

AfICTA – Africa ICT Alliance

Secretariat Report

On



2nd eConference

Theme:

**THE 4th
INDUSTRIAL
REVOLUTION
APPLICATION
IN
KEY SECTORS**

18th September, 2018

URL: www.aficta.africa/2nd-econference/index.php

Submitted on September 30, 2018

Agenda			
S/N	Time*	Event	Duration
1	10:00	National Anthem of South Africa Opening remarks by Thabo Mashegoane, Chief Advisor Business Architect, Eskom Vice President, IITPSA Vice Chair, AfICTA Moderator	5mins
2	10:05	Presentation by Engr. Saeed Mohammed Vice Chairman, EITESAL - Egyptian IT, Electronics & Software Alliance Topic: <i>Brief on the "1 Million jobs initiative by 2025"</i>	10mins
3	10:15	Q & A with Engr. Saeed Mohammed	5mins
4	10:20	Presentation by Carolynn Chalmers, Executive Director, Candor Governance Topic: <i>Ethics, AI and Machine Learning - Ensuring IT professionals are doing the right things.</i>	10mins
5	10:30	Q & A Session with Carolynn Chalmers	5mins
6	10:35	Presentation by Mr. Sunil Geness, President & Director, ITA (Information Technology Association) South Africa Topic: <i>Effective internet governance for sustainable development in Africa.</i>	10mins
7	10:45	Q & A Session with Mr. Sunil Geness	5mins
8	10:50	Presentation by Mr. Mpumelelo Ncwadi, Non-Executive Director, ECRDA (Eastern Cape Rural Development Agency) Topic: <i>Modern Farming methods: using technology for food security.</i>	10mins
9	11:10	Q & A Session with Mr. Mpumelelo Ncwadi	5mins
10	11:15	<i>Tribute to the Legendary Kofi Anan</i> delivered by Dr. Jimson Olufuye, Chair AfICTA.	5mins
11	11:20	Vote of Thanks and Closing remarks by Engr. Saeed Mohammed, Vice Chairman, EITESAL Co- Moderator	5mins

WELCOME ADDRESS

AfICTA 2nd eConference was held online on Tuesday 18th September, 2018, with theme: “The 4th Industrial Evolution Application in Key Sectors”. The event began at exactly 10:00am South African time with welcome address by the Vice Chair of AfICTA, Thabo Mashegoane followed by the South African National Anthem.

OPENING REMARK

Mr. Thabo Mashegoane in his opening remark, appreciated all participants and invited guest speakers that graced the event. Guests present at the event included: The Executive director Candor Governance, Mrs. Carolynn Chalmers, CEO Kontemporary Consulting and Chairman AfICTA, Dr. Jimson Olufuye fncs, CISA, CISM, CRISC, PRINCE2, PhD; The Chairman of the 1 Million Jobs project; Mr. Ahmed Yosri and The President of ICT Professionals Association of Namibia, Mr. Paul Rowney among others.

According to the Vice Chair AfICTA, the eConference is an initiative that is line with the AfICTA vision which is to fulfil the promise of the digital age hence the theme of the eConference. He further elaborated that Africa has lots of challenges and events like this with themes on the application of the 4th Industrial could do justice to bringing the promise of the digitization to Africa.

INTRODUCTION

The Second eConference focused on South Africa and further information regarding the upcoming edition which would concentrates on Egypt would be communicated to the general public.

As the event progressed, the agenda was shared with participants shortly after which the event moderator opened by giving the first presentation of the day.

1st PRESENTATION

Introduction: The 4th Industrial Evolution Application in Key Sectors

The first speaker; Mr. Thabo Mashegoane, Vice President of IITPSA and Vice Chairman AfICTA presented a paper on “The 4th Industrial Evolution Application in Key Sectors”. Mr. Thabo introduced by giving a brief history of previous revolutions which evolved from the steam engine down to the digital revolution which is dependent on the internet (the great leveler) which Africa could find useful as proven in the degree to which the internet has penetrated in Africa. He further explained that some top technologies encapsulated in the digitization age includes; Robotics, Blockchain, IoT, Artificial Intelligence and Cloud computing/Big data computing. He then said that with opportunities that can be exploited in Africa an important entity that must be considered are the threat that comes with such exploitation and in order to manage the effects of the adverse use of the internet in Africa ethics of the 4th Industrial revolution catalyst must be a topic worth exploring. On a final note he thanked all for joining the event before taking questions.

QUESTION & ANSWER

Question 1.

The 4th industrial re v provides Africa with the opportunity to transform itself from poverty and other challenges which she faces currently but is it not noteworthy that if she doesn't

embrace it well Africa might lose out again as history have told us she did in the past revolutions? (Dr. Jimson Olufuye)

Mr Thabo's response.

In the previous revolution it was found that Africa played little or no role at all in the previous one which resulted in Africa missing out and the repercussions still felt as of this day, case in point even with the most recent 3rd revolution which has gone now, we find that most countries in Africa are still struggling to provide basic infrastructures such as broadband, network etc. it's only a matter of extrapolating that the effects will be worse in Africa if we don't embrace and adopt the 4th revolution quickly. He added that the first 2 revolutions lasted for over centuries before the 3rd revolution which took less than 40 years before the digitization era which will definitely take less time and if Africa doesn't take it seriously the effect will be worse than that of the previous revolutions.

Question 2

Given that AfICTA's platforms serves as a means of ensuring that Africa embraces the 4th industrial revolution but what else can be done in the larger framework of engagement in order to get the continent involved in embracing the revolution. (Dr. Jimson Olufuye)

Mr Thabo's response.

There are lots of things being done currently in order to realize this but the most critical is **Education**: - we need to change the focus of education now and start ensure that the people of Africa are trained and impacted with relevant skills that enables them play roles in the digitization era, other things will begin to fall in place if education is addressed head-on, subsequently the next level will be the integration between those who are given the education and those that are in the industry playing the part, meaning that the industry and academia (down to the elementary levels) needs to have and integration so there is no loss of communication between the supply and the demand end. He concluded by saying that there needs to be a total rethink as to the way things have been done over time adding that an important part in engagement is the cooperation and coordination between the industry player to which AfICTA has constantly ensured it marries industries players in conversation in order to achieve this goal.

2nd PRESENTATION

“Ethics, AI and Machine Learning - Ensuring IT professionals are doing the right things”

The moderator introduced Mrs.Carolynn Chalmers the Executive director Candor Governance and before given a rundown of her profile.

Carolynn Chalmers, is a Corporate Governance advisor who specializes in the areas of IT, Information and Transition / Project Governance.

Carolynn is a Director of Candor Governance (Pty) Ltd through which she provides governance advisory services. Carolynn volunteers her time to the Institute of Information

Technology Professionals of South Africa (IITPSA), being a member of their Social and Ethics Committee and Western Cape Chapter Committee.

Carolynn has extensive management and governance experience and has held various CIO, CTO, Board, Board Committee and other Executive roles for international, listed and private organisations, spanning many industries.

Mrs. Carolynn Chalmers delivered a presentation on “*Ethics in the 4th Industrial Revolution*” she opened by introducing the concept of ethics and morality and how it has developed over time from researches such as that of Immanuel Kant whose work known as “**Kantian ethics**” is relied upon today to give insight on ethical structures. She also stated that the South African legislation insists that companies of certain sizes need to have code of ethics and regulations which guide them. Some of such legislations include the Company Act, Bill of Right legislation, Consumer protection Regulation etc.

She furthermore explained that in as much as the initial tier of ethical responsibility in all countries is to her constitution, codes and standards (be they international or national) also govern the way in which organization and entities operate and adhere to.

A recent paper on “Ethics of Artificial Intelligence “written by Bostrom & Yudkowsky in 2011 highlights the ethical issue associated with the technological era which may not be present now but could be foreseen as potential issues that will need to be addressed in the future. Some of ethical issues highlighted in the papers include Social roles – transparency and predictability, the advance nature of AI in the future which challenges moral compass etc. some of which are manifesting today as seen in the **Child Online Act** which challenges things that children are allowed to see online. Less than five years later the World Economic Forum articulated 9 Challenges of AI today that pose ethical threats in the global community some of which include:

1. Employment- a threat projected that nearly 80 of the worlds predictable workforce would be replaced by machine learning, robotics and the 4th Industrial revolution. This would result a bunch of idle hands and humans are known to not fare so well when idle
2. Wealth – Since the 4th Industrial revolution is being pushed forward by the wealthy nations this can only result in the poorer countries getting poorer.
3. Humanity – a challenge the 4th revolution poses is a lack of human connection with each other which leads to isolation which in turn leads to depression (the highest death cause currently in the world more that any terminal disease).
4. Bias – human biases already exist in the world today and when they are relayed in the foundation of the source code of the AI machines we have such biases escalated.
5. Security – the use of AI and these technologies in security are driven by the defence agencies and we don’t know how such technologies are being geared, recently the Snowden story comes to mind, it was found that the US govt had been spying on its citizen via their mobile devices. Theses amongst many are the security threats the 4th industrial revolution brings.

6. Rights – humans rights have been completely abused time and again and currently companies have now by legislation been given rights be considered juristic person so with new legislation seeing to make these AI machines, robots be given right to be considered as imaginary persons and this can only lead to unintended consequences which would only spin out of the control of humanity.

In January 2017 at the Asilomar conference where big tech players such as Stephen Hawking, Elon Musk and many others concluded on 23 principles that should govern ethics with AI machines, Carolyn summarized the 23 principles into 3 categories and suggested that based on her experience in the IT industry these principles are very important across the technological world but only a few would be particular to IT business industries of the attendees at the eConferences. Download full presentation [here](#)

QUESTION & ANSWER

Question 1.

In the technological world currently, we find that the jobs and decision are being taken by men alone and the risks of encoding patriarchal bias into AI Systems and Technologies is imminent, even the principles that are to guide AI technologies are being postulated by men so how do we avoid such patriarchal biases from proliferating into society, how can we prevent this bias from being exasperated even in the tech world? (Mr. Thabo Mashegoane)

Carolynn Chalmers response.

It starts from a societal view that women shouldn't be constrained to playing with dolls when young and women can't be thinkers, it should start from home that the idea of such bias should be erased from the minds of people. A solution to the problems of these bias can be achieved via investments by world IT firm in Women in IT funds and also ensure that the employment strategy as regard gender equality should be reformed just as Amazon for recently. She also pointed that a threat posed by the 4th Industrial revolution is the gravitation towards infographics as the major means of dissemination of information and since it's a fact that women tend to process info graphical data more than men this would have to be dealt with eventually.

Question 2.

The Chair of AfICTA Dr. Jimson Olufuye contributed to the answer on bias in IT by urging attendees to begin give direct intervention by sponsoring girls to IT events and give out grant to women in IT fields before proceeding to ask a couple of questions.

- I. Do You foresee a future where AI Intelligence systems are no longer accountable to stakeholders?

- II. Do emoticons not tackle the idea of lack of emotional connection between human due to the intermediary AI machines in human communication also do emoticons not provide employment opportunities as well.
- III. If animals were to be given rights in the nearest future, what happens to consumption and the methods of

Carolynn Chalmers response.

With regard AI systems accountability Mrs. Chalmers agreed that AI system will evolve into self-learning systems that are no longer reliant on human input hence will not be accountable to humans anymore.

She illustrated through a case of self-driving cars implemented in Germany which were implemented as a result of a death toll on roads due to human errors she said although the foundation for the adoption of self-driving cars is logical the question which she reckoned to have no answer is how to make such systems accountable to humans. She concluded by saying humans have not perfected good governance with principle in dealing with humans talk more of self-learning machines.

Concerning emoticons she agreed they are viable source of employment and can bridge the barrier of emotionless connection between humans but she added that the developers have to come from social professional backgrounds so better emotions and communication are captured way better with emoticons she added that depression (one if the leading cause of increase in mortality rate currently) which stem from loneliness and lack of human connection is a mental illness and emoticons may not be able to suffice for human connection in order to tackle the underlying problem.

She emphasized that there is a great need for a change in the consumption behavior being employed by most now because the demand for the consumption of animals or sentient beings is rooted in greed and drive for profit from suppliers. Suppliers have changed their methods of farming animals which has in turn resulted in our consumption behavior and she urged that on an individual level everyone needs to change the way they consume food and be more concerned and responsible for the way the food they consume is being prepared.

3rd PRESENTATION

“AfICTA pays tribute to Late Kofi Annan, former Secretary-General of the United Nations”



H. E. Kofi Atta Annan was born in Kumasi, Ghana, on 8 April 1938, and was fluent in English, French and several African languages.

Mr. Annan studied at the University of Science and Technology in Kumasi, Ghana, and completed his undergraduate work in economics at Macalester College in St. Paul, Minnesota in 1961. In 1961-1962, he undertook graduate studies at the Institute of International Affairs in Geneva, and in 1972 earned a Master of Science degree at the Massachusetts Institute of Technology's Sloan School of Management.

Mr. Annan joined the UN system in 1962 as an administrative and budget officer with the World Health Organization in Geneva. He later served with the Economic Commission for Africa in Addis Ababa, the UN Emergency Force (UNEF II) in Ismailia, the United Nations High Commissioner for Refugees (UNHCR) in Geneva, and in various senior posts in New York dealing with human resources, budget, finance and staff security. Immediately before becoming Secretary-General, he was Under-Secretary-General for Peacekeeping. Mr. Annan also served as Special Representative of the Secretary-General to the former Yugoslavia (1995-1996) and facilitated the repatriation from Iraq of more than 900 international staff and other non-Iraqi nationals (1990).

The seventh Secretary-General of the United Nations, served from 1997 to 2006 and was the first to emerge from the ranks of United Nations staff. Mr. Annan was awarded the 2001 Nobel Prize for Peace, jointly with the Organization. He has also received numerous honorary degrees and many other national and international prizes, medals and honors.

At Mr. Annan's initiative, UN peacekeeping was strengthened in ways that enabled the United Nations to cope with a rapid rise in the number of operations and personnel. It was also at Mr. Annan's urging that, in 2005, Member States established two new

intergovernmental bodies: The Peacebuilding Commission and the Human Rights Council. Mr. Annan likewise played a central role in the creation of the Global Fund to fight AIDS, Tuberculosis and Malaria, the adoption of the UN's first-ever counter-terrorism strategy, and the acceptance by Member States of the "responsibility to protect" people from genocide, war crimes, ethnic cleansing and crimes against humanity. His "Global Compact" initiative, launched in 1999, has become the world's largest effort to promote corporate social responsibility.

Mr. Annan undertook wide-ranging diplomatic initiatives. In 1998, he helped to ease the transition to civilian rule in Nigeria. Also, that year, he visited Iraq in an effort to resolve an impasse between that country and the Security Council over compliance with resolutions involving weapons inspections and other matters -- an effort that helped to avoid an outbreak of hostilities, which was imminent at that time. In 1999, he was deeply involved in the process by which Timor-Leste gained independence from Indonesia. He was responsible for certifying Israel's withdrawal from Lebanon in 2000, and in 2006, his efforts contributed to securing a cessation of hostilities between Israel and Hizbollah. **Also, in 2006, he mediated a settlement of the dispute between Cameroon and Nigeria over the Bakassi peninsula through implementation of the judgement of the International Court of Justice.** His efforts to strengthen the Organization's management, coherence and accountability involved major investments in training and technology, the introduction of a new whistleblower policy and financial disclosure requirements, and steps aimed at improving coordination at the country level. [Read more.](#)

4th PRESENTATION

AfICTA One Million Jobs Initiative

The Project Manager, Engr Ahmed Yosri gave a presentation on 1 Million Jobs by explaining project execution process.

Phases of Execution

Fund Raising: The committee has contacted over 200 donor organisations for fund raising and once funds start coming in the next phase would be activated.

Market Research: There would be market research to the piloting countries for their unique needs in terms of jobs categories.

Local Offices: Offices would be established in each country identified but its head office would remain in Egypt.

Marketing and Media Campaign: The committee would adopt every possible means of promoting the project and mass media awareness would be made via social media campaign and top-level events.

Creation of Mobile App for the Initiative: A mobile application would be developed to monitor its progress.

Training Programme: Based on the outcome of the market research above, expertise in the identified field would be engaged to conduct training exercise for beneficiaries of the jobs.

Jobs Creation: All the processes above would eventually lead to creation of relevant jobs.

Please download the presentation.

AOB

The Chair reminded attendees of the coming 6th summit and the need for their attendance either remotely or at the venue physically, he urged all to visit the website for more enquiries.

Vote of Thanks

Mr. Thabo thanks all the speakers for their input in the eConference and also advised speakers on the need for us to look at the challenges Africa faces currently and the opportunities therein he also added that some of these challenges still border on bridging the gap caused by space and time. In his final

The event ended @ 11:53 am (GMT + 2)

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