

**THE EVOLVING FOURTH INDUSTRIAL REVOLUTION: CHALLENGES AND OPPORTUNITIES IN THE LEGAL PROFESSION: A SUBMISSION BY RTD. AMBASSADOR AMI R. MPUNGWE AT THE 63<sup>rd</sup> ADMISSION CEREMONY OF NEW ADVOCATES, ON 21<sup>st</sup> DECEMBER 2020, AT KARIMJEE GROUNDS DAR ES SALAAM**

My Lord Justice Prof. Ibrahim Hamis Juma, Chief Justice of Tanzania,

My Lord and Lady Justices of the Court of Appeal of Tanzania,

My Lord the Principle Judge, High Court of Tanzania,

My Lord and Ladies Judges of the High Court of Tanzania,

Honourable Attorney General of the United Republic of Tanzania,

Honourable Director of Public Prosecution,

Honourable Solicitor General,

Honourable Chief Registrar,

Honourable Registrar of Court of Appeal,

Honourable Registrar of High Court,

Honourable Registrars,

Honourable Retired Judges,

Honourable President of Tanganyika Law Society,

The Principal, Law School of Tanzania and Members of the Council of Legal Education,

The newly admitted Learned Advocates,

Invited Guests

Ladies and Gentlemen.

I should begin by expressing my most sincere appreciations to you, Lord Justice Prof. Juma, for your very kind invitation for me to address this 63<sup>rd</sup> Admission Ceremony for Advocates. I am deeply humbled by the large measure of trust and confidence that you have bestowed upon me. May I, therefore, hasten to congratulate the new Advocates who, through this admission, are ready to join legal practices in different aspects of our legal system. I wish them everything of the very best in their future endeavours although I must also caution them that this is just the end of the beginning but not the beginning of the end! This is precisely because, the legal practice itself, like all other professions, and the environment in which it operates, globally and in Tanzania, is going through a range of fundamental changes which are going to define and influence the future of your respective careers and practices!

In this regard and I must confess, My Lord Justice Prof. Juma that I feel extremely inadequate and quite incompetent, as a non-legal person, to discuss matters of high legal interest, to such a high level gathering of legal personalities in our country this morning. My escape route would, therefore, force me to move into my default mode,

as a retired diplomat and make a quick survey of the dynamics of global change, mostly driven by the evolving 4<sup>th</sup> Industrial Revolution and its impact on various aspects of human endeavours, with the specific reference to the legal profession, now and in the future.

It is a confirmed fact that, the fall of Berlin Wall, some 30 years ago and significant developments in Science and Technology, particularly in Information and Communication Technologies, had transformed the world that we knew, prior to that, beyond recognition. Even the nature and character of change itself had significantly changed, transforming everything that distinguishes the human from the rest of the animal kingdom! In turn, it ushered in a new World Order that is characterized by extreme uncertainties, wide-scale unpredictabilities, severe instabilities, profound discontinuities, coupled with the most intensive competition for resources and markets, ever witnessed in recent human history!

Growing efficiencies in Information Technologies and plunging costs of Telecommunications are, as a result, driving this 21<sup>st</sup> Century Globalisation process at an alarming speed. Developments in ICT are already rendering Time, Space and Distance completely irrelevant in the delivery of goods and services, at both global and

local levels. These developments are transforming the nature and character of products, processes, companies, government operations and even competition itself!

Possession of Information or Knowledge resources has already become critical to service delivery or worth generation. Access, Connectivity, Integration and Real Time performance have now become critical, to local or even global competitiveness, be it in individual professions, industries or among nations!

On the other hand, those major developments in ICT have also paved the way for the Fourth Industrial Revolution to set in, as a result of significant developments in Big Data, Analytics, Artificial Intelligence, Internet of Things, Machine Learning, Robotics, Algorithms, Block chain technology etc. which have already begun to substantially alter and even completely disrupt the nature and character of different businesses and professional practices.

These digital technologies are also changing the way the human race, works, relates or even play! As a result, different business and professional practices are transforming and improving their productivity and competitive levels, by both adoption and adaption of new

technologies, largely driven by Data. While some industries and professional practices are disappearing, particularly those that are resistant to change, new industries are being created and a variety of new products and services come off the stream. Increasingly a lot of human jobs are being replaced by technology and this is happening at an alarming speed, as the Canadian Prime Minister Justin Trudeau, once put it at the Davos World Economic Forum in January 2019 and I quote, **“The pace of change has never been this fast ever. Yet, it won’t be this slow again”!**

As a result, these developments are already unveiling strenuous tests to the prevailing systems of governance, legal and regulatory mechanisms, types of the jobs that are available, as well as the delivery of the requisite social and economic infrastructure, the world over. These developments will, undoubtedly, influence the future of work, type of industries that would emerge and the overall directions of different professions and occupations.

This, therefore, requires leadership in different professions and many other areas of human endeavor to start envisioning the future of their respective businesses and professions, in the context of the developments that

arise out of the evolving Fourth Industrial Revolution, in order to future proof their professions and their continued relevance. For instance, with the rising prominence of Big data, Analytics, Machine Learning, Artificial Intelligence etc. a great deal of professional services would increasingly be automated rather than rely on human performance which in the main, is becoming increasingly inefficient, costly and uncompetitive. On the other hand, these new automated technologies bring with them, a range of advantages, in terms of lowering transaction costs, broadening access to service or facilities and enhanced choice!

In the light of the above developments which are fast embracing the entire humankind, across different sectors and professions, it is becoming increasingly apparent that even the legal profession itself is on the brink of unprecedented upheaval. Developments in Digital Technology is having significant impact on the nature of legal service and the legal process itself! The old ways in which, for instance, a legal advice is crafted by lawyers and delivered on one-to-one basis, trials taking place in a court room where procedure is formal and sometimes difficult for the parties to comprehend, is beginning to change.

According to Lord Hodge, Justice of the Supreme Court of the United Kingdom, there are four technological developments which are fast creating new opportunities and challenges in the judicial and legal practices, and these are:

- 1) The availability of Data on an unprecedented scale;
- 2) Huge increase in the computational and data processing power of IT Systems;
- 3) Falling costs of Data storage, and;
- 4) Availability of increasingly sophisticated software services in the market.

In the light of the above, it is clear that DATA has already turned out to be the new raw material of the information age and everything revolves around the manner in which DATA is being collected, processed, stored and deployed. As a result, new products and services are beginning to appear in the legal services of some jurisdictions based on Data. For instance, the emergence of “Smart Contracts” which are self-executing as the terms of the agreement between, for instance, a buyer and a seller, are written into lines of code which exists in block chain, for purposes of transparency, security and privacy. These can be partially or fully executed or enforced, without human intervention, based on the application of Artificial

Intelligence. In some jurisdictions, when the conditions are met, a product is released or payment is made and no one, including courts of law can stop the performance of such Smart Contracts. Of course, should there be a dispute, a remedy may lie in the law of unjust enrichment!

At the same time, it should be noted that, full and wide scale application of Smart Contracts would also have to be backed up by a legislation that would impose or develop a body of law that would decide on how to allocate liability in the event of system failure, such as in the use of digital currency. There would also be a need for international cooperation to establish agreed rules of private international law and also harmonized regulation.

On the other hand, there are also other developments, particularly in the private sector that are already having significant impact on legal practice and legal services delivery. As a result of the evolving 4<sup>th</sup> Industrial Revolution, almost every major corporation and even government departments are currently putting in place, Digital Transformation frameworks and strategies, as an imperative for survival and growth as well as futureproofing their institutions. The growing execution of these strategies would, therefore, have far reaching consequences to the judicial services and legal practices.

The traditional Lawyer's function in developing and reviewing contracts, preparing stacks of papers in legal language to codify the sale of a house or a car, will definitely disappear for all except in the largest and most complex transactions. That notwithstanding, ultimately, AI will also take over, just as Bank Tellers are increasingly being replaced by ATM; airline ticket counters are being replaced by electronic kiosks and travel agents are in the main, being replaced by travel websites.

At the same time, many companies are already resistant to spending vast sums of money on tasks like, documents reviews and due diligence. Many of these companies are already employing Artificial Intelligence solutions, in a creative way that would cause serious challenges to lawyers and professional law firms. For instance, The Coca Cola Company's Legal department, has of late deployed Artificial Intelligence Tools that are streamlining the drafting process for many contractual documents, in a manner that reduces the time that Lawyers had to spend in reviewing those documents, from as much as 10 hours to about 15 minutes. This is not only improving efficiency but also produces more consistent agreements while freeing up the Legal Team for more strategic tasks.

Similarly, J P Morgan Chase invested in its own proprietary AI platform, called Contract Intelligence or COIN, to review commercial loan agreements- an automation that has saved J P Morgan, some 360,000 hours of work by Lawyers and Loan Officers, annually. It has expanded this platform to more complex matters, including credit default swaps and custody agreements.

Law firms are also deploying AI to support or even replace lawyers in some core legal tasks. For instance, in the case Pyrrbo Investments versus MWB Property, an English court expressly endorsed, for the first time, the use of predictive coding software. The case concerned alleged breaches of directors' duties in the Hotel and Leisure industry, where over three million documents had to be considered for relevance and possible disclosure.

The High Court of England considered whether, for purposes of disclosure, the parties could rely on predictive coding, a form of machine learning that takes data input by people about document relevance and then applies to much larger document sets. The Judge considered that there was no evidence that predictive coding software led to less accurate disclosure than manual review, and indeed, there was some evidence to the contrary. He also noted that predictive coding software, offers greater

consistency than dozens, or perhaps hundreds of junior fee earners independently seeking to apply the relevant criteria in relation to individual documents.

Moreover, predictive coding was much cheaper option: it was estimated that it would have cost several million pounds for a full manual review versus approximately Pounds 500,000 for predictive coding software, which could be used several times over!

Similarly, technology is also changing the way courts operate. Many courts around the world are embracing a variety of initiatives, including e-filing, computer assisted transcription, document display systems, electronic presentation of evidence and virtual examination of witnesses.

Access to justice which is a fundamental component of the Rule of Law, also becomes cheaper and more convenient through a variety of online solutions!

As I had indicated earlier, these technologies and digital developments, are embracing the entire world. There is nowhere to hide. The rules of engagement are simple and straight forward-you undergo digital transformation and become handsomely rewarded but if you ignore it, you end up severely punished!

In this regard, the winning countries and organizations are those which have embraced this digital transformation process and put in place clear policy framework and appropriate strategies for the requisite infrastructural requirements, enabling legal and regulatory environment and a more robust education system that would provide employees of the future! Such transformative initiatives should cut across different sectors of the society as, by its very definition, the 4<sup>th</sup> Industrial Revolution is a cross-cutting endeavor. There should never be half measures!

In the light of a foregoing, I need to commend Your Lordship, Chief Justice and the entire Judiciary for putting in place and executing a number of ICT-driven measures that are consistent with the overall global trends. These measures are largely driven by the Judiciary's Five Year Strategic Plan and the Citizen-centric Judicial Modernization and Justice Service Delivery Projects. As these projects are being executed, they will certainly avail our Judiciary System with a very clear Digital Transformation Journey, and the much needed technological reform head-start! Such measures would also contribute positively to timely dispensation of justice and reducing the cost of justice delivery process in Tanzania. The E-Court features that is currently

incorporated into Judiciary ICT platform, is greatly facilitating smooth and rapid adoption of remote hearing of cases, largely through Video Conferencing.

In this regard, Your Lordship, I have taken note of the fact that, by February this year, 60 cases were heard and determined by the Court of Appeal, at different locations in Mbeya, Mwanza and Bukoba Registries, through Video Conference Systems, at a small cost of Tshs. 5 million and, therefore, saving about Tshs. 100 million, which would have cost if the traditional physical sessions had been applied!

At the same time, there have also been advances in uploading judgements delivered by different courts whereby, in my latest check on the Judiciary website last night, 2008 Court of Appeal judgements were uploaded by December 18<sup>th</sup>, 2020 and another 6,737 judgements at the High Court level. Other judgements that had been uploaded, include the 854 of the High Court, Lands Division; 465 of the Commercial Court; 161 of Economic Corruption and Organized Crime and 323 others for the Labour Court.

At the same time, it is clear that the use of ICT resources is helping litigants to file cases electronically through the

Judicial Statistical Dashboard System and there is also an established system of identifying Advocates with valid business licenses as well as names of Court Brokers.

The combination of all these measures that have and continue to be put in place in our Judicial System not only puts Tanzania in tandem with what is happening in the rest of the world and in laying strong foundation for our Judiciary System to be able to cope with the dynamics of the fast evolving Fourth Industrial Revolution, but it also introduces a large measure of efficiency, cost savings, transparency and inclusiveness in our justice delivery system!

Based on the above, our Judicial System was also in a strong position for timely and appropriate response to the challenges of COVID-19, by delivering uninterrupted judicial services, in a more secure and safe environment!

Presenting my case as I have done above, clearly indicates, that the Judiciary on its part has already laid a strong foundation towards full-fledged Digital transformation. However, as I had indicated earlier, full success in that regard will also very much depend on what is happening in other related areas, outside the Judicial System.

This therefore, also brings into sharp focus on the role of private sector, particularly that of legal firms and legal professionals, including the 166 candidates who have been admitted in the Roll of Advocates today. As I had indicated at the beginning of my presentation, the forces of digital economy are accelerating at full speed; competition in either sale of goods or provision of professional services, continue to intensify; over capacity, including that of law firms and legal professionals, puts downward pressure on margins, and; increased productivity, largely through digital interventions, lowers the cost; and produces better quality and improved service. In this regard, customer or client power continues to ascend to higher levels!

This therefore, requires our law firms and legal practitioners to quickly adopt and adapt to new ways of providing services. I am quite aware that a lot of progress has been achieved from the era of a single person practices to the current full-fledged legal firms, covering a portfolio of different legal services. Some of these local firms have entered into partnership with large international firms, putting them in a better position to adapt to various world class technological developments and best practices! Whatever the arrangements and

structures of these firms, they need to appreciate the imperative for adapting and keeping in sync with global technological advancements. You need to run rather than walk! Legal firms that ignore this reality shall be doing so at their own peril.

I, therefore, challenge the new Advocates not to take your admission to the bar today as the end of your journey and that you have now arrived! Rather, it is the beginning of a longer and even more challenging road ahead. You need to develop a culture of constant self-development and reskilling yourself with the new tools that are consistent with the fundamentals of the Fourth Industrial Revolution. Fortunately, in addition to various physical publications, the internet is currently awash with a range of academic and professional materials that are related to different aspects of developments on issues related to the 4<sup>th</sup> Industrial Revolution that you need to access, as a matter of necessity. You must always sharpen your knowledge and skills, far beyond what you have learnt at the law school and other institutions. The biggest challenge that is before you today relate to the best ways of future proofing yourselves in the face of realities of digital transformation. To do anything less than that would be tantamount to growing old before you are young.

Additionally, you must always strive to demonstrate highest levels of professional excellence and unquestionable personal integrity, supported by strong ethical foundation. These are important ammunitions for growth and success in your professional lives!

As to the leadership and partnerships of the various law firms, I challenge them to pursue and embrace new requirements of managerial skills, administrative acumen, creativity and positive attitudes, in confronting the realities of this new era. You have in the past demonstrated your willingness and ability to change. Time has come for you to prove and demonstrate your resilience once again. The defeatist attitude that relies on business as usual approaches, has no place in these challenging times.

In this regard, your legal association, the Tanganyika Law Society, also has a critical role to play, in futureproofing your legal profession and its membership here in Tanzania. TLS in particular, need to enhance its Continued Legal Education Programme (CLE) by transforming its effective delivery from a more traditional vehicle to one that is driven by digital and other technological innovations!

On the other hand, our public and private Universities, particularly Law Faculties, need to embrace issues that are related the 4th Industrial Revolution and Digital Transformation, in their respective curricula. In this regard, I wonder whether the Law School of Tanzania has fully incorporated ICT and Digital Transformation subjects in the post-Graduate Diploma in Legal Practice which all the newly admitted Advocates have been awarded?

In conclusion, I wish to reiterate that, there is an urgent need for collaborative measures among all stakeholders, in pursuing this digital transformation agenda. It is only through collaborative approach that Tanzania would be able to effectively face the complex challenges and exploit the vast opportunities that are brought about by the fast evolving Fourth Industrial Revolution. It is a long and difficult journey but not insurmountable! Let all of us, individually and collectively, play our respective parts.

May I, therefore, end by once again, wishing all the newly admitted Advocates, everything of the very best in your careers and in your new professional lives! I also wish you all, a Joyous Festive Season and a healthy 2021!

**I THANK YOU FOR YOUR KIND ATTENTATION**