

# WINNER TAKES ALL

THE RACE TO ADOPT AN INTEGRATED  
APPROACH TO WORK CREATION IN THE  
FUTURE AGE OF WORK

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# WORLD GOVERNMENT SUMMIT



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The Summit is a gateway to the future as it functions as the stage for analysis of future trends, concerns, and opportunities facing humanity. It is also an arena to showcase innovations, best practice, and smart solutions to inspire creativity to tackle these future challenges.



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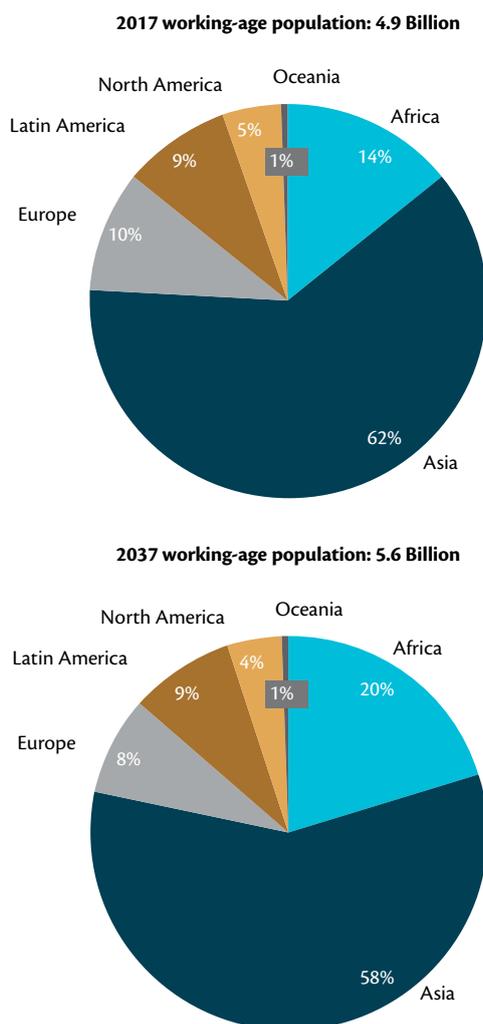


# PART ONE

## DEFINING WINNERS AND LOSERS: GOVERNMENT'S ROLE IN THE FUTURE AGE OF WORK

The nature of the economy, and hence labor markets, is changing dramatically. Individuals spend years training for jobs only to see them fade away into obsolescence. Companies are capable of sourcing talent not just from a domestic pool of labor, but from a highly competitive global market. New, ultra-disruptive companies are maturing, rethinking work whilst destroying old industries in the process. The rise of automation and artificial intelligence (AI) forebodes a future world resembling Keynes' 15-hour workweek. All this will happen in the world with a working age population increasing by 700 million in the next 20 years<sup>1</sup>.

**Figure 1**  
**Global Working Age Population (2017-2037)<sup>1</sup>**



These dramatic shifts mean that the world may see a new era of widespread, higher quality work as menial tasks become obsolete. However, this is far removed from the current situation. Indeed, it appears as though the world is heading in a direction where new work is created; however, the nature of these jobs and the responses of institutional actors mean that whatever growth does take place will be concentrated in a small segment of the populous. The end result of this will be a dramatic increase in social inequality as a small group of talented, high-skilled actors reap all the rewards of modern labor markets. This inequality may be tolerable in the short term, but will clearly produce unsustainable outcomes in the long term.

Arguably, governments have rarely done a perfect job in solving inequality through employment while simultaneously ensuring economic growth. Conceptual debates assessing the value of boosting employment or stimulating economic growth have been at the forefront of public discussion since the 20th century. There have always been disconnects, in principle and in practice. But their negative effects were sufficiently minor, and/or not adequately politically sensitive to require urgent attention. That is no longer the case. The disconnect is huge and growing; and the consequences are no longer tolerable.

So what is at the heart of this disconnect? What are the changes in the reality of 21st century labor markets that drive this urgency?

1. Significant growth potential around a broad range of high-innovation industries, spiking a need for skilled professionals.
2. At the same time there is a large number of unemployed people who feel increasingly isolated from the labor market; these are people being "left behind" by the train of the global economy.

<sup>1</sup> US Census Bureau; International Databases

Some would argue that we have seen these changes before, around the brink of every industrial revolution. Nevertheless, the speed of today's transformation is unprecedented. Rapid technological disruption leaves governments no choice but to mobilize all their internal resources and address attendant talent sourcing. Ultimately, government actions carry a host of political, economic, social and ethical consequences. Depending on their actions, we will inevitably see a distinction between winners and losers:

**Losers:** Countries that are unable to adapt to the tectonic shift in the nature of work or retain skilled talent. Inevitably, a wide segment of their populations will feel disaffected and isolated, triggering a negative feedback loop of populist politics, increased unemployment, economic slowdown, and rising social tensions.

**Winners:** Countries that embrace the future of work and adapt their ecosystems to deal positively with the realities of the labor market of tomorrow. They are able to successfully build the positive feedback loop of attracting skilled talent in innovative industries whilst attracting innovative industries drawn to skilled talent.

So why are governments not reacting to this new reality? On the contrary, they are – however, despite their best efforts, their actions are falling short of producing the desired outcomes. To understand where governments are going wrong, we must explore how governments are reacting to changes in the workplace and identify how their actions fail to produce the intended results.



## UK CASE STUDY: Winning 3.4 million jobs in the automation game

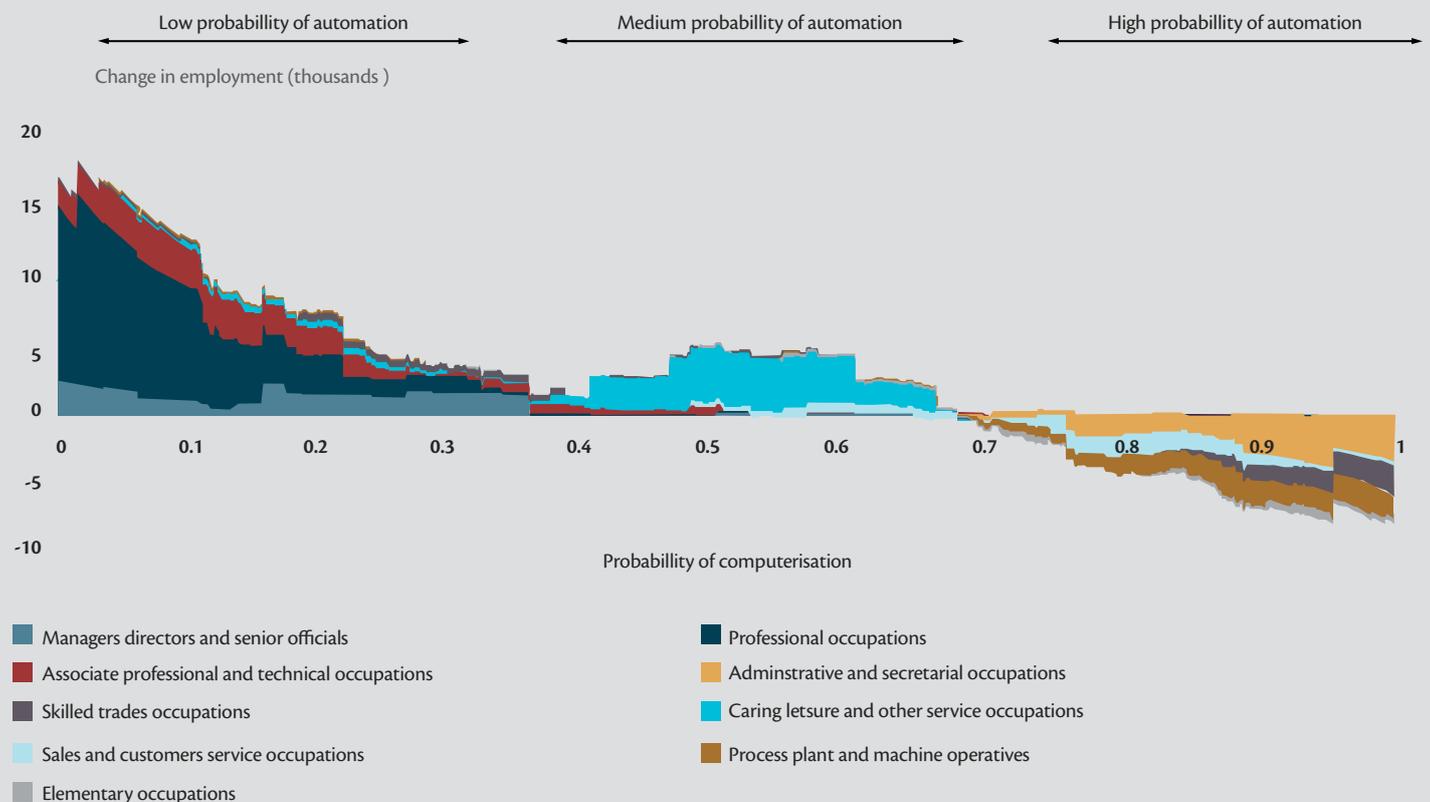
Over the last 15 years, the UK has benefitted from a technology-driven shift that has resulted in the substitution of low-skilled, routine jobs for higher-skilled non-routine jobs. While around 80,000 jobs have been lost as a result of new sophisticated technology such as automation and AI, almost 3.5 million new ones have been created<sup>2</sup>. These jobs require a higher degree of manual dexterity and cognitive skills than previous jobs, consequently demanding higher pay. On average, higher-skilled jobs pay approximately £10,000 per annum more than the jobs they replace, resulting in a £140 billion net boost to the economy.

Looking to the future, technology will continue to play a significant role in the workforce. Deloitte estimates that 35% of jobs in the UK are at high risk of automation in the next 10 to 20 years. Meanwhile, according to a survey conducted by Deloitte, almost three quarters of UK businesses believe that they will net employ more people

in the future and that technology will have a significant or very significant impact on their businesses. While some analysts worry that this shift towards a capital-intensive model will present us with a binary choice (human or robot jobs), the reality is far more nuanced. The resulting hybrid will significantly augment productivity and quality for all parties involved.

Ensuring that the workforce of the future is equipped with the right skills and education to deal with this new reality is also important. Future employees will require a more sophisticated skillset than the previous generation did. The same survey of UK businesses reveals that digital know-how, management capability, creativity, entrepreneurship and complex problem solving will become the most highly demanded skillsets of the future. The success of governments in developing these skills will lie in their ability to provide citizens with the appropriate training and education to enable them to optimize the benefits of automation and technologically-driven disruption.

**Figure 2**  
Change in employment by occupation in UK from 2001 to 2015



Note: the area under all curves (sum of employment in each probability bin) is equal to the total change in employment.  
Source: Frey and Osborne, ONS, Deloitte analysis 2015

<sup>2</sup> 'From Brawn to Brains: The Impact of Technology on jobs in the UK', Deloitte, 2015

# PART TWO

## THE FOUR FUNDAMENTAL SHIFTS: HOW ARE GOVERNMENTS DEALING WITH THE EVOLVING NATURE OF WORK?

There are many papers, approaches and frameworks that have attempted to describe the evolving topic of the future of work. Some have focused on the advancing processes in the labor market, others have examined the diversification of the skillsets required. Most race to respond to the cardinal question, ‘how many people will lose their jobs?’.

While these are valid angles and questions to explore, we are more concerned with the way employment ecosystems are changing and the way governments respond to those changes. Therefore, in the following section we will explore what we believe to be the ‘Four Fundamental Shifts of the 21st Century Employment System’. We will identify the impact of each “shift” on the system, the typical knee-jerk reaction of governments, as well as alternative responses that warrant some merit, but do not sufficiently address the root causes of the problems.

The four fundamental shifts of the 21st century employment ecosystem are:

1. Innovation of business models
2. Re-engineering the work and the work place
3. Transformation of worker to work matching mechanics
4. A changing workforce

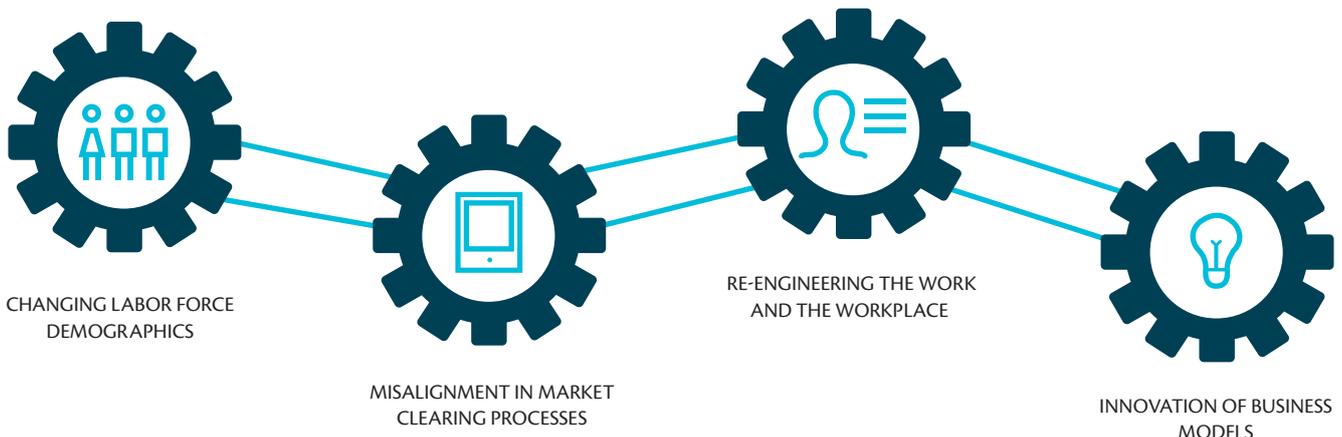
### SHIFT 1: Innovation of Business Models

#### The Shift

Business models are shifting faster than ever with the falling costs of sophisticated technology disrupting entire industries and lowering barriers to entry. For example, business model innovation has given rise to ‘matchmaker’ businesses which provide a physical or virtual platform for vendors and consumers to connect. These companies do not own assets, but rather operate as a forum for individuals to sell their own assets and services. Although this business model is not new, its profitability has grown dramatically due to the advancement of technology, which has facilitated the ease and speed at which buyer and seller can be connected. At the same time, it has reduced the need for companies to hire workers on a full-time basis, creating a business model where workers are hired on an ‘as-needed’ basis.

At the same time, the sophistication of automation has improved the speed and accuracy in which goods and services are delivered, while also displacing the role of labor in the conducting of routine tasks. Across both of these cases, we witness a trend in the replacement of labor-intensive models with capital-intensive models that place far greater value on the importance of systems, infrastructure and research and development than on human capital.

Figure 3  
The Four Fundamental Factors Shifting the Future of Work



## **The Employment Challenge**

The impact of this trend has been heavily felt on workers of all skillsets and caliber. Even workers who are technologically-savvy and well-educated struggle to compete for the limited number of jobs available. For some, strong competition in their industry – intensified by an increasingly more mobile and educated workforce – has forced them to work in less sophisticated and secured positions with limited career trajectory or opportunity for growth. Every year, more disillusioned graduates enter the workforce unprepared for this new reality of unemployment and job insecurity. They grow increasingly frustrated with the institutions that have left them heavily indebted yet unemployed. They even lose confidence in universities that no longer equip them with the skillsets the market requires from them.

## **Government's knee-jerk reaction**

Governments are trying to counteract evolving business models by reinforcing the status quo. This includes propping up dying industries in an attempt to create short boosts in employment and placing regulatory restrictions on industries that support new models. For example, across many Western countries there has been a return to industrial strategies as a method for boosting jobs for blue collar workers. Governments assume that promoting “tried-and-true” industries will still create the same jobs, or value-creating potential, as in bygone years. Though these strategies may be well-intentioned, they do not address the new reality that the future of work brings. In the face of automation and technological innovation, jobs across industries such as mining, construction and manufacturing will be fundamentally restructured. In many cases, they will no longer exist.

At the same time, there is evidence of some countries enforcing burdensome regulations to drive out businesses that do not conform to the status quo. For example, companies such as Uber and Airbnb have faced such significant regulatory restrictions across Western cities to the extent that they were forced to exit the market. These decisions restrict employment opportunities for the general population, who use such platforms as a forum for selling their goods and services.

## **Doing more, better: Government's approach to resolve the unemployment challenge**

In many cases, governments recognize that technology has stimulated innovation, and in response, have embraced these new business models, in some instances replicating their use in the public sector. As opposed to the governments that place barriers to new business models, some governments have endorsed Uber-like platforms and ride-sharing applications to match prospective riders with taxis or even auto-rickshaws.

While business model innovation is compelling – and certainly beneficial to consumers in the transportation industry – blind government endorsement is problematic. Ride-sharing disrupts pre-existing taxi industries by either substituting driver-for-driver or increasing the labor pool of ride-sharing drivers in the economy. While government support for this model is beneficial in the short-term, there is no focus on how the required skill – driving – will evolve in the long-run, raising questions around its long-term applicability. In reality, ride-sharing is an intermediate stage towards automation. More cars will be automated in the future, which will consequently reduce the need for drivers. Instead of focusing on the long-term future of the transportation industry, governments are capitalizing on short-term gains.

**While business model innovation is compelling – and certainly beneficial to consumers in the transportation industry – blind government endorsement is problematic.**

## **SHIFT 2: Re-engineering the work and the workplace**

### **The Shift**

The rise of a global talent market and communication technologies have created more freedom in the way in which people work. Rather than being tied to large corporations, employees are more freely able to operate as on a temporary basis, work remotely or part-time. This has given rise to ‘gig economies’, markets where temporary, flexible jobs are commonplace and companies hire independent contractors and freelancers instead of full-time employees. A Deloitte study of multinationals found that around a third of their workforces are contingent, and 51 per cent of business leaders believe that figure will increase within the next five years.

This form of work arrangement has created cheaper, more efficient services for customers since contingent workers are often cheaper and more flexible in their availability. It has also expanded the pool of talent open to employers since employers no longer need to hire somebody based on their proximity. As a result, positions have become more fluid benefiting both employers and workers.

Institutions are able to find and access talent globally when needed and workers are able to work with the flexibility to suit the lifestyle they desire.

### **The Employment Challenge**

While this new style of working has brought some benefits, it has also resulted in the growth of the open talent economy and a fall in the protection for workers. For example, gig economy platforms such as Deliveroo connect workers with customers without taking any responsibility for them as employees. These workers do not receive the same benefits as full-time, permanent workers, such as holiday, sick pay and redundancy packages and, in some markets, health insurance. In many jurisdictions these workers fall into a legal 'no man's land'; not independent workers since they are still closely monitored by the platform, but also not employees since they often use their own tools and choose when to log on to work.

Moreover, employers are not required to offer their contingent workers the same level of training and career progression as they do for full-time employees. In contrast to traditional models of employment that place the onus of training and skills development on companies, part-time workers are expected to have the necessarily skills to fill positions. This expectation places greater pressure on the education system to equip students with skills that are transferable to the workforce, and which are constantly subject to rapid change.

### **Government's knee-jerk reaction**

Governments have been hesitant to outright support "gig economy" platforms, due to concerns over the way workers are treated. According to a 2017 report by the UK Parliamentary Committee<sup>3</sup>, such platforms are using "self-employed workforces as cheap labor" to excuse them from the responsibilities towards their workers and other liabilities. As a result, some governments have gone as far as to outright ban companies since they are unsure how to accommodate these new positions in the economy. Additionally, gig economy platforms may disrupt pre-existing, government-led industries. Banning them, however, is short-sighted and will more likely lead to reduced competition in the labor market or the rise of an informal economy around it which lacks the appropriate labor protections notwithstanding the fact that these protections will be of a different nature to those afforded to an employee engaged under an employment contract.

### **Doing more, better: Governments approach to resolve the unemployment challenge**

Governments are slowly recognizing that their workforces are shifting towards freelance and/or entrepreneurial opportunities. To facilitate this trend, governments are steadily creating new laws to codify this professional activity. Western countries have created categories of workers for freelancers with specific protections, such as workers' benefits. Creating these categories also make it easier for governments to quantify the number of workers pursuing freelance activities. As governments gain a broader perspective of their labor market ecosystems and the kinds of freelance work that gig-workers gravitate towards, they have better information to support these workers and ensure their skills contribute productively to national economies.

**As governments gain a broader perspective of their labor market ecosystems and the kinds of freelance opportunities in-demand, they have better information to support these workers and ensure their skills contribute productively to national economies.**

There is more work to be done, however, to continue pushing this trend. Freelancers in some countries are ineligible for insurance coverage as health insurance is primarily sponsored by employers. Moreover, even though governments are promoting self-employment training, freelancers can receive more educational support from academic institutions to successfully prepare for their engagement in the open talent market.

<sup>3</sup> Work and Pensions Committee, 2017. 'Self-Employment and the Gig Economy', Publications.Parliament.uk

**Figure 4**  
**The Four Fundamental Shifts in the Future Age of Work: Detailed Analysis**

THE FOUR FUNDAMENTAL FACTORS SHIFTING THE NATURE OF WORK				
	CHANGING LABOR FORCE DEMOGRAPHICS	MISALIGNMENT IN MARKET CLEARING PROCESSES	RE-ENGINEERING THE WORK AND THE WORKPLACE	INNOVATION OF BUSINESS MODELS
THE SHIFT	<ul style="list-style-type: none"> <li>Labor force is becoming simultaneously older and younger and is becoming more global</li> </ul>	<ul style="list-style-type: none"> <li>Employers expecting a broader range of skills</li> <li>There is greater demand for cognitive skills</li> </ul>	<ul style="list-style-type: none"> <li>Positions are becoming more remote and less permanent</li> </ul>	<ul style="list-style-type: none"> <li>Businesses are shifting from a labor-intensive to capital-intensive model</li> </ul>
THE EMPLOYMENT CHALLENGE	<ul style="list-style-type: none"> <li>Increased unemployment</li> <li>Increased pressure on educational programs to provide talent that meets labor market requirements</li> </ul>	<ul style="list-style-type: none"> <li>Mismatch between expectations of the employer and employee</li> </ul>	<ul style="list-style-type: none"> <li>More informal employment</li> <li>Less protection of workers</li> </ul>	<ul style="list-style-type: none"> <li>Educated and tech-savvy people are losing their jobs</li> <li>New graduates are not prepared for the jobs being created</li> </ul>
KNEE-JERK REACTION	<ul style="list-style-type: none"> <li>Regulation on foreign expatriates</li> <li>Government creating 'chicken factory' positions that are unsustainable</li> </ul>	<ul style="list-style-type: none"> <li>---</li> </ul>	<ul style="list-style-type: none"> <li>Governments ban these forms of employment leading to reduced competition in the market</li> </ul>	<ul style="list-style-type: none"> <li>Governments support the status quo by propping up dying industries and introducing restrictions on new ones</li> </ul>
GOOD BUT NOT GOOD ENOUGH	<ul style="list-style-type: none"> <li>Promoting internships and apprenticeships but not retraining people throughout their career</li> </ul>	<ul style="list-style-type: none"> <li>Governments are moving towards accrediting MOOCs but aren't going far enough to align soft and hard skillsets</li> </ul>	<ul style="list-style-type: none"> <li>Regulation does not fully support new models of working, e.g. ease of registering a business</li> <li>Education system does equip with correct skills</li> </ul>	<ul style="list-style-type: none"> <li>Blocking these industries leads countries to fall behind those that do allow them</li> <li>Supporting them also risks supporting the substitution of jobs for automation</li> </ul>

### Shift 3: Misalignment in market clearing processes

#### The Shift

The changing nature of market clearing mechanisms has resulted in a significant shift in employers' expectations from job seekers. Technological disruptions such as automation and AI are likely to substitute specific tasks previously carried out as part of certain professions and create new types of work requiring rapidly changing core skills. Businesses have a greater tendency to hire for roles that involve complex, highly cognitive tasks that cannot be performed by technology. Therefore, employers have moved beyond simply looking towards hard skills, formal qualifications and standardized interviews to hire talent. In the current labor market, there is a growing focus on a broader range of social skills including teamwork, creativity and problem solving.

Sophisticated technologies have also enabled employers to develop innovative recruitment strategies to source candidates with the relevant skills and experience for job vacancies. For example, artificial intelligence is now used throughout the recruitment process to manually screen applications, communicate with candidates, and analyse candidates' words, speech patterns and facial expressions during an interview. These techniques reduce the time taken to fill a position and improve the quality of new hires. Communication technology such as Skype has also

expanded the pool of talent from which companies can engage, allowing them to tap into the global market and access candidates with the most suitable skillset.

#### The Employment Challenge

Recruitment strategies have changed in a way that the labor market has not prepared for, resulting in a disconnect between the expectations of job seekers and employers. Job seekers expect their formal education to land them good jobs in prestigious organizations whereas employers question the ability of the formal education system to produce candidates with the right skills for the labor market. Employers look for candidates with the perfect combination of soft skills and education (both formal and informal), which often the current education system does not equip them with, focusing on rote learning as opposed to the development of behavioral and social skills. As a result, young professionals struggle to secure work in the roles they hope for, or are hired with little understanding of the tasks that will be required of them. All parties lose faith in the credibility of the education system and its ability to effectively equip job seekers with the necessary skills.

#### Doing more, better: Government's approach to resolve the unemployment challenge

The market clearing system has historically favored traditional education from certified academic institutions. However, the educational landscape is changing. This change is most visible with the growth of Massive Open

Online Courses (MOOCs), which are online educational platforms. Examples include Khan Academy, which provides educational content for users from primary school to higher education. Governments, in response, have begun leveraging MOOCs to improve educational outcomes, from primary school to higher or vocational education. Moreover, some governments have also certified MOOCs as a legitimate form of learning through higher education accreditation and quality assurance.

## Recruitment strategies have changed in a way that the labor force has not prepared for, resulting in a disconnect between the expectations of job seekers and employers

Government embrace of MOOCs, unfortunately, has not sufficiently transformed labor market clearing. MOOCs have certainly increased the quantity of skilled talent in the job market. Students step into the job market with strong technical skills, comparable or even stronger than students from traditional institutions. However, jobs require well-rounded candidates with real work experience. The interface in which MOOC users practically apply their skills in real jobs is missing because there is no integrated strategy linking educational outcomes from MOOCs to the needs of the job market. Moreover,

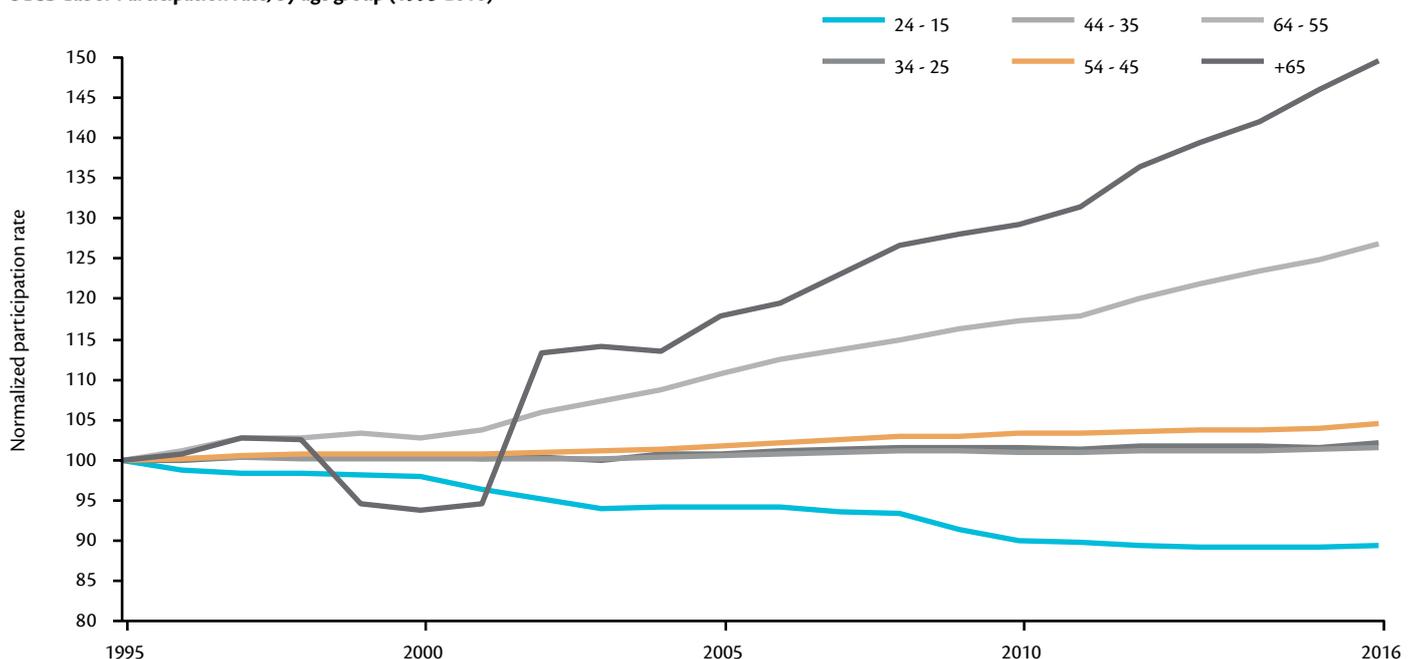
although MOOCs users may demonstrate proficiently their technical skills such as coding, they lack the ability to demonstrate the soft skills increasingly required by employers. Government endorsement of MOOCs without considering how students can receive a structured and value-creating educational roadmap may result in students with a set of isolated, not integrated, skills. These disconnects, once again, are symptomatic of the failure of government to use Systems Thinking when addressing this major technological development.

### Shift 4: Changing Labor Force Demographics

#### The Shift

The supply of workers is rapidly expanding and evolving as a result of shifting demographics, enhanced longevity and heightened value on workplace diversity. The workforce in many economies is getting both older and younger. Reductions in barriers to labor market entry have increased labor force participation rates amongst youth while advances in public health and medicine have increased the labor force participation rate amongst older worker well beyond traditional retirement age. For example, in OECD countries, the age groups undergoing the highest increase in the labor participation rate are population segments above the age of 75<sup>4</sup>. Additionally, the labor market expansion has been fueled by increased access to a global talent pool by both organizations and job seekers. This has been enabled by networks and platforms opening up new possibilities for the way each interacts with the other.

Figure 5  
OECD Labor Participation rate, by age group (1995-2016)



<sup>4</sup> OECD Employment and Labor Market Statistics

### **The Employment Challenge**

This will result in increased unemployment due to the labor force expanding at a higher rate than the amount of work available. Work created will become more competitive as remote working enables candidates around the world to apply for openings in any country. It will also lead to increasing pressure on the educational system to provide programs that equip job seekers to meet labor market requirements by developing both hard and soft skills simultaneously. Moreover, as the population ages and the retirement age increases, governments will need to find ways of retraining professionals and equipping them with a skillset that is suitable for the evolving workplace. This will require strong collaboration between the government, business and education system.

### **Government's Knee-Jerk Reaction**

The rise of a global labor force, dovetailing from an increasingly globalized economy, has required governments to assess the state of their own domestic labor force. To provide their own citizens with access to jobs, some governments have required foreign workers to prove their qualifications for positions with the appropriate educational certificate (i.e. foreign doctors should have an authenticated medical degree to practice medicine). Other government practices require employers to demonstrate that foreign hires are more capable, or suited, for jobs that could otherwise be done by properly educated nationals. This reaction is understandable: governments are keen to provide jobs for their nationals. However, this approach fails to appreciate the increasingly mobile, global and interconnected workforce.

To accommodate a growing pool of youth and seniors, governments also create low skilled jobs by promoting public works projects or invigorating commercial sectors like tourism or retail. These responses do not upskill laborers; they accommodate members of the labor force who would otherwise be unemployed. In fact, these approaches may result in under-employment, as graduates of higher education institutions take lower skilled jobs to make ends meet. Unfortunately, these makeshift solutions to an evolving labor force do not recognize that the nature of jobs is changing, rapidly. There is a strong risk that these same positions will be automated in the future, resulting in workers who once again become job seekers.

### **Doing more, better: Government's approach to resolve the unemployment challenge**

Youth employment is a major priority for governments across the world. In Europe, they are keen to promote apprenticeships and internships for youth among employers, both in the public and private sector. Specifically, they combine a set of financial incentives, training programs, and regulatory requirements to provide non-traditional means of work that could subsequently lead into full-time jobs. These efforts give the youth critical work experience that makes them competitive both at home and internationally. However, a majority of government efforts to upskill workers begin and end at the youth level. Senior members of the work force require skills re-training, which is more difficult to do at later ages. As a result, even though this segment of the workforce is growing in volume, they are being insufficiently provided for.

## PART THREE

# WATCH YOUR STEP: COMMON PITFALLS IN THE WAY GOVERNMENTS RESPOND TO WORK CREATION

So what are governments getting wrong? It is our belief that there are two common pitfalls that governments make when addressing the future of work.

The first is the knee-jerk reaction to stand in the way of change, trying to **maintain the status quo**. Governments justify maintaining the status quo in two ways. Firstly, they harbor a bias towards the “tried-and-true” ways of the past, and argue that innovation and disruption will only result in job loss. As a result, they may block entry of businesses that display innovative, unknown business models while abetting dying industries that once promised jobs in the past. Secondly, governments may resist innovation or change due to simply not knowing better. These governments have no understanding of the real problems affecting the labor market and focus on secondary issues. For example, rather than upskilling nationals, governments may restrict the immigration of expatriates through quotas. As history has illustrated, these attempts to block change ultimately delay the inevitable and at the same time undermine a country’s competitiveness against those that embrace change.

The second common pitfall is to attempt to “do more, better” by **repackaging and applying the same tried and tested tools** that have worked for them in the past but do not adequately tackle the issues of the future. In this scenario, governments attempt to deal with change in the same style that they would row a boat in a regatta. In other words, in order to achieve a certain objective, all team members on the boat bend over a little farther, pull a little harder, and work a little better in a team to beat the other boats. There is no change in course, no pause to look at the distant horizon, and no time to develop a vision. Likewise, governments attempt to deal with issues of unemployment by hunching over and pulling harder – releasing new programs in the same vein as old programs – to reach a “finish line” of an arbitrary unemployment number without a proper understanding of the suitability of this approach to the modern day. This approach leads to, at best, only marginal improvements as there is no understanding or appreciation for how government actions impact the labor force of the future.

So why do governments attempt to maintain the status quo or repackage outdated labor policies that do not work?

There are a few reasons:

- **Governments have a faulty understanding of the kind of reality that currently exists.** Governments have oversimplified complex problems and assume that “problems can be fixed and remain fixed”.
- **Governments address problems in isolation.** Governments maintain a flawed belief that problems can be broken down, identified and addressed on a standalone basis when they actually require a unified and integrated response from all stakeholders involved.
- **Governments adopt a faulty line of sight on the complexity of the reality to be addressed.** This is an inevitable by-product of institutional structures and leads to scenarios where individual departments each take on a blinkered approach to the problems at hand. As a result, a government may have a dozen departments working on simple arithmetic, when it should have one department focused on differential equations.
- **Governments focus on ‘quick wins’ and top line figures.** The idea that unemployment can be boiled down to a single number without consideration given to employment trajectories, underemployment, career ladders and industrial innovation leads governments to adopt ‘quick win’ approaches. This shortcoming fails to address the root causes of problems and leads governments to create ephemeral and unsustainable jobs.

The remedy for these pitfalls is two-fold: 1) an acknowledgement and acceptance of the complexity of creating newly designed work for the future and 2) an integrated and systemic approach to dealing with it. This involves adapting the way that governments understand issues, design solutions and align in the execution of their plan. In the next section, we introduce how governments can adopt a ‘systems approach’ to understand the complexity of the labor market ecosystem and explain how this framework can help governments win the race to tackle the future age of work.

# PART FOUR

## OPEN YOUR EYES: ADOPTING A SYSTEM DYNAMICS VIEW ON THE EMPLOYMENT ECOSYSTEM

We have discussed how successfully navigating the transformation of work requires a refreshed and holistic response. Rather than continuing to apply the same set of solutions to different problems, governments and policy makers must adopt an integrated approach that accounts for the connections and interdependencies of elements within the labor market ecosystem.

### **To facilitate this, they can adopt systems thinking.**

#### **What is systems thinking and how can it be used to provide an integrated view of the future of work?**

Systems thinking is an approach to understanding the nonlinear behavior of complex systems by identifying and analyzing the dynamic, interlocking elements within it. It is a framing technique that can be used by governments to diagnose and identify solutions to employment by helping them to achieve the following:

- Providing policy makers with a holistic perspective of their workforce ecosystem that enables them to grasp the “bigger picture” of what is happening in the system, and what the actors are trying to achieve
- Helping governments see and understand the complexities of a problem to identify impactful points of leverage for long-term change
- Highlighting the dynamic interaction between individual elements within the system, helping governments to identify processes of change which over time reveal patterns of behavior

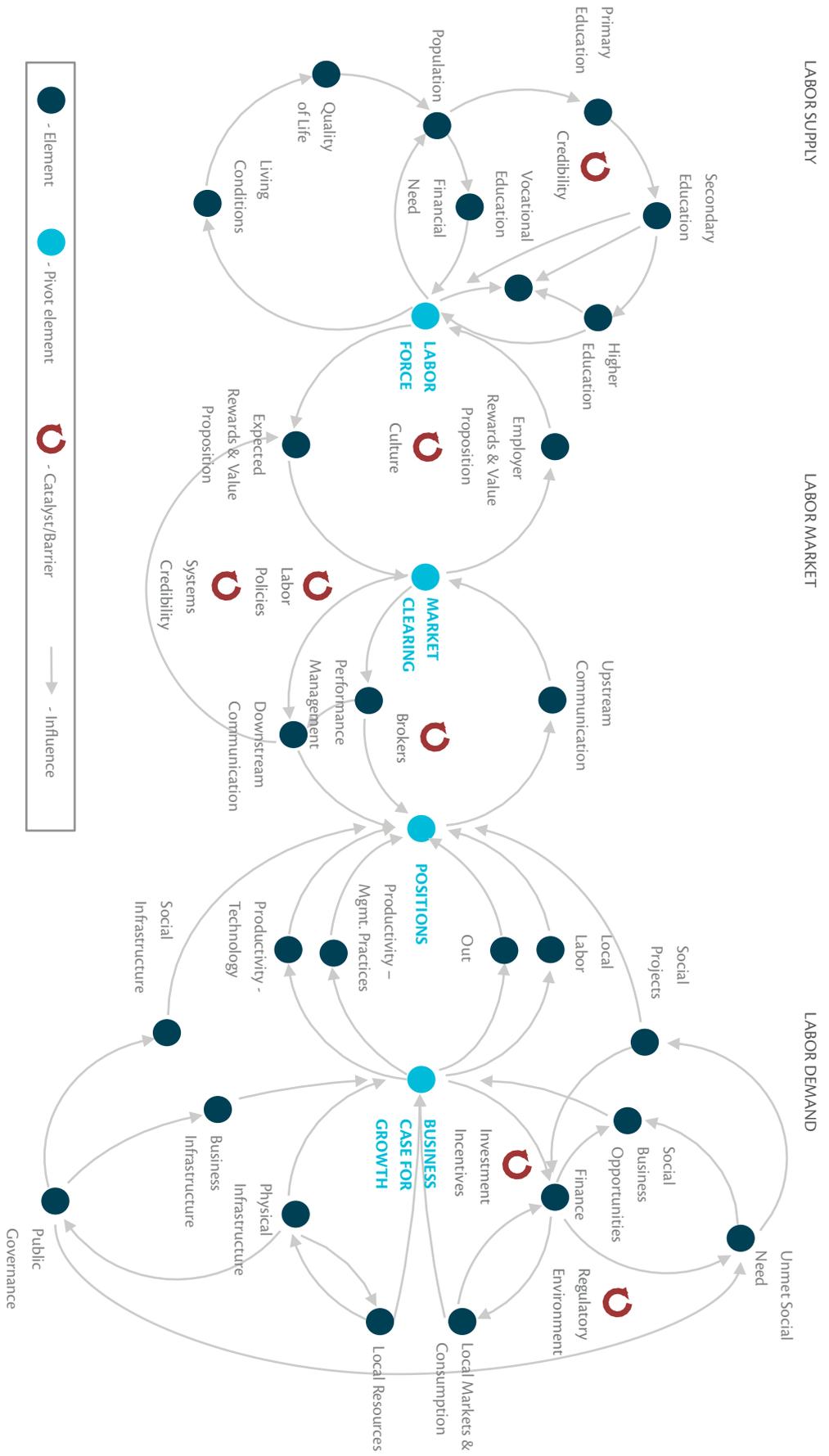
Systems thinking is an analytical tool that can assist the way policy makers understand the causes of labor market behaviors and structure coordinated responses needed to produce sustained results over time. It can help government analyze the future of work, prepare for its impact and capitalize on the opportunities it presents.

#### **How do you develop a systems approach?**

A systems approach to the future of work considers the wider system of interlinked supply, demand and market factors. These factors, also known as elements, can be mapped according to their impact and interconnections. The mapping process requires governments to gradually peel away layers of the employment system to uncover more granularity and complexity.

At its top layer, the labor market system comprises of four pivot elements: labor force, market clearing, positions and business case for growth. Pivot elements represent the dynamic forces that exist between labor supply, market and demand. Below them lie six sub-systems that work together within the larger labor system to drive employment. These sub-systems are education, demographics, the labor market, third sector, private sector and governance. The sub-systems comprise of a number of elements. Each element represents a key actor, institution, process, activity or resource central to the functioning of a self-sustainable employment ecosystem. They also comprise of separate elements that represent catalysts, barriers and gaps to employment. The elements within a system are connected using ‘feedback loops,’ which portray the behavioral outcomes of these elements and the timeframe within which they produce these.

**Figure 6**  
**Labour Market Systems Dynamics Map<sup>5</sup>**



<sup>5</sup> Monitor Deloitte Middle East, 2016

### **What are the benefits of a systems approach?**

Visually mapping the various components in the employment ecosystem and their feedback loops can enable governments to visualize the 'dynamics' and interdependencies of the system. In doing so, governments can better identify the decision-making process of actors within the system, and the short and long-term impact of their actions. A systems perspective helps deepen government understanding of challenges in the employment ecosystem by giving policymakers insight to the what and when, as well as the how and why.

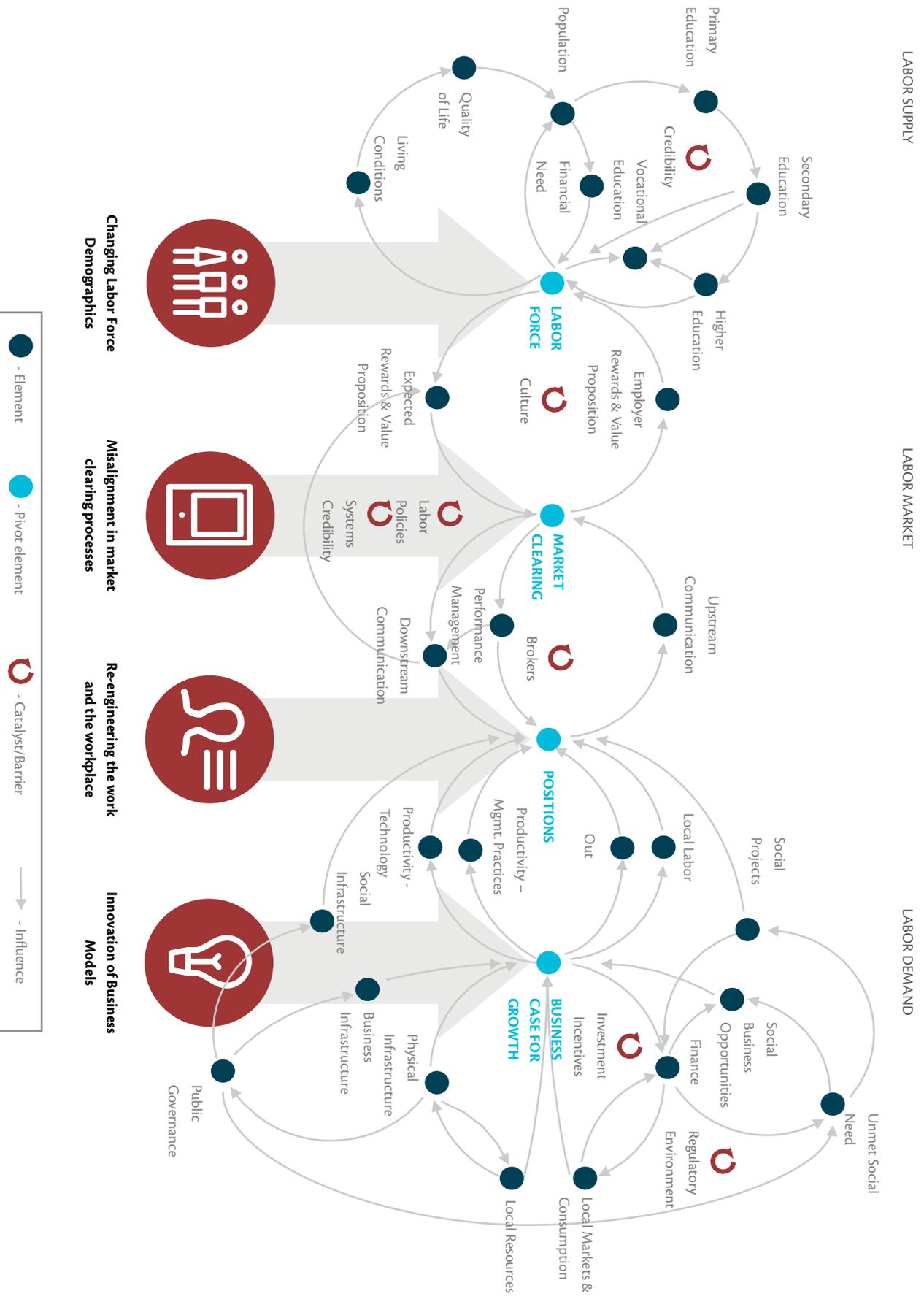
Moreover, a systems approach recognizes the importance of every player in the ecosystem and the way in which they interact. This recognition will lead to a comprehensive planning effort rather than a fragmented approach. As such, a systems approach negates human tendency to become side tracked by personal agendas by encouraging stakeholders to work towards a unified and collective goal. It encourages more strategic planning by

ensuring governments collaborate across the ecosystem with business and educational providers and focus on a small number of ways to achieve change on a large scale rather than producing a laundry list of activities that rarely produce desired outcomes.

### **Applying a Systems Approach to the Future of Work**

An integrated approach to future of work will become increasingly important in light of today's shifting employment landscape. As work becomes more technological, more digital and more global, the significance of the elements that sit inside the employment ecosystem will change. Governments must proactively navigate the future of work by addressing the impact of these forces and their effects on the redesign of work. They must also be prepared to grasp the complexities of this reality and understand how their actions have systemic consequences. They must anticipate the challenges that the future of work presents and design solutions to help workforces to overcome them.

**Figure 7**  
**Labor Market Systems Dynamics Map of the Future<sup>6</sup>**



<sup>6</sup> Monitor Deloitte Middle East, 2017

## NORWAY CASE STUDY: The Unintended Consequences of an Isolated Approach to Employment

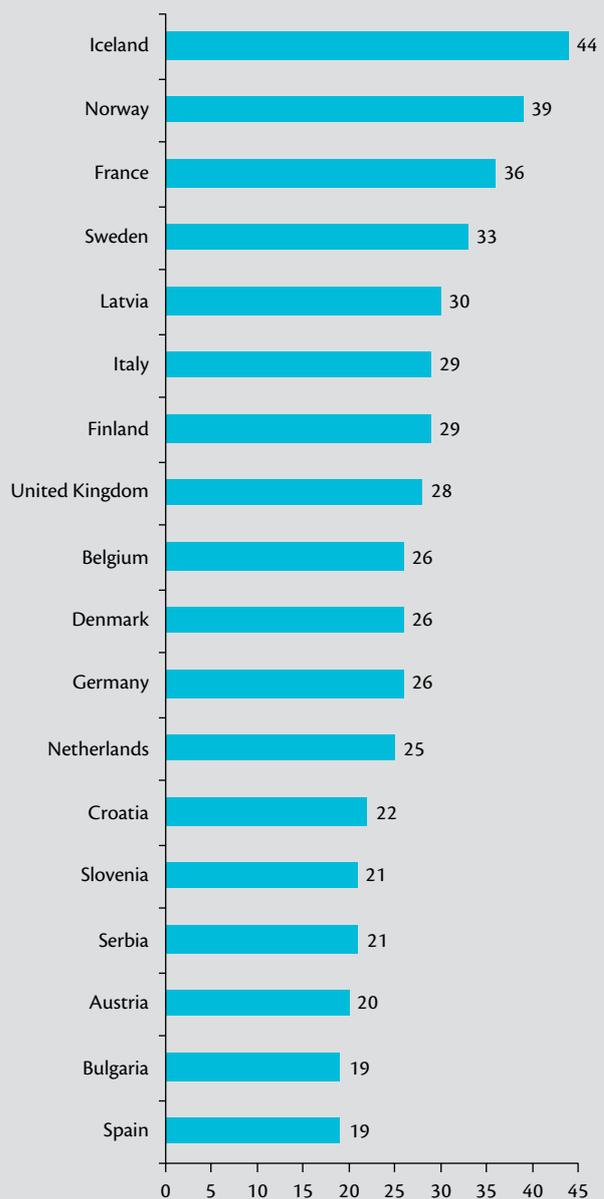
In 2003, the Norwegian government passed a law that requires companies to have at least 40% of company board members to be women and those that did not comply would be dissolved. The regulation was intended to expand career opportunities for women in business and promote equality in Norway's largest organizations. The regulation has resulted in 39% of women holding seats on boards, the second highest in Europe after Iceland.

However, despite the well-intentioned objective of the regulation, a study by Ahern and Dittmar<sup>7</sup> later revealed that implementation of the policy had resulted in a significant drop in stock prices for companies that had complied. The research examined a total of 248 listed Norwegian companies using stock market information and found that the value of all companies affected decreased by 12.4% over the period when the female/male ratio had to be increased by 10%.

The main reason for the decline identified was due to the fact that companies had to appoint relatively inexperienced women to the board. Women appointed were on average eight years younger than their male counterparts and had significantly less experience in top management positions. The negative effect was also a result of the short time span within which companies were required to comply with the quota, which meant that companies competed to hire the best candidates from a limited supply of qualified female professionals.

The unintended consequences of this policy were down to the isolated approach the government took to resolving female employment issues and the limited understanding they had for how such changes would impact the labor system as a whole. The lack of qualified and experienced female professionals in Norway meant that corporations were forced to hire less qualified board members than they would have without the quota. In contrast, adopting an integrated line of sight would have enabled businesses to understand the unintended consequences such a policy would have resulted in and enabled them to identify ways to train women and equip them with the skillset to fulfill the positions being created for them.

Figure 8  
Percentage of seats held by women in 2015<sup>8</sup>



<sup>7</sup> Ahern, Kenneth R. and Dittmar, Amy K., The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation (May 2011, 20). Quarterly Journal of Economics, 2012, vol. 197-137 -(1)127.. Available at SSRN: <https://ssrn.com/abstract=1364470> or <http://dx.doi.org/10.2139/ssrn.1364470>

<sup>8</sup> European Commission, 2015. Women on European corporate boards

# PART FIVE

## SO HOW SHOULD GOVERNMENTS RESPOND?

We live in a world where governments do not always use the right tools in the right ways for the right objectives, and do not measure their results in the right way. Some of the most sophisticated government institutions, who have the most technologically advanced tools, are susceptible to these mistakes.

It is crucial that governments better understand the complexity of problems and solutions related to employment. Initial steps to right these wrongs would be:

1. Clear acknowledgement that employment ecosystems are evolving and interconnected, not static and standalone pieces.
2. Recognition of the differences between the points at which systems contend with interventions and the ground-level implications of policies. This is especially true for social systems where each intervention can lead to unexpected feedback loops. It is crucial for voices across all points of the employment ecosystem to be engaged. Policies must be designed and implemented by empowering constituencies on the ground.
3. An understanding that traditionally outdated approaches to policy were linear and one-dimensional: Design the policy and impose it. The traditional approach of ministerial bureaucrats sitting in offices will not work. Approaches must be fit for each constituency and its context. Solutions should be prototyped, tested, amended and retried.
4. An acknowledgement of the need for accurate information which gives policymakers a full, integrated line of sight on work creation.
5. An acknowledgment of the need for new and different metrics to measure sustained performance outcomes.



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