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A HUMAN RESOURCE PERSPECTIVE ON THE DEVELOPMENT OF WORKFORCE AGILITY

A Research Project

Presented to the Faculty of

The George L. Graziadio

School of Business and Management

Pepperdine University

In Partial Fulfillment of the Requirements for the Degree

Master of Science

in

Organization Development

by

Alejandro Virchez Azuara

December 2015

This research project, completed by

ALEJANDRO VIRCHEZ AZUARA

under the guidance of the Faculty Committee and approved by its members, has been

submitted to and accepted by the faculty of The George L. Graziadio School of Business

and Management in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

IN ORGANIZATION DEVELOPMENT

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Abstract

This study explored workforce agility from a human resource perspective. This included its main determinants, such as adaptability, proactivity, resiliency, business orientation, and self-awareness; the interventions through which it is developed, such as performance management processes, training, and coaching; and finally the main challenges that organizations face when developing it, such as cultural context and the lack of strategic clarity. The empirical analysis provided several insights on the development of workforce agility. Although limited to a small sample, the study provided evidence supporting the need for future research on the definition of the characteristics of an agile workforce, the definition of a competency model to support its development, the need to deepen the understanding of the mechanisms related to its development, and the main challenges faced by leaders in the implementation of an agile workforce.

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Chapter 1: Introduction

The uncertainty, ambiguity, and turbulence that characterize early 21st century business environments compel organizations to search for new business and organizational models that allow them to respond rapidly and efficiently to market disruptions (Dyer & Shafer, 2003; Shafer, Dyer, Kilty, Amos, & Ericksen, 2001). One capability adopted to meet these challenges is organizational agility, defined as an organization's capacity to sense its environment, generate strategies and responses to it, test them, and incorporate the acquired knowledge into the organization to support the temporary competitive advantage (Dyer & Shafer, 2003; Trinh, Molla, & Peszynski, 2012; Worley, Williams, & Lawler, 2014).

Scholars have studied specific factors that promote organizational agility (Nejatian & Zarei, 2013). Such factors include strategic awareness, organizational reconfigurability, learning capacity, flawless execution, and workforce agility (Breu, Hemingway, Strathern, & Bridger, 2001; Doz & Kosonen, 2008; Dyer & Shafer, 1998, 2003; Worley et al., 2014). The last factor, workforce agility, is the focus of this thesis.

Workforce agility has been identified as a crucial element for the development of organizational agility (Dyer & Ericksen, 2006; Dyer & Shafer, 1998, 2003; Sherehiy, Karwowski, & Layer, 2007). Workforce agility is defined as the workforce's ability to deal with uncertain scenarios, learn from them, generate innovative solutions, and deliver specific skills at any given time (Breu et al., 2001; Muduli, 2013). The development of workforce agility is related to specific human resource (HR) activities, such as work design, staffing, training and development, employee communication, performance management, rewards and recognition, and work context (Dyer & Shafer, 1998, 2003). In addition to these activities, Dyer and Shafer (2003) introduced a set of agility-oriented

principles linked to a range of prototypical HR policies, programs, and practices related to the development of workforce agility such as drive, discipline, autonomy, accountability, growth, and continuity.

Despite its emerging importance, workforce agility remains a relatively understudied element of organizational agility from an empirical perspective (Breu et al., 2001; Sumukadas & Sawhney, 2004). Thus far, the literature has focused on conceptual frameworks of the definition of an agile workforce (Breu et al., 2001; Dyer & Shafer 2003) and on the theoretical mechanisms that foster its development (Dyer & Shafer 1998, 2003; Nijssen & Paauwe, 2012; Sumukadas & Sawhney, 2004). The main goal of this study is to partially fill this literature gap by exploring, from an exploratory qualitative perspective, the most important determinants of agile workforce development as well as the potential challenges that organizations face in the process of enabling an agile workforce. Given that workforce agility is highly dependent on HR leadership decisions, the study's research design is based on qualitative data acquired from interviews of experienced HR leaders from a diverse range of companies in Mexico.

Study Purpose

The purpose of this study is to gain a better understanding of workforce agility, its determinants, the interventions through which it is developed, and the main challenges that organizations face when developing it. It does so by capturing HR leaders' perspectives on the following questions:

- 1. How relevant is it to develop workforce agility?
- 2. What are the characteristics of an agile workforce?
- 3. What are the competencies that HR professionals are promoting in order to develop workforce agility?

- 4. What types of HR interventions are being used to develop workforce agility?
- 5. What are the main challenges in developing workforce agility?

Study Scope

The study focused on a diverse sample of medium- and large-sized companies based in Mexico. The 10 individuals who participated in the study held HR leadership positions. A description of the organizations that were part of the study is presented in Table 1.

Table 1. Organizations that Participated in the Study

Industry	Type of	Country of Origin	Local	Interviewee
	Company		Company	Position
			Size	
Packaged	Global	United States	Large	HR Director
foods				
Packaged	Global	United States	Large	Regional
foods				Transformation
				Leader
Packaged	Global	United States	Large	HR Transformation
foods				leader
Information	Local	Mexico	Medium	HR Director
technology				
Retail	International	Mexico	Medium	HR Manager
Finance	International	Mexico	Large	HR Vice President
Consumer	Global	United States	Large	HR Manager
goods				
Agro	Global	United States	Large	HR Vice President
Consumer	Global	Germany	Large	HR Manager
goods				
Construction	Global	Switzerland	Large	HR Director

N = 10

Note. The individuals who participated in the study worked, at the time of the study, in medium-sized (between 200 and 999 employees) or large-sized (more than 1,000 employees) companies in Mexico.

Study Significance

This is one of the few empirical studies on workforce agility. Many results derived from the analysis constitute important contributions to the literature. First, this research shows that although many current models provide a clear description of the main elements that describe an agile workforce, none of them provides a complete definition of workforce agility. This analysis shows that in order to have a comprehensive diagnosis, it is necessary to incorporate workforce agility characteristics from a variety of models. This finding has important consequences for future research on the topic. Second, the study finds that there is a lack of clarity on the part of HR leaders regarding the competencies that influence the development of specific characteristics of an agile workforce. Third, results identify additional mechanisms for the development of workforce agility which have not been explored in previous literature. Fourth, this appears to be the first study to identify leader perceptions of challenges they face in the development of an agile workforce. Thus, this thesis contributes to a better understanding of the ways in which workforce agility can be promoted and, with it, organizational agility and development. Fifth, this study confirms what is purported in previous research: that workforce agility is a crucial emerging organizational development need. Within a variety of industry conditions, all research participants agreed that workforce agility is very relevant, providing evidence that the development of workforce agility is, indeed, an important subject for further research.

Organization of the Study

The study is developed throughout five chapters. The first chapter provides a background to the study by defining its purpose, significance, and scope. The second chapter presents an extensive review of the literature related to workforce agility, its main

characteristics, the HR strategies proposed for its development, and the current literature gaps. The third chapter covers a description of the research methods used in the study, the specifications of the research design, and the procedures that were used to obtain and analyze the data. Results from the study are presented in Chapter 4. The final chapter presents a summary of main conclusions derived from the analysis, provides suggestions for future research, and addresses the limitations of the study.

Chapter 2: Literature Review

This chapter presents an overview of the literature on organizational and workforce agility. The first section introduces the concept of organizational agility and the characteristics of agile organizations. The second section explores the concept of workforce agility, one of the most important elements for enhanced organizational agility, and also explores the characteristics of an agile workforce. The third section reviews current HR strategies and activities related to the development of workforce agility. Finally, the fourth section concludes with a discussion of the most important research gaps in the literature of workforce agility development.

Organizational Agility

The turbulent business environment poses challenges to current management principles employed by organizations and their leadership (Breu et al., 2001; Dyer & Shafer, 2003; Joiner & Josephs, 2007; Vázquez-Bustelo, Avella, & Fernández, 2007; Weber & Tarba, 2014; Worley et al., 2014). Organizations have been in search of novel organizational principles and configurations that provide the capabilities required to thrive in such hypercompetitive and turbulent environments (Dyer & Shafer, 1998; Hamel, 2012; Hatum, 2013; Worley et al., 2014). For instance, in order to operate efficiently within these environments, enterprises have developed a specific set of capabilities, which some authors refer to as organization agility (Dyer & Shafer, 2003; Worley et al., 2014). Authors have defined organization agility as an organization's ability to constantly adapt to an ever-changing environment in a rapid and profitable way (Goldman, Nagel, & Preiss, 1995; Huang & Nof, 1999; Worley et al., 2014; Yusuf, Sarhadi, & Gunasekaran, 1999).

The concept of organization agility was introduced in the 1990s as a manufacturing principle, before expanding into broader business applications (Breu et al., 2001). The study of agile organizations has been approached from diverse perspectives: as a structural capability (Dyer & Shafer, 2003), as a set of organizational routines or processes embedded in the organizational culture (Worley et al., 2014), as a set of capabilities based on management practices (Doz & Kosonen, 2008; Meredith & Francis, 2000; Nejatian & Zarei, 2013), and as a set of organizational competencies (Nijssen & Paauwe, 2012). For the purpose of this review, characteristics of agile organizations were grouped into five categories: strategic awareness, reconfigurable organization, organizational learning, flawless execution, and agile workforce:

- 1. Strategic awareness: Agile organizations are aware of their external environment as well as their internal priorities. This allows them to identify opportunities and threats faster. Their capacity to communicate, interpret, and analyze strategic information is supported by formal dialogue processes (Doz & Kosonen, 2008; Dyer & Shafer, 1998, 2003; Meredith & Francis, 2000; Worley et al., 2014; Zhang & Sharifi, 2000).
- 2. Reconfigurable organization: Agile organizations have the ability to easily redesign, rescale, realign, and redeploy their processes, systems, products, work methods, and even business models in a rapid way (Doz & Kosonen, 2008; Dyer & Shafer, 1998; Nijssen & Paauwe, 2012; Worley et al., 2014). This attribute relates to the ability to create open and flexible structures. As Dyer and Shafer (1998) suggested, "Rather than being locked into fixed structures, the tendency is to create designs that encourage rapid reconfigurability within (e.g., the formation and reformation of temporary teams) and across organizations (e.g., moving in

- and out of temporary alliances, including virtual relationships, with other, similarly agile, organizations)" (p. 13).
- 3. Organizational learning: The ability to learn is crucial for any organization seeking to make the right changes at the right moment. Organizations need to learn in many different ways; single-, double-, and even triple-loop learning are required in order to gain competitive advantage (Dyer & Shafer, 2003; Morgan, 2006; Sessa, London, Pingor, Gullu, & Patel, 2011. Agile organizations are able to accurately spot an opportunity, transmit that information, turn it into an actionable strategy, test it, learn from the test, and decide whether to enhance it or drop it (Worley et al., 2014). Generating relevant knowledge, transmitting it, and ensuring that it is available for everyone within the organization are crucial for organizational learning (Nijssen & Paauwe, 2012; Teece & Pisano, 1994).
- 4. Flawless execution: Agile organizations must be able to implement rapid changes to their business model in order to exploit temporary competitive advantages (Dyer & Shafer, 2003; Worley et al., 2014). Making change happen is completely different in a well-known environment than in an unknown one. Worley et al. (2014) made a distinction between execution and implementation: "Execution involves doing better what you already know, understand, or have accepted; implementation involves learning to do well what you may not yet understand and are trying to do for the first time" (position 2452). Agile organizations have the ability to both integrate processes (Worley et al., 2014) and manage the paradoxical challenge of balancing today's and tomorrow's performance (Dyer & Shafer, 2003; Lewis, Andriopoulos, & Smith, 2014; Worley et al., 2014).

5. Agile workforce: Agile organizations depend on their employees' capacity to deliver specific skills at any given time (Breu et al., 2001; Muduli, 2013).
Developing agile workforce behaviors and competencies is crucial for any organization that intends to build organizational agility through strategic HR management (Dyer & Shafer, 1998). Unfortunately, so far, there has been little consensus on the classification of agile workforce attributes (Breu et al., 2001).
The following section further explains the current frameworks and models related to workforce agility.

Workforce Agility

Scholars have identified the development of workforce agility as a crucial factor in the development of organizational agility (Dyer & Ericksen, 2006; Dyer & Shafer, 1998, 2003; Sherehiy et al., 2007). Workforce agility is defined as the workforce's ability to deal with uncertain scenarios, learn from them, generate innovative solutions, and deliver specific skills at any given time (Breu et al., 2001; Muduli, 2013).

Different frameworks have been proposed to classify the characteristics of an agile workforce. Workforce agility may result from a set of attributes, behaviors, competencies, capabilities, or mindsets (Breu et al., 2001; Dyer & Shafer, 1998, 2003; McCann & Selsky, 2012; Muduli, 2013; Shafer et al., 2001; Sherehiy et al., 2007). To further understand workforce agility-related characteristics, a summary of these frameworks is presented in Table 2, followed by a brief description of each framework.

Table 2. Frameworks Related to Workforce Agility

Characteristics of an Agile Workforce	Characteristics	Type of	Reference
	Classification	Study	Study
Adaptive	Mindsets and	Theoretical	Dyer &
Proactive	behaviors		Shafer,
Generative			2003
Business-driven	Competencies	Theoretical	Dyer &
Focused			Shafer,
Generative			1998
Adaptive			
Values-driven			
Business-driven	Competencies	Empirical	Shafer et
Values-driven			al., 2001
Focused			
Generative			
Resilient			
Responsiveness to changing customer	Capabilities	Empirical	Breu et al.,
needs			2001
Responsiveness to changing market			
conditions			
Speed of developing new skills and			
competencies			
Speed of acquiring the skills necessary			
for business process change			
Speed of innovating management skills			
Speed of acquiring new information			
technology and software skills			
Effectiveness of cooperating across			
functional boundaries			
Ease of moving between projects			
Employee empowerment for independent			
decision making			
Support of the information technology			
infrastructure for the rapid introduction of			
new information systems			
Being purposeful	Capabilities	Theoretical	McCann
Being aware			& Selsky
Being action-oriented			2012
Being resourceful			
Being networked			

Characteristics of an Agile Workforce	Characteristics	Type of	Reference
	Classification	Study	Study
Proactivity	Capabilities	Literature	Sherehiy
Adaptability		review	et al.,
Resiliency			2007
Adaptive	Attributes	Literature	Muduli,
Flexible		review	2013
Developmental			
Speedy			
Collaborative			
Competent			
Informative			

Note. Table compiled from information in Dynamic Organizations: Achieving Marketplace and Organizational Agility With People (CAHRS Working Paper #03-04), by L. Dyer and R. A. Shafer, 2003, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/27/; From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility (CAHRS Working Paper #98-12), by L. Dyer and R. A. Shafer, 1998, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/125; "Crafting a Human Resource Strategy to Foster Organizational Agility: A Case Study," by R. A. Shafer, L. Dyer, J. Kilty, J. Amos, and J. Ericksen, Fall, 2001, Human Resource Management, 40(3), 197-211; "Workforce Agility: The New Employee Strategy for the Knowledge Economy," by K. Breu, C. J. Hemingway, M. Strathern, and D. Bridger, 2001, Journal of Information Technology, 17, 21-31; Mastering Turbulence: The Essential Capabilities of Agile and Resilient Individuals, Teams and Organizations [Kindle version], by J. McCann and J. W. Selsky, 2012, San Francisco, CA: Jossey-Bass; "A Review of Enterprise Agility: Concepts, Frameworks, and Attributes," by B. Sherehiy, W. Karwowski, & J. K. Layer, 2007, International Journal of Industrial Ergonomics, 37(5), 445-460; "Workforce Agility: A Review of Literature," by A. Muduli, July, 2013, IUP Journal of Management Research, 12(3), 55-65. Available at http://ssrn.com/abstract=2350029

Dyer and Shafer (2003) classified agile workforce behaviors under three specific mindsets: being adaptive, being proactive, and being generative. Table 3 defines the behaviors associated with each mindset.

Table 3. Dyer and Shafer's 2003 Characteristics of an Agile Workforce

Mindset	Behavior	Definition
Be	Initiate	Actively search for opportunities to contribute to
proactive		organizational success and take the lead in pursuing
		those that appear promising
	Improvise	Devise and implement new and creative approaches to
		pursuing opportunities and dealing with threats
Be adaptive	Assume	Perform in multiple capacities across levels, projects,
	Multiple Roles	and organizational boundaries—often simultaneously
	Rapidly	Move quickly from role to role
	Redeploy	
	Spontaneously	Engage often and easily with others with a singular
	Collaborate	focus on task accomplishment (and disengage just as
		easily when contribution is no longer needed)
Be	Learn	Continuously pursue the attainment of proficiency in
generative		multiple competency areas, eschewing over-
		specialization and complacency
	Educate	Actively participate in the sharing of information and
		knowledge through the organization, as well as with
		its partners and collaborators

Note. Adapted from Dynamic Organizations: Achieving Marketplace and Organizational Agility With People (CAHRS Working Paper #03-04; p. 15), by L. Dyer and R. A. Shafer, 2003, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/27/. Adapted with permission.

In another earlier study, Dyer and Shafer (1998) identified and categorized a number of personal competencies related to agility (see Table 4) which provided better guidance for organizations in search of developing an agile workforce.

Table 4. Dyer and Shafer's 1998 Characteristics of an Agile Workforce

Category	Competencies
Business-driven	Visionary, future-oriented, big picture-oriented, customer-focused,
	knowledgeable about the marketplace and the way the business
	operates, and results-oriented.
Focused	Able to set priorities, solutions-oriented, and (im)patient (i.e.,
	simultaneously exhibit a strong sense of urgency and a willingness to
	let things take their course).
Generative	Organizationally adept, open to experimentation, fast learners and
	appliers of new knowledge, and team players.
Adaptive	Comfortable with themselves, empathetic, comfortable with
	ambiguity, comfortable with paradox, and resilient.
Values-driven	Instinctively behave in accordance with the organization's core
	values.

Note. Table constructed from quotations in From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility (CAHRS Working Paper #98-12; pp. 17-18), by L. Dyer and R. A. Shafer, 1998, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/125. Quotations reproduced with permission.

A similar set of competencies was identified by Shafer et al. (2001) in a case study from a healthcare network (AEHN). The definitions of these competencies differ from the ones explained above because they were applied to a particular organizational case. As an additional reference, the definition of each competency defined by Shafer et al. is presented in Table 5.

Table 5. Shafer et al.'s 2001 Characteristics of an Agile Workforce

Competency	Definition
Business-driven	Dedicate to developing AEHN as an agile integrated network as
	well as to achieving narrower specialty area, functional, or subunit
	goals.
Focused	Able to set priorities and develop world-class solutions while
	willingly accepting personal accountability for those actions as well
	as for the results obtained.
Generative	Able and willing proactively to apply new knowledge and skills in
	a constant search for innovative solutions.
Resilient	Comfortable with ambiguity and taking calculated risks and able to
	bounce back quickly and easily when a situation changed or things
	went wrong.
Values-driven	Instinctively living the organization's core values.

Note. Table constructed from quotations in "Crafting a Human Resource Strategy to Foster Organizational Agility: A Case Study," by R. A. Shafer, L. Dyer, J. Kilty, J. Amos, and J. Ericksen, Fall, 2001, *Human Resource Management*, 40(3), p. 200. Copyright 2001 by John Wiley & Sons, Inc. Quotations reproduced with permission.

Breu et al. (2001) performed an empirical analysis that identified 10 key variables relevant to workforce agility, which they categorized into five capabilities: intelligence, competencies, collaboration, culture, and information systems. Because the focus of their research was on the influence of information systems on workforce agility, the definitions of some of these capabilities relate to organizational attributes beyond the individual level. In this model, capability definitions are given by specific attributes, which are presented in Table 6.

Table 6. Breu et al.'s 2001 Characteristics of an Agile Workforce

Capabilities	Attributes
Intelligence	Responsiveness to changing customer needs.
	Responsiveness to changing market conditions.
Competencies	Speed of developing new skills and competencies.
	Speed of acquiring the skills necessary for business process
	change.
	Speed of innovating management skills.
	Speed of acquiring new information technology and software
	skills.
Collaboration	Effectiveness of cooperating across functional boundaries.
	Ease of moving between projects.
Culture	Employee empowerment for independent decision making.
Information	Support of the information technology infrastructure for the rapid
Systems	introduction of new information systems.

Note. Adapted from "Workforce Agility: The New Employee Strategy for the Knowledge Economy," by K. Breu, C. J. Hemingway, M. Strathern, and D. Bridger, 2001, *Journal of Information Technology, 17*, p. 27. Reprinted by permission from Macmillan Publishers Ltd.: Journal of Information Technology, copyright 2001, published by Palgrave Macmillan.

In their review of concepts, frameworks, and attributes of agile enterprises, Sherehiy et al. (2007) classified the attributes of an agile workforce into three main capabilities: proactivity, adaptivity, and resiliency. The specific attributes of these capabilities are listed in Table 7.

Table 7. Sherehiy et al.'s 2007 Characteristics of an Agile Workforce

Capabilities	Attributes
Proactivity	Anticipation of problems related to change.
	Solution of change-related problems.
	Personal initiative.
Adaptivity	Interpersonal and cultural adaptability.
	Spontaneous collaboration.
	Learning new tasks and responsibilities.
	Professional flexibility.
Resiliency	Positive attitude to changes, to new ideas, and to technology.
	Tolerance to uncertain and unexpected situations.
	Coping with stress.

Note. Reprinted from *International Journal of Industrial Ergonomics*, *37*(5), by B. Sherehiy, W. Karwowski, & J. K. Layer, "A Review of Enterprise Agility: Concepts, Frameworks, and Attributes," p. 458, copyright 2007, with permission from Elsevier.

McCann and Selsky (2012) developed a model with five essential capabilities of highly agile and resilient individuals, teams, organizations, and ecosystems. Their model included not only the ability to deal with rapid change (agility), but also the ability to deal with disruptive change (resiliency). The definitions of these capabilities at the individual level are presented in Table 8.

Table 8. McCann and Selsky's 2012 Characteristics of an Agile Workforce

Capabilities	Definition
Being purposeful	Positive self-concept with a physically and psychologically
	healthy presence capable of sustaining them in highly ambiguous,
	stressful work situations.
Being aware	Active learners with a curiosity about the larger world, open to
	change and able to make sense and act in ambiguous
	environments.
Being action-	Confident and competent in taking the initiative, acting or reacting
oriented	as necessary to gain advantage, avoiding collisions, or minimizing
	setbacks.
Being resourceful	Entrepreneurial in securing resources, talent, and support required
	to meet a goal despite the setback.
Being networked	Positive, active relationships maintained within the immediate
	family, work group, and community to sustain a sense of
	connectedness and meaning.

Note. Reproduced from portion of table in *Mastering Turbulence: The Essential Capabilities of Agile and Resilient Individuals, Teams and Organizations* [Kindle version], (Table 3.2, position 910), by J. McCann and J. W. Selsky, 2012, San Francisco, CA: Jossey-Bass. Copyright 2012 by Jossey-Bass. Reproduced with permission.

Based on an extensive literature review, Muduli (2013) classified the attributes of an agile workforce into seven categories described in Table 9.

Table 9. Muduli's 2013 Characteristics of an Agile Workforce

Attributes	Definition		
Adaptive	Refers to the ability to be comfortable with change.		
Flexible	Refers to the ability to quickly change from one strategy/task/job		
	to another.		
Developmental	Refers to the ability to have a positive attitude towards learning		
	and self-development.		
Speedy	Refers to the speed of skills development, adaptation, and		
	information access.		
Collaborative	Refers to the ability to collaborate with other teams, functions,		
	and organizations.		
Competent	Refers to the acquisition of new knowledge.		
Informative	Refers to the ability to search and process information that is		
	relevant to their objectives.		

Note. Table created from information in "Workforce Agility: A Review of Literature," by A. Muduli, July, 2013, *IUP Journal of Management Research*, *12*(3), pp. 59-60. Available at http://ssrn.com/abstract=2350029

There are mostly semantic differences across the several definitions of workforce agility used by authors in the literature. Specifically, there is no agreement on whether it should be considered a group of mindsets or behaviors (Dyer & Shafer, 2003), competencies (Dyer & Shafer, 1998; Shafer et al., 2001), capabilities (McCann & Selsky, 2012), or attributes (Muduli, 2013; Sherehiy et al., 2007). In an attempt to compare all the attributes that describe an agile workforce, an extended version of Sherehiy et al.'s (2007) framework, which already groups most of the characteristics proposed by other authors, was used (see Table 10). This extended version incorporates two additional characteristics that were not considered in the original model. One of the characteristics is related to the individual's alignment to the organization and its principles, defined as "business-driven" (Dyer & Shafer, 1998, p. 17) and "values-driven" (Shafer et al., 2001, p. 200). The second characteristic added to the reference framework is related to the individual's self-awareness, which McCann and Selsky (2012) identified as being "purposeful" (position 910) and Muduli (2013) referred to as "developmental" (p. 59). The final reference framework used in this study is detailed in Table 11.

Table 10. Comparison between Sherehiy et al.'s 2007 Model and the Other Related Models

Attributes	Dyer &	Dyer &	Shafer	Breu et	McCann	Muduli,
defined by	Shafer,	Shafer,	et al.,	al., 2001	& Selsky	2013
Sherehiy et al.,	2003	1998	2001		2012	
2007						
Anticipation of		X			X	
problems related						
to change						
Solution of	X	X	X	X	X	
change-related						
problems						
Personal initiative	X	X		X	X	
Interpersonal and				X	X	
cultural						
adaptability						
Spontaneous	X			X		X
collaboration						
Learning new	X	X	X	X	X	X
tasks and						
responsibilities						
Professional	X					X
flexibility						
Positive attitude		X	X	X		X
to change, to new						
ideas, technology						
Tolerance to		X	X			X
uncertain and						
unexpected						
situations						
Coping with					X	
stress						

Note. Sources compared include "A Review of Enterprise Agility: Concepts, Frameworks, and Attributes," by B. Sherehiy, W. Karwowski, & J. K. Layer, 2007, International Journal of Industrial Ergonomics, 37(5), 445-460; Dynamic Organizations: Achieving Marketplace and Organizational Agility With People (CAHRS Working Paper #03-04), by L. Dyer and R. A. Shafer, 2003, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/27/; From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility (CAHRS)

Working Paper #98-12), by L. Dyer and R. A. Shafer, 1998, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/125; "Crafting a Human Resource Strategy to Foster Organizational Agility: A Case Study," by R. A. Shafer, L. Dyer, J. Kilty, J. Amos, and J. Ericksen, Fall, 2001, *Human Resource Management*, 40(3), 197-211; "Workforce Agility: The New Employee Strategy for the Knowledge Economy," by K. Breu, C. J. Hemingway, M. Strathern, and D. Bridger, 2001, *Journal of Information Technology*, 17, 21-31; *Mastering Turbulence: The Essential Capabilities of Agile and Resilient Individuals, Teams and Organizations* [Kindle version], by J. McCann and J. W. Selsky, 2012, San Francisco, CA: Jossey-Bass; "Workforce Agility: A Review of Literature," by A. Muduli, July, 2013, *IUP Journal of Management Research*, 12(3), 55-65. Available at http://ssrn.com/abstract=2350029

Table 11. Proposed Reference Framework for the Study of Workforce Agility Characteristics

Capabilities	Attributes		
Proactivity	Anticipation of problems related to change.		
	Solution of change-related problems.		
	Personal initiative.		
Adaptability	Interpersonal and cultural adaptability.		
	Spontaneous collaboration.		
	Learning new task and responsibilities.		
	Professional flexibility.		
Resiliency	Positive attitude towards changes, new ideas,		
	technology.		
	Tolerance of uncertain and unexpected situations.		
	Coping with stress.		
Business orientation	Alignment to the organization values.		
	Knowledge of the organization's operations, business		
	environment, and future priorities.		
Self-awareness	Attitude towards self-development and self-learning.		
	Attitude towards physical and psychological health.		

Note. Constructed by the author based on From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility (CAHRS Working Paper #98-12), by L. Dyer and R. A. Shafer, 1998, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/125; Mastering Turbulence: The Essential Capabilities of Agile and Resilient Individuals, Teams and Organizations [Kindle version], by J. McCann and J. W. Selsky, 2012, San Francisco, CA: Jossey-Bass; "Workforce Agility: A Review of Literature," by A. Muduli, July, 2013, IUP Journal of Management Research, 12(3), 55-65. Available at http://ssrn.com/abstract=2350029; "Crafting a Human Resource Strategy to Foster Organizational Agility: A Case Study," by R. A. Shafer, L. Dyer, J. Kilty, J. Amos, and J. Ericksen, Fall, 2001, Human Resource Management, 40(3), 197-211; "A Review of Enterprise Agility: Concepts, Frameworks, and Attributes," by B. Sherehiy, W. Karwowski, & J. K. Layer, 2007, International Journal of Industrial Ergonomics, 37(5), 445-460.

Human Resource Strategies and Activities Related to Workforce Agility

The uniqueness and particularity of each organization and the variety of changes that each experiences makes defining a specific set of activities that would help to develop an agile workforce difficult (Dyer & Shafer, 1998). Scholars have defined diverse activities related to strategic HR management that provide guidance for the development of an agile workforce (Dyer & Shafer 1998, 2003; Muduli, 2013; Sumukadas & Sawhney, 2004). These practices include staffing, training and development, work design, information-sharing practices, rewards and recognition policies, work context, performance management, and power-sharing practices like quality circles or job enrichment (Dyer & Shafer, 1998, 2003; Muduli, 2013; Sumukadas & Sawhney, 2004).

In addition to these practices, Dyer and Shafer (2003) also suggested six agilityoriented HR principles related to the desired mindset and behaviors of an agile
workforce: "drive (common purpose)," "discipline (contextual clarity)," "autonomy (fluid
assignments)," "accountability (ownership of outcomes)," "growth (continuous
development)," and "continuity (continuous employment)" (p. 27). In the same study, the
authors described the types of policies, practices, and programs that exemplified these
principles, such as communication to promote the vision and core values, open-book
management, discretionary work design, outcome negotiation, layoffs as a last resort, and
zero tolerance to competency obsolescence.

Up until now, there has been little empirical evidence on specific HR activities that would support the development of workforce agility. Part of this research focused on gathering empirical evidence of the mechanisms that HR leaders are using to develop workforce agility.

Conclusions and the Need for Further Research

Research on workforce agility has mostly been approached from a theoretical perspective. Several authors agree on the need for empirical research on the development of workforce agility (Dyer & Shafer, 2003; Muduli, 2013; Nijssen & Paauwe, 2012). Some of the research suggestions include defining workforce characteristics (Gunasekaran, 1999), understanding which employees' attitudes and behaviors influence the development of workforce agility (Dyer & Shafer, 2003; Breu et al., 2001), measuring the impact of workforce agility in performance indicators (Breu et al., 2001), and developing scales for measuring workforce agility (Sumukadas & Sawhney, 2004).

Regarding research design, Dyer and Shafer (2003) suggested the use of exploratory qualitative methodologies, such as case studies focusing on testing the individual mindsets and behaviors required of employees. Gunasekaran (1999) suggested the use of empirical and case study research to define the characteristics of an agile workforce. Breu et al. (2001) suggested the use of inductive methods that could provide additional insights into other variables that should be included in the development of workforce agility. Additionally, Breu et al. suggested that future research should focus on the creation of causal models that receive both theoretical and practical support.

The main focus of this study was to obtain perceptions of HR professionals regarding the characteristics of an agile workforce, the competencies related to its development, the mechanisms used in its development, and the potential challenges that might arise in the development of workforce agility.

Chapter 3: Methods

The purpose of this study was to gain a better understanding of workforce agility, its determinants, the interventions through which it is developed, and the main challenges that organizations face when developing it. It did so by learning about HR leaders' perspectives on the following questions:

- 1. How relevant is it to develop workforce agility?
- 2. What are the characteristics of an agile workforce?
- 3. What are the competencies that HR professionals are promoting in order to develop workforce agility?
- 4. What types of HR interventions are being used to develop workforce agility?
- 5. What are the main challenges in developing workforce agility?

Research Design

Given the need for exploratory empirical research on workforce agility, the study followed a qualitative approach using data collected through one-on-one interviews, performed either in person or by telephone. Interviews were used to gather the interviewees' perspectives and experience in developing workforce agility. General information about the interviewees' position, years of experience, company size, and company country of origin also was collected and used for the description and coding of the sample.

Participants

The development of workforce agility has been mostly related to HR activities (Dyer & Shafer, 1998, 2003). Given that workforce agility is highly dependent on HR leadership decisions, the study's research design was based on qualitative data acquired from interviews of experienced HR leaders from a diverse range of companies in Mexico.

The individuals who participated in the study worked, at the time of the study, in medium-sized (between 200 and 999 employees) or large-sized (more than 1,000 employees) companies in Mexico.

The participants were part of the researcher's professional network and were invited through a formal e-mail, which included an introduction to the research topic, a brief description of the interview process, and the confidentiality disclosure. For further reference, see Appendix A.

Data Collection

Information was gathered through a semi-structured interview with five open-ended questions. The estimated time to complete the interview was 30 to 45 minutes. The interviews were audio-recorded and transcribed for analysis. During the interview, the researcher took notes in digital format. It is important to acknowledge that since all the interviews were conducted in Spanish, the data codification process also was performed in Spanish, although the results, conclusions, and recommendations are presented in English (translated by the author).

The interviews were conducted using the following protocol:

- Introduction to the study: Present the study purpose and clarify the definitions of organizational agility and workforce agility.
- 2. Gathering of general information: Collect general information about the profiles of the interviewees, their experience, and the types of companies they work for.
- 3. Interview: The interview consisted of five open-ended questions, each targeting a specific element for the development of workforce agility. The purpose of each question is described in Table 12. For further information on the interview guidelines, see Appendix B.

Table 12. Interview Questions and Purpose

Question	Question Purpose		
1. What are the characteristics of an agile	To explore the core characteristics,		
workforce?	traits, competencies, and behaviors		
	of agile individuals.		
2. How relevant is it for you to develop	To introduce the concept of		
agility and why?	workforce agility and understand its		
	relevance for the interviewee.		
3. What competencies do you promote to	To capture the characteristics, traits,		
develop workforce agility?	competencies, and behaviors that		
	leaders are promoting in their		
	organizations.		
4. Through what type of mechanisms or	To learn about the different human		
interventions are you developing or	resource strategies and activities		
planning to develop these competencies?	that the interviewee uses or plans to		
	use to foster workforce agility.		
5. What are the main challenges in	To learn about the main challenges		
developing agile workers?	in shaping an agile workforce.		

Data Analysis and Interpretation

The data were analyzed through an adaptation of the content analysis process suggested by Creswell (2013), undertaking the following steps:

- 1. Organize and prepare the data for analysis.
- 2. Read through all the data.
- 3. Code the data using Tesch's (1990) eight steps in coding data. The information was coded using the qualitative analysis software QDA Miner Lite (http://provalisresearch.com/products/qualitative-data-analysis-software/freeware/).
- 4. Identify specific themes.
- 5. Advance how the themes would be represented in the qualitative analysis. The results of the characteristics of an agile workforce and the competencies that HR

- leaders are using to develop workforce agility were coded into the reference framework proposed by the author in Table 11.
- 6. Interpret the qualitative analysis.
- 7. Support the accuracy and validity of the findings. As a final step, peer debriefing was used (Creswell, 2013) as a method to support the accuracy and validity of the findings.

Chapter 4: Results

The purpose of this study was to gain a better understanding of workforce agility, its determinants, the interventions through which it is developed, and the main challenges that organizations face when developing it. It did so by learning about HR leaders' perspectives on the following questions:

- 1. How relevant is it to develop workforce agility?
- 2. What are the characteristics of an agile workforce?
- 3. What are the competencies that HR professionals are promoting in order to develop workforce agility?
- 4. What types of HR interventions are being used to develop workforce agility?
- 5. What are the main challenges in developing workforce agility?

This chapter presents the results of the study in the following order: The characteristics of an agile workforce are presented first, followed by results on the relevance of developing workforce agility. The next section provides insight on the competencies that HR leaders are promoting to develop workforce agility. The following part contains the results of the interventions that HR leaders are using to develop workforce agility. Finally, the last sections discuss results regarding the challenges in developing agile workers and present a summary of the results.

The Characteristics of an Agile Workforce

Participants were asked to describe the characteristics of an agile workforce. As previously explained in the methods section, the results were coded into the proposed reference framework described in Table 11. Results are presented in Table 13.

Table 13. Results: The Characteristics of an Agile Workforce

Characteristics of an Agile Workforce*	n
Resiliency	
Positive attitude towards changes, new ideas, and technology	5
Tolerance of uncertain and unexpected situations	3
Coping with stress	0
Adaptability	
Interpersonal and cultural adaptability	4
Spontaneous collaboration	5
Learning new tasks and responsibilities	1
Professional flexibility	0
Proactivity	
Anticipation of problems related to change	2
Solution of change-related problems	1
Personal initiative	4
Business Orientation	
Alignment to the organization's values.	2
Knowledge of the organization's operations, business	3
environment, and future priorities	
Self-awareness	
Attitude towards self-development and self-learning.	3
Attitude towards physical and psychological healthy	1

^{*}The reference framework used to code the results is shown in Table 11. N = 10

Resiliency. Participants considered that being resilient was an important characteristic of an agile workforce. They mentioned two of the three elements that define resiliency.

A positive attitude towards change was mentioned five times. One of the participants commented

People that adapt fast, interiorize rapidly, accept the change, and ask the right questions. On town halls, you see them restless. They ask many questions. ... They do not freeze, wondering whether they have the right information or not. They do not sit and think if it is right or wrong. They can have their own point of view, but it is not that relevant. They end up saying—"Well, it is what it is"—and turn the book to the next page.

Another participant mentioned something similar: "These people are highly tolerant to frustration and very dynamic. In human resources, we define them as DI profiles, highly focused on tasks and on people."

The tolerance of uncertain and unexpected situations was cited three times. One of the participants noted that "It is related to being comfortable with the complexity that arises in moments of change; the agility that we are talking about is related to ambiguity. Not everything will be written all the time." Another participant mentioned "... they are capable of managing themselves with little information and a lot of ambiguity."

Interestingly, none of the participants mentioned anything related to the ability to cope with stress.

Adaptability. Three out of four of the elements that define adaptability were mentioned in this study, with the most relevant being interpersonal and cultural adaptability and spontaneous collaboration.

Interpersonal and cultural adaptability was mentioned four times. One of the participants commented

We are looking for new talent that will enter a global organization. For example, if we have to make a decision between two candidates with the same level of skills and experience, we will give preference to the one that has lived out of the country. This is because we know that this person has experienced an adaptation process. We know that this person, in one way or another, has adapted to a different culture, a different mindset, and a different language. ... We need our future leaders to be able to develop high-performing teams anywhere in the world.

Another participant said "In order to be agile, it is important to develop this 'people agility,' to be able to adapt to your team's situation, to different leadership styles, and to be able to manage interpersonal conflicts." Another participant mentioned

They have to be curious, they have to love reading. Reading for me is everything, anything from gossip magazines to business books. From my perspective, change

is much more related to culture and cultural issues than it is to particular processes.

Five participants noted that agile people collaborate spontaneously. As one participant mentioned, "I believe that what makes our employees agile is their capacity to connect with anyone, to be able to work with everyone, to be able to establish a conversation with a global group or with a sales representative." Another participant mentioned that "They automatically trust their teams, assuming that they are all at the same level. They start working from there."

One person commented on the importance of learning new tasks and responsibilities:

We are looking for people that are strong learners, fast learners. One of our initiatives is to transfer the development process to collaborators, not relying on their bosses. ... We have a slogan—your future, our future—and the message we are sending is that we need a self-learning organization.

None of the participants mentioned anything about professional flexibility.

Proactivity. Participants identified various characteristics related to proactivity: anticipation of problems related to change, solution of change-related problems, and personal initiative. Two participants commented on the anticipation of problems related to change. One of them commented "... to think two steps ahead, I think that it is a basic. You need to be considering options all the time, anticipating for the future." Another participant noted that "They have to be able to deal with situations before they happen. For me, that's it, to do something before it happens. Everything else would be a reaction."

One participant commented on the ability to solve change-related problems: "I think that for the people that are constantly generating ideas, being agile is more normal and less tortuous."

Personal initiative was mentioned four times. One of the participants commented "I would say that they should do the best they can with what they know, reducing times and reducing costs or expenses at all time." Another participant argued, "This company has [been around] a hundred years, and there are always things that could be done better. I would expect that an agile employee would challenge the organization in a positive and constructive way."

Business orientation. Two participants mentioned the importance of alignment with organizational values. One of them commented on the set of specific values required in its organization:

In our organization, this has to do more with the networking abilities, the social abilities, and the connection abilities. To be able to work across the matrix, to be aligned with the processes and, evidently, execute flawlessly, which is one of the things that is most valued in our company.

Another participant made a similar comment related to the organization's focus on client service: "I believe that all people at all organizational levels should have a clear objective. In our case, this translates into client service."

Three people mentioned elements that were related to knowledge of the organization's operations, business environment, and future priorities. One of them said

They have to know the process from end to end and also know how their work impacts this process. What I mean is that they have to know that they are part of something bigger and how their contribution is relevant to the process.

Another one supported this argument by saying

Another factor is to be able to see the whole picture. ... It is important that all employees learn to see the whole picture. This means that if I make a decision, I need to know how it may impact other departments within the organization.

Self-awareness. The two elements that define self-awareness were mentioned in the study. Three persons commented on the attitude towards self-development and

self-learning. One of them said "It would need to be someone with the ability to change its mindset; someone who would actually enjoy the process of change, someone who is willing to go forward and overcome its own resistance to change." Another one supported this argument by saying "To be able to know yourself, to be reflective when change happens. To be clear about your strengths and opportunities and how change can help you keep growing."

One person made a comment related to the attitude towards physical and psychological health: "They need to have a highly developed emotional intelligence.

People tend to spend much time on excuses and on why the changes are not convenient.

People who do this have an underdeveloped emotional intelligence."

The Relevance of Developing Workforce Agility

All 10 participants mentioned that the development of workforce agility was important. Two out of those 10 participants additionally mentioned that it was more important for certain organizational levels, such as middle management employees and executives.

Some of the participants mentioned that it was important due to the nature of their industry. One of the participants commented

It is one of the competencies that we require for all our employees. We have three competency levels, five core competencies, five leadership competencies, and five executive competencies. It is a core competency because we have many elements that are unpredictable, and this forces us to have it as a core competency. I will give you an example related to the weather. In our industry, you can have a frost in Sinaloa that could terminate the whole state's agricultural production, and this is something that changes from one day to another. All your production plans change from one day to another. This particular competency is related to the nature of our business and all the things that we cannot control.

Another one mentioned its importance due to the environment's changing conditions:

It is very important. What happens to us one day is completely different the next morning. Our company is like that, and I refer to our company as a global company. At a certain moment, it is relevant to have a local agenda, and the next day, the corporate guideline could shift to a global-selling strategy. People that have been working for months or maybe years in one program will have to agree that it is no longer a priority. They will need to go with the new program, where the guidelines might not be what they expected. They will have to work on their own capacity to let go and embrace the new program as if it was theirs.

Other participants additionally mentioned that workforce agility was more important for certain levels of their organization:

It is important for our company, but we would need to think at what level. If we are talking about an operational area, where the tasks that are being performed do not change despite the changes in the business strategy, well, in that case, we need people who are experts on their tasks. ... But if we are talking about an administrative workforce, being adaptable and fast is even part of our development evaluation.

Another participant echoed this by saying "In our company, it is one of the competencies that the middle management and executive candidates must develop. This is because our company is in constant change."

The Competencies Used to Promote Workforce Agility

In this section, participants were asked to mention the competencies that they were promoting in order to develop workforce agility. A list of 36 competencies was derived from this question. On average, each company mentioned 3.6 competencies. More detailed results are shown in Table 14.

In general terms, HR leaders and their companies promote workforce agility through a diverse range of competencies; 32 out of the 36 total competencies mentioned were distinct from each other (see Table 15). Only four competencies were mentioned more than one time: results orientation mentioned four times, client orientation mentioned two times, collaboration mentioned two times, and dealing with ambiguity mentioned two times.

Table 14. Results: The Number of Competencies Used to Develop Workforce Agility

	Competencies
Company	Mentioned
1	3
2	2
3	3
4	12
5	3
6	3
7	1
8	4
9	3
10	2
TOTAL	36
AVERAGE	3.6

One participant commented

The first competency is results orientation, which is defined by how well you organize yourself, how well you prioritize, how well you understand your role. For me this competency is very important, especially for a changing environment. Another competency [related to workforce agility] is called collaboration for results, and we define it as the way you build your team, support it, and get involved in all the company's processes. Finally, another competency is related to client and customer orientation; this is an element that even our competitors mention. We are living in a changing environment, and being close to our channels and our consumers has become critical to understand their needs rapidly.

Another participant mentioned

We work with Lomingher leadership competencies. One of our competencies is dealing with ambiguity; from the perspective of our directors and managers, this means how well you focus on what is important. For us this is a leadership imperative. ... The other one is being strategic, is having this strategic agility.

Table 15. Results: Competencies Used to Develop Workforce Agility

Competency	n
Results orientation	4
Client orientation	2
Collaboration	2
Dealing with ambiguity	2
Accountability	1
Emotional intelligence	1
Ethics and values	1
Holistic decision making	1
Imagination	1
Leadership	1
Learning ability	1
Learning on the fly	1
Managing innovation	1
Managing mission and vision	1
Openness and transparency	1
Perspective	1
Proactivity	1
Problem solving	1
Rapidly adapt to changes	1
Risk and decision making	1
Self-awareness	1
Self-motivation	1
Strategic agility	1
Think outside in	1
Think two steps ahead	1
Transcultural sensitivity	1
Understand the business and	1
its environment	1
Value change and innovation	1
Working across the matrix	1
Working by process	1

In order to understand the relevance of these competencies for the development of an agile workforce, they were grouped according to their impact on specific elements of the reference framework (see Table 16). According to this classification, HR practitioners focused more on developing three specific characteristics: business orientation (9), proactivity (8), and adaptability (5). Participants mentioned three additional elements that did not fit into any of the categories on the reference framework: risk and decision making, client orientation, and results orientation.

Table 16. Results: The Competencies Used to Develop Workforce Agility in Relation to the Reference Framework

	Com	pany									
Characteristic	1	2	3	4	5	6	7	8	9	10	TOTAL
Resiliency		1	1	1	1						4
Adaptability				4		1					5
Proactivity	2		1	2	1			1	1		8
Business		1	1	3		2		2			9
Orientation											
Self-				1						1	2
Awareness											
Other	1			1	1		1	1	2	1	8
TOTAL	3	2	3	12	3	3	1	4	3	2	36

 $\overline{N} = 10$

The Mechanisms to Develop Workforce Agility-Related Competencies

In this section, HR leaders were asked to define the mechanisms that they were using to develop the competencies related to workforce agility. The results were grouped into five categories: performance management processes, training, individual feedback or coaching, communications strategies, and international assignments. Results are presented in Table 17.

Table 17. Results: The Mechanisms Used to Develop Workforce Agility

Mechanism or Type of Intervention	n
Performance management processes	8
Training	7
Individual feedback or coaching	4
Communication strategies	2
International assignments	1

N = 10

Three of these five mechanisms were consistent with those suggested in the literature: training, communication strategies, and performance management. Other mechanisms such as work design, staffing, information-sharing practices, rewards and recognition policies, and power-sharing practices were not mentioned at all. Additionally, participants mentioned two other mechanisms that had not been considered previously in the literature: individual feedback or coaching and international assignments (Table 18).

Table 18. Comparison between the Mechanisms Identified by the Participants and the Mechanisms Suggested by Literature

Mechanism Identified by the	Mechanisms Suggested in Literature
Participants	
Training	Training and development
Communication strategies	Employee communication
Performance management	Performance management
Individual feedback or coaching	
International assignments	
	Work design
	Staffing
	Information-sharing practices
	Rewards and recognition policies
	Power-sharing practices

Note. Mechanisms suggested in Dynamic Organizations: Achieving Marketplace and Organizational Agility With People (CAHRS Working Paper #03-04), by L. Dyer and R. A. Shafer, 2003, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/27/; From Human Resource Strategy to Organizational Effectiveness: Lessons from Research on Organizational Agility (CAHRS Working Paper #98-12), by L. Dyer and R. A. Shafer, 1998, Ithaca, NY: Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies. Available at http://digitalcommons.ilr.cornell.edu/cahrswp/125; "Workforce Agility: A Review of Literature," by A. Muduli, July, 2013, IUP Journal of Management Research, 12(3), 55-65. Available at http://ssrn.com/abstract=2350029; "Workforce Agility Through Employee Involvement," by N. Sumukadas & R. Sawhney, 2004, IIE Transactions, 36(10), 1011-1021.

Performance management processes. Eight out of 10 participants mentioned performance management processes as a mechanism for the development of workforce agility. One of them commented

This is part of our everyday. People are interested in it because it is part of their end-year review. We evaluate people for their performance and their potential. We define potential as the ability to learn and to adapt. Additionally, we look into the individuals' potential in terms of their ability to adopt and live according to the company's values.

Another participant supported the importance of the performance management process and its relationship to financial rewards:

I believe that, in general terms, we use all our talent management processes. First, we use goal setting, our process to define goals. Second, we use mid-year reviews, which are a partial evaluation of our goals' achievement. In this process, all collaborators are evaluated, and it is decided whether they are on track or off track. All of us receive feedback. Finally, we have our end-year review, where it is decided whether you reached your end-year goals or not. The important thing here is that the agility level is directly related to your bonus. There are many financial elements, and everything is related to these rewards.

Additionally, a different participant mentioned specific distinctions within their performance management model:

We use it as part of our competency development process, which is a very important factor in our performance and incentive program. Seventy-five percent of your evaluation depends on business objectives and twenty-five percent on the development process. Your incentives depend on whether you develop this competency. At least, this is the case for our leaders.

Training. Seven out of 10 participants were using training to develop the competencies related to workforce agility. One of the participants commented on their training model:

It is a core competency and its development depends on your organizational level. For each level, we have development suggestions. We use the 70-20-10 model. We have online training suggestions as well as everyday practices that you can incorporate into your daily routine.

Another participant gave examples of the different types of training that they use for the development of a specific set of competencies:

For example, for promoting collaboration, we established a partnership with a company, and we started training people on different collaboration tools through e-learning, virtual roundtables, telepresence meetings. ... For another competency, we developed a gamification strategy, like Farmville. In the game, people worked in teams, and for the first 10 rounds you did not know who your team was. In a second round, you get to know who your teammates are, and you get the chance to connect with them through e-mail. This initiative was a simulation of our real-life process.

Another participant commented on a different training approach: "With the common needs of the organization, we develop generic training syllabi, and we then create the training programs that we will provide throughout the year."

Individual feedback or coaching. Four participants commented that they used individual feedback or coaching methodologies to develop the competencies related to agility. One said

We have a specific mechanism directly related to the agility competency. Through a series of questions, you can perform a self-assessment. ... You can perform this assessment with the help of your supervisor to check if you have an adequate development for your organizational level.

Another participant commented on a similar mechanism: "We have a workshop. In this workshop, you work on a self-assessment to learn about the competencies that you need to develop."

Another participant mentioned the use of coaching strategies to promote certain competencies: "We have coaching programs as part of our talent programs, in which we select key talent and help them acquire different management competencies."

Communication strategies. Two participants commented on the importance of supporting competency development through communication strategies. One of them said "We had a communication campaign for inclusion. This year we are going to continue

with it, including in it the concept 'openness to change.' We want people to see the benefits of change, to see the opportunity it brings." Another participant echoed this argument:

One thing I learned from a colleague is that any project should be supported by a strong communication platform. If you don't communicate your culture, your business results, or the agility model that you expect people to follow, then no one will ever know what to do.

International assignments. One of the participants mentioned the use of international assignments as a means to foster the development of certain competencies: "Another thing that I could mention is our international assignment program, which we see as a development process. For our company, this mechanism is very real."

The Main Challenges for Developing an Agile Workforce

HR leaders identified five main challenges in the development of an agile workforce: cultural context, not having enough strategic clarity, leaders' inability to promote agility, integrating different generations, and individual resistance to change (see Table 19).

Table 19. Results: The Main Challenges for Developing an Agile Workforce

Challenge	n
Cultural context	7
Not having enough strategic clarity	5
The leaders' inability to promote agility	4
Integrating different generations	3
Individual resistance to change	3

N = 10

Cultural context. Seven HR leaders commented on the impact of the cultural context on the development of an agile workforce. One of the participants said

Culturally speaking, I personally believe that we are not an agile country. ... You can give a message every day, but the truth is that outside the company, your

employee will run into non-agile processes. The challenge is to fight against this complicated context.

Another participant echoed this

Unfortunately, in Mexico, our people go out of our office, and the environment is adverse. If you take the case of our salespeople, they encounter an environment in which they are asked to pay to avoid being robbed, they are asked to pay to be the first to load [their shipment], and everything seems to work in that way. This is why we are working with them in ethics and anticorruption. We want them to become unbreakable. Otherwise, all their energy is wasted in avoiding being robbed.

Another participant mentioned something similar:

In Mexico, we are still entering globalization; maybe the younger generations are more open, but the truth is that, today, there is a lack of talent in Mexico. ... I believe that it is a cultural thing. We are very hierarchical, we are used to thinking that "my boss is always right," we don't challenge the status quo.

Not having enough strategic clarity. Five people identified the lack of strategic clarity as a major roadblock in the development of workforce agility. One of them mentioned

Even people who don't mind changing get tired and question where we are going. Not having a clear definition of where we are going, a clear mission, vision, or strategy, is a major roadblock. We have this problem in our organization.

Another participant mentioned a similar challenge:

Understanding the business. I have noted this in all the companies that I have worked for. People don't know the business, they don't know what they do, how much do they sell, why they are not selling. ... Another challenge is to state a clear vision and the path to translate it into action. That is something that I'm experiencing right now in this company, and something that I also experienced in the previous company I worked for.

Leaders' inability to promote workforce agility. Four people identified the leaders' inability to promote workforce agility as a roadblock. One participant related the challenge with the leaders' inability to let go and empower others:

Agility means empowerment; no one can be agile without being empowered and accountable. This sense of ownership requires freedom. Middle managers are

forced to give freedom, to voluntarily let go, but this is a higher level of consciousness. While they get to that next level, some make it and some don't. Middle managers suffer, because there is a feeling of being left with empty hands.

Another participant echoed this argument: "The biggest challenge is to develop your leaders' capacity. How many leaders do you have that can actually change and turn the page around rapidly? People who become a living example?"

Integrating different generations. Three people thought that integrating different generations was a major roadblock in the development of workforce agility. One of them commented

[One barrier is] how our leaders manage diverse generational teams and how they integrate them. In a team, you have millennials, gen X, baby boomers, and the question is how to motivate them, how you can make them get into the same boat, how you can make them aware of the benefits of being a team. I will give you an example: home office. Current leaders don't like home office; they do not see the difference or the benefits. They don't get it, don't prefer it, and don't see it as an additional benefit. But for a millennial, home office is a must.

Another participant supported the argument by saying

You have to understand who you are working with. Our biggest challenge is that we have many generations working together. The same strategy would hardly work in the same way for everyone, because you have people who are either too old or too young, not only in age but also in the way they work. We have tried to work this out by diversifying training formats: There is one coaching course that is available as a live, 1.5-day course. A second option is a 3-hour-long e-learning. Finally, a third option is a live webinar that has three virtual classes where you can listen to your professor, raise your hand, interact with your classmates and the consultant, and take an exam.

Individual resistance to change. Three people identified individual resistance to change as a major challenge in the development of workforce agility. One described "the natural resistance that people have to act in a different way and to risking things that are considered important at any given moment." Another participant echoed this by saying "The resistance to change is very strong. It is human to resist change and to resist leaving the comfort zone of doing what you know. This makes you vulnerable."

Summary

All ten participants agreed on the importance of developing workforce agility.

Most of them agreed that it was a need derived from their industry dynamics.

Additionally, two of them mentioned that it was more relevant for middle managers and executives.

HR leaders identified, at least once, 12 out of the 14 elements of the reference framework. Specifically, they mentioned two out of three elements of resiliency, three out of four elements of adaptability, three out of three elements of proactivity, two out of two elements of business orientation, and two out of two elements of self-awareness. The elements that were most relevant for the participants in terms of their frequency were positive attitude towards changes, new ideas, and technology; spontaneous collaboration; interpersonal and cultural adaptability; and personal initiative. The two elements that were not mentioned were coping with stress and professional flexibility.

On average, HR leaders use 3.6 competencies to develop workforce agility. In total, 32 different competencies were mentioned. These competencies were related mostly to the development of business orientation, proactivity, adaptability, and other characteristics that did not fit the reference framework.

Participants mentioned five different mechanisms to develop the competencies related to workforce agility: performance management processes, training, individual feedback or coaching, communication strategies, and international assignments. The most relevant mechanisms in this study were performance management processes, mentioned eight times, and training, mentioned seven times.

Participants also listed five main challenges for developing an agile workforce: cultural context, not having enough strategic clarity, their leaders' ability to promote

workforce agility, integrating different generations, and individual resistance to change.

The cultural context was the most popular challenge, mentioned seven times, followed by not having enough strategic clarity, mentioned five times, and leaders' inability to promote workforce agility, mentioned four times. The next chapter analyzes the results and presents the study's findings.

Chapter 5: Discussion

The purpose of this study was to gain a better understanding of workforce agility, its main determinants, the interventions through which it is developed, and the main challenges that organizations face when developing it. It did so by learning about HR leaders' perspectives on the following questions:

- 1. How relevant is it to develop workforce agility?
- 2. What are the characteristics of an agile workforce?
- 3. What are the competencies that HR professionals are promoting in order to develop workforce agility?
- 4. What types of HR interventions are being used to develop workforce agility?
- 5. What are the main challenges in developing workforce agility?

The perspectives of the HR practitioners that were part of the interview provided valuable insight on the practical implications for developing an agile workforce. The participants identified a diverse range of characteristics that were related to the reference framework defined in Table 11, constructed by the author based on previous classifications from Dyer and Shafer (1998), McCann and Selsky (2012), Muduli (2013), Shafer et al. (2001), and Sherehiy et al. (2007). The two specific elements that were not mentioned in this study were coping with stress and professional flexibility. Although the study suggests that these elements were not relevant for developing workforce agility (in this context), it cannot be inferred that these elements are not relevant at all.

All 10 participants agreed on the importance of developing workforce agility.

Most of them agreed on it because it was relevant for their industry and the conditions generated by their environment. The answers to this question provided evidence of the

relevance to HR leaders and the interest they have in the development of an agile workforce.

HR leaders mentioned, on average, 3.6 competencies, which is a relatively low number considering that the reference framework is composed of 14 different elements. The study results suggested there is a large and diverse range of competencies that HR leaders are using to develop workforce agility. From the 36 competencies that were mentioned in the study, 32 were completely different. After grouping all 32 competencies into the reference framework, this research showed that HR leaders were focusing on the development of a different set of characteristics than those that they had considered more relevant in the previous research question.

Participants mentioned five mechanisms to develop an agile workforce. As summarized in Table 18, participants mentioned only three out of the eight different mechanisms proposed by literature. The other two mechanisms that were mentioned, individual coaching or feedback and international assignments, have not been considered previously.

The participants identified five main challenges for the development of an agile workforce: cultural context, not having enough strategic clarity, their leaders' inability to promote workforce agility, integrating different generations, and individual resistance to change.

Limitations

A limitation to the present study is the use of a small sample size comprised of 10 HR leaders from 10 different companies in Mexico. This is the main reason why this empirical investigation should be considered only an exploratory, preliminary analysis on

the development of workforce agility. Future studies should consider a larger sample from a more diverse cultural context.

A second limitation is the corporate influence on the participants' perspectives. Some of the participants seemed to be influenced by the corporate policies of their workforce, which might differ from the participants' perspective. Future studies could overcome this limitation by finding ways to eliminate confounders and ensure that the responses reflect participants' perspectives and not their organizations' point of view.

Implications

This research provided a set of implications in the development of an agile workforce. First, it showed that although many of the current models provide a clear description of the main elements that describe an agile workforce, none of them provides a complete definition of it. It is necessary for future research to incorporate characteristics from various models, ensuring that all the potential characteristics previously defined are included. In addition to these findings, the study suggests that HR leaders have a lack of clarity regarding the competencies that influence the development of specific characteristics of an agile workforce. A recommendation for future research is to define and validate a unified competency framework that promotes the development of the characteristics of an agile workforce.

In relation to the development of workforce agility, the study suggested two further conclusions. First, there is a gap between the mechanisms that HR leaders are using and the ones suggested in current literature. Second, there are other mechanisms that are being used by HR leaders to develop workforce agility and that have not been considered in the literature so far. A recommendation for future research is to evaluate the efficiency of the different mechanisms that promote the development of specific

competencies related to workforce agility. The insights derived from this recommendation could provide better guidance to the professionals interested in developing an agile workforce.

Finally, this study suggests a set of challenges that may influence the development of workforce agility. Since it is the first attempt in the literature to explore the challenges in developing workforce agility, and given that the study was limited to only 10 participants, future research should focus on validating current findings and on exploring other potential challenges that HR leaders might face in the midst of developing an agile workforce.

Conclusions

This study explored, from an HR perspective, the relevance of workforce agility, its main determinants, the interventions through which it is developed, and the main challenges that organizations face when developing it. The empirical analysis provided support on the need for further research on the development of workforce agility.

The main findings of this research are the following:

- Despite many current models providing a clear description of the main elements
 that describe an agile workforce, none of them provide a complete definition of
 workforce agility.
- 2. There is a lack of clarity on the part of HR leaders regarding the competencies that influence the development of specific characteristics of an agile workforce.
- 3. There are additional mechanisms for the development of workforce agility which have not been explored in previous literature.
- 4. The study identified an initial set of challenges that HR leaders have faced in the development of an agile workforce.

5. The study provided a confirmation that workforce agility is a crucial emerging organizational development need.

Based on these findings, future research should focus on the development of a unified framework, with a clear definition of the characteristics of an agile workforce, a set of competencies that influence the development of these characteristics, and the suggested mechanisms that could enhance its development. Additionally, future research also should provide more insights on the main challenges that leaders may face in the development of an agile workforce.

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Appendix A: Study Invitations (English and Spanish Versions)

Study Invitation (English Version)

DATE

Dear NAME:

I write to you as a graduate student of the Master of Science in Organization Development at Pepperdine University. I am currently working on my thesis project "A Human Resource Perspective on the Development of Workforce Agility." The study seeks to understand the perspective of human resource leaders on the development of workforce agility.

I am currently in the process of recruiting individuals to participate in the study. I am inviting human resource leaders from medium and large organizations in Mexico to participate in an interview, and I would like to extend this invitation to you. Please understand that your participation in this study is strictly voluntary.

If you decide to be part of the study, you will be interviewed either in person or over the phone, depending on your preference and possibilities. The interview should take approximately 50 minutes. Your personal information and your company's information will be strictly confidential. No names will be used to identify anyone who has taken part in the study. No particular comments will be attributed to any individual in the thesis, in any analysis beyond the thesis, or in possible future publication of the results. If you decide to participate in the study, please sign the attached consent form.

For further information, you may also contact my research supervisor, Darren Good, Ph.D. at the following number + 1 310 506-8540 or e-mail darren.good@pepperdine.edu, or Dr. Thema Bryant-Davis, Chair, GPS IRB & Dissertation Support for Pepperdine University at the Graziadio School of Business and Management at the following e-mail GPSIRB@pepperdine.edu. I appreciate your consideration and look forward to working together soon.

Sincerely,

Alejandro Virchez Azuara

+52 55-5584-2296

avirchez@pepperdine.edu

Study Invitation (Spanish Version)

FECHA

Estimado(a): NOMBRE

Escribo como estudiante de la Maestría en Desarrollo Organizacional de la Universidad de Pepperdine. Actualmente me encuentro trabajando en mi proyecto de tesis titulado "Una perspectiva de recursos humanos sobre el desarrollo de agilidad en la fuerza laboral." El estudio busca entender la perspectiva de Líderes de Recursos Humanos sobre el desarrollo de una fuerza laboral ágil.

Actualmente estoy en el proceso de reclutamiento de personas que quisieran participar en el estudio. Estoy invitando a Líderes de Recursos Humanos de medianas y grandes empresas en México a participar en una entrevista, y me gustaría invitarlo a usted. Le recuerdo que su participación en este estudio es completamente voluntaria.

Si decide participar en el estudio, usted será entrevistado ya sea en persona o por teléfono, dependiendo de lo que usted prefiera. La entrevista tomará aproximadamente 50 minutos. Su información personal y la información de su compañía serán tratadas de manera confidencial. No se usarán nombres para identificar a las personas que hayan sido parte del estudio. Ningún comentario realizado en las entrevistas será atribuido de manera personal en la tesis, en cualquier análisis adicional a la tesis o en potenciales futuras publicaciones de los resultados. Si decide participar en el estudio por favor firme la carta de consentimiento adjunta.

Para mayor información, puede contactar a mi supervisor de Tesis, Ph. D. Darren Good en el siguiente teléfono + 1 310 506 8540 o correo darren.good@pepperdine.edu o al Dr. Thema Bryant-Davis, Jefe de GPS IRB & Dissertation Support for Pepperdine University, de la Escuela de Negocios Graziadio en el correo GPSIRB@pepperdine.edu. Agradezco mucho su atención y espero que pronto podamos trabajar juntos.

Atentamente,

Alejandro Virchez Azuara +52 55-5584-2296

avirchez@pepperdine.edu

Appendix B: Interview Guidelines (English and Spanish Versions)

Interview Guidelines (English Version)

General information:

Company:	Company country of origin:
Number of employees in Mexico:	Number of international employees:
Position:	Time in that position:
Industry:	

- 1) What are the characteristics of an agile workforce?
- 2) How relevant is for you to develop workforce agility and why?
- 3) What competencies do you promote to develop workforce agility?
- 4) Through what type of mechanisms or interventions are you developing or planning to develop these competencies?
- 5) What are the main challenges in developing agile workers?

Interview Guidelines (Spanish Version)

Información General:

Empresa:	Origen:
Empleados en México:	Empleados a nivel internacional:
Puesto:	Tiempo en el puesto:
Industria:	

- 1) ¿Qué tan importante es desarrollar agilidad y por qué?
- 2) ¿Cuáles son las características de una fuerza laboral ágil?
- 3) ¿Qué competencias promueves que ayuden a desarrollar agilidad en la fuerza laboral?
- 4) ¿A través de qué mecanismos están desarrollando o planean desarrollar estas competencias?
- 5) ¿Cuáles son los principales retos para poder desarrollar colaboradores ágiles?