

TRANSITION TO A LEAN MINDSET THROUGH THE “HERO’S JOURNEY”

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ABSTRACT

Transitioning from a conventional, established, and familiar project mindset to a Lean mindset has proved challenging and is a barrier to implementing Lean Construction. It has been argued that shifting from traditional management thinking to a Lean mindset can be considered a paradigm shift. Such substantial changes will require overcoming innate resistance and adjusting ingrained habits to become progressive and open-minded to the potential benefits of new ideas. This conceptual paper investigates how the potentially demanding change from a traditional mindset to a Lean mindset can be dealt with by employing Joseph Campbell’s “Hero’s Journey” framework. The Hero’s Journey describes a generic journey about overcoming challenges met when facing unfamiliar territory. It is found in antique stories but is also applicable in life. A way to tackle the challenging task of adjusting to the ongoing change in the construction industry using the Hero’s Journey is proposed in this paper. The research shows that applying the Hero’s Journey framework in a construction context can be valuable for making the transition to a Lean mindset less daunting for practitioners.

KEYWORDS

Lean construction, Hero’s journey, Collaboration, Storytelling, Change

INTRODUCTION

The construction industry meets increasing demands for innovation to improve value delivery. However, the industry’s characteristics appear to detain the innovation process. Development can be divided into two categories: innovation related to production or processes. Product innovation incorporates adding new materials or components into physical products. On the other hand, process innovation, representing a variety of management challenges, focuses on developing new organizational structures, management techniques, and other methods to enhance business processes and competitiveness (De Valence, 2010).

This paper relates to innovation – and changes. Implementing Lean Construction (LC) often requires a shift in organizational culture and structure (Nesensohn et al., 2012). Doubt or resistance to change are common challenges to implementing LC in construction projects. Porwal et al. (2010) write that one of the challenges of implementing the Last Planner® System (LPS) is organizational opposition through a “This is how I’ve always done it” attitude. Through a comprehensive literature review, Wandahl (2014) found that the most common barriers to LC implementation were insufficient knowledge about the LC approach, lack of training, and general maturity. Similarly, Albalkhy and Sweis (2021) identified 29 barriers to LC implementation, and among them were *management resistance to change, lack of adequate lean awareness and understanding, employees’ resistance to change and fear of unfamiliar*

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practices, and insufficient training for workers. All these relate to the challenges of embracing unfamiliar territories that require a change in mindset.

In traditional project delivery methods, the delivering parties are often incentivized to concentrate on their interests rather than owners and public project objectives. Due to the isolated organizational structure, the project actors' diverse interests may sometimes align or sometimes oppose. According to Ballard et al. (2014), maintaining scope stability is key to successfully applying traditional, non-lean project management methods. Korb and Ballard (2018) argue that transitioning from traditional management thinking to Lean thinking can be considered a paradigm shift, suggesting that adopting Lean requires considerable effort. Further, they encourage the LC community to address the challenges posed by the paradigm shift by presenting innovative measures and strategies to advance the progression of LC.

There is a lack of research addressing the challenges mentioned above regarding changing and transitioning to LC. Searching for “transition” or “change” on iglc.net only gives one hit (Riekkari et al. (2023) suggest using takt production as a driver for the implementation of LC principles). This paper seeks to respond to this knowledge gap by addressing resistance to change during the introduction of an unfamiliar practice, such as applying a Lean mindset to a construction project. We explore strategies to enhance the transition from a traditional project management mindset to a Lean mindset, employing the narrative effectiveness of storytelling.

The “Hero’s Journey” was introduced by Campbell (1949) and popularized by Vogler (1992). It is a narrative framework that outlines the typical stages a hero typically undergoes in a story. The framework has since been used as an illustrative metaphor in many fields. Williams (2019) writes that the Hero’s Journey can be used as a comprehensive guide for individuals who willingly embrace or are forced to undergo change. Recognizing life as a “mudmap” with distinct phases and various substages enables life’s chaos and challenging aspects to possess order and purpose. This paper has taken a conceptual approach. Supported by the narrative structure of the Hero’s Journey framework, this study seeks to provide valuable insights and guidance for navigating and overcoming obstacles in the evolving landscape of construction practices. Thus, through the framework of the Hero’s Journey, we aim to address the following research question: *“Can the Hero’s Journey work as a tool for a successful transition from a traditional mindset to a Lean mindset in construction projects?”*

METHOD

This paper takes a conceptual approach to building theory. Conceptual papers are effective for theory-building (Cropanzano, 2009; Jaakkola, 2020). A conceptual paper does not have empirical data. According to Gilson and Goldberg (2015, p. 128), conceptual papers do not need to present new theories but rather “bridge existing theories in interesting ways, link work across disciplines, provide multi-level insights, and broaden the scope of our thinking.”

Jaakkola (2020) presents four types of research design for conceptual papers: theory synthesis, theory adaptation, typology, and model. This paper has the theory adaptation design. Papers focused on theory adaptation aim to incorporate insights from other theories to improve an existing theory. This study employs theoretical insights from human storytelling, notably exemplified by the Hero’s Journey, to enhance strategies for addressing the challenges of implementing LC posed by the paradigm shift in the construction industry. This paper utilizes the Hero’s Journey framework of mythologist Joseph Campbell to illustrate how construction industry practitioners can move from a traditional mindset to a Lean mindset. Two books have been vital as core literature in this research. First, the third edition of Joseph Campbell’s book from 1949, *The Hero with a Thousand Faces* (Campbell, 2008). Secondly, the popular screenwriter textbook *The Writer’s Journey*, where Vogler puts Campbell’s original work into a movie screenwriter context (Vogler, 1992). A literature study in the Google Scholar and Scopus databases was conducted for social sciences literature by searching for literature on

words such as: “curiosity,” “storytelling,” “narrative,” and “myth.” Furthermore, we have looked at research examples where the Hero’s Journey has been applied in various academic fields in the same databases. Also, since the Hero’s Journey has been placed in the context of LC and collaborative project delivery, a literature review on these topics has been conducted for the research.

STORYTELLING AND NARRATIVE

According to Polletta et al. (2011), a *narrative* is a sequential account of events meant to convey a point, and they usually involve characters, often human or human-like, fostering audience empathy. McAdams (2019) writes about how storytelling creates the essential tools for *narrative identity*: constructing a self-defined life narrative that explains how a person has become who they are. This is because storytelling is a fundamental human characteristic. Lewis (2011, p. 505) writes, “*Humans are drawn to a story through our residence in narrative life.*” Storytelling is a cornerstone of the teaching profession, with great teachers such as Homer, Plato, Jesus, and Gandhi using stories, myths, and personal history to instruct. Stories make information more believable and easier to remember (Zabel, 1991).

Stories are powerful means for communicating values, ideas, and norms, often proving to be more impactful tools than statistical data (Morgan & Dennehy, 1997). Campbell (2008, pp. 197-198) wrote: “We may doubt whether a scene ever actually took place. But that would not help us any; for we are concerned, at present, with problems of symbolism, not historicity. We do not particularly care whether Rip van Winkle, Kamar al-Zaman, or Jesus Christ ever actually lived. Their stories are what concerns us, and these stories are so widely distributed over the world - attached to various heroes in various lands - that the question of whether this or that local carrier of the universal theme may or may not have been a historical, living man can be of only secondary moment.” Ideas embedded in mythology resonate with psychological truth, and the universal power of mythological ideas renders them applicable to comprehending almost every human challenge (Vogler, 1992). Stories want to teach you a lesson disguised as entertainment.

THE HERO’S JOURNEY

The hero’s story is always a journey that can appear in many variations. The hero leaves his own well-known, familiar, and comfortable surroundings to venture on an inward journey (of the mind) or outward journey (physically). The Hero’s Journey was introduced by Joseph Campbell (1949). Campbell showed how the standard path of the mythological adventure of the hero follows the same formula with three stages and associated sub-stages: 1) Separation/Departure, 2) Initiation, and 3) Return. Campbell named these three symbolic transitions the *nuclear unit of the monomyth*. Campbell contended that “whether presented in the vast, almost oceanic images of the Orient, the rigorous narratives of the Greeks, or in the majestic legends of the Bible, the adventure of the hero normally follows the pattern of the nuclear unit ... a separation from the world, a penetration to some source of power, and a life-enhancing return” (Campbell, 2008, pp. 27-28).

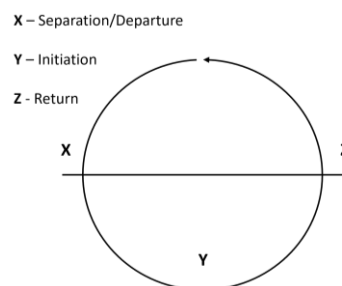


Figure 1: The nuclear unit of the monomyth (Campbell, 2008).

EXAMPLES OF THE HERO'S JOURNEY IN VARIOUS DISCIPLINES

The Hero's Journey is an illustrative metaphor in various fields, showcasing its diverse applications. Below, a selection of these disciplines will be listed to highlight the range and variety of contexts where the Hero's Journey finds relevance. As we can see from Table 1, there are many different segments where the Hero's Journey has been applied, and the list goes on.

Table 1: The Hero's Journey applied in different academic fields.

Author (year)	Area of Study	Summary
Vogler (1992)	Screenwriting	Adapted Campbell's work for screenwriting, using familiar Hollywood narratives like Star Wars.
Osland (2000)	Human Recourses	Applies HJ to expatriate experiences to aid the Hero's Journey professionals and individuals living abroad.
Senn (2002)	Religious Education	Discusses the Hero's Journey in the context of religious education.
Smith (2002)	Nursing	Examines myths in nursing, linking health and healing literature to the Hero's Journey.
Goldstein (2005)	Education/Teaching	Uses the Hero's Journey as a metaphor for managing stress in student teaching.
Ip (2011)	Video Games	Evaluate the Hero's Journey in narrative structures of video games.
Kelsey (2016)	Journalism	Investigate the Mail Online's articles about whether the former leader of the UK Independence Party, Nigel Farage, was portrayed in a heroic light through the ideological mechanisms of populist discourse.
Robledo and Batle (2017)	Tourism	Relates transformational tourism to the Hero's Journey as an archetypical transformation journey.
Williams (2019)	Humanistic Psychology	Proposes the Hero's Journey as a guide for personal change.
Moin et al. (2020)	Marketing	Argue for using the Hero's Journey in promotional videos for marketing.
Rogers et al. (2023)	Sociopsychology	Analyses the Hero's Journey in a socio-psychological context, discussing its impact on life's meaning.

STEPS OF THE HERO'S JOURNEY

In this paper, we will adopt Vogler's 12-step Hero's Journey (Vogler, 2007). The reason we prefer Vogler's journey is that it is simpler. Campbell's journey dives deep into ancient myths, folktales, and legends and uses a language that is harder to follow, while Vogler's version is more accessible and easier to communicate. It should be noted that Vogler's version is wholly based on Campbell's original journey, and scholars from different research areas have embraced both journeys. A detailed examination of the 12 steps will ensue as we discuss them in an LC context later in the paper. For now, we will settle by presenting the steps chronologically, as illustrated in Table 2.

Table 2: The Hero’s Journey (Vogler, 2007, p. 205).

Character arc	Step of the Journey
Limited awareness of a problem	Heroes are introduced in the ORDINARY WORLD, where...
Increased awareness	They receive the CALL TO ADVENTURE.
Reluctance to change	They are RELUCTANT at first or REFUSE THE CALL, but...
Overcoming reluctance	Are encouraged by a MENTOR to...
Committing to change	CROSS THE FIRST THRESHOLD and enter the Special World, where...
Experimenting to change	They encounter TESTS, ALLIES, AND ENEMIES.
Preparing for a significant change	They APPROACH THE INMOST CAVE, crossing a second threshold...
Attempting a big change	Where they endure the SUPREME ORDEAL.
Consequences of the attempt (improvements and setbacks)	They take possession of their REWARD and...
Rededication to change	Are pursued on THE ROAD BACK to the Ordinary World.
Final attempt at a significant change	They cross the third threshold, experience a RESURRECTION, and are transformed by the experience.
Final mastery of the problem	They RETURN WITH THE ELIXIR, a boon or treasure, to benefit the Ordinary World.

LC AND COLLABORATIVE PROJECT DELIVERY

PROJECT DELIVERY METHODS

Numerous strategies have been developed over the years to ensure the successful completion of projects. These strategies are encapsulated in project delivery methods, which define how to achieve project objectives. Miller et al. (2000, p. 59) describe it as a “system for organizing and financing design, construction, operations and maintenance activities that facilitates the delivery of a good or service,” while Love et al. (1998) define it as an organizational system that allocates specific responsibilities and authorities to individuals and organizations and outlines the different components in constructing a project. Furthermore, many different categories, or classes, of project delivery methods exist. Some scholars use a continuum ranging from separated to integrated (see Miller et al. (2000)). Others use the terminology of traditional (discrete) and collaborative (relational) (Ballard & Howell, 2005).

As Ian MacNeil outlines, the concept of relational contracts positions contracts on a spectrum from discrete to relational. He proposed that while some forms of contract are discrete, other forms of contract are relational in their conception and are, in many instances, a reflection of societal customs and norms (MacNeil, 1985). Relational contracting is a term used for transactions or agreements designed to acknowledge the partnership between contracting parties formally. The contract places greater emphasis on the relationship, with delivery mechanisms prioritizing trust and partnership (Colledge, 2005). In construction, integration of delivery evaluates how project components like planning, design, construction, and operation are combined throughout the production cycle, while separated-focused methods distinctly divide design and construction activities (Miller et al., 2000). Integration-focused methods merge design and construction responsibilities, rely on inter-organizational collaboration, and potentially offer competitive pricing through the contractor’s market expertise and purchasing power (Davis et al., 2008).

LEAN CONSTRUCTION

Research in organizational behavior and psychology indicates that to implement new managerial practices successfully, there must be corresponding shifts in the culture or social relationship structure (Blader et al., 2015; Collins & Smith, 2006). LC represents a divergence from traditional managerial practices and culture. Scholars refer to Lean as a philosophy that requires a 'paradigm shift' so that practitioners adopt the 'lean thinking' mindset (Tommelein, 2015). To explain what constitutes a Lean mindset, we will refer to prior literature on the subject recognized and well-known for Lean practitioners.

Womack and Jones (2010) presented five principles of Lean: 1) The customer defines value, 2) A value stream creates value, 3) Make the value stream flow, 4) Use "pull" to drive flow, and 5) Continuous pursuit of perfection. Lean Project Consulting, Inc. presented the "Five Big Ideas that are Reshaping the Design and Delivery of Capital Projects" at a Sutter Health conference in 2004. The five ideas can be considered as a basis for shaping a Lean organization culture, and they are as follows (Macomber, 2004): 1) Collaborate, really collaborate, throughout design, planning, and execution; 2) Optimize the whole; 3) Tightly couple learning with action, 4) Projects are single-purpose networks of commitments, and 5) Intentionally build relationships on projects. Lastly, Lean Construction Institute (2024) has introduced the "Six Tenets of Lean": 1) Respect for people, 2) Optimize the whole, 3) Removal of waste, 4) Focus on process and flow, 5) Generation of value, and 6) Continuous improvement.

If we summarize these principles, the general purpose of Lean seems to be collaboration to generate value for customers while respecting all people. It also removes wasteful activities and increases process flow by optimizing the whole. In addition, it's essential to couple learning with action so you can learn from the process and continuously pursue improvement and perfection.

LEAN CONSTRUCTION IN THE HERO'S JOURNEY

For our purpose, the Hero's Journey is about transitioning from one mindset to another and can be regarded as an inward journey (transitioning from a traditional PM mindset to a Lean mindset). It will also arguably be a physical change in the workplace. However, due to limitations in the paper format, we choose to only reflect on the inward journey and change of mindset.

The steps associated with the hero's story are symbols of universal life experiences and can be applicable to a simple comic book story or the most sophisticated drama (Vogler, 1992). The Hero's Journey is a structure that does not necessarily need to be followed precisely. Although all the stages in the framework are usually evident in any story, the order of the stages can be shuffled and come in different variations. Stages can also be deleted or added without losing their power. Therefore, the Hero's Journey has endless flexibility, accommodating myriads of variations without compromising its features. In the following, we will use the Hero's Journey as explained by Vogler (2007) and put it in a context where someone (e.g., an individual practitioner or organization) must switch from a traditional mindset to a Lean mindset.

Ordinary World

Most stories take the hero into a new, unexploited "special" world. To illustrate the new world, it is first necessary to show the hero in his comfortable surroundings, the "ordinary world."

In our example, the ordinary world is a well-known work environment with familiar tried-and-tested techniques that fit a traditional mindset in the construction industry. However, the organization realizes the inefficiencies and waste in current methods and acknowledges the potential benefits of LC, which calls for adventure.

Call to Adventure

The hero is presented with a problem, challenge, or adventure. Once he or she is presented with the "call to adventure," the hero can no longer remain in the comfortable zone of the ordinary world.

In our example, the call to adventure can be the recognition of a need to change in the construction process. Or, as Korb and Ballard (2018) call it, a paradigm shift. A new strategy that relies more on interdisciplinary collaboration requires a Lean mindset. For our hero, accustomed to the comfort of doing things the old way, adjusting to this new, unfamiliar way of thinking is challenging. However, whether the new strategy is embraced or resisted, the situation requires a change, which is the call to adventure that represents our hero’s challenge.

Refusal of the Call

At this point, the hero is normally reluctant to the expected change. Refusal of the call is usually tied to the fear of change. The hero is not fully committed to what’s happening at this journey stage.

In our example, resistance to change might be due to the comfort of existing practices, skepticism about new methods, or fear of the unknown. As mentioned in the Introduction section, reluctance to change is one of the top barriers to LC implementation (Albalkhy & Sweis, 2021; Wandahl, 2014). Some kind of encouragement or change in circumstances might be helpful for the hero. For instance, some calming words from a person with LC experience (a *mentor*) can be encouraging.

Meeting with the Mentor

At this stage in the journey, most stories have introduced the mentor, which often comes in the form of a wise old man or woman (Gandalf in *The Lord of the Rings*, Prof. Dumbledore in *Harry Potter*, the Fairy Godmother in *Cinderella*). Still, they can come in different shapes (e.g., Aslan in *Narnia* or Rafiki in *The Lion King*). The relationship between hero and mentor is among the richest in symbolic value, as it represents the bond between parent/child, teacher/student, role model/protégé, etc.

In our LC example, the mentor could come in different shapes, from forward-leaning companies leading down to individual Lean champions. For instance, Raghavan et al. (2017) found that the drive by the top management, coupled with efforts from Lean champions in the project team, was essential for transitioning from a conventional project delivery method to an LC method. These mentors provide training, resources, and support to understand and implement Lean principles. They can typically be represented by the project manager or someone with experience and knowledge of LC or change management. However, the mentor can only go so far with the hero. Eventually, the hero must embrace and be open to the task himself. The hero must *want to* go through the change to a Lean mindset.

Crossing the First Threshold

Now, the hero commits to the adventure fully and enters the new special world for the first time by crossing the first threshold. Vogler (2007) writes that movies are built in three acts: 1) the hero’s decision to act, 2) the action itself, and 3) the consequences of the action. The first threshold indicates the point of no return between acts 1 and 2. It’s not always the hero’s decision to act.

In a construction project, crossing the first threshold may be when a project commits to an LC approach. It can be at the start of a project where the involved are going into the uncharted territory of interdisciplinary and collaborative methods for the first time. It can also be a pilot project or an initial implementation phase where the LC principles are applied on a small scale.

Tests, Allies and Enemies

The first threshold is crossed, and the hero is now in the unfamiliar territory of the “special world.” The hero will now encounter new challenges, make allies and enemies, and start to learn the norms and expectations in the new environment. This is a stage where the hero usually can undergo stressful situations, but the hero gains a lot of experience. The challenges can be both inward and outward.

Challenges arise as the organization starts applying Lean principles. Wandahl (2014) found that mis-conceptualization and mis-implementation of LC, particularly the Last Planner System, are significant issues, with the consequence that benefits are not being realized, with inadequate knowledge, education, and communication identified as key contributing factors—other issues like adapting to new workflows, resistance from employees, or logistical challenges. Interdisciplinary collaboration, resources, unexpected events, etc., are challenges that make the transition to an LC approach difficult. There can also be inward challenges, such as a lack of understanding of the concept and its benefits or a transition to a Lean mindset during a stressful period at work. Our heroes might feel angry or frustrated at being outside their comfort zone. Luckily, the mentors are there to help, and after a while, people will steadily improve their understanding and mastery of the approach.

Approach to the Inmost Cave

The hero approaches the edge of “the inmost cave,” which is a place where the object of the quest can be found. The inmost cave is usually the most dangerous place in the special world. Typically, this can be the enemy’s headquarters or where the object of special value is hidden. The approach covers all preparations to enter the innermost cave, where death or supreme danger can be expected. This is the second significant threshold in the journey.

As challenges are identified, the project organization needs to refine its approach. This might involve more training, better communication, or adjusting strategies to fit the context better. The *inmost cave* can, for example, be the construction phase. In the construction phase, you will determine if everything is going according to plan and how the new LC approach works. The planning phase can be considered as the *approach*, as this is where all the preparations for the “dangers” of the construction phase occur. Furthermore, research has stated that successful implementation follows the line from top organizational management down to its divisions and into construction projects, becoming embedded in the organization (Torp et al., 2018).

Supreme Ordeal

In this pivotal moment, the hero experiences a battle with his greatest fears. Faced with the possibility of death (figuratively), he is pushed to the edge in a fierce confrontation with a hostile force. In movies, the supreme ordeal serves as a “black moment” for the audience, leaving us uncertain about whether the hero will succeed or succumb to the challenges. This is a critical moment in any story. The hero must die or appear to die so he can be reborn.

Theoretically, this is the decisive moment for all organizational change processes. Despite the potential benefits, change is not easy to achieve in practice, and some have even stated that up to 70 % of change processes fail (Higgs & Rowland, 2000). In a construction project context, the supreme ordeal might be when our hero meets challenges that make him question the new approach. This is a critical point where the organization faces significant challenges that test its commitment to LC. This could be financial constraints, communication issues, opportunism, unforeseen events, different perspectives, external issues, etc. How our heroes confront these challenges and overcome the urge to return to safe traditional methods is vital and can be considered the supreme ordeal.

Reward

The hero can celebrate overcoming the supreme ordeal (slaying the dragon, finding the holy grail, finding love, etc.). The hero now takes possession of the treasure he was seeking, the reward. The reward comes in various shapes, either by tangible items or increased knowledge or experience. The hero may also become more attractive after surviving the supreme ordeal.

In our example, the reward is increased knowledge, experience, and understanding of how the Lean mindset works after overcoming major challenges in the construction phase. The organization started seeing the benefits of LC – improved efficiency, reduced waste, higher quality, and better interdisciplinary collaboration (Ashcraft, 2022; Cheng & Johnson, 2016). Additional long-term benefits may include an improved project outcome or the acquisition of expertise that will appeal to future projects intending to employ the LC approach.

The Road Back

However, the journey has yet to be finished. On the road back, we are crossing the third threshold as the hero deals with the consequences of confronting the dark forces of the supreme ordeal. The hostile forces are pursuing the hero after he seizes his reward.

Our heroes have survived the biggest challenge by gaining knowledge, understanding, and experience about the LC approach. However, unforeseen events can still occur, and they will be put to the test again. Aligned with the Kaizen philosophy (continuous improvement), often expressed with the PDCA cycle (Plan-Do-Check-Act) (Kunz & Fischer, 2020), lessons are applied to refine processes in the organization further.

Resurrection

The hero must be reborn and cleansed in one last ordeal and resurrection before returning to the ordinary world. This is the final exam, where the hero will be tested to see if he has learned his lessons.

In our example, this might be to ensure that the experience and insight from the project are saved and can be utilized in future work. LC becomes ingrained in the organization's culture. It's not just a set of practices but a way of thinking and working. Our heroes should be able to deal with unforeseen troubles using new tools, knowledge, and experience acquired during the LC journey.

Return with the Elixir

The hero returns to the ordinary world and brings back an "elixir," a treasure or lesson from the special world. This elixir can be both tangible and intangible. The hero is doomed to repeat the adventure if nothing is brought back from the special world to the ordinary world. But usually, the hero returns with increased experience and knowledge, which can hugely benefit the ordinary world.

In our example, the elixir will be the increased knowledge of LC, which will help us overcome the transition from a traditional mindset to a lean mindset. Our heroes have not forgotten the ways of the ordinary world but are now equipped with the knowledge to also handle the Lean mindset. Our heroes have now conquered the fear of change from the comfort of the old mindset, and this is no longer a barrier to future LC projects. The knowledge and experience gained can be shared with others in the industry, contributing to broader change.

CONCLUSIONS

We set out to answer if the Hero’s Journey can work as a tool for a successful transition from a traditional mindset to a Lean mindset. Employing the Hero's Journey in a construction context can make the transition to a Lean mindset less overwhelming for practitioners. Going through each stage of the Hero’s Journey, we have shown that it can easily be applicable in an LC

context and work as a “mudmap” for change. Another interesting observation is how Joseph Campbell’s iterative cycle of the monomyth resembles the iterative process of continuous improvement in Lean.

Table 2 summarizes the Hero’s Journey for LC, drawing parallels between each step and the corresponding stage in the Lord of the Rings films. This approach provides a familiar comparison from the movie world, intending to enhance the reader’s understanding of the Hero’s Journey and how it can be applied. The steps proposed for LC are illustrative examples, and journeys might differ depending on the practitioner’s or the organization’s purpose.

Table 2: A Hero’s Journey: Lean Construction versus the Lord of the Rings films.

Step of the Journey	Lord of the Rings	Lean Construction
Ordinary World	The Shire	A traditional PM mindset
Call to Adventure	Gandalf entrusts Frodo with the ring	Transition from a traditional mindset to a Lean mindset
Refusal of the Call	Frodo refuses that he, a simple hobbit, can be entrusted with such a task	Hesitation to change something well-known and comfortable
Meeting with the Mentor	Aragorn and Gandalf function as mentors	A project manager or an LC expert/consultant
Crossing the First Threshold	The hobbits leave the Shire	Committing to an LC approach or the start of an LC project
Tests, Allies and Enemies	The fellowship of the ring, Sauron, Gollum, trolls, orcs, the ring itself	Frustration, unexpected events, resistance from employees, trouble adapting to the approach
Approach to the Inmost Cave	Frodo and Sam’s journey through the pass of Cirith Ungol and into Mordor	Preparations for the construction phase
Supreme Ordeal	Frodo and Sam face Gollum, Sauron, and finally, Frodo’s own hesitation	The construction phase
Reward	The hobbits seize the reward of destroying Sauron to save Middle Earth	Increased knowledge, experience, and understanding of LC
The Road Back	The ring is destroyed, and the volcano erupts. The eagles rescue Frodo and Sam.	Dealing with new challenges by continuously improving the process
Resurrection	Frodo heals from the strains of destroying the ring. The hobbits are praised and honored for their contributions.	Making sure the new knowledge is saved for the future. LC is ingrained in the organization’s culture.
Return with the Elixir	The hobbits return to the Shire scarred but wiser, wealthier, confident, and with peace.	The hero is now equipped with a Lean mindset and has conquered their fear of change.

PRACTICAL SIGNIFICANCE, LIMITATIONS, AND FURTHER WORK

The practical usage of the LC Journey depends on the user’s imagination. The framework’s flexibility makes it adaptable to various contexts. One possible area of use is within teaching, where the framework can describe the benefits of LC and how the Lean mindset differs from

traditional management thinking. Another area can be at the start of a project where it is decided to implement LC principles or at any arena to present LC engagingly. A limitation of the research is that the study did not examine how the framework applies to a diverse range of projects. The framework has yet to be tested on people without LC knowledge, so further work on this topic might be done to design a journey for a selected purpose within LC and test the framework. Furthermore, looking deeper into how Campbell’s monomyth can be used to demonstrate continuous improvement is possible.

REFERENCES

- Albalkhy, W., & Sweis, R. (2021). Barriers to adopting lean construction in the construction industry: a literature review. *International Journal of Lean Six Sigma*, 12(2), 210-236.
- Ashcraft, H. (2022). Transforming project delivery: Integrated project delivery. *Oxford Review of Economic Policy*, 38(2), 369-384.
- Ballard, G., & Howell, G. A. (2005). Relational contracting and lean construction. *Lean Construction Journal*, 2(1), 1-4.
- Ballard, G., Kim, Y.-W., Azari, R., & Cho, S. (2014, 19-21 May). Starting from scratch: A new project delivery Paradigm. Construction Research Congress 2014: Construction in a Global Network, Atlanta, GA, USA.
- Blader, S., Gartenberg, C., Henderson, R., & Prat, A. (2015). The real effects of relational contracts. *American Economic Review*, 105(5), 452-456.
- Campbell, J. (1949). *The Hero With a Thousand Faces*. Pantheon Books.
- Campbell, J. (2008). *The hero with a thousand faces* (Vol. 17). New World Library.
- Cheng, R., & Johnson, A. (2016). Motivation and means: How and why IPD and lean lead to success.
- Colledge, B. (2005). Relational contracting: creating value beyond the project. *Lean Construction Journal*, 2(1), 30-45.
- Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of management journal*, 49(3), 544-560.
- Cropanzano, R. (2009). Writing nonempirical articles for Journal of Management: General thoughts and suggestions. In (Vol. 35, pp. 1304-1311): SAGE Publications Sage CA: Los Angeles, CA.
- Davis, R. P., Love, P., & Baccarini, D. (2008). Building procurement methods.
- De Valence, G. (2010). Innovation, procurement, and construction industry development. *Australasian Journal of Construction Economics and Building*, The, 10(4), 50-59.
- Gilson, L. L., & Goldberg, C. B. (2015). Editors’ comment: so, what is a conceptual paper? In (Vol. 40, pp. 127-130): SAGE Publications Sage CA: Los Angeles, CA.
- Goldstein, L. S. (2005). Becoming a teacher as a hero's journey: Using metaphor in preservice teacher education. *Teacher Education Quarterly*, 32(1), 7-24.
- Higgs, M., & Rowland, D. (2000). Building change leadership capability: ‘The quest for change competence’. *Journal of change management*, 1(2), 116-130.
- Ip, B. (2011). Narrative structures in computer and video games: Part 1: Context, definitions, and initial findings. *Games and Culture*, 6(2), 103-134.
- Jaakkola, E. (2020). Designing conceptual articles: four approaches. *AMS review*, 10(1), 18-26.
- Kelsey, D. (2016). Hero mythology and right-wing populism: A discourse-mythological case study of Nigel Farage in the Mail Online. *Journalism Studies*, 17(8), 971-988.
- Korb, S., & Ballard, H. G. (2018). Believing is seeing: Paradigms as a focal point in the lean discourse. 26th annual conference of the international group for lean construction,
- Kunz, J., & Fischer, M. (2020). Virtual design and construction. *Construction management and economics*, 38(4), 355-363.

- Lean Construction Institute. (2024). *Tenets of Lean*. Retrieved Jan 9 from <https://leanconstruction.org/about/lean-tenets/>
- Lewis, P. J. (2011). Storytelling as research/research as storytelling. *Qualitative inquiry*, 17(6), 505-510.
- Love, P. E., Skitmore, M., & Earl, G. (1998). Selecting a suitable procurement method for a building project. *Construction management and economics*, 16(2), 221-233.
- MacNeil, I. R. (1985). Relational contract: What we do and do not know. *Wis. L. Rev.*, 483.
- Macomber, H. (2004). Putting the Five Big Ideas to Work. *Lean Project Consulting*, White.
- McAdams, D. P. (2019). "First we invented stories, then they changed us": The evolution of narrative identity. *Evolutionary Studies in Imaginative Culture*, 3(1), 1-18.
- Miller, J. B., Garvin, M. J., Ibbs, C. W., & Mahoney, S. E. (2000). Toward a new paradigm: Simultaneous use of multiple project delivery methods. *Journal of Management in Engineering*, 16(3), 58-67.
- Moin, S., Hosany, S., & O'Brien, J. (2020). Storytelling in destination brands' promotional videos. *Tourism Management Perspectives*, 34, 100639.
- Morgan, S., & Dennehy, R. F. (1997). The power of organizational storytelling: a management development perspective. *Journal of Management development*, 16(7), 494-501.
- Nesensohn, C., Demir, S. T., & Bryde, D. J. (2012). Developing a "true north" best practice lean company with navigational compass. 20th Annual Conference of the International Group for Lean Construction (IGLC), San Diego, California, USA.
- Osland, J. S. (2000). The journey inward: Expatriate hero tales and paradoxes. *Human Resource Management*, 39(2-3), 227-238.
- Polletta, F., Chen, P. C. B., Gardner, B. G., & Motes, A. (2011). The sociology of storytelling. *Annual review of sociology*, 37, 109-130.
- Raghavan, N., Mahalingam, A., & Varghese, K. (2017). Initial Euphoria to Sustained Change—Mainstreaming Lean Culture.
- Riekkki, J., Rannisto, J., Lehtovaara, J., Seppänen, O., & Peltokorpi, A. (2023). Achieving a 4-hour takt time—and driving change with it. Annual Conference of the International Group for Lean Construction,
- Robledo, M. A., & Batle, J. (2017). Transformational tourism as a hero's journey. *Current issues in Tourism*, 20(16), 1736-1748.
- Rogers, B. A., Chicas, H., Kelly, J. M., Kubin, E., Christian, M. S., Kachanoff, F. J., Berger, J., Puryear, C., McAdams, D. P., & Gray, K. (2023). Seeing your life story as a Hero's Journey increases meaning in life. *Journal of Personality and Social Psychology*.
- Senn, C. F. (2002). Journeying as religious education: The shaman, the hero, the pilgrim, and the labyrinth walker. *Religious Education*, 97(2), 124-140.
- Smith, M. C. (2002). Health, healing, and the myth of the hero journey. *Advances in Nursing Science*, 24(4), 1-13.
- Tommelein, I. D. (2015). Journey toward lean construction: Pursuing a paradigm shift in the AEC industry. *Journal of construction engineering and management*, 141(6), 04015005.
- Torp, O., Knudsen, J. B., & Rønneberg, I. (2018). Factors affecting implementation of lean construction. Proceedings of the 26th Annual Conference of the International Group for Lean Construction (IGLC), Chennai, India,
- Vogler, C. (1992). *The Writer's Journey: Mythic Structure for Storytellers and Screenwriters* (1st ed.). Michael Wiese Productions Studio City, CA.
- Vogler, C. (2007). *The Writer's Journey: Mythic Structure for Writers* (3rd ed.). Michael Wiese Productions Studio City, CA.
- Wandahl, S. (2014). Lean construction with or without lean—challenges of implementing lean construction. 22nd Annual Conference of the International Group for Lean Construction (IGLC), Oslo, Norway.

- Williams, C. (2019). The hero’s journey: A mudmap for change. *Journal of Humanistic Psychology*, 59(4), 522-539.
- Womack, J. P., & Jones, D. T. (2010). *Lean thinking: Banish waste and create wealth in your corporation*. Simon and Schuster.
- Zabel, M. K. (1991). Storytelling, myths, and folk tales: Strategies for multicultural inclusion. *Preventing School Failure: Alternative Education for Children and Youth*, 36(1), 32-34.