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**Leveraging Managers’ Mindsets:**

**Command and Control or Innovation Management**

# Abstract/Summary

Research has shown the powerful impact that mindsets have on outcomes. In this context, mindset refers to the knowledge structures that managers use to survey the environment, focus on specific data, make judgments and decisions regarding opportunities, create value, and encourage growth. This article presents the results of a qualitative analysis identifying the differences in mindsets between managers who engage in innovation efforts and managers who run routine organizational endeavors. The paper first presents the importance of mindset to management outcomes. It then defines the relevant terms of comparison as being the mindsets of successful routine or ‘command and control’ (C&C) managers and successful Innovation Management (IM) managers. Qualitative analyses of semi-structured interviews yielded 16 core realms in which differences are enacted by effective C&C manager and effective IM managers. These 16 issues are elicited and defined, followed by in-depth explanations. Results have potentially important implications for the theory, research, and practice of innovation management. The paper concludes with suggestions for further research and applied management recommendations.

**Keywords:** command and control, logical framework, innovation management, mindset

# Introduction

Organizations, the building blocks of society, are confronting enormous challenges, resulting from the increasingly complex and rapid changes in society. The terms: Volatility, Uncertainty, Complexity and Ambiguity (VUCA) have been adopted to describe these turbulent times.[[1]](#endnote-1) As noted by Millar: “VUCA is both an outcome of disruptive innovation and a driver of it,”[[2]](#endnote-2) and VUCA “creates an acute challenge for management in designing innovation.”[[3]](#endnote-3)

Technological and scientific advances have grown exponentially in recent years, demarking the Era of the Singularity, a “period during which the pace of technological change will be so rapid, its impact so deep, that human life will be irreversibly transformed.”[[4]](#endnote-4) As a result, our planet is suffering, and if we want future generations to inherit it, emergency creative interventions are required. All these factors are contributing to the increasingly tempestuous organizational environment in which managers are operating.

Managers require new and adaptive tools to successfully drive their organizations within this challenging context. Tidd identified uncertainty and complexity as key environmental factors in innovation management processes.[[5]](#endnote-5) Innovation and its management are becoming essential managerial tools, as indicated by the increasing number organizations that are appointing managers to the newly-established role of Chief Innovation Officer. This raises the need to better understand IM managers’ mindsets.

# Innovation Management

Innovation, once an aberration and exception among management concepts, has become a staple in most organizations. Managers understand the need for innovation within their organizations and are coming to the realization that without it, their organizations will not survive, let alone be able to provide the societal value for which they were created.[[6]](#endnote-6)

Previous research has investigated the entrepreneurial mindset, but this is not applicable to the phenomena of innovation. Although the concepts of innovation and entrepreneurship are related, and often confused, even in academic circles,[[7]](#endnote-7) they are distinct from each other. Unclear concepts lead to incorrect questions and therefore useless conclusions. Amsel provided distinct definitions for each concept and noted: “…there is an urgent need to untangle frequently confused concepts: Entrepreneurship, Innovation and Startups….”[[8]](#endnote-8) It behooves academicians and practitioners in the areas of innovation and entrepreneurship to use clear and distinguishing definitions to guide our research and conclusions.

For the purposes of this paper, innovation is defined as the process of adding value by creatively addressing needs in a previously unknown fashion (for example by developing new products or implementing a new business model). As such, creativity comprises only one (albeit critical) component of the innovation process. The other critical component, which has been given less attention in research, is that of adding value.

This inquiry focuses solely on Innovation Management (IM). The purpose is to shed light on the mindset of individuals who work in hierarchical organizations, who receive a monthly salary so that their income is not at direct risk, and who led creative efforts and risk-taking on behalf of the organization with which they are currently employed.

## *The importance of innovation and its management*

If the number of publications using a term is an accurate measure of interest in it, interest in Innovation Management seems to be exploding: Googles’ Ngram shows that searches featuring the word “innovation” jumped from 0.0005% in 1960 to 0.0030% in 2018. Amazon’s online bookstore yields over 30,000 results for the search Innovation + Management, and Google Scholar renders about 4,330,000 results for the same search. Sumita established that “…innovation is more and more substantial for sustainable corporate profit and economic growth…” and “…more and more people in the world have come to commonly recognize how important the innovation is for economy.” [[9]](#endnote-9) This is not only true for businesses. Coppock stated: “Grassroots innovation can help fortify social, human, and financial capital and this, in turn, can improve risk management and human well-being.”[[10]](#endnote-10) Regarding the broader national picture, Kao said: “Innovation has become the new currency of global competition … where the capacity for innovation is viewed as a hallmark of national success.”[[11]](#endnote-11) Or as van Stamm simply put it: “the only way for an organisation to survive, let alone thrive, in such a VUCA context is to innovate.”[[12]](#endnote-12)

IM is indeed coming of age. One key feature of successful IM is the manager’s mindset. More research attention needs to be given to the effects of management innovation at an organizational and functional level.”[[13]](#endnote-13)

# Mindset

What makes managers engaged in innovation tick? How do their worldviews and perceptions guide their efforts and decisions? What do they believe?

Mindsets are wonderful yet intangible interpreters of reality and generators of reality, which are contained inside our heads. In order for us to be able to manipulate them to our benefit, they need to be made explicit. Otherwise, organizations are run on auto-pilot, without setting the destination or even knowing what it is. Mindsets tacitly and actively filter how we interpret events and how we respond to those events.

How we think impacts our behaviors. As Norman stated: “People form mental models of each other, the world, and the devices and systems with which they interact.”[[14]](#endnote-14) These mental models can be used to predict system behavior and guide actions.

Senge pointed out that, despite their relevance in defining success in executive decision-making, mental models have remained a largely unexplored area in business research.[[15]](#endnote-15) A recent study called for “more research into the mental models of senior executives.”[[16]](#endnote-16) Duffy[[17]](#endnote-17) conceptualized mindsets as nested within mental models. In the present research, the concepts of mindset and mental models will be used interchangeably.[[18]](#endnote-18)

In the field of social cognition, a mindset is defined as a cognitive structure in place to increase personal efficiency in the use of cognitive resources. Mindsets prompt people to prioritize information, make assessments, solve problems, and make decisions regarding the value and feasibility of an idea. Mindsets guide managers decisions and behaviors, which in turn “alter the direction, focus, and performance of the organization.”[[19]](#endnote-19) Maidique and Hiller explored leadership mindsets and concluded: “Knowing the strengths and pitfalls of each mindset — and which ones you rely on most heavily — can help you create better teams and have a greater impact.”[[20]](#endnote-20)

## *The importance of understanding managerial mindsets*

Although mindsets are difficult to grasp, they are crucial for unlocking management. Successful and effective IM decisions and actions generally follow from a proper mindset. The impact of the mindset on outcomes has been the focus of much psychological, educational, and organizational research in the last 30 years. Mindsets have been found to influence a variety of behaviors, and studies have delved into concepts such as: self-efficacy and motivation or the ‘growth mindset,’[[21]](#endnote-21) entrepreneurship,[[22]](#endnote-22); global management,[[23]](#endnote-23) global service management,[[24]](#endnote-24) positivity,[[25]](#endnote-25) learning from errors,[[26]](#endnote-26) senior executives’ mental models and how top management makes sense of strategic issues such as creating customer value,[[27]](#endnote-27) the resilience-growth mindset[[28]](#endnote-28) and the unconscious thought effects (UTE) decision-making theory.[[29]](#endnote-29) Research has revealed the critical impact mindset has on organizational results: “How we understand the mind matters … for what we value in ourselves and others, for education, for research, for the way we set up institutions, and most important for what counts as a humane way to live and act.”[[30]](#endnote-30)

Because mental models are usually tacit, existing below the level of awareness, they are often untested and unexamined. They are generally invisible until we look for them. The core task is bringing mental models to the surface, exploring them and talking about them with minimal defensiveness. This will help us see their impact on our lives to and find ways to create mental models that serve us better in the world.[[31]](#endnote-31)

As Drucker (1980) stated: “the greatest danger in times of turbulence is not the turbulence; it is to act with yesterday’s logic.”[[32]](#endnote-32) Thus, the proper mindset strives to avoid applying “yesterday’s logic” and rather to adopt the logic of today, or even better, that of tomorrow as well. This highlights the importance of making implicit mindsets explicit.

Further, personal limitations, in Piet Hein’s view,[[33]](#endnote-33) are failures to act rather than failures while taking action. Limitations (in mindsets) are deceptive, but, unfortunately, people often don’t realize this. Nor do they realize that limitations are based on perceptions, rather than on actions. Knowledge of limitations is not based on tests of skills but rather on avoidance of testing one’s skills.[[34]](#endnote-34)

The research questions for the present study are: Do IM managers have a specific enacted mindset? If so, how does it differ from the mindset of a manager in charge of routine organizational efforts? If differences exist, how can they be leveraged for the benefit of the organization?

# Methodology/Methods

This field research set out to explore the mindsets of effective IM managers. For this purpose, we conducted semi-structured interviews with managers and observations of their work. Out approach was guided by an understanding that studying individuals’ mindsets necessitates data from personal interviews. Interviews can reveal senior executives’ mindset because dialogue “enables the understanding of participants’ thought processes, values, aspirations and professional and life stories in context.”[[35]](#endnote-35) In this paper the terms “mental model” and “mindset” are used interchangeably.[[36]](#endnote-36)

This study’s participants were Israeli project managers from three sectors: a business corporation focused on safety and security services, a mid-sized municipality, and the Israel Defense Forces.

At the outset of the research, we explained the difference between usual/routine management and IM to people in the organization’s human resources department or the organizational consultant. Based on their recommendations, we compiled a sample of managers to be interviewed. From each surveyed organization, we selected two managers who were as similar demographically as possible, but with a fundamental difference: one was manager of an innovative endeavor within the organization and the other was a manager of a routine endeavor.

However, preliminary analysis of the data gathered from the first round of eight interviews revealed that the relevant counterpart for IM managers is not merely *any* other manager at the organization, but specifically an efficient manager. This led to a fine-tuning of the target interviewees. Our contacts in the human resource departments and the organizational consultants defined efficient, successful managers as ones who “deliver” or “get things done.” Thus, we framed efficient routine management (in contrast to IM) as a type of management that applies a ‘command and control’ (from here, C&C) managerial mindset. Corporations have been grooming this type of mindset for decades, and it often enables them to thrive. Indeed, reliance on successful routine management within an organization partly explains why corporations, while advocating openly for the need for innovation, simultaneously find themselves having to recruit, promote and advance efficient C&C managers.

Given this understanding, the sampling instructions changed from: “We need to interview managers in your organization engaged in innovative projects and other managers engaged in other organizational projects,” to “We need to interview one of your best usual/routine process managers and one of your best innovation project/process managers.”

In the second round of interviews, we interviewed a total of 30 managers. Fifteen were identified by their organizations as innovative project managers, and fifteen were identified as effective routine (non-innovative) managers. All interviews were conducted in Hebrew, sprinkled with the English “computerese” jargon used at the interviewees’ organizations.

Interviewers first explained to the interviewees that the purpose of the research was to understand their management mindset. Managers were not aware of the criteria for being chosen. They only were told that the human resources department or organizational consultant considered them as “having management experience worth tapping into.”

We explained that we want to know how a “good” manager thinks, and that they would provide their own definition of “good” during the interview. At a certain point in the interview, we gave a short summary of the Logical Framework method.[[37]](#endnote-37)

Potential participants were guaranteed anonymity. They were asked to give their voluntary informed consent for participation in the research.

We proceeded to ask the following open-ended questions:

1. What constitutes good management in your view?
2. Can you give me an example or case of good management?
3. What roles must a good manager fulfil?
4. From the above-mentioned roles, which is the most important and why?
5. Who are your clients? What is good client management?
6. How do managers in this organization assign tasks/projects/challenges?
7. When you assign a task, how is that done? How do employees respond?
8. Regarding the Logical Framework Apporach (as explained): what should be the focus of a good manager? Why?
9. Complete this sentence: A good manager should nurture an organizational climate of…. Why? Can you elaborate?
10. Now that you understand what this interview is about, is there anything else you think we should have asked? What? What would you be your answer to these questions?

In addition, two short hypothetical cases were presented to the interviewees. One asked what they think should be done with a cutting-edge AI software program. The second pertained to what to do with a motivated employee who continuously comes up with ideas, but the ideas are mostly bad ones. Interviewees were asked how they would react to these cases.

Finally, we observed four meetings in which the IM and C&C managers participated.

# Results/Findings

Qualitative data analyses revealed 16 main areas in which the mindsets differed between the efficient routine (C&C) managers and IM managers.

Table 1 summarizes the differences found in the responses given by managers of these two types. The first column presents the managerial aspect revealed, the second column presents how an effective C&C manager thinks about that aspect, and the third column presents how an IM manager thinks about the same aspect.

Table 1. A comparison between the C&C managerial mindset and the IM mindset

| ***Management aspect*** | ***C&C Managerial Mindset*** | ***IM Mindset*** |
| --- | --- | --- |
| 1. Manager’s main role | Control & efficiency | Adding value[[38]](#endnote-38) |
| 1. Manager’s self-image | Leader & enforcer | Facilitator & enabler |
| 1. Approach to task accomplishment | Tasks will be accomplished as simply and easily as possible. | Among the various ways to accomplish tasks, the best option is not always obvious. It should always be asked whether there a different way to do something. |
| 1. Approach to suggested changes in tasks | “If it works, don’t fix it.” | “Let’s see how it works.”[[39]](#endnote-39)  “Let’s tweak/hack this.” |
| 1. The Logical Framework Approach | Outputs | Results, impact |
| 1. Organizational climate fostered | Serious. Professional. | Playful. Curiosity. |
| 1. Time framing | Past then present. Managers draw from previous experience to make decisions about present issues. | Future then present.[[40]](#endnote-40) Managers focus on the long-term and then decide on present issues. |
| 1. Risk-taking | Avoid, reduce, do damage control. | Risks are exciting. One should maintain a sense of wonder. |
| 1. Meaning given to mistakes at work | “We weren’t paying attention.” | “When dealing with new ideas, mistakes come with the territory.” “We are trying in earnest.” |
| 1. Approaches to mistakes made at work | Minimize, manage, mistakes take an emotional toll. | Curiosity. Embrace mistakes as learning opportunities. |
| 1. Prioritizing challenges | Achievable | Large and small, but interesting. |
| 1. Ideation. What to ask when presented with a new idea. | Is it worthwhile? Is it feasible? | How can it be done? What if? Is it important? |
| 1. Getting knowledge from employees. When managers ask questions, they expect: | Clear-cut, black-or-white, either-or answers. | Myriad different potentially good answers. |
| 1. View of the client | “Customer is always right.” The client is most important. Satisfaction is important. | Partner and decision maker. Relationship is important. |
| 1. Who to ask for advice/help | An expert, particularly the best. | A heterogenous team. Discussion helps. |
| 1. Perceptions of diversity | Nuisance, better to standardize | Valued, interesting, challenging |

## How Differences are Enacted

The voice of the C&C manager is one that advocates getting things done, wisely applying past experience, using resources efficiently and not taking risks. The voice of the IM manager, in contrast, advocates invoking the imagination, developing opportunities to enhance experience, and pointing out other possible directions. The dialogue between these two voices is extremely delicate and full of potential.

One example illustrates how these mindsets elicit different managerial responses and behaviors and thus different outcomes in similar situations facing the organizations. At the beginning of the research, we observed managers’ team meetings at which the status of a long-term project status was being updated and evaluated. When a team member questioned a decision made in a previous meeting, the C&C manager responded: “We already settled this in the past. Get informed about that meeting.” In contrast, the IM manager’s response was: “We decided about this in the past. Do you have any new thoughts that will make us reopen that decision?”

Further analysis of the results provides insights into how these identified differences affect managers’ behavior. The mindsets of C&C and IM managers widely differ. The differences elicited are not necessarily opposites, but in many cases, they are orthogonal (uncorrelated) and clearly point in different directions.

### ***Manager’s main role***

Interviews opened with the following question: “What constitutes good management in your view?” Most managers’ first responses were concrete, project-oriented statements. For example, one said (cynically): “On time, on budget. But everyone knows that to get that, you have to be cheating either yourself, others, or both.” Other initial answers were: “Make sure the customer is satisfied” or “To justify my pay.” These are the most common and widely accepted answers.

As the interviewers probed more deeply into what is meant by a “good” result that managers are expected to achieve, differences begin to emerge. Participants gave answers like: “My role is to make sure everything runs smoothly” (C&C); “Make the best use of the resources” (C&C); or “Deliver to my customers something better than what they have now” (IM). From this we learn that in order to tap into the mindsets guiding management decisions, we need to probe below the surface of acceptable responses. There was little differentiating the initial responses of the C&C managers from those of the IM managers. Management mindsets differ in that C&C managers reflect on the internal inputs and resources for which they are accountable, for example: “I steward resources for which I am responsible, therefore I must be frugal, efficient.” IM managers look at a different picture; how they can produce value from these resources, internally or externally, for the organization. They ask: “What can I produce with these resources?” or “What else can be leveraged here?”

The mindsets can be summarized accordingly: IM managers see the main role of the manager as one of adding value while C&C managers view their main role as ensuring control and efficiency.

### ***Manager’s self-image***

C&C managers often use the terms leader or leadership, as in “I’m a role model of leadership for the soldiers in my unit.” IM managers seldom used these terms. Instead, they would say things such as: “I’m like a sports coach,” or “I need to help soldiers give their most.”

There was a striking difference regarding how they help their team members relate to their superiors in the organization. A C&C manager said: “I need to lead him to make better decisions.” In contrast, an IM manager stated, “I facilitate so she will shine in front of her bosses.” In one instance, the manager’s office had a leadership training workshop, and in the workshop evaluation, the IM manager said: “It doesn’t help me. I need a workshop on how to handle group dynamics, how to make a team out of my team.” The C&C manager, in contrast, said: “I need more feedback on my leadership style.”

The mindsets were categorized accordingly: IM managers perceive themselves as facilitators and enablers, while C&C managers view themselves as leaders and enforcers.

### ***Approach to*** ***task accomplishment***

C&C and IM managers perceived task accomplishment in distinctly different ways. The first and main difference is that task accomplishment was central for C&C managers, but secondary for IM managers. C&C managers emphasized this repeatedly, in various ways, saying that is what they are being paid for and it’s the essence of management. In contrast, IM managers view task accomplishment as side effects of doing their job. For example, one said: “Yes, of course they will accomplish the goal, but my main contribution was to show them there are alternative ways and think through how to choose one for the task at hand.”

Second, C&C managers said they apply an Occam’s razor approach, saying for example: “Apply the KISS (keep it simple, stupid) rule,” “The easier the better” and “How can you get it done cheaper?” On the other hand, IM managers said they see richness and potential in playing with different ways to approach tasks, regardless of the resources that need to be used. One said: “I do not like the ‘but this is how we always do this’ attitude” Another said: “Wow, so this is routine, let’s see how many different ways we can do this.”

The different mindsets were labeled accordingly. In summary, IM managers are aware that there are different ways to accomplish tasks and do not think it is always clear which way is better. C&C managers view task accomplishment as a value in itself and strive for the simplest and easiest ways to accomplish them.

### ***Approach to suggested changes in tasks***

When employees offered suggestions on how to improve their work, C&C managers usually responded as if they saw this as a waste of time. For example, one said: “We have been doing this like this for 2000 years, why change?” Another said: “Not during my shift, I am in a hurry.” IM managers m suggestions with curiosity and with motivation to play with them “just for the sake of it.”

The different mindsets can be summarized as follows: IM managers are open to ways to hack or tweak how tasks are approached. In contrast, C&C managers, once they have found a simple and easy way to accomplish a task, prefer not to change it, following the motto “if it works, don’t fix it.”

### ***The*** ***Logical Framework Approach***

The Logical Framework Approach[[41]](#endnote-41) is a conceptual model of the flow of the work/management, in five steps: 1) inputs, 2) processes, 3) achieving outputs, 4) results (outputs used by someone) and 5) scaling up results to show impacts.[[42]](#endnote-42) This thought model is commonly taught to managers and its use is frequently required by impact funding agencies. Most C&C managers emphasized the output stage. As one said: “My responsibility is to place the engineering product (output) in the hands of the user (client), and that’s it. What he does with it is his problem.” IM managers were more likely to focus of their attention on how the output will change their customers’ life: “While developing software, I keep trying to figure out how this will make the users’ task easier. I don’t always come with an acceptable answer, but I will keep trying.” During one discussion about a glitch in software the company developed, a C&C manager winked and said “Let’s call it a feature,” to which the IM manager answered: “That’s great for us, but what about the user?”

The C&C mindset is focused on outputs, which are the immediate results of the processes. This mindset has a mastery of resources (inputs) and in-depth knowledge of processes, therefore it is natural they view outputs and high performance as their main contribution to the organization. In contrast, the IM mindset goes several steps further in the Logical Framework. They disregard inputs and processes and emphasize instead that their employees focus on the results that will be achieved when the outputs are put to use. They even look further, striving to create an impact on their customers, the community, and society when the results are leveraged.

### ***Organizational climate fostered***

In response to the question regarding what organizational climate managers should strive to create, the C&C’s managers’ answers included: “one that makes sure employees take the tasks seriously”; “a businesslike [formal] climate”; “one that does not allow employees to take the project lightly”; and one that emphasizes “how important is the project is and the need for a professional approach.”

In contrast, IM managers responded to the same prompt with answers such as: “this is a game of how to make the project a success”; “we are competing with other teams within the company, (or at competitor companies), let’s win”; “a climate where employees feel free to explore different ideas and approaches and are not constrained by specific company specifications.”

These mindsets lead managers to behave differently. While managers with a C&C mindset have a positive view of serious professionals invested in hard work, IM managers view positively curious and playful employee, who enjoy being at work. Managers with each mindset may observe the same behavior, for example employees having a “nerdy” discussion among themselves about whose approach to a problem is better. The C&C manager will see her role as fostering a learned, disciplined, sequential, convergent discussion, while the IM manager will see her role to foster a divergent and unruly discussion, even if it leads to some dead ends.

The different mindsets were labeled accordingly: IM managers see themselves as facilitators and enablers, while C&C managers view themselves as leaders and enforcers.

C&C’s managers, accordingly to their role perception and managerial focus, foster an organizational climate of professionalism and seriousness, while IM managers foster an organizational climate of playfulness and curiosity.

### ***Time framing***

Another clear example of how people with these different mindsets view the world pertains to how they respond when presented with an idea or issue. C&C managers draw on their past experiences in similar situations and apply it to the issue at hand. C&C managers make decisions using Herbert Simon’s conceptualizations.[[43]](#endnote-43) IM managers use the time heuristic differently: they consider the potential outcomes of their decisions and make a decision based on the desired future. One humorous instance was observed when the local news featured a governmental and political crisis that could have impact a large project for the company. A C&C manager said, “So what’s new? We had similar cases in the past. What we need to do is sit and wait. It won’t take long.” An IM manager commented on the same crisis “Wow, this opens up plenty of alternatives. I will ask for a budgetary meeting, to find out how can we benefit.” This could easily be ascribed to a difference between pessimism and optimism (and perhaps be correct!) However, this use of time frames parallels the ones managers use in responding to employees who present an idea. A C&C manager stated, for example, “I know in the past something similar failed, so what’s the use?” while an IM manager said, “Imagine what could happen if this works! Let’s see what we now need to test this.”

### ***Risk-taking***

Risk-taking is in the eye of the beholder. The C&C managers often used phrases such as risk management, mitigation, and damage control. They viewed their role as minimizing risks. IM managers spoke about the excitement of dealing with risks: “I like those adrenaline spikes,” “I did not realize how complex the issue would become. In retrospect, it was an incredible experience.”

Data analyses showed that while C&C managers utilize risk avoidance tools, IM managers embrace risks.

### ***Mistakes were made: Now what? The*** ***meanings given to mistakes at work/Approaches to mistakes made at work***

Another prominent difference between the mindsets was the approach to errors. People from both samples clearly stated that in the complex environment in which they manage projects, errors are inevitable and “the best way to avoid mistakes is to do nothing”. However, managers with the two types of mindsets view work errors very differently and this affects ow they react (even emotionally) towards the occurrence of errors.

C&C managers perceived mistakes as a nuisance. They see their role as managing risk-taking and minimizing the occurrence of mistakes. When mistakes do happen they ask why it happened and who was in charge. They proceed to take two parallel courses of action: damage control and finding ways to avoid future mistakes. They expressed pain and stress even when speaking about dealing with mistakes. Usually, their approach to avoid future mistakes were to jot down a normative and inform everybody to avoid this in the future.

IM managers view risks as part of the territory. Regarding mistakes, they adopt the motto: “if you can’t take the heat, get out of the kitchen.” When mistakes happen, they embrace them with a sense of curiosity. They ask how mistakes happen, then leverage it to extract lessons, which they discuss with their team members and ask for their view on the situation. When the managers were discussing their attitudes toward errors during the interviews, we noted that the IM managers had an attitude that mistakes were interesting, and they wanted to figure out how to deal with them.

The striking difference between those two mindsets is exemplified by the following anecdote. At a session where we were presenting some of our findings to two managers (one C&C and one IM) an employee entered and said, “There is urgent bad news: we purchased the (expensive) wrong piece of equipment for the project.” The C&C identified manager responded: “Check with the purchasing officer what we need to do to return it, immediately.” The IM identified manager said after a short delay “Wait, let’s see what can we do with this equipment, then we can decide on its return.”

### ***Prioritizing challenges***

Managers in the surveyed organizations tackle multiple challenges simultaneously. At times they have not finished dealing with one challenge and already others have landed in their “to do” folder. Prioritizing challenges is the definitive managerial skill and prioritizing is an ongoing part of their life. Nevertheless, people with the two mindsets prioritize according to different criteria. When asked about how they assign tasks, C&C managers search for efficiency and give higher priority to achievable challenges. They want to solve one challenge and free up their energy to deal with the next set of challenges. They said, for example: “If it seems unsurmountable, I will set it aside. Sometimes time helps dealing with that task,” or “I prefer tasks where the horizon of results is around the corner and not too far away.”

IM managers use the criterion of how interesting a challenge is to prioritize tasks, sometimes disregarding their level of difficult. For example, they said: “I know this is a small issue, but somehow it intrigues me how it will unfold” or “It is an overwhelming and huge task, but I cannot thwart my curiosity, it keeps bugging me.”

### ***Ideation***

All managers work in organizations fostering the adoption of new ideas, so occasionally employees approach their managers with an idea. “Certain employees will approach me, usually on Sundays! [the first day of the workweek in Israel] and say I have this idea…” C&C managers, understanding that innovation is part of the organization’s strategy would listen to these ideas and begin to ask questions regarding whether it was feasible or worthwhile such as: “I hear you, but how can we mass produce this?” or “All right, let’s assume we deploy this. Wouldn’t the required resources outweigh the outputs?” IM managers would respond with statements such as: “Ok, how do you suggest we apply this?” or “Wow! What if we can do this with other products?”

C&C managers seems frequently use feasibility as an idea-screening criteria, while IM managers would screen ideas by the their potential impact or importance.

### ***Getting*** ***knowledge from employees***

A large part of managers’ work is obtaining knowledge from their employees and colleagues. They understand that people working in the field have valuable input for their decision-making processes. We observed that C&C managers were impatient with employees who gave long-winded answers and a wide range of possibilities. They would say things such as: “I like it when they give a clear-cut answer: this OR this.” IM managers prefer multiple answers, saying, for example: “I will approach those (employees) I know will think thoroughly about the issue and come back with a few good answers. It is my role then to choose.”

### ***View of the client***

Another striking difference between managers was their approach to clients. All managers know the mantra: we are here for our customers. This also holds true for the surveyed managers in the Israel Defense Forces, which is not a for-profit organization. The two groups adopted distinct approaches to how to “be there for the customer.” In the interviews, the C&C managers often used clichés such as “The customer is always right” and “customer satisfaction is a priority.” IM managers said they approach customers as “partners in this endeavor,” “relationship nurturing is an important part of my role here,” and “they can tell me what they want and together we decide what they really need.”

C&C managers reflect a well-known perspective that the customer is always right and they must strive to make customers happy, while IM managers view the customer as partners in a relationship to be nurtured and as decision makers as well.

### ***Who to ask for advice/help***

C&C managers hold “expert” opinions in high regard. They could easily name experts in their field whose advice and perspective they seek out when confronted with important issues. As one said: “One of the perks of this place is that I have free access to the best professionals in this area.”

In contrast, IM managers confronting important issues said they prefer discussion with a diverse team. As one said: “In those instances, I love to gather different views and follow the discussion unfolding, many times adding my own oil to the fire.” Another IM manager said he responded to his superior’s suggestion to: “ask ‘so and so’ he is THE authority in these issues” by seeking out three experts and “going on a ride by participating in their discussion.”

### ***Perceptions of diversity***

Diversity in areas such as ideas, processes, human resources, and issues are perceived differently by people with the two managerial mindsets. C&C managers opt for standardization, and prefer uniformity and homogeneity, while IM managers clearly prefer variety and heterogeneity. For example, when setting meeting agendas, C&C managers try to schedule similar items together (aside from considerations of urgency). They only invite to certain meetings “those whose professional background will allow them to make a contribution to the topic(s).” IM managers on the other hand said they prefer to have “a variety of disciplines in the room to discuss tough issues” and “invite different points of view into the room, it makes for a more interesting one.”

# Discussion: Practical Implications of the Research

This section discusses three areas in which top management can leverage the distinctive characteristics of each mindset. The insights presented here can be used to inform organizational staffing, promotion, and training efforts. Further, they can impact the dialogue between C&C managers (who will still be required in high proportion in organizations) and the critically essential new kids in the block: IM managers.

## The Value of Recognizing and Legitimizing the Different Mindsets

Organizations usually do not pay attention to what they are really encouraging. As Steven Kerr eloquently expressed it, organizations reward A but want B.[[44]](#endnote-44) To extract value from these two mindsets, organizations must explicitly acknowledge that both exist (among many others), equally valuable and needed, and therefore should be rewarded. In a discussion of digital transformation (equally applicable to the field of innovation) Solberg et al. recommend management that will “Develop greater self-awareness about one’s own digital mindset.”[[45]](#endnote-45) They further suggest managers “Pay attention to, manage, and leverage the diversity of mindsets within the organization.”[[46]](#endnote-46)

## Nurturing the Complementarity of the Different Mindsets

It is a natural human tendency to praise one’s own way of thinking and belittle other ways. However, this tendency is detrimental. Both of the mindsets discussed in this article can be nurtured by having public discussions about a challenge and asking participants with different mindsets to present their view of best way to approach the challenge. This may be followed up with a mapping of the consequences of applying their perspective and then asking them to “switch sides.”

Strategic human resources management begins with branding the organization for potential employees, through the selection, placement, and advancement process. One important criterion to attract and keep talent can be the mindset that the organization needs to thrive. As Liu stated “solutions are likely to require access to a diverse set of capabilities and experience beyond those available.”[[47]](#endnote-47)

How can we engage different mindsets, leverage the best of each, and reach synergy? Is there an optimal balance of the two mindsets within the organization, to optimize performance? As a rule of thumb, a corporation may require 80% of their managers to have a C&C mindset and 20% to have an IM approach. Which positions require which type? Perceiving mindset as a state and not a trait, certain managers can be trained into the different mindset as required.

There is a need to research valid answers to these questions. This will take time. In the meantime, top management can map critical decisions within their organization, assign which ones require each mindset or both, and at what stage of the decision-making process it would be most beneficial to apply each.

# Limitations of the Study

The managers sampled for this research were chosen based on their superiors’ perceptions regarding their success in routine management (C&C) or in managing an innovative project or process (IM). Hence, this sampling may be biased on the senior managers’ perceptions of the managers who were interviewed and the tasks in which they are engaged. The small size of the sample makes it difficult to generalize across industries. Another limitation to generalization is that this study is culture-country specific. This research was conducted with a sample of managers in Israel, which has been called the “Startup Nation.”[[48]](#endnote-48) It is possible that IM managers in other cultural contexts may hold different mindsets.

# Conclusions

The present study is a preliminary exploration of this field. It indicates that being a successful ‘command and control’ (routine) manager does not necessarily imply that one would be an effective IM manager. The two mindsets are very different.

Further research should look into these mindset features to investigate, among other issues, whether the C&C mindset and the IM mindset are at opposite ends of a spectrum, and that one individual can hold only the set of features associated with one or the other. It may also be possible that these mindsets are orthogonal, such that individuals can hold either of these mindsets at different times, or both at once: managers with ambidextrous thinking processes. The literature on IM points to instances of ambidextrous management, defined as the capacity to hold both mindsets simultaneously.[[49]](#endnote-49)

Moreover, this paper points to the need for research-based data to help establish recruitment and promotion procedures that screen for the IM mindset. Additionally, research should address the question of whether an IM mindset can be taught or trained for, and if so how.[[50]](#endnote-50)

Further research should include the gathering of quantitative data about the mindset of IM managers from other countries, if possible. Issues addressed should include: the suppleness of the managerial mind, how to activate the appropriate mindset in lieu of tasks at hand, how to develop its features within the organization’s management ranks, the optimal balance of C&C managers and IM managers, how to enrich their interaction, and how to develop the IM mindset to best serve the forthcoming needs of innovative organizations. Ideally, follow-up quantitative research should be conducted, with a wider and more varied sample of managers. In addition, if results can be measured, follow-up research could address kinds of tasks managers the different mindsets perform and are most appropriate for, and their success (or failure) in doing so.

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