

available at [www.sciencedirect.com](http://www.sciencedirect.com)journal homepage: [www.elsevier.com/locate/orgdyn](http://www.elsevier.com/locate/orgdyn)

# Authentic leadership and the knowledge economy: Sustaining motivation and trust among knowledge workers

Fred O. Walumbwa, Amanda L. Christensen, Fernanda Hailey

## INTRODUCTION

The end of the twentieth century, immensely influenced by the invention and proliferation of the Internet, defined the blueprint for a new world order in business and management. The Internet and other technological tools altered how organizations and society conduct business. The world population is entering into new dimensions, where geographical barriers are minimized and new cultural values emerge. It is a heterogeneous world, where managing individuals and companies across hemispheres has become a challenging adventure. As a consequence, special leaders are required — leaders who not only possess the skills to manage teams and comprehend the ongoing challenges posed by traditional managerial hindrances — such as motivating, rewarding, and accountability — but leaders who also have to be able to convey their messages in an efficient and trustworthy manner.

As the world wirelessly connects, all world species, human and animal, become part of a quiet revolution of sorts. Today, an individual can comfortably sit in his or her living room in the United States or Australia and become an active participant in the events of the earthquake in Haiti or the slaughtering of whales off the coast of Japan. By keeping a blog, becoming a member of a social networking Web site such as Facebook or Twitter, or even monetarily helping to fund a cause anywhere in the world by using the Internet, anyone can be an activist and join forces with issues of their liking, whether the issues are close to home or far away. The development of the Internet has changed how people participate in society, from dating to shopping, from education to the workplace. Even many years after its development, the Web is still rapidly redefining how individuals, corporations, countries, and cultures operate in the world economy.

Maintaining a global workforce has many benefits for companies, but it also presents challenges not encountered

before. Educated workforces, which in the past were traditionally fostered in industrialized nations, are now sprouting from every corner of the world. As Thomas L. Friedman exemplified in his book *The World is Flat*, new competitors from India, China, and the former Soviet Empire are not just walking, but running, onto the flat world field, with an enormous hunger to get ahead by out learning the competition. Friedman suggested that we are witnessing a mad dash born of 50 years of pent-up aspirations in places like India, China, and the former Soviet Empire where, for five decades, young people were educated but not given an outlet at home in which to fulfill their potential. These well-educated young adults, also referred to as knowledge workers, often choose to stay in their home country while working for major corporations headquartered abroad.

For example, companies such as automakers Renault, Volkswagen, and Harley Davidson outsource complex design engineering projects to eager workers in India. Not only do these workers have nearly equal, or better, educational experiences than American workers, but they also have access to workflow software, freeware, and shareware that makes them every bit as competitive and effective as workers in these companies' headquarter countries. Add that to an unparalleled competitive spirit and motivation, and it is easy to see how these workers and a global organizational structure are here to stay. In fact, a recent article in *The Economic Times* reported that the India engineering services outsourcing industry is projected to reach 55 billion U.S. dollars by 2020.

In order to take advantage of a global pool of talent and to effectively compete in the marketplace, companies have begun to utilize technological tools to form remote teams. Cisco Systems released a press announcement regarding an agreement with Bank of America to deploy the largest network of Cisco TelePresence systems to enhance and enable

team collaboration across the globe. The videoconferencing technology allows people in nearly 50 locations to meet at once, and allows companies to take advantage of their existing facilities and data networks.

Indeed, virtual teams are now a part of many companies where team members are often geographically dispersed and may seldom or never meet in person. Because of the inherent challenges presented by this new system of managing organizations fueled by advances in technology, a new set of leaders is required. Organizations need leaders who possess accurate self-knowledge and who are guided by internal moral standards and values, as opposed to those who base behaviors on external forces such as peers, organizations, or market pressures when confronted with difficult ethical challenges.

Organizations in the knowledge economy require leaders who promote positive relationships through disclosures, including openness in terms of information sharing, accountability, and honesty, and leaders who objectively analyze relevant information and solicit views from others — including those they lead — before making decisions. This is because leaders of knowledge workers may have limited face-to-face interactions with workers, all the while needing to instill the enterprise's message and to harness their teams to accomplish common goals by transcending electronic limitations, physical locations, and cultural differences. Moreover, such leaders have to convey their views, values, creed, and objectives to their knowledge workers with the same effectiveness as they would were the employees physically present, but with the added challenge of not easily being able to transpose their individual leadership personalities, energy, psychological abilities, and charisma.

## EXEMPLIFICATION OF AUTHENTICITY

The study of leadership has developed many concepts throughout time — from toxic to charismatic or transformational, Theory X to Theory Y, unethical to servant, leaders are generally segmented in numerous theoretical and practical concepts. For example, leaders described as charismatic or transformational focus on inspiring and engaging followers as the means to attain organizational goals. They inspire and engage their followers by activating their higher order values such that followers identify with them, feel better about their work, and perform beyond expectations. Servant leadership emphasizes leaders' primary duty as giving priority to the needs of their followers. Such leaders have been described as individuals of character who put people and organization stakeholders first, are compassionate collaborators who de-emphasize leader glorification, and exercise high moral authority. Ethical leadership, on the other hand, demonstrates high ethical standards, as well as fairness, respect and trust, and actively tries to influence the ethical behavior of followers by communicating appropriate standards, modeling ethical conduct, and rewarding ethical acts.

The study of *authentic leadership* elevates leadership segmentation to a new height; it takes into account the person who is the leader as an individual style that is inherent in each person. Specifically, authentic leadership encompasses these aspects of leadership constructs, but goes deeper, examining not just the behaviors associated with the

leadership style, but leaders' ability to know themselves and to use this knowledge to learn with and develop their followers. As Rob Goffee and Gareth Jones state, "authentic leaders seem to know which personality traits they should reveal to whom and when." These authors argue that because authentic leaders are highly attuned to their environments, such leaders rely on an intuition born of formative, sometimes harsh, experiences to understand the expectations and concerns of people whom they seek to influence. John E. Pepper, who formerly served on the board of directors of The Procter & Gamble Company, in a speech to students at Brigham Young University, said that authentic leaders are faithful in their actions to their most important core values, to their promises, and to their words.

Goffee and Jones further suggest that authentic leaders retain their distinctiveness as individuals, yet they know how to win acceptance in strong corporate and social cultures and how to use elements of those cultures as a basis for radical change. Authors Avolio, Gardner, Luthans, Walumbwa, and their colleagues agree and describe authentic leadership as a synergistic pattern of leader behaviors that exhibit balanced processing, internalized moral perspective, self-awareness, and high levels of relational transparency, which they argue results in self-regulated positive behaviors on the part of leaders and associates, fostering self-development.

**Dimensions of authentic leadership.** Avolio and his coauthors use the term *balanced processing* to describe a relatively unbiased form of information processing that is less susceptible to denials, distortions, exaggerations, and/or ignorance regarding one's personal experience, private knowledge, and external feedback on the self. Hence, authentic leaders are presumed to be free of the need to engage in ego-protecting biases that distort the process of self-relevant information. Stephen R. Covey popularly quotes an anonymous source for saying, "When man found the mirror, he began to lose his soul." In other words, some people are more concerned with their image than with their true selves. Success and effective influence can be hard when individuals lay their egos aside and listen to the consciousness inside them that allows them to process information from a more holistic perspective.

*Internalized moral perspective* is used to refer to leader behaviors that are guided by internal moral standards and values, as opposed to those behaviors based on external pressures such as peer, organizational, and societal pressures. When confronted with difficult ethical dilemmas and challenges, leaders who are higher in moral perspective are expected to think and behave in a more pro-social and ethical manner, as they tend to act in line with their highly developed value structures. Robert C. Gay, formerly of Bain Capital, said, "Honoring conscience, not conformity of thought or tradition, is what matters." Leaders will be faced with tough choices, but it is those who are brave enough to make the right choice in the face of adversity who will rise above others.

*Self-awareness* refers to the extent to which a leader possesses accurate self-knowledge and demonstrates that he or she is cognizant of his or her impact on other people, and it is expected to result in higher levels of self-understanding, which can enhance the leader's capacity for leading and developing followers. Indeed, according to Peter Drucker, "Success in the knowledge economy comes to those who

know themselves, their strengths, their values, and how they perform.” Thus, to be effective in the knowledge economy, leaders are expected to use knowledge about themselves to affect their thinking, motivation and choice of behavior when interacting with their followers.

Finally, *relational transparency* refers to leader behaviors that promote positive relationships through disclosures that include openly sharing information and expressions of a leader’s true thoughts and feelings. Leaders demonstrating relational transparency have the ability to create relationships with followers marked by accountability, honesty, openness, and trustful exchanges. Thus, authentic leaders also have the capability to understand their teams, their purpose, and the organization’s mission in a concise and honest manner which fosters open relationships. Cisco chief executive officer (CEO) John Chambers said, “a large part of our business is based upon trust and working together.” Additionally, writing for *The Wall Street Journal* regarding new leaders, Bill George, the former chairman and CEO of Medtronic, put forth that “the old ‘command-and-control’ style is being replaced with an empowering, collaborative style.”

**Authentic leadership at work.** According to authors William Gardner and John Scheremhorn Jr., authentic leaders are also considered genuine in their actions and reactions. A similar perspective is taken by positive organizational behavior experts and psychologists who view authenticity as involving both owning one’s inner thoughts, beliefs, and emotions, and acting in a way that reflects one’s true self (i.e., saying what you really think and feel and behaving accordingly). In this manner, the intentions of authentic leaders are transparent and reflect a consistent link between their espoused values and actions. This intrinsic ability of self-awareness and global vision regarding followers and the enterprise is the fundamental characteristic of an authentic leader who is entrenched in the operations and has a deep understanding of the challenges each functional department faces.

Meg Whitman, CEO of eBay, is an excellent example. eBay was built on the foundation that everyone needed to be treated with honesty and respect. For eBay, the business model would fail were trust and access to information not present. The company was described by *U.S. News & World Report* as “growing faster in its first decade than any other enterprise in the history of capitalism.” When Whitman joined eBay, she was aware of the need to be respectful of the culture and past achievements of the company. Whitman faced several challenges when she joined eBay, especially that of the difference in working styles between her and the current employees. Whitman had to adjust aspects of her working style, which had previously garnered her enough success to be sought as the president and CEO, to effectively influence those at the company. In order to lead well, Whitman had to engage in balanced processing and respond to what individual employees needed, and not to what her ego needed.

Whitman is a perfect example of an authentic leader who helped to build a company and culture that transcends her humanity by being approachable, honest, attuned to the environment, and responsive to individuals’ and the organization’s needs beyond her personal ambitions. She was concerned with her employees and her company, and most importantly, she built relationships within and outside the

company. Whitman understood that, to be successful, she had to work to build continuous consensus among employees and to earn trust through transparency.

Thus, authentic leadership at eBay resonates at every level of the organization, where leaders, followers, and the customer community perform for the greater good of the organization and community by understanding their role and value. At eBay, they refer to this as “The Power of All of Us.” Such leaders as Whitman fully understand themselves and better prepare for future challenges; they also try to help others do the same by modeling and supporting the professional and moral development of their associates. By helping employees to better understand themselves and the organization through transparent decisions and processes, authentic leaders are able to foster a positive and productive organizational climate. Whitman, while at eBay, was a key example of an authentic leader joining an existing organization and flourishing with authenticity.

Realizing that “no commanding officer has a monopoly on the ship’s skills and brainpower,” Captain Mike Abrashoff of the U.S. Navy’s USS Benfold knew that he needed to harness the creativity and know-how of everyone on the ship, even those below the deck. No single person on the ship could manage all the information or make all the decisions, thus, Abrashoff had to find a way to harness the crew’s knowledge and motivate them, even when they were miles away from land and outside for months at a time. When Abrashoff took command of the ship, the crew was demoralized; retention and trust were two of the ship’s biggest problems.

Abrashoff knew that to effectively lead the crew, not only did he need to provide a vision and values for the crew, he also needed to guide them and coach them. But to do that effectively, he had to change and learn with them. Abrashoff said, “Together we learned a different way to think and act.” To develop the crew, Abrashoff developed with them, by modeling behaviors he had seen in leaders whom he admired and by encouraging workers to adopt many of the same behaviors. By creating a trusting and open environment, Abrashoff encouraged collaboration and accountability and helped to reduce the Benfold’s painful retention problem.

In sum, Meg Whitman and Mike Abrashoff share characteristics of living with authenticity, which in turn has been clearly demonstrated thus far during their tenures as leaders of their respective organizations. Whitman helped shape a new market, and today, years after she joined eBay, the company continues to be the leader in the online auction industry. Additionally, through exemplifying authentic leadership, Mike Abrashoff was able to turn around a demoralized Navy crew and engender a spirit of collaboration, trust, and accountability. His efforts also put an end to the ship’s long-standing retention problem.

## KNOWLEDGE WORKERS IN THE KNOWLEDGE ECONOMY

The twenty-first century has brought uncharted challenges for individuals and companies. The emergence of developing countries, cost efficiencies, decentralization of firms, and enhanced work/life balance desires have aided in the growth of virtual teams, which can be located within the same department or across continents while functioning as a unit

of the corporation. Improvements in infrastructure and comparable income potential have enabled individuals in some developing countries to live in their home countries instead of migrating to the United States or Europe in order to obtain professional careers. Thus, it appears that the shift to a knowledge economy is a worldwide phenomenon occurring in all countries, whether in an advanced industrialized country such as the United States or a developing nation like Kenya.

This evolution has created a new workforce of highly skilled global professionals, called knowledge workers, who want to live and work in their country, and with recent technological advancements, are finally able to do so because most large and even some small organizations today are globally dispersed. This fuels a need for people to communicate and work together, even if separated by great distances. Thanks to advanced technology, many companies are able to run cohesive yet decentralized operations by linking employees in virtual teams and communities of practice around the globe.

Knowledge workers are finding their place in the new work order by becoming an intrinsic part of virtual teams or organizations. Unlike a production worker, who was interested in hourly pay, performance raises, and supervised activity, knowledge workers are independent thinkers who perform with almost no supervision, value their job for the fulfillment they receive, and enjoy being rewarded for ideas they generate. They enjoy challenges and want to be engaged in their job, making it a part of their whole being.

Moreover, a knowledge worker wants *to be part of* an organization instead of *working for* an organization. In other words, a knowledge worker is concerned with the vision and mission of the company and how it aligns with his or her personal interests and values. An example of this is the emergence of Internet wikis and open-source software, where people with expertise on certain topics or software coding voluntarily work to improve available information. Individuals are motivated to update encyclopedic entries, improve software code, or review products simply because they enjoy the work and see value in the potential of the information economy. Most amazingly, much of this work is done for free, and individuals' primary reward is personal enjoyment and challenge. Furthermore, even though individuals working on these projects never meet face-to-face, a strong sense of community develops among them. The challenge for leaders, then, is to inspire similar motivation among their virtual teams through authenticity.

The corporate cultural shift to a broad use of virtual teams encompasses a wide spectrum of responsibilities for corporations and its leaders, as knowledge workers seek to be part of companies that share their own espoused values. Thus, it is critical for leaders and knowledge workers to have a clear understanding of each other's values in order for both sides to triumph.

The emergence of knowledge workers poses new obstacles to traditional leadership and management. Although it's extremely convenient for employees to be able to work any time and from anywhere, and for the company to be able to hire new talent without location being a limitation, this type of organizational structure can lead to disaster if not managed properly. For example, whereas the use of e-mail, teleconferences, and corporate intranets have become

the preferred vehicles for sharing and accessing information, establishing communication and learning to effectively use the tools available are key ingredients for the effectiveness of virtual leaders. Still, these leaders are not able to rely on body language, charisma, and other advantages of managing traditional workers located at the same physical place. Virtual leaders are left to instill their objectives through various electronic means. Are virtual leaders able to connect, teach, and propagate their authentic values to knowledge workers? If so, how?

## AUTHENTIC LEADERSHIP AND KNOWLEDGE WORKERS

Authentic leadership is founded on the notion of trust and transparency, which is a vital element that enables people who work together to know they can rely on each other implicitly. As articulated by Bill George, authentic leaders know with a high degree of confidence that they are contributing to others' success, not just their own. For example, higher levels of self-awareness are expected to build greater capacity for those leaders to use knowledge about themselves to adjust their thinking, motivation, and choice of behavior when interacting with those they lead, even at a distance. We also suggest that when leaders are self-aware, they are more likely to understand how they influence others and, in turn, they adjust their interactions to create a more positive dynamic to enhance the motivation of those they lead.

Further, by being relationally transparent, authentic leaders create greater openness in their interactions, where essential information needed by those they lead to perform their duties effectively is readily available. When leaders share information openly, they provide their followers with opportunities to develop collective intuition, expand their knowledge, learn from each other, and acquire new skills. Indeed, accurate and rapid communication is an important facet of the knowledge worker in the knowledge economy, because everything depends on how fast one reacts to the challenges at hand. Further, transparency means disclosing the leader's intentions and thereby allowing followers to focus on the task at hand rather than engaging in questioning the leader's motives.

Regarding moral perspective, authors Avolio and Gardner have argued that as followers internalize values and beliefs espoused by the leader, their conceptions of what constitutes their actual and possible selves are expected to change and develop over time. As followers come to know who they are, they in turn will be more transparent with the leader, who then will benefit in terms of his or her own development. Authentic leaders also demonstrate balanced processing behavior by soliciting feedback from those they lead and openly discussing what caused problems and outcomes. By soliciting views from those they lead, such leaders are more likely to create ownership through respect and trust — one of the fundamental building blocks for knowledge workers. Thus, leaders who understand this concept, as we would expect with authentic leaders, will earn the respect and trust of knowledge workers. Jim Collins, in his book *Good to Great*, argued that some of the most exceptional leaders are the ones who don't blame others for their or their companies'

problems. Rather, they accept the problem as their own and then seek unbiased information in forming a solution.

**Leader-follower trust.** A good example of the power of leader-follower trust is illustrated in the book *WIKINOMICS*. The authors talk about Best Buy, a company built on brick and mortar retail, while claiming competitive advantage because of its virtual teams. Best Buy's Geek Squad unit employs the use of video games, blogs, and wikis, among other technologies, to develop products, improve service, and, most importantly, act as resources for other team members. For instance, if a Geek Squad agent is working on a project and needs help, he or she has the capability to immediately access fellow agents anywhere the company is located. Collaboration is not only allowed, but highly encouraged, and the unit's leader, Robert Stephens, rapidly credits his group for the growth, success, and impact they have had on Best Buy and the industry. In short, Stephens is an authentic leader who created a highly productive team, provided appropriate tools, and trusted each team member to perform to their utmost capability.

At VeriFone, individuals are similarly encouraged to draw on knowledge from other individuals around the globe when faced with a problem. Using e-mail, videoconferences, or application sharing, individuals can seek a broad range of information from other representatives in the company, regardless of location, allowing VeriFone to compete more effectively. William Pape, cofounder of VeriFone, encourages individuals to communicate clearly and frequently, recognizing that misunderstandings can be very costly when communicating virtually. Pape says that, "most really useful information comes from informal conversations." Pape recognizes that trust is a necessary element in freely eliciting information from knowledge workers.

Recent research by Walumbwa, Luthans, and colleagues confirms the impact of leader authenticity on trust, positivity, and performance of people they lead. In their work in a large banking organization, findings revealed that group leaders who demonstrated authentic behavior enhanced group members' trust in the leader and group members' own psychological capital, comprising positive psychological resources of efficacy, hope, optimism, and resiliency, which in turn was positively related to group members' performance and demonstrated citizenship behaviors. The argument here is that authentic leaders are likely a source of guidance because they are credible role models. When leaders lead by example, they demonstrate commitment to their work and provide guidance to followers about how to remain connected and engaged with the organization, regardless of their location.

In other research, Walumbwa and colleagues surveyed employees in two telecommunications firms located in the People's Republic of China; one was a state-owned firm, and the other was jointly owned by the government and a foreign private company. They reported that leader authenticity was positively related to the extent that employees identified with their supervisors and were engaged in their work. Other related recent studies involving police officers and high-technology startup and established firms by Peterson, Walumbwa, and their colleagues further confirms the beneficial effects of authentic leaders, broadly defined. For example, in a study involving senior police officers (i.e., lieutenants) and their direct followers (i.e., sergeants),

these authors found that leader psychological capital was positively related to follower psychological capital, which in turn, was related to performance. Similarly, Peterson and her colleagues found that CEO's psychological capital predicted firm performance in both high-technology startup and established firms. Taken together, these research findings further suggest that leader authenticity may play an important role in the new global and knowledge economy characterized by rapid technological advancements, more so among knowledge workers.

## MANAGERIAL IMPLICATIONS

The twenty-first century workforce, specifically the knowledge worker category, is rapidly becoming the most independent workforce in history. This category demands creative freedom and is fully cognizant of their responsibilities. They also require feedback and coaching from their leaders. However, for effective leader-follower collaboration, there must be mutual respect and trust between knowledge workers and their leaders. Leaders must always strive to develop and maintain an enhanced level of trusting climate. Organizations and their leaders may do this by inviting honest feedback from knowledge workers, listening to their concerns, and encouraging them to speak up with candor and without fear of being penalized.

More specifically, when knowledge workers are able to freely express their concerns, an atmosphere is created that leads to more cohesive and effective functioning, regardless of geographical and cultural differences. This is often a difficult concept for many to grasp, but companies that understand and embrace honest feedback, such as Best Buy, have shown that it is possible and can be greatly beneficial. Additionally, by incorporating employees into problem-solving processes and asking for their feedback, as demonstrated by Meg Whitman, companies will ensure that workers will trust their leaders to have their best interests in mind, and will feel more motivated to exert discretionary effort, just like the open-source coders and wiki writers.

A recent study conducted by the Institute for Corporate Productivity revealed that 25 percent of organizations do not offer any training and development opportunities for leaders to improve their virtual leadership skills. The study also revealed that when it comes to specific topics related to virtual leadership – for example, leading at a distance – only 18 percent of the surveyed organizations said such topics are included to "a high" or "very high extent" in their leadership development programs. Similarly, Harvard University conducted two national studies in 2007 and 2009 to examine the confidence the American public has in its leadership. In a 2007 national study, the researchers reported that 77 percent of participants responded as agreeing or strongly agreeing that there was a crisis of confidence regarding American leaders.

The story was no different in the National Leadership Index conducted in 2009. The study showed that 63 percent of Americans do not trust what business leaders say and 83 percent believed that business leaders work to benefit themselves or a small group with special interests. Importantly, when asked what qualities they seek in leaders so that they

can regain their confidence, most respondents cited acting in concordance with commonly held values, being in touch with people's needs and concerns, and working for the greater good. This calls not only for a more concerted effort by organizations to invest more resources to develop virtual leadership skills, but more important, to develop leaders with high levels of moral character, courage, and authenticity.

With advanced technology, this can be done in several ways, including a blog managed by the leader that invites workers' input, a podcast with information to develop workers, an electronic newsletter, or simply an electronic bulletin board or forum where individuals can post questions and answers. Additionally, leaders can encourage their knowledge workers to e-mail or text them freely to encourage timely and open communication.

The art and science of leading people is one that has intrigued the most influential and developed minds in modern history. Nevertheless, virtually leading independent workers who are highly educated and skilled and who require little supervision, but who are still humans with the same emotions and needs as other workers, is a tremendous accomplishment for those who are able to master it. Knowledge workers employ their brains rather than their brawn, using knowledge, theory, and concepts to contribute to their organization.

Therefore, to manage knowledge workers, leaders should possess interpersonal skills and the ability to communicate with subordinates, because knowledge workers require regular communication with their supervisors. In his book *True North*, Bill George discusses authentic leadership, and notes that in order to become an authentic leader, one must be true to oneself. As he describes, "to optimize their effectiveness, leaders build their influence by honing their style and making authentic use of their power to generate superior performance from their teammates."

Superior results build the reputations of authentic leaders and their teammates and earn them added reputation, responsibility, and resources. In one example in his book, George interviewed several CEOs of major corporations, and although their paths to leadership greatly differed, the common thread appeared to be passion and knowing oneself. This self-awareness allows authentic leaders to discard all superficial objectives and become unique and devoted to their followers. Virtual authentic leaders have an even greater responsibility to discover their True North, because in virtual leadership, human interaction with followers may be rare or non-existent. For this reason, a leader must discover his or her core values and beliefs in order to lead with authenticity, since they will need to display openness and candor in order to become effective virtual authentic leaders.

Still, many leading today have received nominal training on how to manage this new class of professionals. For instance, the Mayo Clinic, started by brothers J. William and Charles H. Mayo in the beginning of the last century, has had a prosperous history of authentic leadership and virtual collaboration. The brothers, who have long departed, built a legacy that transcends their leadership and is evident in every aspect of the hospital's operations. The "Mayo Way" is a set of known values for collaboration and leadership throughout the company. According to Seltman and Berry,

both physician and administrative leaders alike at Mayo Clinic must be team players. They point out that respect, truthfulness, and peer-to-peer collaboration is required among all leaders in the organization. Those leaders of generous spirit — those who can share in leadership and share with the team both the credit and the blame — have the bedrock value on which a successful leadership career can be built at Mayo. The hospital offers a combination of virtual and in-person collaboration. Doctors and staff members from different locations work together on a common goal, and information sharing is an important part of the operations.

In addition, virtual teams from different campuses or disciplines collaborate in an authentic environment and are always encouraged to understand the Mayo culture in order to earn the trust and followership of others. Importantly, the Mayo legacy remains alive a century later in an organization with 43,000 employees who are often referred to and treated as "family." The result of this culture, implemented by the young doctor physicians over a century ago, is a highly successful business operated, often virtually, by knowledge workers who understand their purpose within the organization, receive clear direction, and are able to collaborate with their leaders in order to achieve the common goals of the corporation.

Authentic leaders who process their ideas using some of the tools described above, and work in partnership with their teams, enhanced by mutual trust among all, will be able to transcend their leadership skills to any environment. However, leadership is a life learning process, and leaders must continually learn and adapt to their environments. Successful companies, such as eBay and Mayo Clinic, developed and led by individuals who had a greater goal of leading and developing others than their own personal goals, have sustained their success by maintaining core values, transparency, and a psychologically safe culture. For example, as an individual walks into a Mayo hospital, there is an immediate feeling of pride and happiness emitted by the employees of this organization. This experience and feeling enables organizations to thrive in any economic environment. For instance, a Mayo doctor virtually collaborates with nurses, administrators and other Mayo doctors daily, and trusts his/her peers and leaders within the organization. This communication is open and often virtual, where leaders and followers share a common goal, and work as a team to achieve their goal.

## CONCLUDING REMARKS

In conclusion, leading knowledge workers, whether virtually or in person, requires an authentic leader whose values are aligned with the company's mission, in order to lead with transparency and trust. When leaders interact with members with openness and truthfulness, this promotes unconditional respect and trust. Moreover, by setting a personal high moral standard, with integrity, and involving members in the decision-making process, authentic leaders are able to build a deep sense of trust in group members. This trust sustains a transparent process of dealing with difficult problems, in part because of shared values.

In addition, leading knowledge workers requires input from team members; leaders must be in tune with the team's needs in order to react accurately and appropriately. Authen-

tic leaders have an uncanny ability of translating purpose into action, and virtual authentic leaders should have the same capabilities in order to effectively manage knowledge workers. Indeed, one of the key roles of an effective leader is the ability to give rise to high confidence among followers. If leaders believe that every follower has the ability to make a positive contribution at work, by demonstrating this belief, either consciously or unconsciously, they will positively influence their followers' work engagement, motivation, and

commitment to their organization, regardless of the physical location of employees.



To order reprints of this article, please  
e-mail [reprints@elsevier.com](mailto:reprints@elsevier.com)



## SELECTED BIBLIOGRAPHY

For more information about the research on authentic leadership see B. J. Avolio, and W. L. Gardner, "Authentic Leadership Development: Getting to the Root of Positive Forms of Leadership," *Leadership Quarterly*, 2005, 16(3), 315–338; B. J. Avolio, W. L. Gardner, F. O. Walumbwa, F. Luthans, and D. R. May, "Unlocking the Mask: A Look at the Process by Which Authentic Leaders Impact Follower Attitudes and Behaviors," *Leadership Quarterly*, 2004 15(6), 801–823; B. J. Avolio, and F. Luthans, *The High Impact Leader: Moments Matter for Accelerating Authentic Leadership Development* (New York: McGraw-Hill, 2006); W. L. Gardner, B. J. Avolio, F. Luthans, D. R. May, and F. O. Walumbwa, "Can You See the Real Me? A Self-Based Model of Authentic Leader and Follower Development," *Leadership Quarterly*, 16(3), 343–372; W. L. Gardner, and J. R. Schermerhorn Jr, "Performance Gains Through Positive Organizational Behavior and Authentic Leadership," *Organizational Dynamics*, 2004, 20(3), 270–281; B. George, *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value* (San Francisco: Jossey-Bass, 2003); R. Goffee, and G. Jones, "Managing Authenticity: The Paradox of Great Leadership," *Harvard Business Review*, 2005, 83(12), 87–94; F. Luthans, and B. J. Avolio, "Authentic Leadership: A Positive Developmental Approach," in K. S. Cameron, J. E. Dutton, and R. E. Quinn (Eds.) *Positive Organizational Scholarship*, 241–261 (San Francisco: Barrett-Koehler, 2003); F. O. Walumbwa, B. J. Avolio, W. L. Gardner, T. S. Wernsing, and S. J. Peterson, "Authentic Leadership: Development and Analysis of a Multidimensional Theory-based Measure," *Journal of Management*, 2008, 34(1), 89–126; F. O. Walumbwa, P. Wang, H. Wang, J. Schaubroeck, and B. J. Avolio, "Psychological Processes Linking Authentic Leadership to Follower Behaviors," *Leadership Quarterly*, 2010, 21(5), 901–914.

For more information about the research on positive psychological capital, see F. Luthans, B. J. Avolio, J. Avey, and S. Norman, "Psychological Capital: Measurement and Relationship with Performance and Satisfaction," *Personnel Psychology*, 2007, 60(3), 541–572; F. Luthans, C. M. Youssef, and B. J. Avolio, *Psychological Capital: Developing the Human Competitive Edge* (Oxford, UK: Oxford University Press, 2007); S. J. Peterson, F. O. Walumbwa, K. Byron, and J. Myrowitz, "CEO Positive Psychological Traits, Transformational Leadership, and Firm Performance in High Technology Start-up and Established Firms," *Journal of Management*, 2009, 35(2), 348–368; F. O., Walumbwa, F. Luthans, J. Avey, and A. Oke, "Authentically Leading Groups: The Mediating Role of Positivity and Trust," *Journal of Organizational Behavior*, 2011, 32(1), 4–24; F. O. Walumbwa, S. J. Peterson, B. J. Avolio, and C. A. Hartnell, "An Investigation of the Relationships Between Leader and Follower Psychological Capital, Service Climate and Job Performance," *Personnel Psychology*, 2010, 63(4), 977–1003.

For more information about the research on ethical leadership see M. E. Brown, "How to Avoid Potential Pitfalls," *Organizational Dynamics*, 2007, 60(2), 140–155; M. E. Brown, and L. K. Treviño, "Ethical Leadership: A Review and Future Directions," *Leadership Quarterly*, 2006, 17(6), 595–616; M. E. Brown, L. K. Treviño, and D. A. Harrison, "Ethical Leadership: A Social Learning Perspective for Construct Development and Testing," *Organizational Behavior and Human Decision Processes*, 2005, 97(2), 117–134; D. M. Mayer, M. Kuenzi, R. Greenbaum, M. Bardes, and R. Salvador, "How Low Does Ethical Leadership Flow? Test of a Trickle-Down Model," *Organizational Behavior and Human Decision Processes*, 2009, 108(1), 1–13; F. O. Walumbwa and J. Schaubroeck, "Leader Personality Traits and Employee Voice Behavior: Mediating Roles of Ethical Leadership and Work Group Psychological Safety," *Journal of Applied Psychology*, 2009, 94(5), 1275–1286.

For more information about the research on servant leadership see M. G. Ehrhart, "Leadership and Procedural Justice Climate as Antecedents of Unit-Level Organizational Citizenship Behavior," *Personnel Psychology*, 2004, 57(1), 61–94; R. K. Greenleaf, *Servant Leadership* (New York: Paulist Press, 1977); J. W. Graham, "Servant-Leadership in Organizations: Inspirational and Moral," *Leadership Quarterly*, 1991, 2(2), 105–119. R. C. Liden, S. J. Wayne, H. Zhao, and D. Henderson, "Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment," *Leadership Quarterly*, 2008, 19(2), 161–177; M. J. Neubert, K. M. Kacmar, D. S. Carlson, L. B. Chonko, and J. A. Roberts, J. A. "Regulatory Focus as a Mediator of the Influence of Initiating Structure and Servant Leadership on Employee Behavior," *Journal of Applied Psychology*, 2008, 93(6), 1220–1233; F. O. Walumbwa, C. A. Hartnell, and A. Oke, A, "Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes, and Organizational Citizenship Behavior: A Cross-Level Investigation," *Journal of Applied Psychology*, 2010, 95(3), 517–529.

For more information about the research on transformational leadership see B. J. Avolio, *Full Leadership Development: Building the Vital Forces in Organizations* (Thousand Oaks, CA: Sage, 1999); B. J. Avolio, F. O. Walumbwa, and T. Weber, "Leadership: Current Theories, Research and Future Directions," *Annual Review of Psychology*, 2009, 60, 421–449; B. M. Bass, *Leadership and Performance Beyond Expectations* (New York: Free Press, 1985); B. M. Bass, and B. J. Avolio, *Transformational Leadership: Improving Organizational Effectiveness* (Thousand Oaks, CA: Sage, 1994); B. M. Bass, and R. Bass, *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications* (New York: Free Press, 2008).

For more information about the U.S. National Leadership Index see S. A. Rosenthal, S. Moore, R. M. Montoya, and L. A. Maruskin, "National Leadership Index 2009: A National Study



of Confidence in Leadership” (Cambridge, MA: Center for Public Leadership, Harvard Kennedy School, Harvard University, 2009); S. A. Rosenthal, T. L. Pittinsky, D. M. Purvin, and

R. M. Montoya, “National Leadership Index” (Cambridge, MA: Center for Public Leadership, Harvard Kennedy School, Harvard University, 2007).

**Fred O. Walumbwa** is an associate professor of management in the Arizona State University’s W. P. Carey School of Business. He is also a senior research advisor with the Gallup Organization, Washington, DC. Walumbwa’s research interests include leadership, organizational climate and culture, business ethics, justice, and cross-cultural issues in management research (Department of Management, W.P. Carey School of Business, Arizona State University, P.O. Box 874006, Tempe, AZ 85287-4006, United States. Tel.: +1 480 965 3431; fax: +1 480 965 8314, e-mail: [Fred.Walumbwa@asu.edu](mailto:Fred.Walumbwa@asu.edu)).

**Amanda L. Christensen** is a Ph.D. student in management in the Arizona State University’s W.P. Carey School of Business. Her research interests include leadership and person-environment fit. She has an M.B.A. from Brigham Young University and spent several years working in the manufacturing industry.

**Fernanda Hailey** is a Master’s in Leadership and Management student in the Arizona State University’s W.P. Carey School of Business. She also has an M.B.A. from the University of Miami, with a concentration in international business management. She is a senior sales manager for a large corporation and has over 15 years work experience in the financial services industry. Her research interests include leadership, gender and diversity, and cross-cultural management.