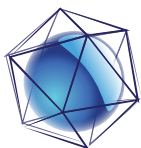
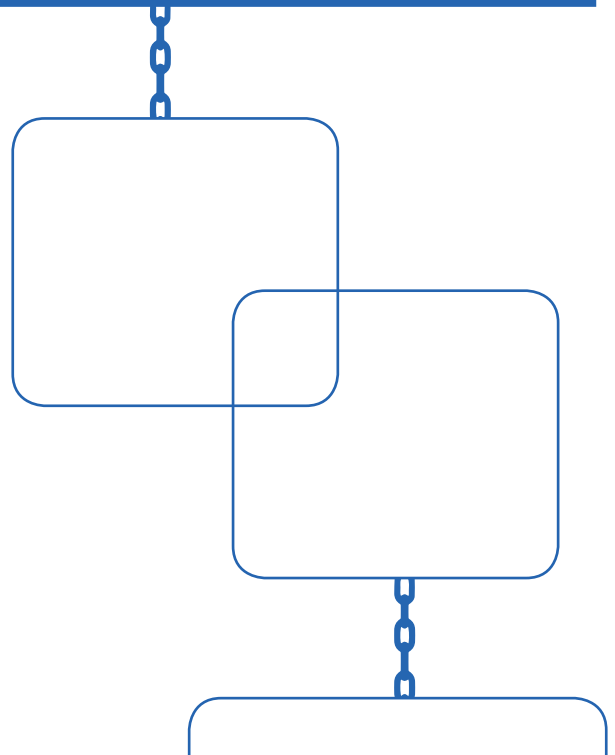


ZIMBABWE & THE FUTURE OF WORK



theSpace

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About theSpace

Is an international platform organized and convened annually by young people as a national process with the sole purpose of re-imagining Zimbabwe's future, influencing an inclusive society, shaping the discourse and its implementation through harnessing youth power.

About theSpace Working Papers: The papers are associated with the annual convening of theSpace event in Zimbabwe. It brings together young people, policy makers, government, decision makers, business, experts and development practitioners for a comprehensive analysis on Zimbabwe's future within global dynamics. Transformative ideas fit for purpose are projected in a series of high level debates moderated by young people drawing on relevant global and regional trends. A series of working papers from the debates whose function is to consolidate fragmented and independent actions towards shaping a forward looking and action oriented agenda are shared with key stakeholders as part of lobbying efforts.

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Zimbabwe & The future of work

“Whatever we think of them, the circumstances of the world of work are the outcome of a myriad of decisions taken, in the public and in the private domains, nationally and internationally, and with regard to all aspects of policy. Equally, and notwithstanding already observable dynamics of change and some very harsh realities, the future of work is what we will make it. The challenge is to make it the one we want”

Guy Rider, 2015

ABSTRACT

This paper reports on and takes forward perspectives and conversations on the future of work from the "theSpace" high-level debate that took place in Harare on the 16th of September 2016, between international policy makers, academia, the private sector, and Zimbabwean youths. While recognizing that conversations on the future of work have so far been located in normative and exploratory future scenario mapping, the paper argues that such exercises are futile if not grounded on extant local realities and context. It highlights Zimbabwe's context as that of an economy that is highly informal, with a large unskilled worker pool, which is not part of unorganized labour. Given the contextual reality, the paper argues that dealing with fundamental human development and institutional deficiencies must be a critical part of Zimbabwe's conversations on, and ability to adapt to the future of work. It suggests that this may be done through a focus on (1.) The transformation of the education system and enhancing learners' innovation capacities and global competitiveness. (2.) correcting institutional credibility challenges that impede both local and international investment into Zimbabwe's productive sectors. (3.) Policies and measures that aid a transition from informality to formality. (4.) Preserving space for collective action and organizing. (5.) Locating dialogue on the future of work around the decent work agenda, and the sacrosanctity of social justice. Addressing these crosscutting issues with an accent on decent work deficits and possible threats to social justice, the paper argues, will be of fundamental importance if Zimbabwe and other countries in sub-Saharan Africa are to forestall threats of the fourth technological revolution advancing a few people while banishing millions to poverty.

Key Words: Zimbabwe; Future of Work; Decent Work; Young People; Labour; Fourth Industrial Revolution; innovation capacity;

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1. INTRODUCTION

How does global dialogue around the “fourth industrial revolution” impact developing countries?¹ How does a country with a traditionally low labor absorption capacity and, whose jobs are predominantly found in subsistence farming and the informal economy, make sense of the conversation on the future of work? What is work, and what are the driving forces for its future? How is Zimbabwe affected? What are the likely implications of positive and negative externalities of endogenous and exogenous trends driving the future of work on Zimbabwe? Is Zimbabwe ready for the future of work?

The above questions are complex and fuller answers are beyond the scope of this discussion paper, but they assist in locating the global conversation on the future of work in its local context. This paper embraces the ILO’s call for national conversations on the future of work, and, without claims at prophecies, paints the Zimbabwe’s context and raises questions to provoke debate on Zimbabwe, and also outlines one illustrative case or possible scenario. The paper reports on and takes forward perspectives and conversations that took place as part of the “theSpace” high-level dialogue on the future of work, on 16 September 2016, between international and national policy makers in conversation with the youth of Zimbabwe.² It thus scopes the issues around Zimbabwe and the future of work. The paper starts by explaining the urgency of the conversation globally, and moves to posit an understanding of work, its future, and its global drivers. It then outlines the state of the Zimbabwean political economy and what this context might portend for the future of work. The paper conducts this conversation using the four thematic issues that are part of the conversation on the future of work as led by the ILO, as a framework, these are Work and Society, decent work, the organization of production and work, and social justice.

2. OVERVIEW: THE FUTURE OF WORK AND THE URGENCY OF NOW

The history of world progress is a paradox of change and continuity. On the one hand, history bears witness to massive impulses to push the technological boundaries of possibility, which changed people's lives in dramatic and previously unimagined ways. On the other hand, history is also witness to resilience, survival, and continuity, with people's ability to

“The world has changed, but the world has not changed.”

Dr. Nginya Mungai Lenneiye
Innovation Baraza Founder

master technological advancement, adapt, and continue as the species at the center of the changes. While some see technological advancement as promoting profit and progress, others view artificial intelligence and automation as heralding Armageddon (Burnell, 2016) and possible subjugation. When considered through a positive lens, optimists see technology reshaping labour markets, making them more digital, online, mobile, and more efficient (Cordagnone, Abadie, & Biagi, 2016). Here, automation and machines serve people, helping them to work less, produce more, specialize, and earn more, resulting in a better work-life balance.

On the other hand, skeptics see automation as putting people out of work at scale (Williams, 2016), with the few jobs left being casual and informal, resulting in more glaring inequalities between the 'haves' and the 'have-nots'. Celebrated economist Joseph Schumpeter in 1942 theorized this constant change in the economy as constructive destruction – a process of industrial mutation that incessantly revolutionizes the economic structure from within, constantly destroying the old one to create a new one (Schumpeter, 1975: 82-85). Whatever the case may be, Guy Rider, (Director-General of the ILO) argues that notwithstanding these 'observable dynamics of change and continuity, the future of work is what we will make it,' argues (ILO, 2015).

So if change has been constitutive of human history and the concomitant of great, revolutionary and often progressive advancements, why is there urgency in conversations and exhortations to engage on the future of work? In part, this is because the levels of change taking place are unprecedented. Ray Kurzweil, a futurist and Google's Chief Engineer commented that 20,000 years of progress would be crammed into the next 100 years (Kurzweil, 2001) and the ILO remarked in 2013 that 'processes of change were taking place at such speed, and on such a scale as to constitute a transformation of the world of work' (ILO, 2015).

These remarks show that, despite the nomenclature, the question of the future of work is not a futuristic academic conversation. It is relevant today, and we feel its effects in changes to our professional, political, social, economic, and personal spaces today (Gratton, 2011; Bersin, 2016).

Politically, some of the immediate implications can be seen in the rise of the right, in part sponsored by conversations around how automation has hollowed out the middle class, which some see as the engine of growth and mainstay of development. In Europe, the repercussions of this hollowing out could be seen in the political 'revolt' by those presumably left behind (former blue collar workers predominantly from small towns) who lost their jobs and associated prestige to automation in industry and the service sector. In Britain, some consider BREXIT as both a manifestation and a consequence of the foregoing. To them the BREXIT, in part, was supported by those 'left behind'- the marginalized, less educated and skilled country folk - revolting against the well thought out arguments of their professional commentariat, scientific community, and tech-savvy, globally connected, more educated big city dwellers who have benefited from technological advancement and globalization (Goodwin & Heath, 2016). In America some argue that, similar phenomena explain the populist ascendancy of Donald Trump to the US Presidency, on the back of a revolt against the establishment by a disenfranchised white working class (Tankersly, 2016), whose anger has been building over time due to growing economic disparities between the urban and the bucolic, and the later, who resent the former, feeling that they had no share in power (Cramer, 2016). This section of society is increasingly skeptical of globalization, and occupy trades in which jobs are in danger from both offshoring of production and automation onshore with an estimated 45% of jobs currently being done by people argued to be automatable using existing technologies (Gratton, 2011; Thomas, Fuchs, & Silverston, 2016)

In some respects the fears around automation are as real as the technological advancements themselves. But it must be borne in mind that technological advancements have also led to enhancement of social services and health care, which have improved our quality of life and increased longevity, adding more years of work for people, beyond the traditional retirement age thresholds. At a global level, private companies, countries, and universities are investing in years of research to understand the future of work.³ The United Nations and its specialist body on labour, the International Labor Organization (ILO) are investing in years of global consultations, and mainstreaming conversations around the future of work, with the ILO placing it at the center of its centenary celebrations in 2019 and political program going forward.⁴

3. UNDERSTANDING WORK IN THE PAST, PRESENT, AND FUTURE

Work is a universal, yet fluid concept, which means different things to different people. However it can be understood generally as whatever physical or mental activities that one carries out, usually in pursuit of income to meet one's basic human needs, and fulfill material responsibilities to self and others. In this respect, work is the primary causal pathway to one's sustenance and survival, but in other respects, it is also more than just the mechanical process of exchanging physical and mental competencies for the capability to fulfill basic human needs. According to the ILO Declaration Concerning The Aims And Purposes of The International Labour Organisation of 1944, work provides the space where workers: (1.) Can have the satisfaction of giving the fullest measure of their skill and attainments. (2.) Make their greatest contribution to the common well being, and (3.) pursue their spiritual development (ILO Declaration of Philadelphia, 1944).

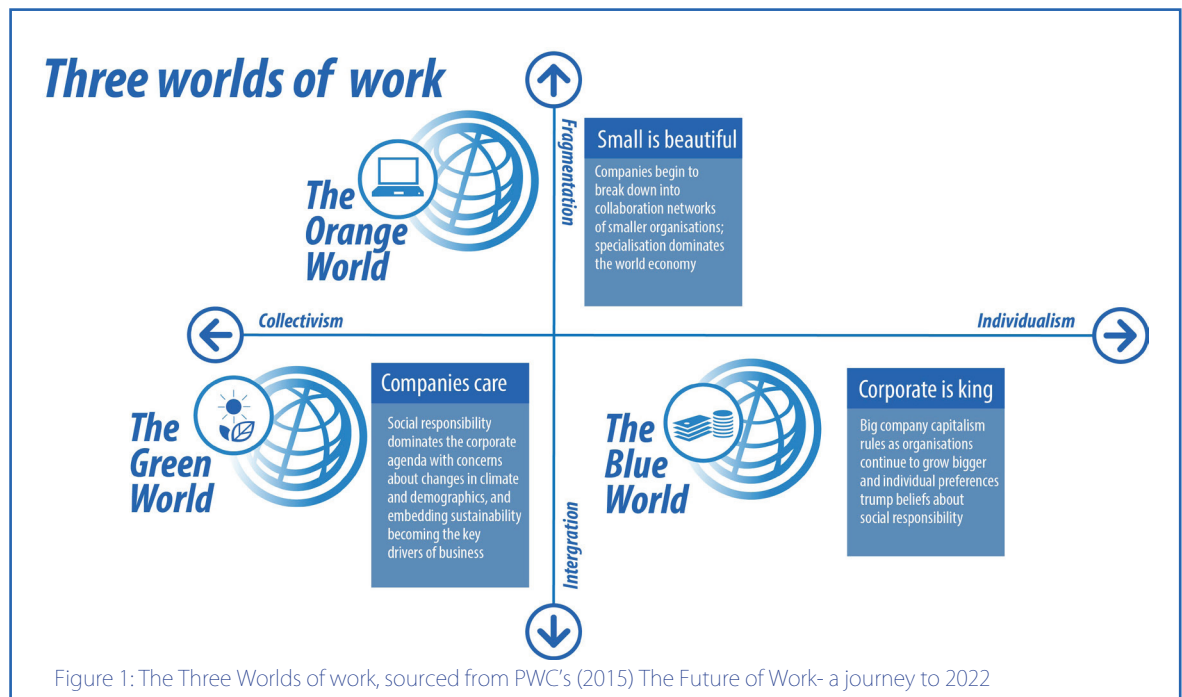
Work is, therefore, the place where one can derive satisfaction from achievement, where calibration and aggregation of purpose and worth to self and society through contributing to the greater good, takes place. Beyond this, work and returns from it have to be just. How one pursues the above functions differs remarkably regarding how, where and for what returns. Despite these differences, as noted earlier, there is consensus that the world of work as we know it, is not just going to change in an abstract future that is the product of active imaginations, but is changing now.

3.1 Global Trends Driving The Future Of Work

Many factors are influencing and driving the future of work, but there is an unusual consensus among governments, international organization's, international finance capital, labour and civil society, on the trends that are foremost in influencing the transformation of work.⁵ McKinsey Global Institute's Dobbs, Manyika, & Woetzel, (2015) arguing from an analysis situated in the present argue that the global economy is being impacted on by: the rise of emerging markets, accelerating impact of technology on traditional market forces, an aging world population, and accelerating flows of trade, people, capital and data (Dobbs, Manyika, & Woetzel, 2015). In addition to these four forces, Gratton, in a more futuristic analysis focusing specifically on the future of work, adds the needs of a low carbon economy, and profound societal changes in terms of people's work and professional consciousness (Gratton, 2011). Price Waterhouse Coopers (PWC), in their prognosis of the future of work, largely based on normative future scenario's follow similar patterns, listing technological breakthroughs, resource scarcity, climate change, shift in economic powers, demographic changes, and rapid urbanization as the forces driving the future of work (Price Waterhouse Coopers, 2015).

PWC suggests that the world of work, for corporations at least, may take any one of three ways or amalgams of the three pure types, which they outline as follows:

- **THE GREEN WORLD**, where social responsibility dominates the corporate agenda, climate, and demographic changes are central to business models, and sustainability (social, economic and environmental) is mainstreamed into business.
- **THE BLUE WORLD**, where there is the dictatorship of big business and individualism with limited to no concern for social responsibility.
- **THE ORANGE WORLD**, where companies are becoming a thing of the past, and collaboration networks of smaller organizations are in vogue with specialization dominating the global economy.



Below is a prognosis on the kind of skills that will rank highly in 2020 according to the World Economic Forum. Although there is no significant departure in the skills mix for 2020 compared to 2015, the rank ordering is suggested to change, highlighting the paradox of change and continuity mentioned in previous sections. The accent on which skills are likely to be valued in the future, is however worth noting.

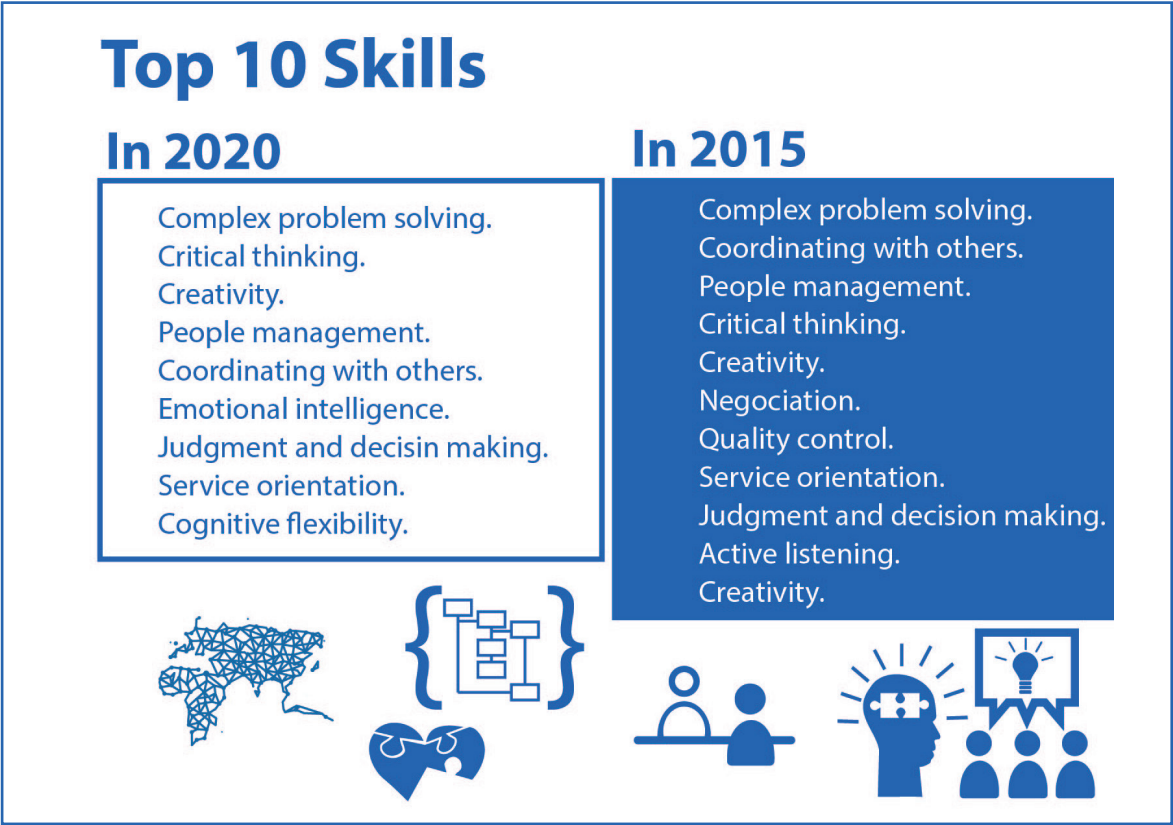


Figure 2 Skills for the future (World Economic forum, 2015)

3.2 A Cautionary Note on Global Trends

It is evident from the consensus on trends from global corporate finance that there is change and fragmentation, of traditional production processes. However, the agreement of capital and business on the patterns, while correct, are trends noted by business, as predominantly speaking to what will impact profitability and operations of the firm. For a fuller picture, one needs to step beyond the realm of profitability and the firm, and doing so brings forward the following issues for consideration:

1. The Locus of “Global” Trends: While trends may be global, they are predominantly informed and more poignantly felt in the developed world and to some extent, in emerging economies (of which Africa invariably has anything from 3 to 12 emerging economies depending on who is counting). This is not to say Zimbabwe and Africa are untouched by these trends, but one should consider the rate of diffusion of the patterns and contextual realities, amongst other factors, when analyzing the differentiated impact of these trends.

2. The Absence of ‘Social’ and the ‘Political’ effects of trends: The articulation of these trends, bar the PWC take, hardly pays attention to other critical components that speak to the politics of the future of work and the impact on:

- Present governing arrangements, power dynamics between the state, capital and society.
- The creation of winners and losers in ways that impede and have social justice implications based on both the trends, and the changes they facilitate or their ability to perpetuate inequalities among persons, sexes, sectors and countries.
- Traditional relations and (a)symmetries of power as, on one-hand, states, usually, the regulators, are losing power to corporations due to constrained financial and technological muscle. On the other hand, both limited financial capacity, and the reorganization of work through flexi-employment, informalisation, global supply chains, teleworking, the gig economy, the sharing economy, and casualization restrict labour organizations’ ability to conduct political action and facilitate collective bargaining and action.
- Global aspirations around sustainable development encapsulated in the African Union’s Agenda 2063 and Agenda 2030 on Sustainable Development Goals and their emphasis on sustainable development based on the triple baseline of social, economic and environmental sustainability.

3.3 Connecting the Dots: Future, Trends & Today's Global Realities On Work

The ILO (2015) attempts to remedy the above-intimated disconnects through adopting a different approach to dealing with the future of work. While noting the trends, it begins the conversation by looking at prevailing conditions in the current world of work highlighting the following about the current context:

- **Jobs, Poverty, and Social Protection:** That a discussion on the future of work needs to acknowledge the current jobs gap globally of 200 million, and gender disparity, in which youth unemployment rates highest and women are adversely affected, respectively. Also, the discussion needs to note that most of those who are in employment are under employed, and the majorities are in informal economy work.
- **Internationalization of production:** That in the current world of work social justice challenges are emanating from the pervasive use of global supply chains in a world in which governments still administer labour rights and laws at national level.
- **The quality of work:** That over 50% of the world is producing within the informal economy, with severe decent work deficits.

But what do these trends and the global context mean for Zimbabwe and Africa. Is the context representative, and the trends fully encompassing? Taking the stated global trends at face value, and ascribing them to the globe, despite the variation in contexts is tempting. This will inevitably lead to conversations that are lopsided, and while conceptually interesting, may be contextually less relevant. The objective conditions of the developing world and countries like Zimbabwe may differ, and in the short term may be affected by different trends and circumstances, or the same trends but at different intensity. What then are the objective conditions of Zimbabwe and the factors contributing to the future of work?

4. ZIMBABWE AND FUTURE OF WORK

Zimbabwe does not exist in a vacuum, as such, Industry 4.0, the demographic changes, the rising salience of low carbon or green economies, shifting patterns of work, the age of big data, shifts in world economic power, and momentum towards sustainable development will all constitute positive and negative externalities for it.

4.1 The Macroeconomic Picture

The shift in economic power, identified as one of the leading trends should give Africa something to smile about. The IMF in 2015 projected that despite some weaknesses regarding institutions, fiscal space, and infrastructure; GDP in sub-Saharan Africa was expected to continue its 15-year growth run with expectations of reaching 6% in 2016, before moderating (IMF, 2014). But as with most types of global data and cross-national statistics, the outlook for Africa belies some far-reaching variation in terms of economic performance amongst regions and between countries. Africa-wide, the impressive run of continental GDP growth was driven by sound economic performance from East and West Africa, with Southern Africa performing the worst after Central Africa (AFDB, 2016). Similar variation is present within the regions as well and a closer look at SADC sub-regional national realities show that despite the upward trend, Zimbabwe's economy has been slow to recover from the hyper inflationary economic crisis that engulfed it between 2000 and 2008. Since rebounding in 2009, the Zimbabwean economy has been on a down turn, experiencing steady declines from a high of 11,9% growth in 2011 to 3,8% in 2014 and 1,5% in 2015.

The Zimbabwean government, through the September 2016 mid-term fiscal policy statement, projected that the economy would grow by 1.2%, down from earlier projections of 2.7% (Government of Zimbabwe, 2016). A month later, the IMF expressed a different opinion, predicting negative growth for Zimbabwe in 2016, at -0.3%, before dipping to between 0 and -2.5% in 2017 (IMF, 2016). These macroeconomic indicators suggest that Zimbabwe is set for tough economic times. The causes are many, but include deflation, stagnation, and low productivity in industry, exacerbated by low commodity prices, weak regional currencies, and impending droughts (Chitiyo, Vines, & Vandome, 2016). The government of Zimbabwe also points to an unfavorable international environment, blaming sanctions, imposed mainly by the US and European Union as acting against meaningful economic recovery. However, Chitiyo, Vines, & Vandome (2016) argue that the situation is heightened by inconsistent policy implementation and articulation, as well as political uncertainty precipitated by in fighting in the ruling party. Others also point to inhibitive business costs, commercial revenue, under-performance due to deindustrialization, poor infrastructure and poor political and economic institutional quality among other factors. Suffice to say that the macroeconomic indicators point to an economy that is stuttering, and unlikely to create employment as a result of factors highlighted above.

“... there is an urgent need to upskill and reskill...”

Natalie Jabangwe
GM Ecocash - Econet Zimbabwe

4.1.1 Productive sector deficits, innovation challenges and location of current work

The state of Zimbabwe's economy points to sterner challenges related to the future of work, because economic performance is an indicator of the situation in the main productive sectors of the economy. In this respect, GDP serves to indicate production levels in the mainstays of the economy - the labour intensive sectors of Manufacturing, Agriculture and Mining, which in Zimbabwe's case, have been in decline (save for mining) regarding contributions to GDP and Jobs over the last 5 years. The gains in mining are great, but come with the caveat that very few countries, have developed and grown from natural resource alone⁶. For purposes of this discussion, it is also worth noting that while natural resources can enhance the state's fiscus, resource extraction tends to be capital intensive, while absorbing little labor and under-developing institutions.

"We are already seeing the impact of technology in traditional jobs. Whether you are on a production line and or even on people to people interaction."

*Her Excellency Ambassador Catriona Laing
United Kingdom Ambassador to Zimbabwe*

Inevitably, the decline in the economy and its key drivers has had as its corollary, not just job losses, but also further informalisation of these areas. This trend is especially worrying from a development perspective, as industry has traditionally driven economic growth (with a few exceptions) contributing skilled jobs in the process. The United Nations Industrial Development Organisation (UNIDO), argues that without industrialization, development is unlikely to occur, and without technology and innovation, industrialization may also not occur (UNIDO, 2015). This places Zimbabwe in a difficult situation where it needs

industry to develop, but its manufacturing sector, which suffered under the hyperinflationary environment up until 2009, was also hit hard by (premature) deindustrialization⁷ ala Rodrik (2015), and what little industry is left is not performing at optimal levels⁸.

Conventional economic growth theory suggests that for Zimbabwe's industry to perform (and converge with the developed world), it needs to deal with varied challenges. These include natural strategic challenges like geography, as well as fostering an enabling environment characterized by sound policy fluency and credible political and economic institutions, together with inducing technology and innovation to spur industry forward.

Central government plays critical roles in all the above. However, part of the challenge stems from the reality that (1.) little can be done about negative geo-spatial endowments, (2.) inducement of tech-innovation is slowed down by the human development challenges that stem from educational foundations, which besides being weak on science education, were also not calibrated to inculcate innovation, and (3.) the workers already in the labour market, especially in the informal sector, are mostly unskilled and possess limited innovation capacity.

According to the World Economic Forum, Zimbabwe's education system has done well in spreading access (quantity) but fares poorly regarding quality. WEF's Global Competitiveness Index ranks Zimbabwe at 125 out of 140 countries. This is allied with poor showings in capacity for innovation (128/140), business sophistication (130/140), education and training (117/140), and labour market efficiency (134/140) (World Economic Forum, 2015)⁹. This is not to say Zimbabwe is devoid of innovators; it has them and anecdotal evidence suggests that the corporate world regards well Zimbabwe's workforce in terms of pay versus productivity. The burgeoning class of creative entrepreneurs in different sectors, and the presence of Zimbabweans amongst at the high echelons of different industries and fields across the world is testament of this. Zimbabwe's challenge concerning innovation capacity and business sophistication is of both inculcation and scale. To meet these challenges, the wealth of indigenous entrepreneurs in the informal economy needs to be turned into a world-beating sophisticated business class that does a little more than petty trade in essential commodities, and innovate beyond services and education applications. It also entails translating the national pride around literacy into more than just reading and writing at grade-3 level ¹⁰, into education that produces people capable of economic modeling, computer coding, engineering, manufacturing, and innovating around global services through improving the appropriacy and quality of education to be a better fit for both the present and jobs of the future.

Given the above, while noting the global nature of today's trends and conversation on the future of work, a discussion on the future of work in Zimbabwe has to be grounded in context and prevailing conditions. While there may be real concerns about the WEF measures and how accurately they reflect Zimbabwean reality, they identify some deficiencies, which conversations on Zimbabwe and the future of work need to address. Additionally, variations between contexts – as suggested by the GCI ratings – entail that strategic conversations on the future of work in Zimbabwe need to be different from debates on the future of work in the Global North where technological advances, industry, and global competitiveness are supposedly at the 'higher end' of the spectrum. This approach would also apply to other countries in sub-Saharan Africa.

The conversation needs to be about how the country can rise in ways that create and promote decent work, and ensure that technology accelerators assist with rebooting the economy without killing livelihoods, banishing the majority of people into poverty, while a select few thrive. Because some of the challenges are natural, and others are legacies of past political and economic disenfranchisement, they will take long to correct, so a conversation on the future of work also needs to have a real future focus beyond the next 5-10 years, and centered on long term planning that allows for structural transformation, rather than immediate responses to just today's problems. Given the nature of the economy, a conversation on the future of work also has to be about facilitating an economic transition, from informality, often regarded as a bane because of the often precarious nature of work there, to formality, where regulation, social safety nets and protection for workers are present.

4.1.2 The Economy Is Informal, Ergo Informal Is The Economy

A Medium Small And Micro Enterprise (MSME) survey conducted in 2012 estimated that there were over two million individual entrepreneurs, and about 800,000 informal and small-scale enterprises, employing over 2.9 million people in Zimbabwe (FinMark, 2013). The vast majority of these entities (82%) are tiny (having less than four employees), very young, (71%, start-ups in operation for less than 4 years), mostly rural (66%), and unlicensed (85%) operating from residential premises, small plots, door to door or on the streets (FinMark, 2013). Some of these numbers were mirrored in the Central Business Registry inquiry of 2013, which highlighted that most businesses were involved in commodities trading where about 30% had an annual turn over of less than USD 5000, while only 1% of them netted over a million dollars annually (ZimStat, 2014).

The Zimbabwe Labour Force Survey for 2014 showed that 94,5 of employment in Zimbabwe is informal, up from around 85% for 2012. Over 86% of those in informal employment are unskilled young people, mostly female (ZimStat, 2015). While the statistic is startling, one has to bear in mind that although current macroeconomic performance and poor productive sector performance have been accelerants, Zimbabwe inherited a dual and enclave economy with a low labour absorption capacity from the colonial state in 1980 (Mhone, 2000; Bond, 2002; Kanyenze, Kondo, Chitambara, & Materns, 2011). The take away is that the economy and its jobs are largely informal, and both macroeconomic policy, and discussions on the future of work need of necessity to factor in this reality. The table below shows where jobs are currently found as a percentage, disaggregated by gender and industrial sector.

**“... there are more
mobile phones than
people with
tooth brushes...”**

Natalie Jabangwe
GM Ecocash - Econet Zimbabwe

INDUSTRIAL SECTOR	MALE	FEMALE	TOTAL
• AGRICULTURE, FORESTRY AND FISHING	62.7	71.6	67.2
• MINING AND QUARRYING	2.7	0.3	1.5
• MANUFACTURING	6.3	1.8	4.0
• ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	0.3	0.0	0.1
• WATER SUPPLY, SEWAGE, WASTE MANAGEMENT AND REMEDIATION	0.3	0.0	0.1
• CONSTRUCTION	3.1	0.1	1.6
• WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLE AND.....	8.3	13.3	10.9
• TRANSPORT AND STORAGE	3.1	0.3	1.7
• ACCOMODATION AND FOOD SERVICE ACTIVITIES	0.6	0.5	0.5
• INFORMATION AND COMMUNICATION	0.7	0.1	0.4
• FINANCIAL AND INSURANCE ACTIVITIES	0.4	0.2	0.3
• REAL ESTATE ACTIVITIES	0.6	0.1	0.4
• PROFESSIONAL , SCIENTIFIC AND TECHNICAL ACTIVITIES	0.6	0.2	0.4
• ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES	1.5	0.3	0.9
• PUBLIC ADMINISTRATION AND DEFENCE, COMPULSORY SOCIAL SECURITY	2.4	0.8	1.6
• EDUCATION	2.5	3.2	2.9
• HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	0.6	1.0	0.8
• ARTS, ENTERTAINMENT AND RECREATION	0.8	0.1	0.5
• OTHER SERVICE ACTIVITIES	1.4	1.8	1.6
• ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS UNDIFFERENTIATED GOODS	1.1	4.0	2.6
• ACTIVITIES OF EXTRATERRITORIAL ORGANIZATIONS AND BODIES	0.0	0.0	0.0
• NOT CODED	0.0	0.0	0.0
TOTAL PERCENT	100	100	100
TOTAL NUMBER	3 091 318	3 174 551	6 265 869

Figure 3 Zimbabwe Labour Force Survey 2014

“1980 Zimbabwe inherited a diversified and sophisticated industrial sector. The second in Sub-Saharan Africa in terms of sophistication”

Dr. Prosper Chitambara
Economist at LEDRIZ

Conversations on the future of work will need to bear in mind that the 81% of the population involved in work, are underemployed and involved in precarious labour in the informal sector, mostly on their own account - self-employed (ZimStat, 2015). The UNDP highlights this challenge through placing the figure of working poor in Zimbabwe at 84,6%, which is above the SADC regional average of 70.5%, and the developing country average of 33.8% (UNDP, 2015).

4.1.3 Transitioning The Informal To The Formal

The high rate of informality also highlights a disconnect between formal institutional arrangements and the reality of economic activity which require resolution. As the ILO (2002) noted, informality is characterized by economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements. People enter the realm of informality out of a need to survive through generating some income, not necessarily out of choice (ILO, 2002).

Given the survivalist nature of the informal economy, transitioning from it (because of the poverty traps, vulnerability and uncertainty that the sector imbues on people) constitutes part of the decent work agenda that this paper argues need to be at the center of conversation on the future of work in Zimbabwe, given its context.

While informality, given the above, is in large part a governance challenge, governance and regulation of the informal economy needs to be designed and effected in ways that acknowledge that it is an integral element of the country's development, not just a potential tax base for the state. The ILO (2014), in dealing with informality as part of the decent work agenda, suggests a policy and diagnostic framework with 7 key pillars, which Zimbabwe could adapt and pursue, as part of the agenda on the future of work and making it a palatable place for the worker (see figure 3 below). (Cadagone & Martens, 2016)

With globalization, the rise of global value chains, growth of the gig-economy¹¹ and share-economy¹² (Cadagone & Martens, 2016), as well as the flexi-employment arrangements that are part of the trends influencing the future of work, limited attention to and proactive positive interventions in the informal economy will likely lead to more, not less, decent work deficits. Interventions should however be fit for purpose, allowing employment creation and innovation to thrive, while workers are also protected in this new terrain, which current legislation, the world over has been struggling to regulate.

Decent work strategies for the informal economy



Figure 4 from ILC 103rd Session Report V (1) Transitioning from the informal to the formal economy. Geneva 2014

4.1.4 The Future Work And Collective Action

An additional pressing concern from informality is its effect on collective action in the labour market. Current statistics show that only 14% of those in employment belong to some worker organization. Various reports and scholarship have documented the depletion of numbers and power of the trade union movement as a result of the economic situation and trend towards informality. The rise of technology especially the Internet (of things) and changing working arrangements (flexi-working, gigging and the share-economy) have the potential to further impair labour's ability to organize. These factors and new entrants into the world of work have the potential of changing 'workers' into 'independent contractors' or self-employed people who are not subjected to the protections and rights of workers as currently understood, or who are not easy to organize, or would need to be organized differently (Hunt & Machingura, 2016). In any case, collective bargaining becomes a difficult prospect, unless those introducing technology through the web-based labour market agree to also act as aggregation portals that unions (for organizing) and labor inspectorates (for inspections and compliance tests) can access and use, which may be unlikely given privacy concerns, unless deemed so legally.

Unions may also struggle to keep pace with technology even as they struggle to figure out how best to stem the hemorrhaging of members that the above developments may entail. A mismatch amongst social partners will be the net result, and the differences in the depths of social partner's pockets will perpetuate power asymmetries. An asymmetry of power between traditional social partners, which used to be mitigated by unions numbers, against the private sector's money, and the states coercive capacities, is likely to be the new reality in the future of work. Imbalance is a bad thing, and part of the future of work challenge will be to see how power relations between government, capital, and labour can be balanced again for the good of society.

This beckoning reality and the issues raised above also point to two important elements for conversations on the future of work. First, discussions on the future of work need to go beyond the traditional social partners of organized labour, government and, employers. They need to take into cognizance the objective conditions, and ensure that they account for the reality of informality and new working arrangements. Second, any conversation on the future of work needs to come up with ways to deal with challenges posed to collective action, and measures taken, to ensure that issues of societal good and social justice remain front and center in any dispensation of work. It may be appealing to the private sector to have a divided labour pool.

However, the benefits and win-wins that have accrued from collective bargaining and tripartite negotiations to all social partners, a disaggregated labor force, in this rights respecting dispensation will not bode well for the employer, and may have political consequences in the long run for the government. In any case, the discerning customer of the future is likely to take an interest in the social aspects of business, with repetitions possibly at scale of boycotts of products and services that result from unfair labor practices, as has occurred in the past (Gratton, 2011)

AGRICULTURE AS AN ILLUSTRATIVE CASE

Technology and the machine will in many respects be the new' game changers for many Zimbabweans, producing shocks, which unchecked, could lead to what the UNDP Human Development report for 1995 called jobless, ruthless, rootless and futureless growth (UNDP, 1996). While agriculture will continue to be the mainstay of livelihoods and the economy, fundamental shifts will also be the order of the day in the medium to long term. The sector was once characterized by large swathes of labor, as exemplified by massive farming concerns like Kondozi farm, in Manicaland province, which used to employ over 5,000 people to work its 550 hectares. It specialized in horticulture and exported to retail supermarkets like Tesco, Sainsbury's, Marks and Spencer and Waitrose in England, and had an additional estimated 15,000 people benefiting from employment through selling produce from the farm and other downstream activities (Moyo, 2016). While most large-scale farms like Kondozi have since seen their labour forces decrease in the aftermath of land redistribution, indications are that those that still exist and operate at this scale will also see reductions in workforce needs through automation of Agriculture. The introduction of highly sophisticated machines, already in use for agricultural purposes in other parts of the world, will be a sweet and sour encounter – increasing productivity, on the one hand, decimating jobs on the other. Already, a newly invented tractor with capabilities of plowing, planting, weeding and watering is said to be on the market and comes with the possibility of rendering most agricultural farm workers jobless.

Environmentalists and conservationists worried about soil erosion, siltation and aiming to reduce soil disturbances, will be up in arms against this machine, as will be the agricultural and plantation workers. The reality is that this is the likely future of work, where a machine, which if we are generous will be operated by four people, replaces 550 jobs. The advent of such technologies naturally creates a sense of trepidation for the millions of affected workers; based on real fears around poverty and the growing inequality that unemployment renders. The 'perceived' jobs along the value chain that technology might create will either consolidate existing ones or strengthen elite networks – that involve people with skills, access and in some respects capital.

This “future,” far from being a distant reality, is already penning out. But perhaps in Zimbabwe farm workers may need to worry less about this challenge, than farm workers in California for instance. The future of work in Agriculture, in Zimbabwe, will change, but conversations on these changes need to be time framed and anticipated changes discussed within both the spatial and the temporal context. Positive and negative externalities will impact the agricultural sector, and knowing what they are likely to be will assist to mitigate adverse impacts. However, timeframes will allow discussions to avoid being abstract and involving machines people are unlikely to see over the next ten years, because while technology and innovation are entering the farms, the rate may be slower than received wisdom on the future of work currently dictates.

At a smaller agricultural scale, local Zimbabwean youths have developed mobile apps that can be used to tag cattle, so that one knows the location and whereabouts of their livestock. This development of course renders vakomana vemombe (cattle herders) endangered, with slow diffusion of ideas, and reluctance to trust technology on the part of rural dwellers, the cattle herder’s saving grace. Other innovators have developed applications for use in organic agriculture involving piggery, fisheries, and other livestock. Increases in Internet penetration levels in Zimbabwe will eventually assist with the proliferation of app-based technology in the small-scale agricultural sector. Already, for the medium and large-scale commercial farmers, the spread of the Internet has spawned the launch of applications that connect farmers; share weather information, and facilitate trade across the rural and urban divide.

4.2 Of The Internet (of Things), Technology and the Future of Work in Zimbabwe

The developments mentioned at the end of the illustrative section on agriculture are sponsored, in part, by the lower investment thresholds involved in mobile telephone applications development, compared to other areas of innovation. Resultantly, most innovations, at least those that the press publicly lauds in Zimbabwe and the SADC region, are located in this terrain. It is also because of the phenomenal and unprecedented growth and penetration of the Internet and mobile telephone services, aided by the advent of cheaper smart phones.

According to The Postal and Tele-communications Regulatory Authority of Zimbabwe (POTRAZ), in its first quarter report for 2016, Zimbabwe’s Internet penetration rate stood at 49,8%, which is well above the regional average estimated to be between 20 and 30% (POTRAZ, 2016). The mobile penetration rate (active) was pegged at 96.5%, while 23% of all data usage was reported to be on Whatsapp bundles. Facebook is said to be the most used social media platform with about 97.34%, followed by Twitter with about 1,7% of traffic based on mobile Internet (POTRAZ, *ibid*).

Greater connectivity assists in the sharing of ideas, trading, and easing communication challenges both locally and globally, and will certainly play a huge role in the changing world of work. However, as a channel, communication serves to aid the transmission of ideas generated and innovations undertaken. Despite the economic hardships and reported challenges with setting up business in Zimbabwe, it still has a lively start-up scene, which the Ministry of Information Communication Technologies has been encouraging through their innovation showcases, and a promised 25 Million dollar fund. Mobile and Internet service providers have also been sponsoring similar startup showcases. Through such initiatives, some promising start-ups have showcased impressive applications. The real challenge for the developing world is with innovation beyond applications.

“While Jobs are going, there is a massive skills shortage at the top, technical skills are important but not enough, you have to be on the move every-time, AND YOU have to be creative, be a complex problem solver. With equally strong social skills, persuasion and emotional INTELLIGENCE.”

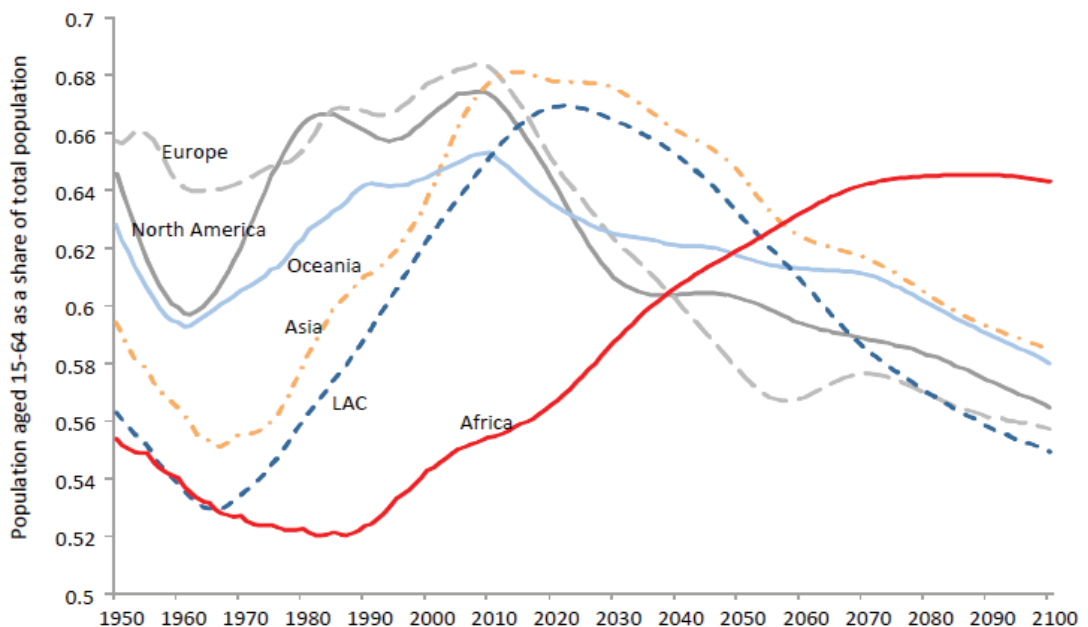
*Her Excellency Ambassador Catriona Laing
United Kingdom Ambassador to Zimbabwe*

The app development start-up sector has become almost synonymous with tech startups; however, this sector needs to be supported to innovate beyond communications and service provision. The country also needs innovations in agriculture, chemistry, biology, physics, engineering and mining, not just computing services.

This is perhaps where Zimbabwe lags behind as a consequence of the deficiencies in industry and education, which in other countries act as the spaces for innovation stemming from experienced challenges in the work place and society as well as experiments in labs. Part of government's solution has been through encouraging students to take up Science, Technology, Engineering and Mathematics (STEM), which bodes well for the grooming and development of innovations beyond computing and telephone-based applications. The initiative is critical to preparing for the future of work and should be encouraged. The dearth of trained educators in these fields, as well as the dilapidated infrastructure for STEM subjects in schools, colleges, and universities, will, however, be part of the challenge that confronts this laudable initiative. Recurrent allegations of looting of the Zimbabwe Manpower Development Fund (ZIMDEF) by officials responsible for it, will also not aid this otherwise critical initiative¹³.

4.3 Demographic Transition: Averting Disaster striving for Dividend

Most parts of the world, save for Sub-Saharan Africa, are confronted by the prospects of an aging population. This challenge has also been at the center of conversations about the future of work, as people contemplate what this will mean as several generations collide in the work place. This is less of a challenge for Africa, and Zimbabwe. UNFPA suggests that the Sub-Saharan African region is estimated to have a favorable population structure regarding work, as it has the highest share of young people of productive age.



Source: IMF staff estimates based on UN World Population Database

This wealth of youth is representative of a demographic transition, which may yield a demographic dividend if managed well, as the productive capacity of the working-age population surges with the additional labour supply. However, this can only be a dividend if proper investments into human development and social sectors are made to ensure that this burgeoning workforce is skilled and educated enough to innovate, work, and create jobs for others.

Without the necessary investments, the dividend can quickly turn into a disaster, as the demographic transition will be occurring in an already constricted labour market, with no plan on creating space for the new productive age group entrants. The options, for those who are part of this population boom, if they fail to be engaged in meaningful work at home, would be to take flight abroad, if they have the requisite skills to compete at a global level. However, although it is anticipated that labour will be very mobile in the future, it has to be taken into consideration that the world already has a jobs deficit that stands at more than 200 million people (ILO, 2015). Taking advantage of this dividend will also entail deliberate attempts at narrowing the existing gender gap both regarding work placement, and pay disparities between men and women.

Although this paper has only signaled them with no in-depth conversation, the future of work also depends on and will be influenced by the state of our political and economic institutions. Zimbabwe fares poorly on indices of economic and political governance, and these will have to be attended to, to ensure that they both, are enabling to enterprise domestically and can absorb the labour surplus that the demographic transition will offer. Institutions will also need to be tailored to be facilitatory, not prohibitive, and welcoming to possible foreign direct investment (FDI) that can aid the development of industry, sponsor innovation and create jobs.

5. RECOMMENDATIONS

The future of work for Zimbabwe remains in the hands of Zimbabweans – the main actors including the state, private and public sector, young people, in concert with international partners. The pace at which the fourth industrial revolution will unfold in Zimbabwe is a function of uptake and capacity to take up global innovations by locals, but perhaps, more importantly, the State's attitude towards the world of work, its quickness to accept and encourage innovation and its investments in education and innovation. Despite its current realities, Zimbabwe has a stock of talent and the foundations to make the country's economy grow and for the future of work to take place without leaving a trail of destruction through uprooting jobs and widening the chasm between the haves and the have-nots.

This paper suggests that the path to sustainable and manageable future of work lies in having constructive engagements about the current state of affairs, and then developing both basic and innovative solutions to mitigate the challenges and create the desired future. It is one thing to dream of the future one wants, and yet another to develop a clear path to it. Solutions have to be grounded in sustainable development, which heeds the inevitability of technological advancements, but also takes care of the social, economic and environmental well being of the people who are supposed to benefit from the said advances. Specifically, this paper recommends the following:

5.1 Recommendations On Discussions on the future of work

Deliberations on the future of work are urgent, and in this respect:

- Honest conversations, which are realistic, and context specific must be encouraged. A lot of the trends shaping the future of work are global, but they have local manifestations and may differ from context to context. Discussions on the future of work in Zimbabwe need to be tailored to its context and objective reality but be inclusive of environmental and social justice concerns.
- Conversation on the future of work need to be broad based, to include traditional social partners (government, labour, and business) and wider civil society, especially the informal sector, which is where most of the work is being done in Zimbabwe. As this future is of interest to everyone, efforts should be made to ensure that, as many voices as possible are part of the conversation, especially women, and youth, to ensure that no credible voices are left out of the conversation. This could be by way of a national convention on the future of work, which brings together relevant actors, and or a decentralized conversation that targets either regions or sectors or both.
- Prioritization of conversations: This paper strongly recommends that the nation, through State and sector leaders engage on “Decent work and Social Justice” as an entry point to future of work conversations. Decent work and social justice are part of ILO’s suggested four conversational pillars, which different countries can focus on, and is possibly the most critical and appropriate conversation for Zimbabwe.

5.2 Recommendations To Government

1. That government, through relevant ministries (ICTs, Education, Labour and social welfare, Health, Finance and Economic Planning as examples) initiates dialogues with labour and other societal voices especially young people, young women and civil society actors on the global discourse around the future of work;
2. That government makes a long term plan aimed at addressing and adapting Zimbabwe's education system to meet the needs of the current and emerging world of work, through curriculum revision and strengthening, and better resourcing of institutions financially, materially and human resource wise.
3. That government moves towards corrective measures in policy focus and finance to include a greater focus on the informal sector, not as a tax base, but as an integral element of the country's future development.
4. That government fosters an enabling environment for the country's citizens to thrive, express and explore their ingenuity and innovation without undue restrictions and red tape.
5. That government develops sound plans to boost the productive sectors, especially the high labour-absorbing sectors of manufacturing and agriculture, with an accent on agro-based manufacturing, and value adding natural resource light industry as part of structural transformation and job creating economic growth.

5.3 Recommendations To The Private Sector

1. That it starts internal conversations on the skills needed for the type of work their companies do and engage in dialogue with institutions of learning and government on these required skills for possible inclusion in the curriculum.
2. Should invest in current employees through staff development on the new work directions and competencies in preparation for the future.
3. Invest in Research and Development, not just in their companies but also in institutions of learning, to help ensure that learning centers are well equipped and up to speed with the research requirements of the firm of the future.
4. If the companies are international, facilitate skills transfers and learning exchange programs for local staff with their centers or between networks to enhance current skill sets.

5. Consider the welfare – financial, spiritual and aspirational- elements of their staff teams as they innovate and move towards the future.
6. Invest in value through showing consideration for sustainable developments that are cognizant of climate change challenges and social justice prerequisites of a just world now and in the future.
7. Incubate and support smaller projects in the informal economy that are related to their industries, and begin to incorporate them in their supply chains.

5. Recommendations to Young People

1. Accept that the future of work will be disruptive (positively and negatively), and tool up through docking into the knowledge economy, developing versatile skills, and sharpening areas of expertise and emotional intelligence.
2. Build networks and unusual synergies to meet the world's demand for greater versatility.
3. Accept that courses and degrees are inherently foundational in the broader scheme of work. The future of work in many respects lies in the foundational ethos of hard work, honesty and integrity married to innovation, creativity, and ingenuity.
4. As you innovate, remember that work also has a social function, which remains critical in defining the nature and form of Zimbabwe's future of work. Strengthen on the ethos as much as you strengthen your skills and competency set.

5.5 Recommendations To Organized Labour

1. Explore avenues of representing beyond traditional unions, including the informal sector through further strengthening of platforms like the Zimbabwe Chamber of Informal Economy.
2. Sponsor dialogues or labour forums on both the nature of work today and the future of work amongst members of both the formal and informal economy and civil society partners.
3. Strengthen structures in the formal and informal economies, to increase subscriptions beyond the current 14% in the formal sector, and limited representation in the informal sector, as part of ensuring that space and structures for collective discussion and action on the future of work are available.
4. Lead public conversations (press, meetings and broad public engagements) on the future of work, as the moral voice of society and by way of providing leadership on the subject at the very least for current workers and civil society, and at best in the interests of everyone involved in work, as a social justice responsibility.

CONCLUSION

This paper has demonstrated the salience of future of work conversations, especially ahead of the International Labour Organisation's (ILO) centenary conversations for 2019 when it turns 100. A multi-sector global debate is underway focusing on four conversations: work and society; decent jobs; organisation of work and production; and the governance of work. There is apparent emerging consensus that the exponential pace of automation and other technological advances are the leading global trends informing the future of work. In addition there is also acknowledgement that the future of work is being influenced not just by the rise of emerging markets, demographic transitions, and global value chains, but also by social concerns such as changes in work consciousness, rising inequality, climate change, and rapid urbanization.

Despite the foregoing consensus, there is disagreement on the expected impact of trends influencing the future of work in various contexts. The paper highlighted that while some see technological advancement as promoting profit and progress, others view artificial intelligence and automation as heralding Armageddon. Those who consider the shifts underway positively see technology reshaping labour markets, making them more digital, online, mobile, and more efficient. The net impact is suggested to be automation and machines serving people, helping them to work less, produce more, specialize, and earn more, resulting in a better work-life balance. On the other hand, skeptics see automation as putting people out of work at scale, with the few jobs left being casual and informal, resulting in more glaring inequalities between the 'haves' and the 'have-nots'. The truth of the impact of global trends influencing the future of work probably lies in between the polar positions, and will still be subject to human agency, as it is people who will make the future of work what they want it to be.

There is no doubt that the conversation on the future of work is urgent. But in this urgency, and given the power of information proliferation, global discussions on the future of work, focusing on global trends must also place an importance on local contexts. After all, it is the local that constitutes and informs the global. This paper has argued that these local contexts have so far received scant attention.

The paper highlighted that for Zimbabwe and the bulk of sub-Saharan Africa, these contextual realities comprise underdeveloped industries, premature deindustrialisation, and an underemployed and untrained labour force mostly located in the “precarious” informal economy, where gender gaps in both access to work and remuneration persist. The paper highlighted how the World Economic Forum’s Global Competitive Index (GCI) gives Zimbabwe’s capacity to innovate, business sophistication, labour market efficiency, education, and training comparatively low ratings. It argued that while there may be real concerns about these measures and how accurately they reflect the Zimbabwean reality, they identify some deficiencies, which conversations on Zimbabwe and the future of work need to address. In addressing deficiencies and dealing with concerns and issues around the future of work, variations between contexts entail that strategic conversations on the future of work in Zimbabwe need to be different from debates on the future of work in the Global North where technological advances, industry, and global competitiveness are supposedly at the ‘higher end’ of the spectrum. This approach would also apply to other countries in sub-Saharan Africa.

The paper argued that for a country like Zimbabwe, the conversation on the future of work has to be informed by the state of the economy, human development, and attendant gender disparities. Given the predominance of the informal economy, the paper advocates that this sector should feature as an integral part of the country’s development and as the bastion of work, production, creativity, and innovation, rather than the state viewing it solely as a potential tax base or criminalizing and penalizing its participants. The paper highlighted how Zimbabwe’s high rate of informality is indicative of the direction that the future of work conversation may need to take, possibly centering on dealing with decent work challenges. In this respect, the paper argues, conversations should aim to ensure that technological accelerators and economic regulation do not unduly destroy livelihoods in the name of efficiency and progress, and do not fortify existing social inequalities.

The paper also noted that Zimbabwe, like other countries in sub-Saharan Africa, faces a myriad of challenges, which include natural (geographic) and political issues (policy choices and global economic and geopolitical dynamics), as well as challenges stemming from political and economic colonial legacies. It noted that dealing with these challenges, as part of preparing for the future of work will need conversations on visionary, long-term integrated planning. It argued that through such an integrated future focus, countries like Zimbabwe can manage staggered economic transitions that include improving education and building technological capacity, transitioning production and jobs from the primary sectors of agriculture and mining possibly to light mining and agro-industries based on value addition, and further heavy industrialization. It is through such long term planning that transitions of jobs of the future from informality to formality can be facilitated.

The paper exhorts the future of work in Zimbabwe and beyond to be the subject of continuing discussions, planning, and action of a broad range of societal interests at local and global levels, beyond celebrations and events. Apart from traditional ILO social partners such as organized labour, the private sector, and government, the paper encourages collective conversations on the future to include the youth and women, who are both the primary actors in the informal economy as well as the biggest stakeholders in the future given current demographic transitions. Such a process, it argues, can allow for reflections on the future of work that locate the roles of the main societal sectors and may need to consider the following issues drawn out of the sector specific recommendations:

- Transformation of the education system, going beyond ensuring access to enhancing recipients' innovation capacities and their global competitiveness through quality, fit for purpose curriculums.
- Political and economic institutional credibility challenges that impede local and international investment into Zimbabwe's productive sectors, which can produce decent work.
- Policies and measures that support entrepreneurs and innovators in the informal sector, and aid a transition of the sector's participants from informality to formality.
- Private sector investment in and promotion of innovation in the firms of these entrepreneurs as well as in the informal sector through sponsoring and supporting the incubation of ideas there.
- Making informal economy actors part of the value chains of industry, while also investing in curriculum development and research in secondary and tertiary institutions of learning.
- Preserving spaces for collective action and organized labour and as a corollary the decent work agenda and the sacrosanctity of social justice.

The issues covered in this paper highlight the interconnected nature of challenges central to the future of work and all four ILO centenary conversations. Conversations and actions taken to shape the future of work must address these issues, pivoting towards decent work deficits and possible threats to social justice. This will be of fundamental importance if Zimbabwe and other countries in sub-Saharan Africa are to counter the looming threat that the fourth technological revolution could foster the advancement of a few while banishing millions to poverty in a highly unequal world.

The paper raised the above-mentioned issues and stated recommendations as way of furthering the conversation on the future of work in an empirically grounded manner. It takes no firm positions on what the future of work will look like, but encourages such visions to be steeped in context, and informed by conditions existing which may need to be addressed as part of building the desirable future of work in Zimbabwe.

END NOTES

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1. The term 4th Industrial Revolution is used to refer to the current stage of development in the organization of value chains in the manufacturing industry, where the technology, automation, use of computers and Internet are prominent aspects. It is also referred to depending on setting as 'industry 4.0'-first brought into prominent conversations by the German government as it sought to computerize and automate its manufacturing sector – or The Internet of Things.
2. A video of the discussion is available on YouTube at <https://www.youtube.com/watch?v=va9RIOkDNPg>
3. For illustrative purposes, see the work done by the London Business School's Deloitte Institute of Innovation and Entrepreneurship, since 2008 or their Lynda Gratton's blog www.lyndagrattontofutureofwork. See also Price Waterhouse Coopers which has done extensive scenario building work on the future of work and released a report, The Future of Work: A Journey to 2022, developed a disruption profiler for different industries to test their readiness for the future of work, and several blogs on the future of work. For early country investments into understanding the future of work, see for instance the UK Commission for Employment and Skills report, "The Future of Work: Jobs and Skills in 2030".
4. See www.ilo.org/futureofwork
5. Following the UKCES 2014 report, this paper adopts the understanding of trends as, an empirically documented development, which lasts for several years. Trends are relatively stable and less likely to be affected by cyclical changes and fluctuations, nor are they subject to sudden reversals or dramatic increases. In general, trends have a clear direction and a robust course.
6. Botswana is a notable exception in the SADC region.
7. Premature deindustrialization refers to the situation where developing countries are become service economies without having had a proper experience of industrialization, which were the precursors of most of the service oriented economies of the developed world. A bog on the concept by Rodrik can be accessed here <http://voxeu.org/article/premature-deindustrialiation-developing-world>
8. ZIMSTATS Volume of Manufacturing Index (VMI) shows that the sector as a whole has been in decline and largely operating below 2009 levels. See <http://www.zimstat.co.zw/industrial-production-statistics-zimbabwe>
9. Highlights available online at <http://reports.weforum.org/global-competitiveness-report-2015-2016/report-highlights/#ranking>
10. The basic UNESCO definition of literacy implies the ability to read and write a sentence and understand it, while others using education attendance as a proxy, like number of years spent in school
11. The gig economy comprises of short-term project or shift work accessed by workers through the sharing economy, and includes what is referred to as "crowdwork" (commissioned and done virtually through internet connections) and "work on-demand through apps" (work that is mediated through technology and apps as connector but done locally/physically not virtually) e.g Uber.
12. The share-economy is a digital labour market where labor-intensive services are traded by matching requesters (employers and/or consumers) and providers (workers)
13. On abuse of ZIMDEF funds see "ZIMDEF Scandal- ZANU-PF report implicates party" at <https://www.theindependent.co.zw/2016/11/11/zimdef-scandal-zanu-pf-report-implicates-party/>

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