk). UK major projects are defined as those which (1) require spending over and above departmental expenditure limits (2) require primary legislation (3) are innovative or contentious.

projects, the major defence project teams are the focus of this paper. Herein, any reference to 'project team' has major defence procurement teams in mind.

As the subject area is extremely broad, the paper will concentrate on *trust* and *communication* as two key factors of high performing teams. Trust and communication revealed themselves as consistent themes within the project management, team theory and human motivation literature.[10] Trust is the most significant determinant of project success and poor communication is the most common failure factor.[11]

Factors such as leadership, purpose, character and culture all pertain to effective teamwork. While these important factors are not directly addressed in this paper, they are indirectly related to the key concepts of trust and communication.

**Format**

The discussion is in four sections with key themes building through each. The first section outlines the defence procurement problem with consideration for project management theory and trust. The second section discusses individual needs and motivations, drawing on Maslow's hierarchy of needs and Herzberg's two-factor theory of satisfaction. The third section uses team theory to differentiate between groups and teams, also exploring efficacy of teams at the organizational level. Finally, section four draws on the previous sections to focus on trust and communication as key factors of

---

[10]Mila Hakanen, Mia Häkkinen and Aki Soudunsaari, *Trust in Building High-Performing Teams: Conceptual Approach* (Electronic Journal of Business Ethics and Organization Studies 20, 2015), 49.

[11]Jeffrey K. Pinto, Dennis P. Slevin, and Brent English, *Trust in Projects: An Empirical Assessment of Owner/Contractor Relationships* (International Journal of Project Management 27, no. 6, 2009), 638.; Graham Brewer and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 287.

high performing teams. Concluding remarks will provide a final 'so what' for defence procurement projects.

## SECTION ONE – THE PROJECT MANAGEMENT PROBLEM

Having introduced and bounded the study, this section frames the defence procurement problem, introducing the importance of people, trust and communication within project management.

### Defence procurement projects

"Large defence projects take decades from inception to full operating capability."[12] Technology maturity, economic constraints, resource issues and political pressures are all examples of external factors that can affect delivery. In particular, global affairs and political wrangling can drive cyclical political appetite for defence spending with significant implications for projects. For example, following the release of Canada's 1994 Defence White Paper, which included significant cuts to defence spending, the Canadian Armed Forces (CAF) found itself operating within a "decade of darkness."[13]

This phenomenon is not unique to Canada. "Following a major projects review in 2010, the UK government assessed that two thirds of its major projects were failed or failing."[14] This resulted in significant project management and accountability improvements and initiatives.[15] Unfortunately, due to workforce rationalization, the UK,

---

[12]Thomas Juneau, Philippe Lagassé and Srdjan Vucetic, *Canadian Defence Policy in Theory and Practice* (Springer, Cham, Switzerland: Palgrave Macmillan, 2019), 334.

[13]*Ibid*, 335.

[14]Thomas Juneau, Philippe Lagassé and Srdjan Vucetic, *Canadian Defence Policy in Theory and Practice* (Springer, Cham, Switzerland: Palgrave Macmillan, 2019), 335.

[15]*Ibid*, 334.

and to some extent Canada, are now attempting to transform acquisition authorities to get the most out of depleted resource. However, "there is no evidence that structural consolidation is the magic bullet."[16] As Klein et al. point out, "although implicitly appealing, improvements in processes cannot always be linked to improvements in [project] team performance."[17]

There are a number of variables that affect team performance, Thamhain, and Nurick suggest four main groups; task, leadership, organization and people.[18] The first variable 'task', focusses on achieving time, cost and quality whereas the other three variables, "people, leadership and organization," concentrate on relationship issues and "the capacity to solve conflicts, build trust and achieve effective communication."[19] Arguably, overemphasis on achieving the task (cost, time, quality) risks neglecting the project variables that really matter. Specifically those concerned with people.

**Author's observations from a major defence project**

Having spent five years within a major defence project team, the author observed a number of challenges consistent across major defence projects. The project in mind was

---

[16]Thomas Juneau, Philippe Lagassé and Srdjan Vucetic, *Canadian Defence Policy in Theory and Practice* (Springer, Cham, Switzerland: Palgrave Macmillan, 2019), 343.

[17] Scott I. Tannenbaum, Rebecca L. Beard, and Eduardo Salas, *Team Building and its Influence on Team Effectiveness: An Examination of Conceptual and Empirical Developments* (Advances in Psychology. Vol. 82, 117-153: Elsevier, 1992), quoted in Cameron Klein et al., *Does Team Building Work?* (Small Group Research 40, no. 2, 2009), 188.

[18]Hans J. Thamhain and Aaron J. Nurick, *Project Team Development in Multinational Environments* (Global Project Management Handbook, NY, USA: McGraw-Hill, 1994), quoted in Abdulaziz A. Bubshait and Gulam Farooq, *Team Building and Project Success* (Cost Engineering 41, no. 7, 1999), 34.

[19]Abdulaziz A. Bubshait and Gulam Farooq, *Team Building and Project Success* (Cost Engineering 41, no. 7, 1999), 34.

a politically sensitive, highly scrutinized, multi-billion dollar program. The observations are grouped under the four project variables of task, leadership, organization and people:

**Task.** (1) Major political milestones drive project team deliverables and create unsustainable workload and pressure. (2) The delivery tasks are complex and involve multiple globally dispersed stakeholder groups. (3) Project requirements creep is common. (4) Changing financial constraints that lead to rework.

**Leadership.** (1) Workforce and leadership turnover creates churn. (2) Workload resource mismatch, limits leadership capacity to lead, direct and motivate.

**Organization.** (1) Change is constant and the organization is always transforming. (2) Project teams are increasingly matrixed but silos remain between internal teams. (3) Introduction of new systems and ways of working create uncertainty and inefficiencies.

**People.** (1) Teams are resource limited and carry significant personnel gaps. (2) Work breakdown structures are not correct and workload is too high. (3) Military and civilian culture create tension.

Noting that the observations above are anecdotal and non-exhaustive, they present a number of areas that challenge the delivery of projects. While some issues could be improved through reorganization or process improvements, most cannot. Also, while improving project processes is a worthy cause, observations from recent UK external

reviews conclude, "making best use of existing resource is vital."[20] This emphasizes the importance of getting the most out of project teams.

The UK released a Defence and Security Industrial Strategy in 2021.[21] It outlines ambitious plans for a number of major defence projects over the next twenty years. However, there is little mention of how investment in people and teams will support project delivery.

The next few paragraphs draw on the Project Management Body of Knowledge (PMBoK) and project management literature to understand where people, trust and communication fit within project management theory.[22]

**Projects and people**

The Project Management Institute (PMI) defines a project as "a temporary endeavor undertaken to create a unique product, service or result."[23] While this definition highlights the temporary and unique nature of a project, it neglects the people and the team tasked to deliver it.[24] The human element is important as a project is only "achieved by using the available resources within the [competing] constraints of cost, time and

---

[20]Thomas Juneau, Philippe Lagassé and Srdjan Vucetic, *Canadian Defence Policy in Theory and Practice* (Springer, Cham, Switzerland: Palgrave Macmillan, 2019), 343.

[21]HM Government, *Defence and Security Industrial strategy: A strategic approach to the UK's defence and security industrial sectors* (CP 410, 2021).

[22]Graham Brewer and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 287. The PMBoK is arguably the globally pre-eminent project management standard and is endorsed by the American National Standards Institute (ANSI) through its recognition of the PMI.

[23]Project Management Institute, *A Guide to the Project Management Body of Knowledge (PMBOK Guide)* (Project Management Institute, 2017), 4.

[24]*Ibid*. Although absent in the definition, the PMI recognizes that an individual, group or organization can undertake projects.

quality."[25] Bubshait and Farooq highlight this by defining a project as "an integrated effort of different disciplines."[26] The people that make up the project team have different needs and bring diverse skills from separate functional areas. This is particularly true of major defence procurement projects where functional teams (e.g. finance, commercial, engineering, logistics, warfighting and project management) work together in a matrixed environment.

**Projects, trust and communication**

In 1994, a five-year mandate was initiated to identify better ways to manage projects across all project management disciplines.[27] "All of the research findings had a common factor; trust."[28] A working definition of trust is "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another."[29] It can also be "a faith in others' behavior that can grow or shrink due to experience."[30] The mandate led to a review of the project management literature and an assessment of the potential impact of trust. Positive

---

[25]Abdulaziz A. Bubshait and Gulam Farooq, *Team Building and Project Success* (Cost Engineering 41, no. 7, 1999), 34.

[26]*Ibid*, 34.

[27]F.T. Hartman, *The role of Trust in project management* (Paper presented at PMI® Research Conference 2000: Project Management Research at the Turn of the Millennium, Paris, France. Newtown Square, PA: Project Management Institute, 2000), last accessed 1 May 2022. The role of TRUST in project management (pmi.org). In 1994, a Chair was established by the Natural Sciences and Engineering Research Council (NSERC) in collaboration with the Social Sciences Research Council (SSHRC) of Canada and a number of industry partners.

[28]*Ibid.*

[29]Denise M. Rousseau et al., *Not so Different After all: A Cross-Discipline View of Trust* (Academy of Management Review 23, no. 3, 1998), 395.

[30]Mila Hakanen and Aki Soudunsaari, *Building Trust in High-Performing Teams* (Technology Innovation Management Review 2, no. 6, 2012), 1.

implications of trust were; "better relationships, lower costs, accelerated time, reduced risk and an increase in effective communication."[31] The reference to communication garnered significant attention as "communication breakdowns account for most, if not all, project failures."[32] The PMI considered trust worthy of championing in the PMBoK.[33]

The work following the mandate set the scene and the PMBoK first made overt reference to issues associated with trust in 2008.[34] In the latest PMBoK edition the word *trust* features 17 times in reference to mutual trust, building trust, inspiring trust, motivation, encouraging honesty, mitigating risk and improving communication. Unlike trust, that is relatively new to the PMBoK, communication appears throughout the publication and has an entire chapter dedicated to it. While the importance of communication is well documented, the relationship between open communication and trust is not.

Having defined and discussed trust and communication it is important to acknowledge some of the barriers to fostering the two factors. First, trust takes time to acquire and the temporary and unique nature of projects can make this problematic. Second, the mainstay of project management is repeatable processes and control mechanisms. On the one hand, this builds trust and confidence, but on the other excessive

---

[31]F.T. Hartman, *The role of Trust in project management.* (Paper presented at PMI® Research Conference 2000: Project Management Research at the Turn of the Millennium, Paris, France. Newtown Square, PA: Project Management Institute, 2000), last accessed 1 May 2022. The role of TRUST in project management (pmi.org), 1.

[32]*Ibid.*

[33]Graham Brewer and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 287.

[34]*Ibid.*

control, from project managers, can lead to distrust.[35] As such, a fine balance must be established. This is an area that the PMBoK fails to fully acknowledge.

General Stanley McChrystal et al. suggest "teams are effective because they trust each other and they have a shared purpose and awareness."[36] A vision of shared consciousness built on trust and communication, supports the theory that the two factors are inextricably linked and mutually beneficial for project success. Alongside trust, communication features heavily as a key factor of performance. The relationship between the two factors, and in particular the notion that "trust building can be sped up via open interaction and good communication skills," will be discussed later.[37]

Having outlined the problem space, explored project management theory and introduced trust, the next section explores human motivation in relation to teams.

## SECTION TWO – HUMAN MOTIVATION

### People first

When navigating to the 'people' tab of the Royal Navy website, the slogan that leaps out is "People are our greatest asset."[38] The website further highlights a set of core values that help unite our people, invest in our people and value our people.[39] The Royal

---

[35]Brewer, Graham and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 289.

[36]Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* ( Penguin, 2015) quoted in Beau Gordon, *Key takeaways from Team of Teams by General Stanley McChrystal,* last accessed 1 May 2022. Key takeaways from Team of Teams by General Stanley McChrystal | by Beau Gordon | Medium

[37]Mila Hakanen, Mia Häkkinen and Aki Soudunsaari, *Trust in Building High-Performing Teams: Conceptual Approach* (Electronic Journal of Business Ethics and Organization Studies 20, 2015), 47.

[38]Royal Navy, *Our people,* last accessed 1 May 2022, Our People | Royal Navy (mod.uk).

[39]Royal Navy, *Our people,* last accessed 1 May 2022, Our People | Royal Navy (mod.uk).

Navy are not alone in espousing people as the most valuable commodity. 'People first' strategies are also widespread in business, industry and civil service. Pfeffer and Veiga provide empirical evidence to suggest that, "culture and capabilities of an organization [derived from management of people] are the real and enduring sources of competitive advantage."[40] However, despite this evidence, trends suggest organizational practices are at odds with the people strategies prescribed.[41] This supports the project management analysis in the previous section.

**Motivation and needs**

Treating people as assets is a management commitment that leverages human motivation. Maslow's theory of motivation and Herzberg's two-factor theory provide a useful basis of comparison to project management and team theory. Maslow defined a hierarchy of human needs that motivate the behavior of people. Typically, the hierarchy is a triangle that builds from the base to the apex. Two versions are in Figure 2.

---

[40]Jeffrey Pfeffer and John F. Veiga, *Putting People First for Organizational Success* (The Academy of Management Executive 13, no. 2, 05, 1999), 37-48.

[41]*Ibid, 37.*

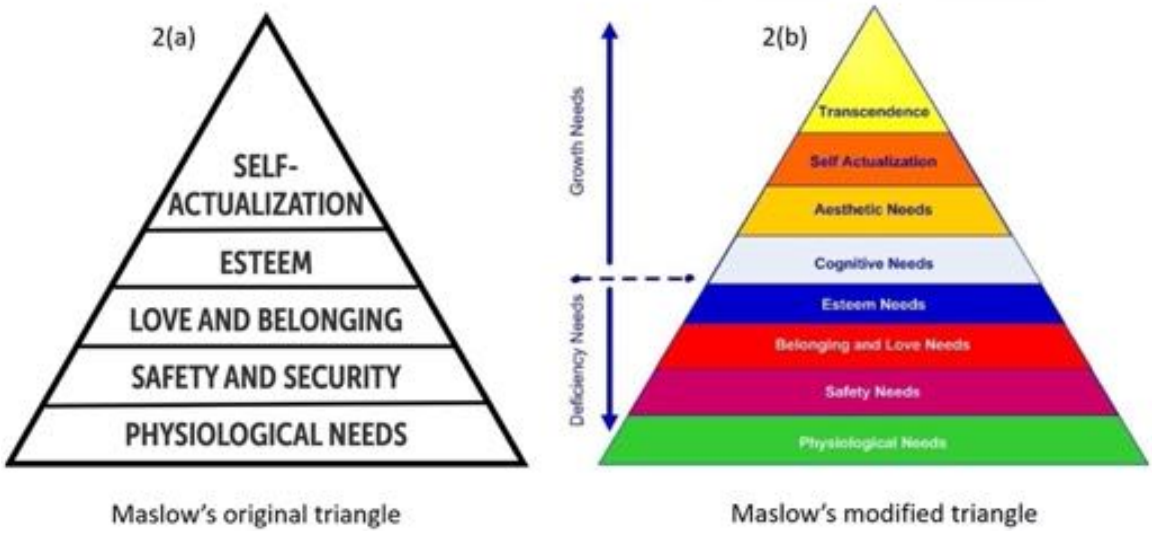


**Figure 2 - Maslow's hierarchy of needs**
Source: Google images last accessed 1 May 2022.

The original hierarchy had five levels as per Figure 2(a). Physiological needs at the bottom build through individual safety, social and esteem needs, before finally arriving at a desire for self-actualization at the top. A more fulsome description of each is as follows:

- **Physiological needs.** Fundamental needs (e.g. food, shelter, sleep) that all humans need for survival.
- **Safety needs.** In times of insecurity, safety needs (e.g. personal, emotional, financial security and health) will have a major impact on behavior.[42]

---

[42]Robert Foley, *Maslow's Hierarchy of Needs* (Outlier), last accessed 1 May 2022, Maslow's Hierarchy of Needs | Outlier.

- **Love and social belonging needs.** The need to love, to feel loved and to have a reciprocal feeling of belonging. Relationships are important at this level.
- **Esteem needs.** Stable sense of esteem from others and themselves based on actual achievements (i.e. this cannot be ungrounded esteem). This includes a sense of recognition, attention or status. Self-esteem is a higher form that drives development of competence and independence.[43]
- **Self-Actualization.** An open category that relies on a drive to fully maximize and realize potential based on goals and motives. Often described as finding peace.[44]

Moving up the triangle, the needs and associated motivational factors change. The first four needs are 'deficiency needs' whereas self-actualization is a 'growth need.' Deficiency needs provide motivation when not met, whilst a desire to develop drives growth needs.[45] Interestingly, meeting deficiency needs reduces motivation to fulfill them. Conversely, meeting growth needs increases the motivation to fulfill them.[46]

---

[43]Robert Foley, *Maslow's Hierarchy of Needs* (Outlier), last accessed 1 May 2022, Maslow's Hierarchy of Needs | Outlier.

[44]Anita Sarma and Andrè van der Hoek, *A Need Hierarchy for Teams* (University of California Irvine, 2004), 3.

[45]Robert Foley, *Maslow's Hierarchy of Needs* (Outlier), last accessed 1 May 2022, Maslow's Hierarchy of Needs | Outlier.

[46]*Ibid.*

In the original hierarchy only self-actualization featured as a growth need. However, Maslow later added three other kinds of growth need, cognitive needs, aesthetic needs and transcendence. The modified triangle is in Figure 2(b):

- **Cognitive needs.** The human need to understand their environment. The need for creativity, predictability, curiosity and meaning. [47]
- **Aesthetic needs.** Satisfaction of an aesthetic order, neatness or structure.[48]
- **Transcendence.** The motivation to go beyond personal self (e.g. ethical, religious, ideological pursuits). Goals and motivations relate to something bigger, such as a group, team or higher power.[49]

Maslow's hierarchy is widely influential but is criticized over the inability to identify common motivation factors across humanity due to the limited sample demographic. Another criticism is the rigidity and linearity of the hierarchy. There is an argument that the hierarchy depends on culture, environment and sociological situations.[50] Following a large multinational well-being study, Tay and Deiner concluded that like vitamins "we need them all."[51] Maslow has since agreed to this line of reasoning.[52]

---

[47]Robert Foley, *Maslow's Hierarchy of Needs* (Outlier), last accessed 1 May 2022, Maslow's Hierarchy of Needs | Outlier.

[48]*Ibid.*

[49]*Ibid.*

[50]*Ibid.*

[51]Louis Tay and Ed Diener, *Needs and subjective well-being around the world* (Journal of personality and social psychology 101, no. 2, 2011), 354.

[52]Robert Foley, *Maslow's Hierarchy of Needs* (Outlier), last accessed 1 May 2022, Maslow's Hierarchy of Needs | Outlier.

Teamwork and satisfaction go hand-in-hand. On the one hand, "teamwork offers real organizational benefits by improving productivity, enhancing employer satisfaction and reducing absenteeism."[53] Whilst on the other hand, satisfaction underpins motivation and team performance.[54]

Herzberg theorized that motivation at work depends on two independent factors, job satisfaction and job dissatisfaction.[55] The theory suggests that job satisfaction stems from the nature of the job, such as opportunities for gaining status, assuming responsibility and achieving self-realization. However, job dissatisfaction comes from the job environment, placing focus on factors such as policies, supervision and working conditions.[56] Whilst Herzberg originally envisaged the two factors were independent of each other, there are arguments that "satisfaction and dissatisfaction no longer exist on separate scales."[57] If people are an organization's greatest asset, the more an organization can do to motivate them, meet their needs, increase satisfaction and reduce dissatisfaction will increase performance.

These two foundational theories present a basis and reference point for focusing on people at the heart of organizations. The premises outlined by Maslow and Herzberg will be pulled through into the next section with specific consideration to the

---

[53]Mila Hakanen, Mia Häkkinen and Aki Soudunsaari, *Trust in Building High-Performing Teams: Conceptual Approach* (Electronic Journal of Business Ethics and Organization Studies 20, 2015), 44.

[54]Russell Cropanzano and Thomas A. Wright, *When a" Happy" Worker is really a" Productive" Worker: A Review and further Refinement of the Happy-Productive Worker Thesis* (Consulting Psychology Journal: Practice and Research 53, no. 3, 2001), 182.

[55]Psynso, *Herzberg's Motivation-Hygiene Theory: Two-factor Theory* (Psynso: Wellbeing, Happiness and Help), last accessed 1 May 2022, Herzberg's Motivation-Hygiene Theory: Two-factor Theory - Psynso.

[56]*Ibid.*

[57]*Ibid.*

performance of teams. Parallels can be drawn that are worthy of further consideration and discussion.

## SECTION THREE – TEAMS

Having explored human motivation theory and applied this to the problem space, this section concentrates on team theory, defining groups and teams to explore factors or characteristics that improve team performance.

### Groups and Teams

"[Effective] teams outperform individuals acting alone or in larger organizational groups, especially when performance requires multiple skills judgements and experiences."[58] Groups and teams play a central role in every aspect of life and several definitions exist within the academic and professional literature. As such, it is important to have a working understanding for the problem space.

While there are no universally accepted definitions of a 'group' or 'team,' Daniel Levi suggests a team "is a special type of group in which people work independently to accomplish a goal."[59] He proposes that a group has specific characteristics and is more than just a collection of individuals. He states the characteristics of groups are; goal orientation, interdependence, interpersonal interaction, perception of membership,

---

[58]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 34.

[59]Daniel Levi, *Group Dynamics for Teams* (2nd ed. Thousand Oaks, California: Sage Publications, 2007), 3.

structured relations, mutual influence and individual motivation.[60] It follows that a team is more than just a group.

There are six main differences between groups and teams; size, selection, leadership, perception, style, spirit.[61] The six differences are in Table 1.

**Table 1 - Six differences between groups and teams**

| Difference | Team | Group |
|---|---|---|
| **Size** | Limited | Medium or large |
| **Selection** | Crucial | Immaterial |
| **Leadership** | Shared or rotating | Solo |
| **Perception** | Mutual knowledge understanding | Focus on the leader |
| **Style** | Role spread coordination | Convergence conformism |
| **Spirit** | Dynamic interaction | Togetherness persecution of opponents |

Source: Meridith R. Belbin, "*Beyond the Team"* (2012), 23-26.

The six differences, and the nuances between groups and teams, matter. The first two (i.e. size and selection) are of particular note to major defence procurement teams. The size and nature of the projects (typically more than 150 personnel) trend organizational structure towards groups rather than teams to make up the project. Similarly, and with most civil service teams, managers rarely have the luxury of personnel selection and must work with what they are given. The remaining four differences are people and relationship focused. Style, spirit, perception and leadership

---

[60]Daniel Levi, *Group Dynamics for Teams* (2nd ed. Thousand Oaks, California: Sage Publications, 2007), 43.

[61]Meridith R. Belbin, *Beyond the Team* (Routledge, 2012) 23-26; Daniel Levi, *Group Dynamics for Teams* (2nd ed. Thousand Oaks, California: Sage Publications, 2007), 43; Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 33-44.

rely on trust and communication (among other characteristics). Therefore, team structure and scalability is challenging within major defence procurement projects.

**Team development**

**Table 2 - Comparison of team development stages**

| Stages (Smith and Katzenbach) | Characteristics | Stages (Buchholz and Roth) | Characteristics |
|---|---|---|---|
| **Working group** | • No performance 'need' to be a team<br>• Interact only to share information<br>• Focus on individual performance only<br>• No common purpose or joint products | **Collection of individuals** | • No shared responsibility<br>• Individual goals<br>• Conflict avoided<br>• Change is avoided |
| **Pseudo team** | • Could be significant performance need<br>• Not focused on performance<br>• Not trying to achieve performance<br>• No common purpose or goals<br>• Weakest of groups – detract from individual performance<br>• Sum of the whole is less than sum of the parts | **NA** | |
| **Potential team** | • There is a significant performance need<br>• Really trying to improve impact<br>• Lacks clarity of purpose and goals<br>• Needs discipline<br>• No collective accountability<br>• Performance impact can be high | **Group** | • Joint identity<br>• Roles are defined<br>• Clear purpose<br>• Norms established |
| **Real team** | • Small (circa <25) number of people with complementary skills<br>• Individuals are equally committed to common purpose, goals and working approach<br>• Mutual accountability | **Team** | • Focused energy<br>• Rapid coordinated response to problems<br>• Shared responsibilities and rewards<br>• Purpose centered actions |
| **High performing team** | • Meets all conditions of real teams<br>• Members are deeply committed to one another's personal growth and success<br>• Commitment transcends the team<br>• Significantly out performs other teams and expectations | | |

Source: Smith and Katzenbach, "*Wisdom of Teams: Creating the High-Performance Organization"* (2015), 58-59; Lundberg, "*Phenomenological study of high performing teams in three countries"* (2007), 49, quoted Buchholz and Roth, *"Creating the High Performance Team"* (1987).

When considering the characteristics of groups, and therefore teams, we can differentiate between the stages of team development. Buchholz describes a three stage model that progresses from a collection of individuals, to a group and then onto a team.[62] Whereas, Smith and Katzenbach provide a five stage team model that compares development against team performance and effectiveness. A summary and comparison of the development stages, as well as key characteristics are in Table 2.

The comparison between development models tease out some interesting points. Buchholz classifies pseudo and potential teams as groups and not teams. Whereas, Smith and Katzenbach differentiate between real and high performing teams. Having described Maslow's hierarchy of needs, remarkable parallels exist between individual growth needs and the characteristics of high performing teams. Specifically, team member's commitment to one another's personal growth and success that transcends the individual and team. Surprisingly, trust and communication are not overt in the models. However, it is reasonable to deduce that, transcendent growth characteristics, coupled with mutual accountability and a significant performance need, requires trust and open communication.

Having described the nuances of team development it is important to fix on a single definition of *team*. The working definition draws on the work by Smith and Katzenbach. They define a team as "a small number of people with complementary skills

---

[62]Steve Buchholz and Thomas Roth, *Creating the High Performance Team* (John Wiley & Sons Incorporated, 1987) quoted by Philip H. Lundberg, *A phenomenological study of high performing teams in three countries* (Saybrook University, 2007), 49.

who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable."[63] They also posit that this is "more than a definition" and it provides "an essential discipline that, if applied, will produce both teams and performance."[64] They represent this as a performance curve through a graphical representation of the five-stage development model.

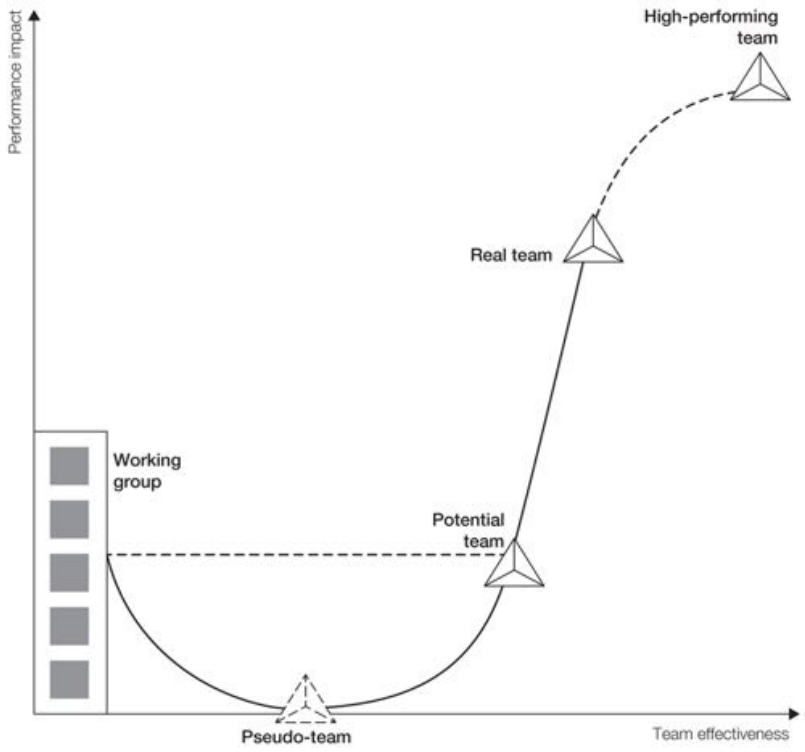


**Figure 3 - Performance curve**

Source: Smith and Katzenbach, *"Wisdom of Teams: Creating the High-Performance Organization"* (2015), Figure II-I, 34.

---

[63]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 34.

[64]*Ibid.*

The performance curve is at Figure 3 and illustrates performance impact and team effectiveness at each stage of team development. Overlaying Maslow's needs (figure 2) onto the performance curve (figure 3) reveals the connection between individual and team needs and performance. For example, the growth needs of transcendence are required to develop a team from a real team to a high performing team. Similarly, a deficiency in an individual's sense of belonging and esteem could inhibit development from a potential team to a real team.

Having introduced the performance curve, there is value in recognizing where a team exists on the curve at any given time. Drawing on the author's observations outlined earlier, defence procurement teams often operate in the working group, potential team and pseudo team space. Rarely, for reasons described such as personnel churn, rigid hierarchal structure, silos and poor communication, and often only by accident, will potential or real teams form. This suggests trust and communication will only go so far. The organization and construct must support individual and team needs as well as key characteristics such as inclusion of complementary skills and longevity in position.

**Team of teams**

Team theory prescribes size limits to teams. "Extended teams, powerful as they are, are not real teams."[65] Whilst a real team that is a subset of a group will provide positive influence, large numbers of people will dilute the common purpose,

---

[65]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 35.

accountability and goals of a real team.[66] Figure 4 depicts (1) a traditional hierarchal 'command' structure (2) a 'command of teams' structure (3) a 'team of teams' structure.

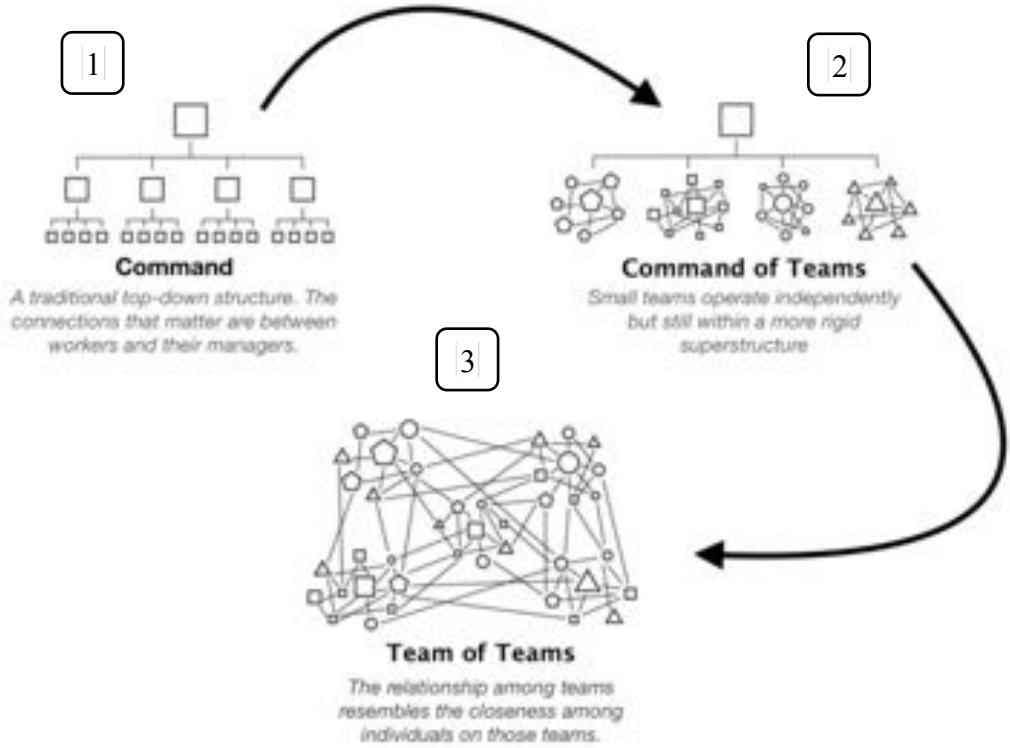


**Figure 4 - Team of teams**

Source: Gordon, *"Key takeaways from Team of Teams"* (2022).

Due to size, major defence procurement teams, like many midsize organizations, are organized as a command of teams as per Figure 4 item (2). For example, each project team will have individual commercial, financial, engineering, logistics and project management teams all reporting to an executive management team. Each individual team

---

[66]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 35.

has a discreet purpose and function but is highly dependent on the other teams. This presents complexity and an added dimension for developing high performing teams.

General McChrystal faced this conundrum in Iraq in 2003-5 with the Joint Task Force. Under his command, separate real or high performing teams consisting of up to 25 elite skilled operatives, were outperformed by an enemy adapting to western tactics. The teams were operating independently of each other in a 'command of teams' structure.[67]

'Command of teams' structures are now common across many sectors and this was akin to what General McChrystal inherited in Iraq. They are more flexible than rigid traditional 'command' structures, but remain constrained by the confines and silos of broader commands.[68] The issue was scalability. A key characteristic of teams is size, beyond a certain size "teams begin to lose their oneness."[69] "It was not possible for the Task Force to become one big team", but maintaining the status quo was unpalatable.[70]

The answer was to create a 'team of teams' structure as depicted in Figure 4 item (3). To do this, the relationships evident between individuals within single teams needed replicating between the teams. "The SEALS needed to trust the Army Special Forces, who needed to trust the CIA."[71] This was a huge undertaking and required

---

[67]Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 122.

[68]Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 122 and 132.

[69]*Ibid,* 126.; Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 35.

[70] Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 126.

[71]*Ibid,* 128.

"unprecedented transformation" and a "complete reversal of the conventional approach to information sharing, delineation of roles, decision-making authority and leadership."[72]

Although the scale is reduced (hundreds vice thousands) the same challenge face defence project teams. The relationships and trust fostered within individual high performing teams needs replicating between all teams in the system. This will lead to a high performing team of teams.

**SECTION FOUR – HIGH PERFORMING TEAMS**

This section aims to draw together the main concepts and discussion points from the previous sections to describe how a defence procurement team can move up the 'performance curve' towards becoming a 'real' or 'high performing team'. A number of key characteristics or factors are evident in support of this goal.

All projects face challenges. Major defence procurement projects are prone to significant external pressure to deliver on time, in budget and to a customer's quality standard. However, they are also prone to internal challenges such as change management and personnel churn. This suppresses trust building and affects performance variables of task, team, organization and people. Command team structures create natural silos that stifle communication and trust across teams.

There is a natural tendency within policy and in practice to focus efforts on improving processes and ways of working to deliver the task. Shifting the attention from project cost, performance and time to people and teams will create efficiencies and

---

[72]Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 131.

benefits across all three deliverables of a project. This is not easy and scaling team theory to large, increasingly virtual, multinational defence projects requires a transformational shift in mindset. Developing, fostering and maintaining 'large' high performing procurement teams will require actions and change at odds with institutional norms.

Transformational change is hard and this is particularly true in the defence procurement space. Traditional organsiational hierarchal structures stem from a rational worldview to create efficiencies through repeatable structures and processes. George Ritzer coined the phrase 'irrationality of rationality'.[73] This describes the stifling effect that bureaucratic inertia can have on innovation and efficiency, the very thing it seeks to create. It is time to break away from traditional worldviews, concentrate more on people to foster innovation, creativity, trust and empower true teamwork.

**Human motivation – individual and team needs**

Placing people at the centre of the project management triangle to create an environment that meets Maslow's deficiency and growth needs will increase individual output and improve team performance. Physiological and safety needs 'should' be a given in any project team. However, workload, fatigue, stress and family security are all factors that are episodically present in people's lives. When 'life' occurs, allowing people the time and space to attend to these needs are fundamental to enabling social belonging and esteem needs.

---

[73]George Ritzer, *The McDonaldization Thesis: Explorations and Extensions* (Sage, 1998).

A "team needs to be cohesive for members to feel accepted."[74] Acceptance, and therefore a sense of belonging, for an individual within a team encourages trust and communication. The same is true for a team. A sense of team belonging to a parent organization encourages trust, communication and external collaboration.[75] Trust is a need found within two of Maslow's deficiency needs. It is a safety need as well as a love and social belonging need.[76]

Belief in a cause and pride in a team creates belonging. A feeling of belonging to a higher authority creates motivation to perform. "The esteem needs of a team are similar to that of an individual. The team seeks to be competent and efficient to attract respect and prestige."[77] Importantly, not just for themselves or their team, but for the higher authority. Fostered through a sense of common purpose and mutual accountability.

**Accountability and open communication**

Communication is central to project management and team performance.[78] Leaders must provide clear direction and communicate often, whilst communication

---

[74]Anita Sarma and Andrè van der Hoek, *A Need Hierarchy for Teams* (University of California Irvine, 2004).

[75]Anita Sarma and Andrè van der Hoek, *A Need Hierarchy for Teams* (University of California Irvine, 2004); Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 127-132.

[76]William G. Kennedy, *The Roots of Trust: Cognition Beyond Rational* (In Biologically Inspired Cognitive Architectures 2011), 188-193.

[77]Anita Sarma and Andrè van der Hoek, *A Need Hierarchy for Teams* (University of California Irvine, 2004).

[78]Brewer, Graham and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 299.; Sai On Cheung et al., *Interweaving Trust and Communication with Project Performance* (Journal of Construction Engineering and Management 139, no. 8, 2013), 942.; Laura Delizonna, *High-Performing Teams Need Psychological Safety: Here's how to Create It* (Harvard Business Review 8, 2017), 3.; Owen Gadeken, Building the Project Office Team (Defence AT&L, 2012), 44.; Mila Hakanen, Mia Häkkinen and Aki Soudunsaari,

between team members is the lifeblood of an effective team.[79] Geographic dispersal, virtual working, reliance on technology and project interconnectedness are all communication challenges faced in projects today.[80] Frequency and authenticity of communication is key, and "building and maintaining an open and trusting environment is a crucial characteristic of high performing teams." [81] The sharing of information, openly and honestly, without fear of misspeaking creates psychological safety, which in turn builds trust.[82] When people feel safe, in a system of collective accountability, open-mindedness, questioning, resilient and motivated communication occurs. This enables innovation and creativity through solution-finding and divergent thinking.[83]

Whether psychological safety is a deficiency need, a growth need or both is not clear, but it is certainly a product of trust and communication. Trust makes it possible to accept and share criticism openly. "Honesty, openness, consistency and respect" supports conflict resolution. [84] Noting conflict resolution is a characteristic of trust within teams not extensively discussed in this paper. "Openness builds trust and trust increases communication."[85] Both are essential within high performing teams. Creating and encouraging an environment of open communication within a procurement project team

---

*Trust in Building High-Performing Teams: Conceptual Approach* (Electronic Journal of Business Ethics and Organization Studies 20, 2015), 44-47.

[79]Owen Gadeken, *Building the Project Office Team* (Defence AT&L, 2012), 44

[80]*Ibid.*

[81]Owen Gadeken, *Building the Project Office Team* (Defence AT&L, 2012), 44.

[82]Laura Delizonna, *High-Performing Teams Need Psychological Safety: Here's how to Create It* (Harvard Business Review 8, 2017), 1-5.

[83]Owen Gadeken, *Building the Project Office Team* (Defence AT&L, 2012), 44.

[84]Mila Hakanen, Mia Häkkinen and Aki Soudunsaari, *Trust in Building High-Performing Teams: Conceptual Approach* (Electronic Journal of Business Ethics and Organization Studies 20, 2015), 45.

[85]*Ibid.*

sets the stage for increased performance and can elevate a team from 'potential' to 'real team' status.

**Relationships between Teams**

By increasing connections and relationships between disparate teams, McChrystal challenges the edict that team theory is not scalable. A 'team of teams' approach increases communication across teams, breaks down silos, creates trust and promotes shared consciousness. Once shared consciousness exists, empowered teams and individuals can act without prior approval.[86] This creates capacity for leaders and enables them to concentrate on fostering a conducive and high performing environment. Replicating this system or methodology within a procurement project team sets the stage for team development.

**Team transcendence**

Having provided an environment of trust and open communication, within teams and between teams, Maslow's growth needs can be realised. In this context, team member's commitment to one another's personal growth and success transcends the individual as well as the team. Team transcendence enables teams to operate beyond functional differences and to work together for a common goal with mutual accountability. This encourages individual members to become deeply committed to one another. The commitment transcends the team and the team can significantly outperform other teams and expectations.

---

[86]Gen Stanley McChrystal et al., *Team of Teams: New Rules of Engagement for a Complex World* (Penguin, 2015), 126.

## CONCLUSION

The quest for value for money, state of the art equipment, national autonomy and national economic value will remain with any defence projects. However, this comparative analysis of project management, team theory and human motivation reveals common and complimentary themes for consideration.

Transformational change is hard but shifting project focus from cost, performance and time to people and teams will realise efficiencies and benefits at all levels of a project. Putting people first, by placing them, and their teams, at the centre of the project management triangle will increase satisfaction and reduce the impact of dissatisfaction. Happier team members are less likely to change roles, thus reducing churn and promoting a trusting environment.

High performing teams share a number of common factors or characteristics. If a team is to become a high performing team, both individual and team needs must be realised, and in particular growth needs that depend on *trust and communication*. "Trust is the most significant determinant of project success and poor communication is the most common failure factor."[87]

Large extended groups of people, potent as they are, are not teams. Major defence project teams wishing to establish teams, rather than groups, must recognize that teams

---

[87]Jeffrey K. Pinto, Dennis P. Slevin, and Brent English, *Trust in Projects: An Empirical Assessment of Owner/Contractor Relationships* (International Journal of Project Management 27, no. 6, 2009), 638.; Graham Brewer and Scott Strahorn, *Trust and the Project Management Body of Knowledge* (Engineering, Construction and Architectural Management, 2012), 287.

do not materialize from popular new management strategies.[88] "Large numbers of people usually cannot develop the common purpose, goals, approach and mutual accountability of a real team," and they will remain as pseudo or potential teams. [89] Introducing a *team of teams* structure in defence projects will require transformational actions at odds with institutional norms. The first step is communication. Effective communication speeds up the development of trust and collaboration *between* teams.

For a major defence procurement team to move up the 'performance curve' towards becoming a *real* or *high performing team* both individual and team growth needs must be attainable to enable transcendence beyond the team. Putting people first encourages and supports relationships. Relationships within and between teams, built on trust and communication, enables collaboration and true teamwork.

---

[88]Karen L. Spencer, *The Wisdom of Teams: Creating the High-Performance Organization* (Book review, Harvard business School Press, Boston, 1993), 104.

[89]Douglas K. Smith and Jon R. Katzenbach, *Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 2015), 68-69.

## BIBLIOGRAPHY


Belbin, R. *Meredith*. *Beyond the Team.* Routledge, 2012.

Brewer, Graham and Scott Strahorn. *Trust and the Project Management Body of Knowledge.* Engineering, Construction and Architectural Management, 2012.

Bubshait, Abdulaziz A. and Gulam Farooq. *Team Building and Project Success.* Cost Engineering 41, no. 7, 1999.

Buchholz, Steve and Thomas Roth. *Creating the High Performance Team.* John Wiley & Sons *Incorporated*, 1987.

Cheung, Sai On, Tak Wing Yiu, and Man Chung Lam. *Interweaving Trust and Communication with Project Performance.* Journal of Construction Engineering and Management 139, no. 8, 2013.

Cropanzano, Russell and Thomas A. Wright. *When a" Happy" Worker is really a" Productive" Worker: A Review and further Refinement of the Happy-Productive Worker Thesis.* Consulting Psychology Journal: Practice and Research 53, no. 3, 2001.

Delizonna, Laura. *High-Performing Teams Need Psychological Safety. Here's how to Create It*. Harvard Business Review 8, 2017.

Deni, John R. and David J. Galbreath. *Routledge Handbook of Defence Studies.* Taylor and *Francis*, 2018.

Foley, Robert. *Maslow's Hierarchy of Needs*. Outlier. Last accessed 1 May 2022. *Maslow's* Hierarchy of Needs | Outlier.

Gadeken, *Owen*. *Building the Program Office Team*. Defence AT&L, 2012.

Gerards, Ruud, Andries de Grip, and Claudia Baudewijns. *Do New Ways of Working Increase Work Engagement?* Personnel Review, 2018.

Gordon, Beau. *Key takeaways from Team of Teams by General Stanley McChrystal.* Last *accessed* 1 May 2022. Key takeaways from Team of Teams by General Stanley McChrystal | by Beau Gordon | Medium.

Hakanen, Mila, Mia Häkkinen, and Aki Soudunsaari. *Trust in Building High-Performing Teams: Conceptual Approach.* Electronic Journal of Business Ethics and *Organization* Studies 20, 2015.

Hakanen, Mila and Aki Soudunsaari. *Building Trust in High-Performing Teams*. *Technology* Innovation Management Review 2, no. 6, 2012.

Hartman, F. T., *The role of Trust in project management.* Paper presented at PMI® Research Conference 2000: Project Management Research at the Turn of the Millennium, Paris, France. Newtown Square, PA: Project Management Institute, 2000. Last accessed 1 May 2022. The role of TRUST in project management (pmi.org).

HM Government. *Major Projects Authority*. Last accessed 1 May 2022. Major Projects *Authority* - GOV.UK (www.gov.uk).

HM Government. *Defence and Security Industrial strategy: A strategic approach to the UK's defence and security industrial sectors.* CP 410, 2021.

Institute, Project Management. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. Project Management Institute, 2017.

Juneau, Thomas, Philippe Lagassé, Srdjan Vucetic. *Canadian Defence Policy in Theory and Practice.* Cham, Switzerland: Palgrave Macmillan, 2019.

Kennedy, William G. *The Roots of Trust: Cognition Beyond Rational.* In Biologically *Inspired* Cognitive Architectures, 188-193: IOS Press, 2011.

Klein, Cameron, Deborah DiazGranados, Eduardo Salas, Huy Le, C. Shawn Burke, Rebecca Lyons, and Gerald F. Goodwin. *Does Team Building Work?* Small Group *Research* 40, no. 2, 2009.

Kruglianskas, I. and H. J. Thamhain. *Managing Technology-Based Projects in Multinational Environments.* IEEE Transactions on Engineering Management 47, no. 1, 2000.

Levi, Daniel, Ph.D. *Group Dynamics for Teams.* 2nd ed. Thousand Oaks, Calif: Sage *Publications*, 2007.

Lundberg, Philip H. *A Phenomenolocial Study of High Performing Teams in Three Countries.* Saybrook University, 2007.

McChrystal, Gen Stanley, Tantum Collins, David Silverman, and Chris Fussell. *Team of Teams: New Rules of Engagement for a Complex World*. Penguin, 2015.

Pfeffer, Jeffrey and John F. Veiga. *Putting People First for Organizational Success.* The Academy of Management Executive 13, no. 2, 1999.

Pinto, Jeffrey K., Dennis P. Slevin, and Brent English. *Trust in Projects: An Empirical Assessment of Owner/Contractor Relationships.* International Journal of Project *Management* 27, no. 6, 2009.

Psynso. *Herzberg's Motivation-Hygiene Theory: Two-factor Theory*. Psynso: Wellbeing, *Happiness* and Help. Last accessed 1 May 2022 Herzberg's Motivation-Hygiene Theory: Two-factor Theory - Psynso.

Ritzer, *George*. *The McDonaldization Thesis: Explorations and Extensions*. Sage, 1998.

Rousseau, Denise M., Sim B. Sitkin, Ronald S. Burt, and Colin Camerer. *Not so Different After all: A Cross-Discipline View of Trust.* Academy of Management Review 23, no. 3, 1998.

Royal Navy. *Our people.* Last accessed 1 May 2022 Our People | Royal Navy (mod.uk).

Sarma, Anita and Andrè van der Hoek. *A Need Hierarchy for Teams.* University of *California* Irvine, 2004.

Smith, Douglas K. and Jon R. Katzenbach. *Wisdom of Teams: Creating the High-Performance Organization*. Harvard Business Review Press, 2015.

Spencer, Karen L. *The Wisdom of Teams: Creating the High-Performance Organization.* n.p., *1993*.

Tannenbaum, Scott I., Rebecca L. Beard, and Eduardo Salas. *Team Building and its Influence on Team Effectiveness: An Examination of Conceptual and Empirical Developments. Advances* in Psychology, Vol. 82, 117-153: Elsevier, 1992.

Tay, Louis and Ed Diener. *Needs and Subjective Well-being Around the World*. Journal of Personality and *Social* Psychology 101, no. 2, 2011.

Thamhain, Hans J. and Aaron J. Nurick. *Project Team Development in Multinational Environments.* Global Project Management Handbook, NY, USA: McGraw-Hill, 1994.

Turner, John Rodney, John Rodney Turner, and Turney Turner. *The Handbook of Project-Based Management: Improving the Processes for Achieving Strategic Objectives.* Second Edition, The McGraw-Hill Companies, London, UK, 1999.