

# SUSTAINABILITY AND MEGAPROJECT DEVELOPMENT

Edited by Franca Cantoni and Edoardo Favari



### INTRODUCTION

Megaprojects are generally defined as large-scale investment initiatives worthing 1b€/\$ or more, facing similar problems independently from the country where they are implemented and the industry they belong to. Even if different researches and approaches have been developed in the last 20 years about this topic, there is still a lot of debate on it, and a holistic approach for effectively manage those initiatives is still missing. What is clear to all researchers and expert in this field is that a tradional-linear management approach is simply not enough, as, at many stages of a megaprojects, iterative and feedback effect occurs due to stakeholders' involvement increase and continuous interaction between them.

The Megaproject Research Interdisciplinary Team (MeRIT) – established in 2018 with the intention of combining the multiple aspects related to the design and implementation of megaprojects – aims to promote the debate around Megaprojects among all categories of stakeholders involved in a megaproject' supply chain, in order to increase the awareness of complex phenomena in charge of criticalities and common problems they face all over the world, and looking for improvement of performances on the whole life cycle (including the selection, design, construction, operation and de-commissioning).

This volume is one of the multiple outputs of the research group and presents a range of perspectives on megaprojects. This multidisciplinary approach is welcome and promising, since megaprojects themselves are multifaceted and intertwined. They are at the same time physical-technical-engineering constructions, financial-economic undertakings, and socio-political negotiations and outcomes. Success typically requires mastery in each of these domains, and failure can come from anyone.

In line with its goal of setting up a debate among different disciplines, this volume does not come to a final definitive conclusion, but it does provide a number of important insights. It contains a set of essays focusing on different aspects and can ideally be divided into two parts: the first one dedicated to the main challenges and the second one to some significant cases.

It begins with the chapter written by Virtuani, Barabaschi and Cantoni where the human side of megaprojects is highlighted. Megaprojects, given their complexity, have a tendency to fail or at least not to achieve the objectives initially planned. The gross error committed consists in recognizing a marginal role to the management style of human resources and specifically in not giving adequate importance to some leadership traits which instead prove to be fundamental.

Chapter 2, written by Caccialanza, Cantoni, Favari and Mariani investigates if the holistic approach needed for overcoming the "iron law" can be identified in sustainability. Indeed, the "3P framework" – People, Profit, Planet – also referred as Sustainability in Triple Bottom Line is becoming a key driver in megaproject feasibility assessment, planning and management.

Colaizzo and Massiani in chapter 3 argue that multipliers are a key element in the public discussion about fiscal policies and spending programs. In this discussion Input-Output and Social Accounting Matrices still play an important role, although they are more and more in competition with DSGE and econometric models. In their work illustrate these issues by taking various examples based on recent experiences in Italy.

Chapter 4 – written by Timpano and Platoni – higlights the fact that the relationship between investments in infrastructure and growth has been analysed by several studies; recently, because sustainability is increasingly becoming a goal for economic policy, the impact of infrastructures on economic performance has been studied also with respect to sustainability composite indicators.

In chapter 5 Allena presents a research framework about the nature of megaprojects and the role of taxation in promoting their development in sustainable and environmental-oriented way: the precise scope of this research is indeed to give an overview of the relations between tax policies and megaprojects construction, also in light of the present context of Covid-19 pandemic spread.

In chapter 6 Arginelli analyses, from a theoretical perspective, the relevance that the taxation may have on the shaping, effectiveness and efficiency of Megaprojects. In this respect, he also briefly discusses the legal boundaries that the use of taxation for such a purpose encounters, in particular within the European Union.

Zecchin concludes the first part of the volume by dealing with an analysis of the role of private autonomy in megaprojects contracts to face government restrictions due to Covid-19 or to other future pandemics.

In the second part, dedicated to case studies, in chapter 8 Dallara presents some issues of the Cost-Benefit Analysis (CBA) of an intermodal logistic node.

In chapter 9 Favari, Maja e Mariani evaluate the economic feasibility of a revolutionary transportation mode (Hyperloop) applying a broad approach, according both the indications of the European Commission's Guide to Cost-Benefit Analysis of Investment Projects (2014) and evaluating also the innovation benefits that such transportation mode, if implemented, will bring.

Marino and colleagues provide a description of the state of the art of the debate about the alternatives for a stable crossing of the Strait of Messina, one of the most discussed public works in Italy.

Sermasi and Frascari conclude the part dedicated to case by affirming that Project Management (PM) techniques and Building Information Modelling (BIM) tools can be used to support each other when dealing with Large Project Design. The Case Study regards the Design of the New Galliera Hospital in Genoa, Italy, carried out by the Joint Venture led by the Consultant's firm "Politecnica Ingegneria ed Architettura".

In all, the contributions provide a useful review of the multiple perspectives required to understand, design, and manage megaprojects and serve to highlight the often underemphasized social and political aspects and the deep stakeholder engagement needed at all stages.

Franca Cantoni Edoardo Favari

# Part 1 MAIN CHALLENGES

### Chapter 1

## THE HUMAN SIDE OF MEGAPROJECTS: LEADERSHIP STYLE AND TRAITS TO FACE GROWING LEVELS OF COMPLEXITY AND UNCERTAINTY

#### Roberta Virtuani, Barbara Barabaschi, Franca Cantoni

ABSTRACT: Megaprojects, given their complexity, have a tendency to fail or at least not to achieve the objectives initially planned. The gross error committed consists in recognizing a marginal role to the management style of human resources and specifically in not giving adequate importance to some leadership traits which instead prove to be fundamental. Within this research work, a leadership style based on three characteristics is proposed: widespread, aware and sustainable (WAS leadership style). 12 leadership traits are analyzed through the life stories of megaproject leaders. Storytelling and narrative are proposed as a method of analysis as they are considered most suitable for bringing out the salient features we want to highlight. The aim is to identify the leadership strategies, vision, sense-making, style and leadership traits of megaprojects managers to train new leaders and improve the management of new megaprojects.

SUMMARY: 1.1. Introduction. – 1.2. Organization and HR in megaprojects: the Human Side of Megaprojects. – 1.3. The Six Paradoxes of Leadership Traits. – 1.4. Methodology: Applying storytelling and the narrative approach to project management research and practice. – 1.5. Stories and narratives. – 1.5.1. The Managing Director of the Mediterranean Rail Freight Corridor (Med-RFC). – 1.5.2. The Project Manager of a High-Speed Trains and Locomotives Company. – 1.6. Findings. – 1.7. Conclusions.

#### 1.1. Introduction

The purpose of this chapter is to find out leadership lessons from megaproject through the life stories of two managers involved in managing teams in a megaprojects' setting (Clegg *et al.*, 2017) (Flyvbjerg, 2014). The focus of our analysis is to discover leadership traits and principles that the project leader applies to achieve his/her project and company's aims.

Our approach is to analyze the two case studies through the method of collecting stories and storytelling. In organizational life stories have an important role. They are even essential as means of meaning making. In the context of organizational life, stories can concern specific events or people.

They can also take the form of biographies. We are interested in gaining insights on how leadership is expressed by managers in a megaproject context through managers' life journey taking place in an international scenario and in a multicultural and multistakeholders' environment. In the chapter a narrative inquiry approach applying thematic analysis is followed to grab lessons learnt through the two managers' experience in a megaproject context. Narratives are collected directly from megaprojects managers through interviews. Organization studies have used the narrative analysis and storytelling that a few authors started also to apply to project management research. The aim of the paper is to contribute to the growing literature on megaprojects using novel approaches of research and analysis (Sankaran, 2018) (Drouin *et al.*, 2021).

Future research is being planned to expand the number of managers to interview to collect their life stories and lessons learnt on leadership in managing a project in a megaproject context (Ready, 2002). The analysis can be helpful to bring out leadership traits and attributes that a complex project requires considering the wide implications it has for the society, economy and environment. The stories analyzed show the human side of the megaproject managers in a multistakeholders' perspective and with people related and societal issues implications.

With our analysis we would like to contribute to the megaproject management literature using the narrative approach. This perspective is quite new because instead of focusing on historical and classical projects it extracts lessons on leadership from life stories of managers. This should be helpful for leadership development and for managing change and innovation in megaproject contexts (Zhai, Xin and Cheng, 2009).

The research question that this paper addresses is: "Does leaders in megaprojects follow the leadership style and own the leadership traits to face growing levels of complexity and uncertainty?".

We are in the early years of the Fourth Industrial Revolution – the digital revolution. Digital technology is transforming our world into an interconnected one. The world is facing significant and increasingly urgent challenges accelerated by Covid-19. They are affecting individuals, organizations, governments and society alike. Organizations are presented not only with existential threats, due to technology and climate change, but also with extraordinary opportunities. With changed competition rules and the pace of business that seems to be accelerating the company's success or failure depends on how they design their strategies and manage their organizations. A new model of value creation requires companies to reimagine their place in the world. A digital mindset is vital while leaders are called to face dilemmas in their behavior and actions to manage a growing

complexity and uncertainty. We will analyze these dilemmas adopting a framework that recognizes twelve leadership traits in the form of six paradoxes (Leinwand and Matt Mani, 2021).

We start our analysis in Par. 1 considering the role recognized to HRs in megaprojects' success/failure. In Par. 2 we present the theoretical framework we will use to bring out and identify the most important leadership traits through the life stories of the two managers interviewed. The model is based on Sheppard's book: Ten Years to Midnight and focuses on 6 leadership paradoxes that characterize leadership in a post-pandemic world and in the digital age. In Par. 3 we outline our methodological approach focusing on the meaning of stories and storytelling in organizations. Organization studies focus on the role of stories and storytelling in constructing identities. Then we consider the literature on megaproject leadership which focuses on the role of stories and storytelling with a brief description of the selected megaprojects case studies. We add details on the data collection and analysis. We present the findings in the form of the life story interview with the two managers focusing on the insight that emerged. Then we discuss the findings following the reviewed literature to explain the empirical data. We conclude highlighting how these two cases allow us to gain insights on the main leadership traits and style that megaprojects managers own to face growing levels of complexity and uncertainty. We consider the managerial implication of our research to contribute to the education of new young leaders and to better understand the human and social side of megaprojects management.

# 1.2. Organization and HR in megaprojects: the Human Side of Megaprojects

Over the past century, megaprojects – defined as projects with a budget of more than 1 billion \$/Euro – have encountered considerable difficulties in being able to produce the desired outcomes as defined in the planning phase while respecting costs, quality and schedule constraints. Indeed, in the face of greater investments and longer scheduling frames, benefits shortfalls often happen giving another strong signal of underperformance.

Currently, the success of a megaproject is measured through the well-known Quality-Cost-Time "iron triangle", meaning that it is well accomplished if stays within the planned level of quality, budgeted costs and time frame. About that, Flyvbjerg in his book "Iron Law of Megaprojects" high-lighted how the trend to go "over budget, over time, over and over again" is present in most cases with a tendency therefore not to respect the triple constraint (also known as "iron law") in megaproject management. This

trend has been pointed out by several other analysis and investigations conducted by the most relevant authors in the field (Lessard and Miller, 2001; Flyvbjerg, 2003; Invernizzi *et al.*, 2018) proving how costs and schedule overruns are the most relevant criticalities in megaprojects.

It is however evident that when it comes to respecting budget and schedule constraints, megaprojects are affected by several variables and behaviors, which affect the performances. Despite the spread of new technologies making software and tools available for setting and reviewing budgets, non-compliance with costs is an extremely recurring problem. The tendency to exceed costs is typically due on the one hand to external events that the project manager is not able to control and can be included in the concept of EEF Enterprise Environmental Factors (i.e. technical aspects, economic or political variables) on the other, the cause can be found in the so-called "optimism bias" phenomenon according to which project managers underestimate costs because of a "cognitive predisposition" to orient their analysis of the project results towards a more optimistic than probable vision (Flyvbjerg *et al.*, 2003). Benefit shortfalls are another perspective of underperformance, given the impact that these endeavors have on communities and groups of interest.

Atkinson (1999) recognizes it as a limited view and affirms "it is time to accept other success criteria" as today – more than in the past – the complexity of megaprojects is increasing due to several phenomena, such as globalization, ICT revolution, and, recently, pandemics. As a consequence, the effort for managing and leading them has become extremely critical.

Kharbanda and Pinto (1996) identified a list of factors that promote project failure:

- ignore project context and its features, including stakeholders' behavior;
- push a new technology to market too quickly;
- do not plan possible to possible problems, for example through "what if" analysis;
- when problems occur, focus on the most visible one ignoring all the other;
- do not encourage projects based on new ideas because of their uncertainty, with the risk that the inertia could kill innovation;
- do not conduct feasibility studies ex-ante;
- do not admit that a project is a failure, continuing to push the project even though contextual feature;
- never conduct post failure reviews, losing the opportunity to learn and understand the main reasons of the failure;
- allow bureaucracy and internal corporate mechanism to be more important than project success; do not worry about project's trade offs;

 let political influence to modify decision making process; chose a not charismatic and skilled project manager.

According to the Authors, an additional cause could be attributable to the fact that megaprojects' managers adopt traditional modes of project delivery because that is their basic training and experience. In this mode, the energy is focused on time and cost (i.e. project efficiency as defined by Shenhar and Dvir (2007) without adequate attention to how to attain the best overall results (Halman and Braks, 1999; Turner *et al.*, 2009, Turner *et al.*, 2010), thereby negating the longer-term strategic views.

In detail, megaprojects managers' focus should be on strategic objectives and business benefits, requiring more of a leadership role than a traditional management one (Murray-Webster and Thiry, 2000). From inception to the start of revenue generation, megaprojects can take a long time (Reinhards, 1989), while operational life-can be even more protracted over time. This long-term nature makes megaprojects vulnerable to uncertainty and ambiguity, emphasizing a need for a strategic decision making in their management, rather than the tactical short-term efficiency management of traditional project execution.

Recognizing megaprojects' managers the role of responsible for navigating the megaproject through the ambiguities of strategy and its emergence, requires a new concept of leadership, that includes managing cultural and political issues involving other parts of the organization (Thiry, 2004) and external stakeholders. A so called sustainable and "aware and widespread" leadership style (WAS Leadership Style).

If we consider the important role that projects play in the society, and the dynamics of the society, a more elaborated view on megaprojects management would be necessary in order to create the organizational and societal changes we need. This also requires an elaborated understanding of success criteria with consideration of benefits, sustainability effects, learnings, etc. Thus, the goal of improving the quality of megaproject management is not to deliver more projects on time and on budget, but to realize the change organizations and society need in order to develop in a sustainable way.

In detail, taking as reference the IPMA ICB4 framework model – the most elaborated professional competency standard for project management – three groups of professional project management competencies emerge:

- technical competencies (now called 'practice');
- contextual competencies (now called 'perspective');
- behavioral competencies (now called 'people' and very much related to personal 'soft' skills).

The issue is that megaprojects managers are too narrowly focused on technical competencies, which are only a part of the professional competencies. It is our belief that the right balance between the three categories of competencies can make the difference between a winning project manager and a loser, and, from a business perspective, having engineers and project managers with the right blend of competencies in the three categories will make an enterprise more competitive in the global markets.

In detail, we argue that given their nature of high complexity and uncertainty (where decisions are accelerated, their outcomes are interconnected, and the terrain within which decision makers move is characterized by information overload) the human side in megaprojects management is fundamental. This work intends to highlight the crucial role of a leadership style that we call WAS (Widespread, Aware and Sustainable) where HRs are the fundamental lever of the whole megaprojects' management system. Following the WAS leadership style we will focused on twelve leadership traits combined in six leadership paradoxes that megaproject leaders need to be able to balance and face to manage and lead with dynamism in a fast changing world.

#### 1.3. The Six Paradoxes of Leadership Traits

Leaders are facing the new order of the digital age leading their companies to undergo significant transformation to be fit for it. The new environment requires leaders who are willing to challenge many of their own assumptions about what it takes to be a good leader and how to lead their organizations through this kind of transformation. Leaders will need to question whether they have the skills and capabilities that are necessary to succeed in this new era of value creation. They need to think about how they can fill the gaps to uncover and rise to the challenge (Drouin *et al.*, 2021).

Following the discussion that is taking place on the individual leadership traits that are going to be required in the digital age, we will analyze the new leadership traits that the new trends are requiring and making critical. We will use a framework that recognizes six paradoxes which are becoming increasingly important for leaders to navigate (Leinwand *et al.*, 2021). These are the ones most urgent in the new context, today and in the future. These paradoxes all are interconnected. They influence each other and need to be balanced simultaneously. It is a critical suggestion for leaders to be able to inhabit both elements of each paradox. The set of characteristics that leaders need is wider and doesn't rely just on the areas of strengths.

Being able to work together with others who have different back-

grounds and different way of thinking is fundamental and critical to succeed. In Figure 1 there are the six paradoxes of leadership presented and discussed by Blair Sheppard in his book Ten Years to Midnight (Sheppard, 2021). We will analyze each one to acquire a clear image of what the digital age is asking to leaders. Then we will apply the six paradoxes framework to the analysis of 2 case studies of leadership in megaprojects where the leadership traits emerge from the life story and the experience of 2 megaproject managers.

Figure 1 – The six paradoxes of leadership

Strategic Executor	Humble Hero	Tech-Savvy Humanist
Traditioned Innovator	High-Integrity Politician	Globally-Minded Localist

Source: Leinwand P., Matt Mani M. and Sheppard B. (2021) elaborated by authors.

#### 1. Strategic Executor

Strategy and execution are usually two inclinations that leaders have separately. In a complex and fast moving world it is critical for leaders to pursue both of them to be effective in execution and highly strategic at the same time. Being strategic means to be able to foresee where the world is going so that it is possible to set the position of the company following the constant evolution of the environment. Strategic leaders are visionaries that understand the new sources of value that in the future can be different from today's. They can position the company so that it can benefit of these new sources. Looking to the future is needed to inform decision making today. On the other side leaders need to be equally skilled at execution leading the transformation of the company toward its future. Strategy needs to be put into practice through a day by day execution. The company operational decisions become critical. For leaders being able to define a strategy knowing what is necessary to evolve and supervise its execution means to mix and have in mind immediate needs and changing future.

#### 2. Humble Hero

In the digital age when times are so uncertain leaders need to be heros for the bold decisions they are asked to take and humble in recognizing when they are wrong and when they don't know something. High self confidence and humility are necessary traits. Critical capabilities that are required are to be available to help and to be helped by other people with different skills and background, learning from them, being inclusive and great listeners. Leaders can be supported in their decision making taking

advice from many parts and with a variety of inputs. Leaders need to reconcile two opposite characteristics: being able to take smart decision, like opening a new business position or quitting another, and navigating through failure with resilience allowing others to make mistakes fostering confidence throughout the organization (Gershfeld, Sedehi, 2021).

#### 3. Tech-Savvy Humanist

Those who have technical skills most of the time cannot understand people needs and have problems in leading them. On the other side those who are responsible and who deal with people most of the time don't understand the impact that technology has on business and on people. It is important instead that leaders know the human implications of technology advancements and what technology can do for the company and how. On the Humanist side leaders are required to help their people to adapt and to adopt the changes that technology brings. Being technically savvy with a focus on humanity is essential to help companies grow and people benefit from this growth (Palsule, Chavez, 2021).

#### 4. Traditioned Innovator

The paradox Traditioned Innovator implies that leaders, in the complex, uncertain and with a fast pace of change world of today in the digital age, are grounded in the original purpose and values of their company. They need to be able to maintain them present every day. At the same time they need to drive innovation and try new things. Innovation brings the possibility to make mistakes with a trial and error process. On the human side, for leaders, this means to have the courage to fail and accept that others fails as well. The challenge is to avoid missing opportunities that can support the business future because leaders are tempted to continue to execute the things that they can do very well. Past and future are strictly interconnected. Past can give light to what it is important to bring forward into the future. Having the courage to do new things is critical and essential. Innovation can be incremental and not just all-new. It can be built on what already exists. Leaders need to recognize the value of the company's purpose and values that can guide the organization because they represent its identity, who it is as a company. Starting from this point leaders can continue to re-imaging their company's place in the world going on in creating value when the speed of innovation is fastest ever. Company's purpose and values represents the tradition. They are the guardrail that bounds experimentation and innovation.

#### 5. High-Integrity Politician

The paradox between High-Integrity and Politician is that leaders are required to maintain integrity and build trust in all interactions. When the environment is deeply political people can lose their integrity. In fact leaders are change agent focused on the optimal outcome for the organization. Change impacts the balance of power and some parties can have the impression that they are losing. The leader's integrity and trustfulness, through actions and words, guarantee the reconciliation of the political requirements while maintaining integrity. Managing the politics means to collect and increase support, negotiate, form coalitions, overcome resistance so that plans can be realized. We live in an ecosystem world where companies, institutions and individual must collaborate to create value. Effective collaboration within ecosystems can only happen when parties involved can trust one another.

#### 6. Globally-Minded Localist

World is increasingly both global and local. The paradox is that leaders need to have a deep commitment to the success of a local market and, at the same time, be able to connect across the globe. Through technology many boundaries and distances has been erased. It is easier to reach customers all over the world and collaborate with people who are very far. The need to think globally can help companies to serve local needs. Leaders need to think and engage globally so that they can have access to new and different thinking and can collaborate with people all over the world. The other way around leaders need to follow and be responsive to the needs of individual customers, local communities and ecosystems in which they operate adopting a mindset that is locally conscious.

# 1.4. Methodology: Applying storytelling and the narrative approach to project management research and practice

Stories and storytelling are not new in the context of organizational studies. They have a long history. The interest in stories and storytelling among scholars and practitioners is high and still growing. Telling stories in organizations is a way for sense-making and it takes place in pragmatic ways for the relationship that is established between the storytellers and their audiences. Stories are based on personal experience and the storyteller communicates his/her personal world to other people. In fact, storytelling is considered an important soft skill especially for those practitioners in senior leadership positions. Stories in organizational life help in building an understanding of self and organizational identities. They are a powerful tool that through its informality allows to project images to others. They have a social and emotional content that can create empathy and connection when constructing identities. Self-identity in organizations is strictly connected with the role that a

person plays. Sergeeva and Davies (2021, p. 49) define storytelling "as an activity of telling and sharing stories about personal experiences, life events and situations". Following Sergeeva and Davies (2021) we distinguish between storytelling/stories and narration/narratives. Stories and storytelling are "more personalized, entertaining and emotional in nature" while narration and narratives are "related more to coherence, stability and performative intent" (Sergeeva and Davies (2021, p. 49) (Dailey and Browning, 2014; Vaara et al., 2016). Both narrating and storytelling are important part of the organizational and personal life. Leaders continuously articulate both narratives and stories according to the different purposes and audiences.

Even in megaprojects research stories and storytelling are getting more and more attention especially for what concern their nature and role as far as leadership is concerned. The human and social aspects in managing projects are becoming increasingly important. Stories and narratives have a key role to construct new working practices and to face organizational change processes. Veenswijk and Berendse (2008) underline the role of microstories as aspects that constitute the projects itself. Personalized stories of everyday individual experiences in projects help in facing challenges and in understanding the strategic direction proposed through more formal narratives. The way in which project leaders express themselves and communicate a point of view influence and shape reactions of the team members to problems. For example, "whether a leader categorizes an event as an opportunity or a threat influences how others respond" (Havermans et al., 2015, p. 974) The organizational reality becomes constituted by the sense-making expressed by project leaders through the messages and words that they use in their communication. Leaders can use both narratives, more formal, or stories, more informal, to communicate their intents according to different purposes and audiences. We are interested in understanding how leaders use stories in practice considering the power of stories that "entertain, explain, inspire, educate, convince, generate and sustain meaning (or undermine and destroy it) stimulate imagination, offer reassurance, justify, inform, advise and warn" (Enninga and van der Lugt, 2016, p. 105).

A narrative inquiry approach is adopted by Sankaran (2018) that analyses leadership lessons of megaproject managers through the life stories of four selected managers from two contemporary and two landmark megaprojects. His main source of data are life histories published as books or in book chapters. Other data were also used to integrate the findings from these life stories. These leadership lessons are of four types. Megaproject leaders select the right people and constantly contribute to the building and developing their capability. Moreover, they can build trust with stakeholders with an effective ability to deal with institutional power and politics. They have the courage to innovate.

A narrative approach is also adopted in the book: Megaproject Leaders. Reflections on Personal Life Stories (Drouin *et al.*, 2021). The book is about leaders of megaprojects around the globe. The aim is to reach a better "understanding of the leaders of megaprojects as individual managing the multifaceted aspects and social dimensions of these projects" (Drouin *et al.*, 2021, p. 3) 16 great megaproject leaders in Europe, Asia, Oceania and North America were interviewed to collect their life stories and experiences. We can find an example of the courage to innovate in the life story of Annegret Schaber that to renovate one of the major motorways in Germany adopting a new process approach reduced the construction time from 24 months to 3 months. This allowed to save a lot of time, money and environmental pollution for all stakeholders involved (Shoper, 2021).

Our inquiry approach is both narrative and based on storytelling. The aim is to identify the leadership strategies, vision, sense-making, style and leadership traits of the two megaprojects managers we interviewed. Knowing more about megaproject managers and the way they express their leadership can help train new leaders and improve the management of new projects.

The narrative approach is applied to the interviews conducted with two managers/leaders operating in the environment of megaprojects as explained in the next paragraph.

#### 1.5. Stories and narratives

In his paragraph we selected two stories (among the many available and collected for the purpose of carrying out this survey) as they represent different points of view: the first one is Furio's story – a general manager – the other is Andrea's one – a project manager. Both interviewees operate in the transport sector which is a common ground for the development of megaprojects. The two stories are presented in an abridged but functional version with respect to the objectives set by the authors. They are emblematic of the fact that in the leadership style we propose (WAS) we advocate the existence of various levels of analysis disconnected from the role hierarchy.

## 1.5.1. The Managing Director of the Mediterranean Rail Freight Corridor (Med-RFC)

Furio is the managing director of the Mediterranean Rail Freight Corridor (Med-RFC) (Zhang, Lu, Fu, Shu-bin Li, 2018). Together with other 10 Rail Freight Corridors, the Mediterranean RFC connects East to West all the

European Union (from Spain, to Hungary through France, Italy, Slovenia and Croatia) and has the goal to make international rail freight transport more competitive and attractive. Co-financed by the European Union and mainly regulated by Regulation (EU) 913/2010 the aim is to create a competitive rail network composed of international freight corridors with a high level of performance. Nine cooperation parties (ADIF, LFP Perthus, SNCF Réseau, OC'VIA, RFI, Sž-Infra, HŽI, MÁV, VPE) work together to cover a line distance over more than 7.000 km Algeciras (ES) - Záhony (HU) and offer to all possible customers a quality service for a competitive and reliable rail freight transport (Lu, Li, Pang, Zhang, 2015). Furio's main commitment is to contribute to the coordination among the different corridors in order to offer the best cross-border harmonization for freight trains (Mulder, Leenders 2019) increasing the quality and the quantity of the offer, establishing negotiations with all the Member States, Infrastructure Managers and Allocation Bodies in order to facilitate cross-borders connections. Furio's attention is strongly oriented to the involvement of customers to better fit their needs. The Mediterranean Rail Freight Corridor (Med-RFC) is a megaproject of success because on one hand everything revolves around the satisfaction of customers' needs and expectations. On the other's hand the different and numerous partners can have a corridor-oriented perspective overcoming national views, exchanging best practices and defining common guidelines. Furio exercises his leadership in this framework defined by the Regulation (EU) 910/2010. He sees himself as a referee over the parts. He always tries to maintain himself neutral presenting objective parameters and data that can overcome the specific reasons of opposing contenders. His wide and strategic view on long term objectives of the corridors and the need to satisfy customers offering them the best conditions to prefer transport by train to sea and road one favor the achievement of shared solutions among the megaproject partners. Furio can orient partners' views of the situation toward a common understanding of the project starting from opposing sides. Through the discussion they can share a common decision making. Furio has the ability to create a collaborative climate because he loves to build shared and participatory solutions made more difficult by the international context with partners representing different countries, cultures and languages.

"For a manager working on a megaproject on an international stage patience and tenacity are basic. There are strict regulations and high bureaucracy and the success depends on the harmonization of practices, structures and operating and technological systems. He needs to be able to listen and talk. Communication skills and maieutics are fundamental." Furio told us.

A leader helps those who know them find solutions. He can increase others' motivation helping them to maintain the focus on project objectives. He transmits them his vision showing others the future of the project