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The CHI Framework: Cultivating Adaptability, Innovation, and Resilience for Organizational Transformation

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Abstract

This article describes the CHI competency framework that is intended to help organizations overcome the challenges and opportunities that accompany large scale transformational change. It is a model encompassing three primary competencies that can help create a future-ready workforce so organizations of today can be leaders for continuous growth and success: Cognitive Tech-Readiness, Hyperconnected Ecosystem Leverage and Innovative Risk-Taking.

The Cognitive Tech-Readiness Competency consists of the cognitive flexibility and fungibility necessary to become adaptive thinkers, problem solvers and decision makers. This is a must in today's world of uncertainty and complexity surrounding digital transformation projects. Its a skill that involves developing an interest and readiness to explore new technologies, and the agility to keep up with the technological environment. This competency emphasizes the collection, manipulation, validation and analysis of data for critical decision-making, key problem solving, and forward planning. **Hyperconnected Ecosystem Competency** gives organizations the capability and mindset to interact with and capitalize on the interconnected network of stakeholders, leaders, partners and technology infrastructures that form the digital business environment i.e. learning how to work synergistically, to exchange expertise, and take advantage of the convergences that exist within these ecosystems. Finally, the **Innovative Risk-Taking Competency** sets the stage for an open-minded, experimental and risk-taking culture that allows organizations to find new possibilities and stay on top of changing and ever evolving market demands. It is a competency that is intended to encourage initiative, lean into disruption and find new ways to solve complex challenges.

If enterprises integrate the CHI competency model to their talent management and performance management systems, they can create an enterprise workforce that is not only technologically competent and advanced but also agile, innovative and adaptive – all skills that are necessary for staying relevant while winning in today's fast-changing business world ruled by technological disruptions.

Keywords: Organization Transformation, Change Management, Competency Frameworks

Introduction

Adaptability, innovation, and resilience in the backdrop of a VUCA world

VUCA, an acronym for volatility, uncertainty, complexity, and ambiguity has come to represent the conundrum that organizations face in the sifting of technology disruptions and customer expectations which present both challenges as well as opportunities. For instance, companies can leverage emerging technologies as tools for innovation rather than viewing them solely as sources of intimidation (Waller et al., 2019).

By cultivating a culture of agility and adaptability, they can pivot quickly in response to market shifts, turning potential disruptions into competitive advantages. Furthermore, collaboration across disciplines becomes essential; breaking down silos enables diverse teams to synthesize knowledge and create holistic solutions tailored to rapidly changing circumstances. Embracing such proactive strategies will be crucial for thriving in an environment where traditional approaches are increasingly inadequate (Sinha & Sinha, 2020).

Additionally, organizations must learn to cultivate a mindset that inculcates continuous learning and experimentation while recognizing that failures often lead to valuable insights. This shift towards a growth-oriented culture builds resilience and empowers employees at all levels to contribute creative problem-solving processes, thus driving innovation from within (Nandram et al., 2017).

We cannot change the basic nature of things and volatility, uncertainty, complexity and ambiguity are woven in the very fabric of the cosmos existing around us. The solution lies in visionary and transformational leadership, being able to formulate concrete strategy and to adopt changing technological advancements, keeping pace and abreast with the environment around us and above all being sensitive to even the slightest change in the business environment and preparing ourselves accordingly (Sinha & Sinha, 2020).

The Significance of a Competency Framework in Modern Organizations

Competencies are knowledge, skills, and attitudes (KSA) connected to their job position, which are generally required to fulfill work role. Competency mapping is the most appropriate tool for analyzing the gap between employees' actual and expected levels of performance and addressing the identified gaps by developing tailor-made training and development programs to achieve the organization's overall vision and mission (Bhasin & Sharma, 2018), (Nagar et al., 2023).

Competency analysis is a multifaceted approach utilized within organizations not only for performance management and conflict resolution but also for tailoring training programs for each employee. It involves identifying specific competencies that influence employee performance and collecting primary data based on these factors to inform decision-making (“A Study on Competency Analysis of Employees in Information Technology Sector,” 2024).

A competency framework comprises of the above three elements - 1) Competency definition, 2) Competency mapping, and 3) Competency Analysis. Competency models or frameworks enable companies to align the specific skills of individuals and teams with strategic business goals, make hiring and promotion decisions, and support specific career and learning and development activities by providing a structured framework for doing this.

But as companies get digitalized and change in many other ways, these structures need to constantly change with the times. In this paper, we will elaborate how to use competency frameworks to enable impactful and lasting organization change.

The need for adaptation of new competency frameworks for digital transformation

Digital technologies such as IoT, Cloud, etc. as well as practices and processes such as Agile, DevSecOps, etc. are ever evolving and constantly affecting the business world in ways that new skills

must be learnt to adapt to the rapidly transforming environment. This means that organizations need to restructure existing competency models to meet the needs of the digital era.
Digital literacy, data-mining, analytical thinking, and adaptability are more important than ever for companies to remain competitive and responsive to the changes in the market.
Adapting competency frameworks to align with career tools like performance management, career development, learning & development and succession planning ensures organizational change needed to thrive in today's digital age.

A proposed Competency framework model for organizational transformation

In this paper, based on a detailed literature review and commentary (initially written by the author), a proposed competency model for organizational change is discussed.
The CHI model is intended to provide a blueprint for organizations to transform their talent practices to match the needs of the fast-paced digital age and ensure their employees have the right mix of skills, ability and knowledge needed to navigate complex digital transformation.
The author invented the acronym "CHI" for a competency model that contains 3 important competency domains:

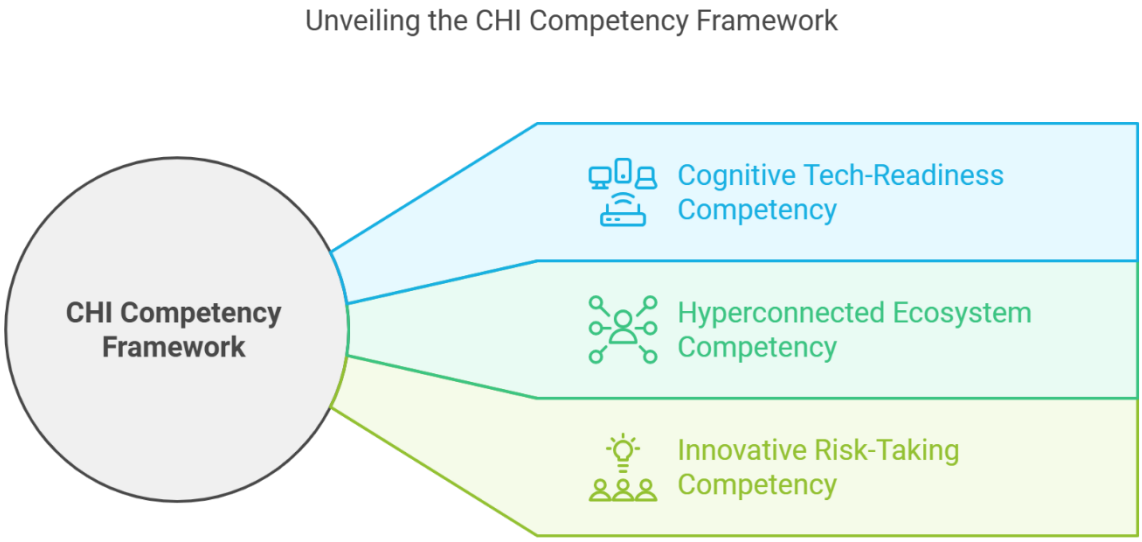

Figure 1

Cognitive Tech-Readiness

Cognitive Tech-Readiness is being defined as developing the intellectual fluidity and agility to adapt to new ways of thinking as well as solving problems and making decisions that are necessary to manage the uncertainty that accompanies the risk of digital transformation projects.
These are the top behavioral markers of cognitive tech-readiness:

1. **Tech curiosity & Innovation:** Being genuinely open to learning and working on new technologies while at the same time being flexible to changes in technology. Successful organizations actively research, learn and implement cutting-edge technologies such as GenAI, AI and cloud computing while being adaptable to change.

2. **Data-driven Decision Making:** Utilizing data and applying it systematically to decision-making, problem-solving and forward planning. Equip your organization to use data, analytics, and AI enabled data to overcome difficult business problems.
3. **Responsible Technology Use:** Developing the ability to use digital technologies in an ethical manner and one that is responsible, in light of potential risks, human biases and social consequences. Promote ethical and sustainable tech use, data privacy compliance and fair and equitable practices.
4. **Tech Innovation Through Collaboration:** High performers collaborate across different functions within the organization to creatively develop and implement innovative technology solutions that increase efficiency, productivity and long-term business performance. They capitalize on multiple viewpoints, skills and resources to create new and innovative solutions that creates value and a competitive advantage for the company.

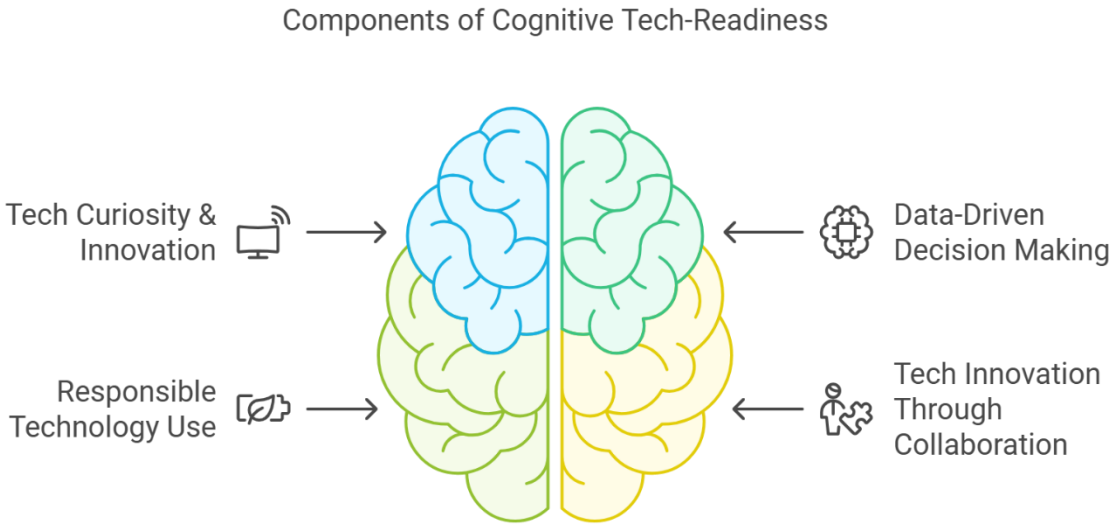

Figure 2

Hyperconnected ecosystem

In an age of innovation and flexibility the best performers are those who are able to create and scale their networks across technologies, teams and systems. These are the people who unlock the power of ecosystems connected through IoT, cloud and hybrid tools to maximize efficiency and synergies at scale. This competency requires having in-depth knowledge of an organization's digital ecosystem, leaders, the value chain, business processes and new & emerging technologies. This holistic understanding of the business environment helps the company develop skills in the area of agile and dynamic decision-making.

The competency behavioral markers are:

1. **Systems Thinking:** The ability to manage interdependencies between digital systems, processes and teams in a way that workflows and processes are seamlessly integrated and run more efficiently.

2. **Digital Collaboration Expertise:** Use connectivity and connected technologies to improve efficiency, collaboration, and innovation within and between teams.
3. **Real-Time Decision-Making:**Get familiar with and leverage newer technology like IoT, edge computing, and real-time analytics to make informed decisions rapidly for agility and responsiveness in complex systems.
4. **Operational Resilience:** Build strong structures and processes for continuity and change through disruption, using hyperconnected devices and networks.

Performance Champions who know how to operate in and leverage Hyperconnected Ecosystems are the people who will change organizations in the digital era. They synchronize, optimize and streamline distributed systems so that there can be innovation-at-scale which is resilient.

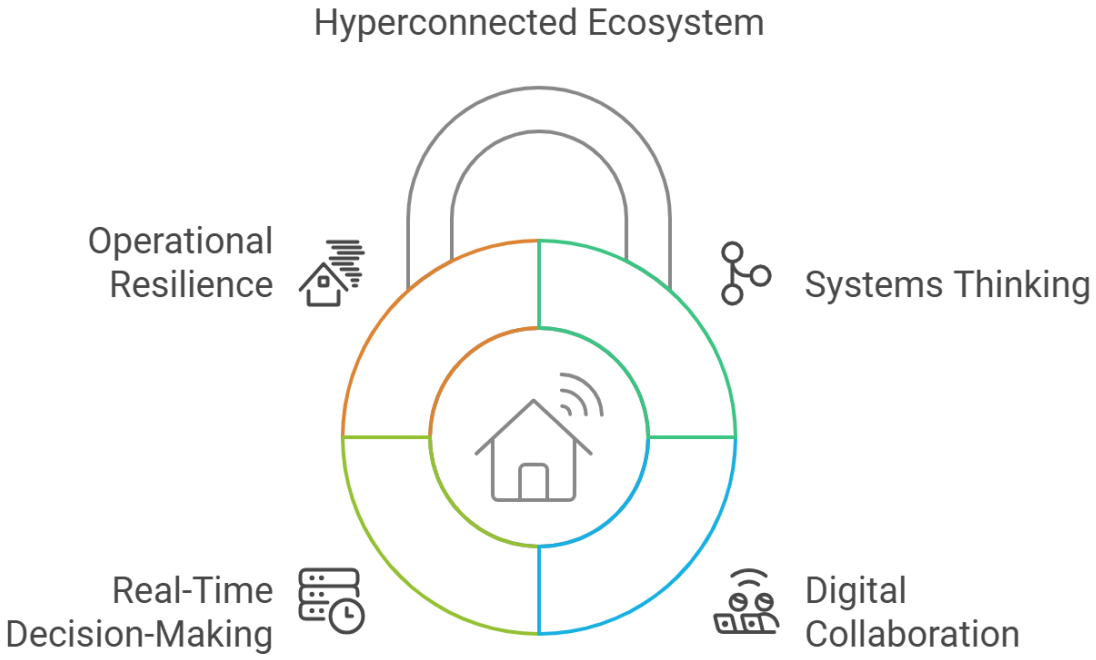

Figure 3

Innovative Risk Taking

In a rapidly evolving digital environment, high performers who are skilled at Innovative Risk-Taking embrace vulnerability and are able to push against the odds to achieve transformative change. They take risks boldly and are able to use ingenuity and data to think outside the box, dare to fail, and steer their organizations towards a competitive edge. Furthermore, organizations need to actively develop an environment that empowers employees to strategically take calculated risks and fail — creating the safe space and the opportunity for them to find solutions that can provide new value and a competitive advantage in the era of digital disruption.

The main behavioral characteristics of the Innovative Risk-Taking competency are as follows:

1. **Strategic Courage:** Empower employees to take risks, be innovative and lean into the big and bold ideas fearlessly while maintaining a realistic grip and staying mindful of what's at stake and the potential benefits.
2. **Data-Driven Experimentation:** Make the most of data-based insights to plan and conduct creative experiments and find breakthrough solutions that have the potential to deliver the organization with a competitive advantage
3. **Stamina-Driven Mindset:** Have the mental flexibility and strength to learn from mistakes, change direction at a lightning speed, and persist through obstacles so that creative ideas can be iteratively improved and optimized.
4. **Inclusion in Decision Making:** Top performers under the Innovative Risk-Taking skill bring in different perspectives and knowledge to support risk evaluation and decision making. This makes it so many new initiatives can be engineered from the inside, taking a holistic look at what is available to the organization, where it's lacking and where multiple stakeholders are at. High performers who master the Innovative Risk-Taking capability create a revolution that helps their organizations thrive amidst digital disruption.
5. **Iterative Feedback leading to Continuous Improvement:** Create mechanisms and processes for gathering feedback, measurement of performance and iterative course correction to help align the organization in an agile manner that ultimately optimizes results.

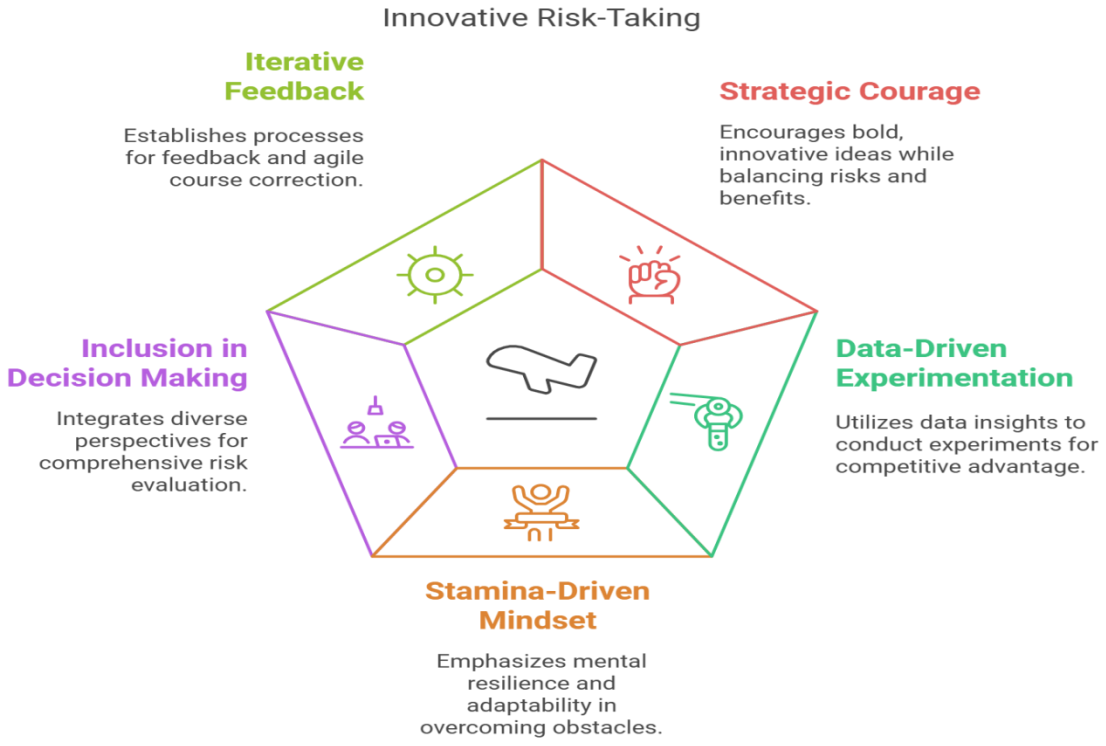

Figure 4

Adapting the Competency Framework

To ensure that the competency framework can have significant impact and can be meaningfully woven into an organization's fabric and culture, there are a few things that need to be considered.

First, flesh out each competency in the CHI Model by outlining the core skill/behavior as applicable to the long-term(5-7 years) vision & goals of the organization. This involves developing deep expertise of the knowledge, abilities, and skills one needs to perform and excel at his/her role.
Second, categorize each competence into Key Behavioral Indicators (KBIs) i.e. a specific, observable action or behavior that demonstrates whether an individual possesses a particular skill, competency, knowledge, or attribute. These indicators are often used to assess performance, guide development, and measure success in a role or activity.
Third, classify these indicators by proficiency levels i.e. High, Medium, Low and include quantifiable objectives for each level. High proficiency is for those who continuously perform the KBIs with a lot of success, impact, and influence. For Medium, an employee would be able to demonstrate clear understanding and use. Lastly, for Low proficiency we have individuals who meet some of the criteria and indicators, but by and large are of low or average level of competence/skill.
Fourth, making sure the alignment of this CHI competency model with other essential talent management activities like performance management, succession planning, learning and development and career development will be essential. Ensuring alignment between these processes is the way that your company can cultivate, use and reward talent in ways that directly aligns with creating a transformational culture. This convergence makes it possible to develop competencies across the entire organization in a holistic integrated manner.

And lastly, schedule periodic reviews, revisions and updates to the CHI competency framework to include new skills and abilities needed as the vision of the organizational evolves. This regular reviewing and updating is necessary to keep the framework current and relevant to the organization's future focused strategic objectives. Newer model could rely more on skills in strategic agility, risk management and organizational learning as these are essential for leaders operating at the scale of transformational change.

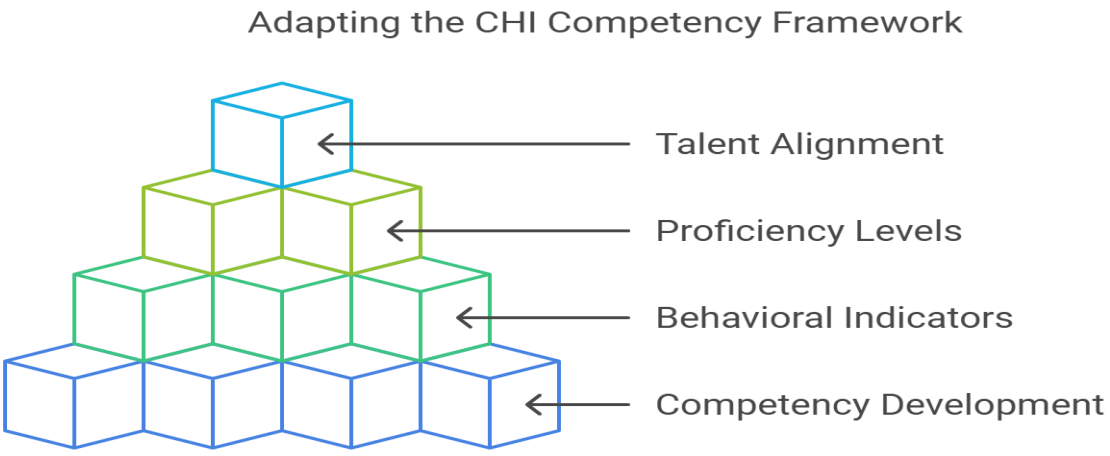

Figure 5

Estimated Economic Impact to the U.S.

For the impact of competency development, we will focus on "high-technology" firms. According to a study funded by the Workforce Information Council,the high-tech sector can be defined

as industries having high concentrations of workers in STEM (Science, Technology, Engineering, and Mathematics) occupations. Although the term high-tech has been notoriously difficult to define, as technology changes all the time, this analysis provides an approach to defining jobs that are in in this sector.

Employment: High-tech industries accounted for 16.9 million jobs in 2014, or 12.0 percent of total employment. From 1994 to 2024, the share of employment in high-tech industries has stayed within a narrow range of 11.3 percent to 12.1 percent. From 2014 to 2024, the high-tech sector is projected to gain 691,000 jobs as it grows at a slightly lower than average rate, resulting in an 11.7-percent share of total employment in 2024.

Output: High-tech industries contributed $7.1 trillion in 2014, accounting for 22.8 percent of total output, down slightly from an all-time high of 23.3 percent in 2011.

Output is projected to grow by $2.4 trillion, in line with the overall economy, as the high-tech sector maintains its share of output at 22.9 percent (Daniel, 1999), (Wolf & Dalton, 2015).

Economic Impact: For financial modeling towards economic impact, we will consider the following: Output: $9.5 trillion and employment: 17.6 million jobs based on above references. Thus, *Output per employee* for high-technology firms is 9.5 trillion dollars divided by 17.6 million employee which equates to ***540,000 dollars per employee annually***.

We will assume the impact of talent development expressed as follows:

1. Productivity gains: In the form of 1) Productivity improvement rate, and 2) Innovation-driven gains.
   We assume at 0.5% improvement for both productivity of an employee and innovation improvement rate considered jointly. This is a conservative assumption and really applicable to high-technology firms where there is ample scope to both drive productivity gains and innovation by deploying a strategic competency development framework. 540,000 dollars per employee multiplied by 0.5% equates to **$2,700 per employee improvement annually**, which can vastly improve profits for tech companies and help maintain long-term economic growth.
2. Cost savings: In the form of 1) Error reduction
   We assume a base-case of 10% cost of error in high technology industry. This is equivalent to waste or error to the tune of 5,400 dollars per employee multiplied by 10% which equates to 540 dollars per employee annuallly.
   For this cost of error at 540 dollars per employee, if we assume a conservative 10% improvement based on competency development, we arrive at **54 dollar per employee improvement annually**.
3. Total Impact: Based on calculation above, we arrive at **$2,754 per employee improvement annually**. Assuming a base-case **0.5% adoption rate** for the competency development framework within organizations **applied to 17.6 million jobs** equates to an **estimated242 million dollarsimpact as a base-case scenario** for application of the **CHI competency framework to organizations**.

Conclusion

Redesigning competency frameworks isn't something that can be accomplished in a vacuum – particularly during an organizational transformation process. This entails being explicit with core

competencies, crafting precise key behavioral metrics as objective measures, and breaking them down into High, Medium, and Low in a demonstrable manner. The CHI framework will need to be periodically updated for changing skills and capabilities required to thrive in an age of shifting business priorities and digital disruption.

Important to note, the CHI competency framework needs to be custom-built to an organization's specific vision, needs and issues related to transformation and should not be generic. This ensures that the framework is also used to guide talent management activities directly related to the transformational strategy. It is also essential to weave the competency framework with other important talent management activities including performance management, succession planning, career development and learning and development — in order to have a coordinated and holistic process of building the most competent talent across the organization that then in turn helps execute on successful transformation.

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