



DEFINING LEADERSHIP COMPETENCIES NEEDED FOR THE FOURTH INDUSTRIAL REVOLUTION: LEADERSHIP COMPETENCIES 4.0

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*Our goal is to offer a way forward and get leaders thinking about what they need to do,
and where they should start - **Leadership Matters***

ABSTRACT

A study by Korn Ferry Institute shows that the current average tenure of C-suite executives is currently estimated at around 5 years compared to about 10 years in 2012. This shows an unprecedented 50% reduction in C-suite executive average tenure in just 5 years. Our research shows that the secret to survival lies not just in transforming organizational structures, systems or processes, but in developing a VUCA-ready leadership.

Notably, leaders today need to apply a different set of leadership competencies to successfully navigate their organisations through the rapid changes underpinned by new business models, increasing customer complexities, millennial labour force and the 'internet of everything' that we are experiencing with the fourth industrial revolution (referred to as "4IR"). Leaders need to be able to work across boundaries to bring together disparate and diverse sets of people, processes, and technologies and reconfiguring them in real time to increase the likelihood of organization survival – responsive, resilient and agile. The rapid, exponential and disruptive technology is driving swift and sweeping global shifts in social, economic and political systems at a rate and scale that is quickly outstripping leadership's ability to keep up.

Through our immersion journey into Africa, we have researched and interviewed industry leaders to understand how leadership competencies have shifted in the global workforce. Africa has had its fair share of disruptions in the recent past, and will not be spared from the required shift in leadership approach, with traditional African banks being continuously challenged by smaller fintech companies and mobile network operators (MNO's). In Africa, the initial disruptions that challenged banking business models were primarily in communities that were previously excluded from financial systems, however, this has evolved, with some encroachment into 'formal' banking channels with services such as money transfers competing with traditional banking solutions. There is a need for a radical leadership transformation in response to the new world demands, which presents a new set of leadership challenges.

To succeed in a VUCA world, leaders must expend that energy in areas that have the highest payoff for their organizations — continuously developing and sustaining themselves, organisational vision and strategy, building high-performing teams, setting the internal and external conditions for success, preparing for the future. Doing so

will allow them to aggressively pursue their goals through the volatility, uncertainty, complexity, and ambiguity of today's global business environment.

This rise of digitisation as a disruptive force makes it imperative to redefine approaches to leadership, and we propose adoption of what we have coined the '**Molecular Leadership Competency Model**' which defines the five key competencies that are essential for leaders to successfully lead in this new environment. The model identifies additional competencies which augment traditional competencies and also redefines how traditional competencies can be re-engineered as they now need to be applied in a different context. The molecular model identifies the following key competencies: **Emotional Quotient (EQ)**, **Digital Quotient (DQ)**, **Agility and Adaptability Quotient (AAQ)**, **Socio-cultural Quotient (SCQ)** and **Creativity and innovative Quotient (CIQ)**. To cope with complex change and help others move forward to achieve success, leaders are required to be agile and adaptable in order to effect quick shifts in business direction, emotionally intelligent in order to lead people from different generations and develop products that are relevant to the market, and most importantly, pack a pound of digital saviness to comprehend the rapid technological developments that have become synonymous with doing any form of business today.

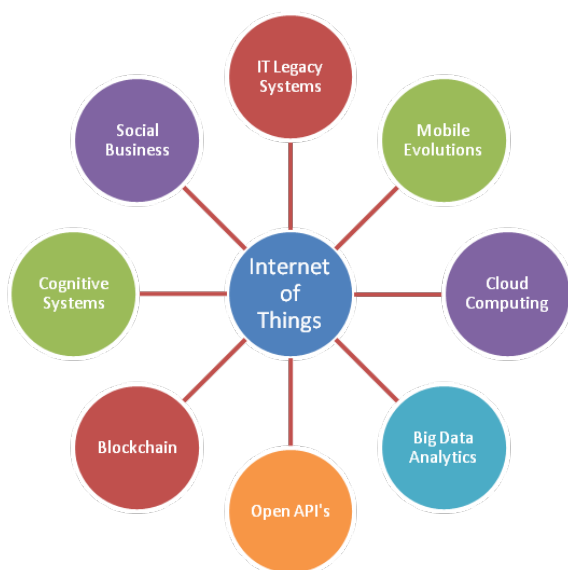
To lead successfully at any point in history requires a specific set of competencies and behaviors that mesh with the demands of the time. Different economic circumstances, technology landscapes, cultures, and social values require different approaches. The current wave of industry disruption is fueled by digital tools, technologies, and business models such as analytics, virtual reality, blockchain, cloud environments, mobile solutions, machine learning, connected devices, the sharing economy, and digital ecosystems.

In accordance with the model, leadership is a fluid construct and molecular in nature, as such we have likened leadership competencies to be molecule made of different atoms making a 'living- leadership molecule', meaning that they are living and constantly moving with the VUCA vortex. Therefore, leaders of today need to constantly and continuously **GROW, MORPH** and **DEVELOP** to stay relevant. As Alvin Toffler said "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn" on the trot, to survive the new normal of the volatile and changing world.

1. CONTEXT TO THE PAPER

Leaders of financial institutions today find themselves having to navigate their organisations through the most aggressive adaptation need their organisations have had to undergo in a long time. Our transition from the world of information to the age of innovation comes with a velocity of change, challenges, hyper-competition, and opportunities that our predecessors could never have imagined. A VUCA (volatility-uncertainty-complex-ambiguity) world demands a whole new focus and set of leadership skills that can take us forward faster, smarter, and stronger at a speed of change, challenges, and possibilities that will continue to accelerate. Business models are being reshaped, artificial intelligence is fast becoming part of our skills force, and innovators are moving into 'non-traditional' industries.

Innovation accelerators powering the VUCA world



A study by Korn Ferry Institute shows that the current average tenure of C-suite executives is currently estimated at around 5 years compared to about 10 years in 2012. This shows an unprecedented 50% reduction in C-suite executive average tenure in just 5 years. Our research shows that the secret to survival lies not just in transforming organizational structures, systems or processes, but in developing a VUCA-ready leadership.

Notably, leaders today need to apply a different set of leadership competencies, augmenting traditional leadership competencies to successfully navigate their

organisations through the rapid changes underpinned by new business models, increasing customer complexities, millennial labour force and the 'internet of everything' that we are experiencing with the Fourth Industrial Revolution (4IR). Leaders need to be able to work across boundaries to bring together disparate and diverse sets of people, processes, and technologies and reconfiguring them in real time to increase the likelihood of organization survival – responsive, resilient and agile. The rapid, exponential and disruptive technology is driving swift and sweeping global shifts in social, economic and political systems at a rate and scale that is quickly outstripping leadership's ability to keep up.

The leadership challenge in the 4IR is that as the future speeds toward us with greater velocity, more complexity, and greater uncertainty, we can choose in how we respond to these challenges or become extinct: We can either be driven by the forces of change or we can choose to be proactive and drive the change. Being a driver means taking some risks, running some experiments, anticipating and preparing for eventualities, and offering innovative solutions. The army makes a good distinction between the skills and competencies required of Generals during times of peace and those required during wartime. In the same way, the skills required to lead organisations today are more adept for wartime rather than peacetime and the leader's ability to know which skills are needed now will be the differentiating factor between those who make it and those who do not. In this context, the 4IR will require an additional set of leadership competencies and attitudes to cope with the shifting and even revolutionary trends.

2. THE LEADER'S DILEMMA

The main leadership dilemma is how to remain relevant amid the revolution. The effects of the 4IR combined with the effects of technological automation on the workforce, leaves us with some crucial questions, which are mainly directed to current and future leaders:

- What does the 4IR mean for leaders and how are they addressing this?
- What does an individual leader need to do differently in this environment for them to thrive, cope and survive?
- What are the new leadership competencies and skills for the future?

3. PURPOSE OF THE CONCEPTUAL CONFERENCE PAPER

Through our immersion journey into Africa, we have researched and interviewed industry leaders to understand the leadership competency shift in global workforce at large. The purpose of this conceptual conference paper are fourfold:

- Firstly, to redefine leadership competencies through the lens of the fourth industrial revolution;
- secondly, to propose a leadership competency model/framework that can be used for leadership developmental purposes;
- thirdly, to create greater awareness of leadership skills needed in the fourth industrial revolution amongst the captains of industries for their survival;
- lastly, to enhance how leaders can adapt their leadership style, culture and way of working to innovate and steer the implementation of new business models, leading and working with a new generation of millennials and face the relentless headwinds of new market realities caused by disruptive technologies and turbulent business conditions.

4. GROWING INSIGHTS AND CONVICTIONS

4.1 The Fourth Industrial Revolution (4IR)

The 4IR is a phrase coined by Klaus Schwab, the founder of the World Economic Forum, to capture the dramatic scale of technological change and its impact on society. The exponential technological advancement that is increasingly transforming how we work, how we live, how we relate to one another and communicate, fundamentally changing our day to day lives appears to contrast traditional leadership. This fast-changing era is propelled by technology-driven transformation, and the impact is felt by individuals, corporations, industries and society itself. Perhaps the greatest impact is felt by business leaders, who are under constant pressure to adapt to the changes, be ahead of the curve or risk getting left behind.

The disruptive innovations and digital technologies are testimonial that our industry is amid the 4IR. These initiatives that drive this revolution have become known - in Germany - under the term of Industry 4.0. The technologies driving this revolution include smart and connected machines and systems, nanotechnology, gene sequencing, renewable energy, quantum computing, 3D printing, driverless cars, new forms of money (e.g. bitcoin), robotics, drones, and biological breakthroughs to mention a few.

Studies also cite the sharing economy (e.g., AirBnB and Uber), interconnectedness and the emergence of cyber warfare as another fast evolving trend. It is the fusion of all these breakthroughs that makes the 4IR different and rather interesting. It's argued that this is not an extension of the so-called Third Industrial Revolution because of: a) its velocity, b) its breadth and depth, and c) its systemic impact.

The World Economic Forum (2015:5) identified six software and services megatrends which are shaping society, namely (1) people and the internet, (2) computing, communications and storage everywhere, (3) the Internet of Things, (4) artificial intelligence (AI) and big data, (5) the sharing economy and distributed trust, and (6) the digitization of matter. It is worth noting that of late there is a buzz word "millennials" trending.

The workplace has not been left untouched in all these revolutionary developments. Lorenz et al (2015:5) lists the top ten effects of industry 4.0 on the workforce as being (1) big-data driven quality control, (2) robot-assisted production, (3) self-driving logistic vehicles, (4) production line simulation, (5) smart supply network, (6) predictive maintenance, (7) machines as a service, (8) self-organizing production, (9) additive manufacturing of complex parts, and (10) augmented work, maintenance, and service.

Engineer and economist Klaus Schwab, founder and executive chairman of the World Economic Forum, noted that the transformation from the revolution will be unlike anything humankind has experienced. "The challenges are as daunting as the opportunities are compelling," Schwab said of the fourth industrial revolution. "We must have a comprehensive and globally shared understanding of how technology is changing our lives and that of future generations, transforming the economic, social, ecological and cultural contexts in which we live..."

"You cannot wait until a house burns down to buy fire insurance on it. We cannot wait until there are massive dislocations in our society to prepare for the Fourth Industrial Revolution," proclaimed Robert J. Shiller, 2013 Nobel laureate in economics, Professor of Economics, Yale University.

The VUCA (volatility, uncertainty, complexity and ambiguity) vortex has already wiped out over half of the Fortune 500 companies since the year 2000. Interestingly, a study by Korn Ferry Institute revealed that the current average tenure of C-Suite executives is estimated around 5 years compared to about 10 years in 2012. This shows an unprecedented 50% reduction in C-suite executive average tenure in just 5 years and likely to reduce further amidst the 4IR. That said, we note that the secret to survival lies not in discretely transforming organizational structures, systems or processes, but in developing a VUCA-ready leadership. Therefore, leaders need to be able to work across boundaries to bring together disparate and diverse sets of people, processes, and technologies and reconfiguring them in real time to increase the likelihood of organization survival – responsive, resilient and agile. The rapid, exponential and disruptive technology is driving swift and sweeping global shifts in social, economic and political systems at a rate and scale that is quickly outstripping leadership's ability to keep up. The revolution driven by the 4IR equal same revolution in aspect of leadership, as new set of leadership competencies are needed for leaders to stay relevant and to be able to navigate their way into a new way of thinking. There is a need for a radical leadership transformation in the current leadership competencies to respond to the new world demands which presents a new set of leadership challenges and mindset.

The 4IR is not an imagined future; it is here, it is happening now. That said, the world is investing in Industry 4.0, business models 4.0 are being operational and businesses that do not integrate 4.0 principles will be left behind. Notably, the 4IR is not only changing the world but with it, the world of leadership radically impacted and will also have to undergo equally fundamental change – as large as leadership within an authoritarian or dictatorial state versus leadership in a democracy. The magnitude of the required shifts are equally great. Which then bring us to the next – What are leaders doing to ensure that they thrive, cope and survive the fast-paced changes?

4.2 The leadership challenge/imperative

Leadership competencies is one subject that has been extensively researched, starting with extensive work done by management gurus in the 70's who grouped behaviours and attributes of leaders into 'core competencies' that came to define how successful leaders behaved, related with their employees and made decisions. With the world reshaping itself as we have witnessed in the recent past, leadership competencies also need a reboot. Africa is still suffering from a crisis in leadership, not only in our nations and commerce and industry, but throughout human society. There has been a paradigm shift in leadership over the years and there is a need of a new leadership competencies to mesh with the times. We need to grow and develop a new set of leaders, those who operate from their souls, rather than their egos.

The world in which we live and work in is changing at an unprecedented pace. Billions of people are now connected by mobile devices with unprecedented processing power and access to knowledge. The possibilities will be multiplied by emerging fourth revolution technology, including artificial intelligence (AI), robotics, 3-D printing, quantum computing, VR, and more. While the impact of the 4IR is hard to predict, it's easy to see that there will be a major impact on businesses. New jobs and roles are emerging while some are disappearing; recruitment is become more complex, and more leaders need to be able to understand and evaluate the competencies possessed by their employees as they evolve in this changing environment.

Several experts and practitioners have said that five years from now, over one third of skills that are important in today's workplace will have changed, which means crucial competencies will have changed as well. It is further stated that in 2020 the top skills are projected to be complex problem solving, critical thinking, and creativity. Further more studies done with Massachusetts Institute of Technology (MIT), shows a shift in leadership capabilities in three areas: how leaders must think, how leaders must act, and how leaders must react. This is one of the leadership challenges.

The 4IR does not only bring along disruptive changes in technology and information processing, but also revolutionizes the daily work of employees on all hierarchical levels. The five "people dimensions" - leadership, new skills and talent, organization, work environment and ways

of working - summarize the people-related areas that are most affected in this context and therefore need to receive attention when shaping an Industry 4.0 strategy and how to respond to the change. To put it in a nutshell, the human dimension in the 'digital world', particularly leadership, is at least as challenging as the technological hurdles companies face today.

As a norm, great leaders have always been expected to succeed in the context of ambiguity. Now, they face even greater pressures as the speed of technology accelerates. The role that leaders play will continue to change, evolve and becoming even more digital-focused and team-centric. This is the leadership competency challenge.

However, considering the challenges and opportunities presented by the 4IR in respect of business model and workforce transformation, the leadership imperative in this call is critical. We believe that traditional leadership mindsets, styles and ways of working within the African bank of the future and global corporations are simply not suited to coping with the speed, volatility, uncertainty, complexity and ambiguity of this new operating environment. That said, it is no doubt that a new approach to leadership learning, leadership competencies and leader development is necessary.

In a study by Deloitte Center for the Edge, 2013 Shift Index metrics: The burdens of the past, 2013, dupress.com it was said "For incumbent companies, the stakes continue to rise. From 1965 to 2012, the "topple rate," at which they lose their leadership positions, increased by almost 40 percent as digital technology ramped up competition, disrupted industries, and forced businesses to clarify their strategies, develop new capabilities, and transform their cultures".

The leadership challenges from an African perspective is further confirmed by the Mo Ibrahim Foundation, which since being launched in 2006, the Mo Ibrahim Prize has only been awarded four (4) times. In February 2017, the Foundation announced that there was no winner of the 2016 Ibrahim Prize for Achievement in African Leadership. Commenting on the decision of the Prize Committee was Dr Salim who said:

"As I emphasise each year, a very high bar was deliberately set when the Prize was launched in 2006. We recognise and applaud the important contributions that many African

leaders have made to change their countries for the better. But the Prize is intended to highlight and celebrate truly exceptional leadership, which is uncommon by its very definition. After careful consideration, the Committee has decided not to award the Prize in 2016."

Therefore, special attention needs to be on leadership as a widely underrated success factor. Leaders 4.0 will become tomorrow's game changers as they navigate the organization through the 4IR by embracing the disruptive changes and encouraging their employees to do the same. Leaders need to be more than just digital leaders but rather they need to develop new leadership competencies to stay relevant to the changing environment, technologies, operating models and processes and changing workforce.

5. NEXT STEPS: LEADERSHIP COMPETENCIES 4.0

Leadership theories have evolved over the past 70 years from the "great man" notion of heroic leaders, through trait theories, behaviourist theories, situational leadership, contingency theory and on to transactional and transformational leadership. Each of these offers some insights into the qualities of successful leaders, but there has been a shift in focus from the generic characteristics and behaviours of the individual to a recognition of the importance of responding to different situations and contexts and the leaders' role in relation to followers. Throughout this paper, we have defined the current leadership landscape and the need for leadership to radically evolve to cope with the rapid technological disruptions business are experiencing.

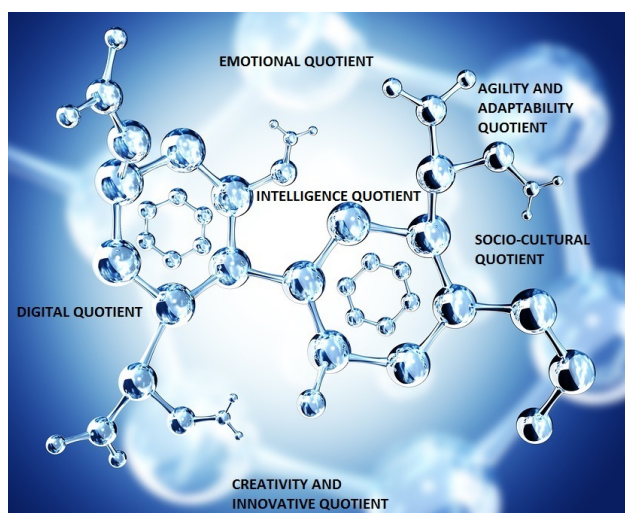
This rise of digitisation as a disruptive force make it imperative to redefine approaches to leadership, and we propose adoption of what we have coined the "**Molecular Leadership Competency Model**". The model identifies additional competencies that must be part of the spectrum of leadership which augment traditional competencies, such as intelligence Quotient (IQ) and further redefines how these traditional competencies can be re-engineered to be relevantly applied in today's context. The five new key leadership competencies which we refer to as Leadership Competencies 4.0, will prepare leaders to address the needs of the 4IR and have been reinforced by our interviewees.

They are:

1. Emotional Quotient (EQ)
2. Digital Quotient (DQ)
3. Agility and Adaptability Quotient (AAQ)
4. Socio-cultural Quotient (SCQ)
5. Creativity and innovative Quotient (CIQ)

As the banking sector is being challenged and strives to become more agile, resilient, responsive and adaptable, leadership needs to be more organic than mechanistic, more systematic than structured, and a fluid construct than rigid.

Accordingly, leadership competencies are structured to be fluid construct in nature, and we have thus likened them to a molecule made of constantly moving atoms to create a 'living- leadership molecule'. This means that leadership competencies are live and constantly moving with the VUCA vortex. To lead successfully at any point in history requires a specific set of competencies and behaviors that mesh with the demands of the time. Different economic circumstances, technology landscapes, cultures, and social values require different approaches. The current wave of industry disruption is fueled by digital tools, technologies, and business models such as analytics, virtual reality, blockchain, cloud environments, mobile solutions, machine learning, connected devices, the sharing economy, and digital ecosystems. These digital innovations are speeding up the pace of change and making order for leaders to accurately create and sustain positions of competitive.



The Molecular Leadership Competency Model™

Whilst traditional leadership competencies will always form the building blocks for how leaders navigate these treacherous times, there is a need to redefine the manner in which these competences are used to respond to the rapid changes happening in the financial industry. At the same time, there is a need to develop new competencies if leaders are to maintain and sustain a competitive advantage.

There has been a paradigm shift in leadership competencies, hence the emergence of new leadership competencies to address the future, be it in banking or in any other industry. To absorb complex change and help others move forward to achieve success, leaders are required to be agile, adaptable, resilient, emotionally intelligent and with a pound of digital savviness. Leaders therefore need to constantly and continuously grow, morph and develop to stay relevant in the fast paced, accelerating change and rapidly evolving world. As Alvin Toffler said "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn" on the trot, to survive the new normal of the volatile and changing world.

5.1 Intelligence Quotient (IQ)

In our journey through Africa and from conversing with captains of industry, it is apparent that traditional leadership competencies are the building blocks and will remain the core of the management toolkit any leader will need to access to lead successfully amidst the rapid changing world environment. At the centre of these traditional competencies is the Intelligence quotient. The Intelligence quotient defines the ability to think and reason, and will enable leaders to learn and understand new concepts and business models. Leaders must be able to keep up with trends – and to anticipate them. Their most important skill is to analyze and to apply past lessons to new situations. They also need to develop a deep understanding to be able to make complex decisions. In other words, they need the sharpest mind, hence we have placed IQ at the 'epicenter' of the model.

Even though we define new leadership competencies this does not mean that the previous leadership skills are no longer a necessary requisite. Quite the contrary: our view is that traditional leadership competencies – such as skills, the ability to effectively lead, manage, and inspire others – are now considered **a bare minimum requirement**.

Traditional competencies require that one possess an academic qualification, which is a measure of IQ in most instances, and whether you possess the right level of skills and relevant experience, exposure and attitude.

Above all, this skill set builds the very foundation of innovation. Leaders must have the ability to question the status quo and criticize it before we can innovate and prescribe an alternative. We note that IQ goes beyond the cognitive intelligence, as in the digital age leaders need to be street savvy and be inclusive thinkers who are in touch with the environment, people, views and opportunities thereof.

5.2 Emotional Quotient

With the exponential technological advancement, advent of robotics and artificial intelligence in augmenting jobs, traditional competencies underpinned by IQ are not much without emotional intelligence (EQ) in the digital age. As technology continues to revolutionize banking workforce, future leaders are in a leadership crisis as they lead in a volatile, uncertain, complex and ambiguous environment. Notably, as these fundamental changes are taking place in the business world in light of industry 4.0, artificial intelligence and robotics will not displace human jobs but rather augment them. Human element will remain relevant an important aspect.

Therefore, leaders need to deal with the current workforce fears of becoming redundant as automation increases, e.g. through replacement by their “robot colleague”. This is further fueled by the workforce transformation with a new generation workforce of millennials or Gen Y needing emotional transformation and a leader acting differently. This dynamic convergence and interface of human, artificial intelligence and robotics abilities produce humanistic artificial intelligence, which make emotional intelligence important to drive the change and effectively apply acumen of emotions at high level.

As such Leaders need to find a balance and have understanding that human perform jobs and robotics and artificial intelligence are augmenting human resource. There is this not it therefore more important than before for leaders to understand how they navigate these trenches to ensure that team work and collaborations are crucial for digital transformation and they make up the cornerstones of innovation. A successful leader in the VUCA world is must be one who can build collaborative relationships, foster diverse talents, manage and influence different people with robotic and artificial intelligence as part of value

chain. This would not be possible without the skill to read and relate to others and the environment. Byron Stock, EQ consultant and author of Smart Emotions for Busy People, says, “Developing the skill to manage our emotions gives us the ability to recover quickly – to be resilient when we are stretched beyond our limit...and to create environments in which people want to work and live.”

No matter how much you try to avoid the 4IR and its impact in workforce, obstacles and adversity can and will be part every aspect of every leader. The same is true when you are shaping the future. Leader's thoughts and beliefs need to be more flexible, optimistic, and realistic, their behaviors and emotional reactions are more likely to produce positive outcomes. Unfortunately, in the VUCA world we can't choose the types of adversity we will encounter, but we can choose how to react.

Therefore, with digital technologies like mobility, social networks, big data analytics and cloud now deeply embedded in every aspect of our personal and professional lives, today's business leaders need to possess some completely new capabilities as such emotional quotient (EQ) comes into play. It is all about the ability to sense, understand and effectively apply the power and acumen of emotions to facilitate higher levels of collaboration and productivity. Leaders who are emotional intelligence have the following traits; **Self-awareness, Self-regulation, Motivation, Empathy, and Social skills.**

According to Talent Smart, 90% of high performers at the work place possess high EQ, while 80% of low performers have low EQ. Emotional Intelligence is absolutely essential in the formation, development, maintenance, and enhancement of close personal relationships. Unlike IQ, which does not change significantly over a lifetime, our EQ can evolve and increase with our desire to learn and grow. A leader with enough emotional intelligence can overcome difficult leadership challenges. To this end, numerous studies conducted in the recent past several years show that people with high emotional intelligence are more adept in addressing organizational conflicts and can deal with ambiguity and uncertainty more effectively and quickly. It is not doubt that leaders need to nurture their emotional intelligence continuously to be able to navigate the treacherous waters of the changing environment and be emotionally-adept to make quick and well-thought of decisions.

It is not doubt that with the exponential technological advancements, market shifts and changing workforce,

leaders need not be afraid of change as they understand change is a necessary part of life, they know what they still need to learn, understand that perfectionist is impossible and are curious to explore possibilities.

From an African context, emotional intelligence can aptly be referred to “UBUNTU”, which is the spirit of humanity. African countries are already grappling with major economic inequalities, with the slow creation of new jobs being the biggest challenge. As modern technologies lead to augmentation of roles previously fully carried out by humans, there is a need for leaders to embrace and apply the spirit of ubuntu in crafting new business lines, which will improve companies’ financial performance but also create alternative jobs. Furthermore, the ability to develop products that adequately solve for customer’s needs requires financial leaders to put themselves in their customer’s shoes and give them experiences that make their lives easier. The days of ‘one size fits all’ product design approaches are over. Empathy, one of the tenets of emotional quotient, plays a critical role in designing solutions that are relevant to different customer segments and geographical categories.

5.3 Digital Quotient

The Digital Quotient (DQ) might be the most vital leadership competency for the future leaders, but this is not about the ability to operate the latest Smartphone, being on social media or to set up a wireless network or a techie. Digital intelligence applies to both the personal attributes of the leader, and the digital evolution of the company. Digitally astute leaders are able to drive rapid adaptation and transformation by injecting digital acumen and mindset into the organization’s strategy. Again, this is an ongoing process; hence leaders must anticipate the evolution of societal and technological trends and continuously realign the organization’s vision. ***The ultimate goal is to be the disruptor, instead of just following trends or being disrupted. For this to be so, leaders need to*** flexible and possess wide intellectual curiosity, and willing to see value in vastly different perspectives. On the other hand, employees at any organizational level will be expected to demonstrate digital competency in coding and web applications, mobile and smart devices, and social networks.

It is not debatable that we are living in a digital age and it is extremely important that leaders leverage on technology for radical leadership transformation. Leaders need digital leadership skills, technology and personal competencies to exploit the new digital ecosystems we now have access to. Notably, success in the disruptive era is about leadership, but combined with understanding emergent technologies and how to use information as a resource.

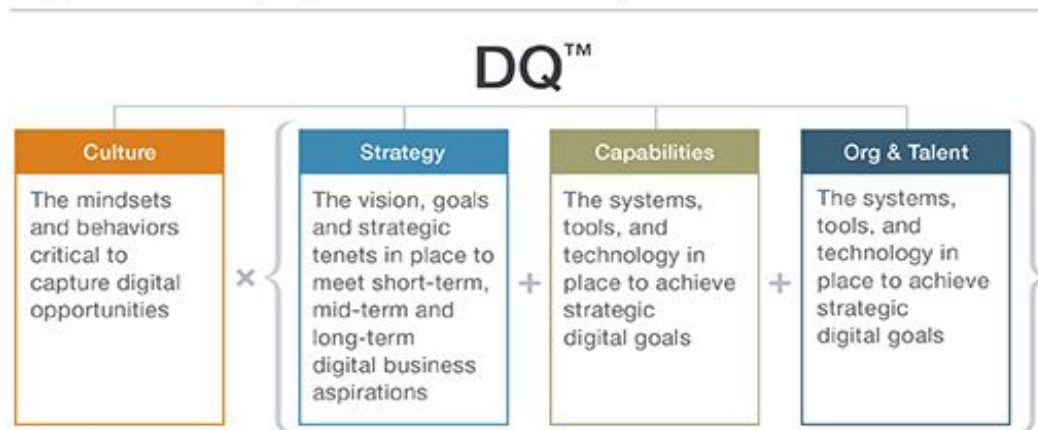
Of note, **with the pace** of change in the world accelerating around us, it can be hard to remember that the digital revolution is still in its early days, this then leaves little or no doubt that more upheaval/disruption is on the way.

Leaders need to exploit and embrace the new and ever increasing digital ecosystems and digital platforms we now have access to. It’s about leadership, but combined with understanding emergent technologies and how to use information as a resource.

There is now a notion called **digital anthropology of a leader** in which leaders are all about driving digital transformation in their organisation and their arsenal is wide to ensure ***Digital Transformation; Leadership in a Digital Age; Leading Change; and Leveraging technology*** for their social and economic benefits.

To gain a more precise understanding of the digitization challenge facing business today, McKinsey has been conducting an in-depth diagnostic survey of 150 companies around the world. By evaluating 18 practices related to ***digital strategy, capabilities, and culture***, they have developed a single, simple metric for the digital maturity of a company. The McKinsey DQ Model is shown on the following page.

Digital Quotient (DQ) is based on four major outcomes



DQ maturity scores directly correlate with digital and financial performance

McKinsey Digital Quotient Model

MCKINSEY DIGITAL QUOTIENT MODEL

We have expanded the McKinsey metric to come up with the Digital Quotient Leadership Competencies Index for leaders to strive in the 4IR, remaining relevant and leverage on digital or emerging technologies to deliver value and maintain a competitive edge.

1. Embrace change and technology
2. Forward thinker,
3. Innovative,
4. Creative,
5. Collaborative,
6. Experimental and not afraid to test and fail (should orient the organization toward a belief that the only failure is failing to fail - they need to incite the same curiosity and willingness to experiment with the new and different);
7. Be the catalyst for curiosity, to understand the what's and how's (leaders need to incite a culture that asks "why not" rather than "why" - encouraging disrupters of complacency, catalysts of curiosity).
8. Use data and information, not technology

Therefore, just as organizations look for ways to improve the DQ of their strategies, capabilities and culture, leaders, too, will be measured by these important competencies and attributes. The digital competency is well explained by Prof. Zamora: "Digital permeates the whole organization and impacts all phases in the value chain. In the same way that a manager is able to interpret a balance sheet, he should be able to know how technology is going to impact the business strategy of the company".

5.4 Agility & Adaptability Quotient (AAQ)

Consumer behavior, needs and expectations are changing as rapidly as technological developments. Adapting quickly to the rapidly changing global context by shifting resources to opportunity areas, new business strategies, plethora of new legislations, working across cultures, dealing with temporary virtual teams, and taking on new assignments all demand that leaders be flexible, nimble and agile. In this age, the dynamics have shifted from 'bigger companies beating smaller ones through scale' to 'fast beating slow'.

Leaders who aren't nimble enough may fail, because once a strategic journey begins, formal plans that are overly rigid tend to go out the window and are rendered impotent by the shifting technologies and the gravitational pull of the past. Agile leaders are nimble and have a keen sense of how their long-term plans are unfolding so they can move fast when problems emerge or action is needed to jump

on a creative idea. They don't defer issues or procrastinate when decisions need to be made. On the other hand, adaptability is key. Leaders in the 4IR need to re-think their point of view on everything and on navigating the volatile, uncertain and ambiguous world.

Therefore, agility and adaptability is a necessary competency for the industry 4.0. Leaders need to be quick to leverage on new technologies and respond change – we call this the chameleon construct competency as it requires the ability to constantly and rapidly develop new behaviors and skills in response to change with the use of five facets of agility: **innovating, performing, reflecting, risking, and defending**, all of which play an important role in the leader's success. According to consulting firm Korn Ferry Lominger, they are five components of agility – Mental, people, Change, Result and self-awareness.

Our findings agree with Brian McGowan, who asserted in a Forbes magazine (June, 2012) article "Agility: The Ingredient That Will Define Next Generation Leadership" that "only 10 percent of today's employees have the appropriate level of leadership agility." Therefore, the agility gap needs to be addressed to be a complete leader to avoid extinction in an environment where the only constant is change, the primary purpose of leadership is therefore to ensure that their organizations become more responsive to market shifts, more resilient to unpredicted technological disruptions, and more adaptive to unforeseen deviations from expected norms.

For example, we note that the biggest banking challenge in Africa is agility and adaptability, as such Fintech are disrupting the banking industry. This is mainly so, because of 3 notable barriers are prevent banks from innovating, thus agile and adaptive to the environment, namely – regulations, legacy systems and risk averse culture, which wrap the bank in ropes of stagnation and rigidity. On the same, breath, leadership need to be agile and adaptive to embrace and have a collaborative mindset with fintech rather than viewing them a competitor, hence ensuring that their business is resilient, adjusting to change and responsive to market and technological shifts.

5.5 Socio-cultural Quotient (SCQ)

SCQ is a system consisting of three interactive components - cultural knowledge, cross-cultural skills, cultural metacognition (sometimes called Mindfulness) and social aspect.

Living in a digital age with workforce and customers cutting across diverse cultures and multiple generations, it is imperative that leaders embrace the wide array of ways of cultures, opinions, perspectives and backgrounds.

The ubiquity of virtual communication technologies has facilitated a collaborative approach to work as teams leverage skills across different social and cultural divides without geographic limitations. An ability to function effectively in these cross-cultural environments has become a critical skill. This then calls upon the chameleon construct of leadership as leaders need to constant understand and adapt as they work across diverse cultures, dealing with project based, virtual and multi-generational teams and with a global customer base.

Culturally intelligent employees also possess the potential to drive up innovation and creativity, due to their ability to integrate diverse resources and help the business make best use of the multiple perspectives that a multicultural workforce brings to the workplace.

This then brings the important concept of **ethnography** into leadership. With the growing use of big data in understanding customer trends, new business growth avenues and even to guide expansion into new markets and geographies, ethnography calls for overlaying this with human judgement in making decisions. In the context of socio-cultural intelligence as a leadership competency, there is need to augment data with human judgment in assessing and appreciating cultural nuances. As an example, in understanding motivations for certain customer and employee behaviors or decision making styles, rather than just relying on headline data, understanding cultural contexts can help businesses make better decisions.

We propose that assessment of leaders' socio-cultural quotient be included as one of the critical measures in assessing their ability to successfully lead the organization of the future.

5.6 Creativity and Innovation Quotient

Last but not least: the Creativity and innovation Quotient. The world is undergoing a technological revolution, including the emergence of smart and connected machines and system, artificial intelligence, bitcoin and sharing economy to mention a few. The velocity, breadth and depth, and systemic impact of the revolution require creative and innovative leadership mindsets. It is no

doubts that with the avalanche of new products, new technologies and new ways of working, workers are going to have to become more creative and innovative to benefit from these changes. On the same breath, leaders and senior executives need to understand their changing environment, challenge the assumptions of their operating teams, operating models and relentlessly and continuously innovate to ensure that their business are not disrupted.

Leaders are expected to be creative to innovate and steer the implementation of new business models and face the relentless headwinds of new market realities caused by disruptive technologies and turbulent business conditions.

This is where the new concept of **design thinking** comes into play. This is because leaders need to continuously make sense of vague external trends, help the organization imagine the digital future, blur the internal and external boundaries in ways that assist the transformation, educate others and repurpose technical expertise, thus using design thinking methods to foster innovation. In future, leaders must be flexible and possess wide intellectual curiosity, and willing to see value in vastly different perspectives.

6. CONCLUSION

The pressure is high for everyone with large amounts of responsibility and in leadership positions to “upgrade” their leadership competencies. **A report by the World Economic Forum** reveals that almost 65 percent of the jobs elementary school students will be doing in the future do not even exist yet. Both the workforce and our knowledge base are rapidly evolving. Combined with the effects of technological automation on the workforce, this leaves us with a crucial question: What are the skills future generations will need?

To survive in this new normal, organizations must do things differently. Notably, there will be fewer bankers in traditional roles, while the roles of those who remain will be fundamentally different. Thus, transforming talent is just as important to rebuilding a viable, successful banking franchise as transforming products and processes. Therefore, for the current leaders, it is important that they future-proof themselves in the age of exponential disruption.

Therefore, the volatility of business environment driven by rapid, accelerating digital technologies and business model changes requires new leadership competencies, which was called Leadership Competencies 4.0. To this end, our conclusion is that leaders in the 4IR living the digital

transformation, to navigate the disruptive environment need to have the following competencies:

The leader in the fourth industrial revolution (referred to as “Leader 4.0”) need to be agile and adaptive to constant change. They need to respond to the changing requirements quickly and flexibly while overseeing the entire value chain and building the foundation for innovations.

Leaders need to show a great tolerance for ambiguity, enabling to identify opportunities, define the corresponding priorities and make decisions in a dynamic environment with high aptitude of Ubuntu. In emphasizing the importance of emotional intelligence, Daniel Goleman takes us more deeply into underlying cognitive functioning and broadens the context to include society. It is these EQ competencies that help us make behavioural changes that strengthen our resilience and agility, bridge “know-do” gaps and sustain change and value over time.

The Leader 4.0 need to be an active driver of innovation and serves as a role model when it comes to trying, testing and using new technologies. Leader need to be experimental and not afraid to fail.

Leader 4.0 need to become a socio-cultural architect, shaping the corporate culture and thus deeply entrenching the concept and the requirements of Industry 4.0 in the company and in the minds of the employees.

It is worth noting that not every leader is already fully aware of the extent of the upcoming changes and impact of the fourth industrial revolution, that is digitally aware and astute. Whereas some have not yet entirely grasped the topic of Industry 4.0, but are rather focusing on digitization on a smaller scale.

Lastly, leaders need to understand that achievements fade, progress inspires and learning endures, therefore leaders 4.0 need to constantly and continuously GROW, **MORPH and DEVELOP** to stay relevant in the fast paced, accelerating change and rapidly evolving world. As leadership competencies evolve, leaders need to know that yesterday got you to where you are today. However, today is only the starting point for tomorrow. While you always keep your gaze on the horizon, you must start with the reality of today. Hence, to be a world-class leader in the 4IR, a leader must have an insatiable desire to learn, unlearn and relearn-outpacing the rest.

Think Big. Act Fast. Fail Quickly. Learn Rapidly

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