Speaking Notes: JP Smith: SA Innovation Summit, CEO Lunch
Thursday, 13 September 2018

Captains of business,
Audrey Verhaeghe, Chairman: SA Innovation Summit
Ladies and Gentlemen,
A very good afternoon to you all.

The Fourth Industrial Revolution or **Industry 4.0** is creating a buzz globally - We have all heard or read about it, but have we really stopped and thought about the real implications - for yourselves as business and for us as government?

What is apparent is that the **4th Industrial Revolution** is one of the **biggest disrupters of the 21st century**.

The fourth in a series of industrial revolutions since the year dot, and like its counterparts, it has the ability to disrupt or transform economies, jobs and even society itself through the introduction of new technologies and processes.

We are standing on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.

Years ago we believed this was the stuff made-up in movies and some of us may never experience it in our life-time, but flying cars, electric cars, artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing.

Ladies and gentlemen, **it is no longer make-believe**, it is very real and we are already witnessing the disruption to our conventional ways of doing business and our daily lives.

It is not extremely clear yet just how it will continue to unfold, but one thing is clear: the **response to this disruption** must be **integrated** and **comprehensive**, **encompass all stakeholders** of the global community, from the **public and private sectors** to **academia** and **civil society**.

So, how do we as **business and governments prepare** for this **disruption**?

What can we do differently, if we are to bring the theme to life: 'Africa our Time has Come!'?

How do we **ALL** (governments, business, communities) collectively make this disruptive journey, to make sure Africa takes its rightful place on the global stage? **Most of all**, how do we ensure that we **leave no one behind** – we take our residents with us on journey

Let me start by sharing with you what we as the City of Cape Town is doing to meet the disruption of this revolution, but we can only do so much. Do we put all our eggs in one basket and build houses and provide services for residents, and get left behind, or do we spread the eggs and join the revolution?
The reality is - it's a tough balancing act…but we muster on

- The objective of the **City's Broadband Project** is to create a **high speed, high capacity** municipal telecommunications network, called the "Metro Area Network" (MAN), which will extend throughout the greater Cape Town area. This is **designed primarily** to meet the **needs of the City**, as well as **provide services** to the **public** and **yourselves as business**.

- The "**Telecoms Networks Strategy**" positions the Metro Area Network as the **enabler** of a "**digital city**" or "**smart city**", which is used as **the carrier** for a number of networks and services.

- *As at June this year, the core network construction has achieved the following:*
  - **750 km** of **optic fibre cabling** installed within the metro, (in terms of distance if we laid it out, it would stretch from Cape Town to PE).

  - Upon completion by **June 2021**, **1 317 km** will be installed (that's almost a return trip from PE to Cape Town)

  - **31** switching facilities are currently **in service**, **95** upon **completion**

  - **382 City buildings connected** to the network, **736** will connected upon **completion**

  - **86 private buildings** connected, **+/-300** upon **completion**

- Since its inception in 2009, the **capital spend** on the Broadband Project sits at **R1,3 billion,** as at June this year.

- The capital cost of the Broadband Project over the remaining three-year period (**to June 2021**) is **R805 m**.

- The numbers are quite sobering, and we are doing as much as we can, which brings me to the question – **what are you as the Captains of Business, going to do to amplify these efforts?**

What I have just mentioned is the capital spend, I would like now like to touch on the tangible, on the ground initiatives that we are rolling out:

- The City donated 10 high-tech desktop computers to the I-CAN facility in Elsies River. This recent donation has bumped-up the number of SmartCape desktop terminals to 21, which has given even more teens and youth access to the digital highway

- The **additional resources** have enabled the centre to develop even more programmes that caters for **learners** who make use of the facility in the afternoon **to enhance** the **digital skills** of the young people

- The **Tech Teens programme teaches** both primary and high school **learners** how **to code**, **design artwork** and **use online applications** to stimulate creativity and innovation. It also teaches teenagers how to stay safe in cyber space.

- In a **short space** of time, a total of **128 teenagers** and **youth** have **acquired coding certificates**. This was **obtained online** through a **Minecraft Coding Platform** that is **underwritten** by **Microsoft**.

- The City's **SmartCape** programme is an initiative to bridge the digital divide among communities. The City runs a number of **digital literacy programmes** that incorporate **computer basics, coding courses, and LAN gaming**, among others.

- **SmartCape** terminals can be found at all of the **104** public libraries, where patrons can also gain **access to free Internet** services via the SmartCape Wi-Fi hotspots.

- What I'm about to mention is one of the most **inspirational stories** I have come across, which has made us ALL realise that **residents have an appetite for all things digital**, the need is huge, and most of all, **local government cannot do it all on its own.**

- You may/may not have heard of the walking-bus initiative that is taking-off in a number of communities. I will explain that in a minute.

- **Women in Mfuleni** who are part of the walking-bus initiative are doing it for themselves. The group **asked the City** to **include them** in the **digital literacy programme** at their local library

- The programme originally encompassed training in Computer hardware and embedded software, Basic Writer (open source Word equivalent), Basic Calc (open source Excel equivalent) and Internet Security.

- However, most of the women have not ever laid hands on a computer previously. In addition, the language was a barrier as almost every single one of them is fluent in isiXhosa and speak very little English, if not at all.

- We very quickly realised that **IT (Information Tech**) cannot be a one size fits all programme, it has to be flexible to cater for varying levels of digital literacy. It was a great opportunity to tailor-make the content to suit the needs of quite literally each woman on the programme.

- A second very inspirational story, where you realise that entrepreneurship today cannot be divorced from digital literacy:

- Another group of phenomenal women, who failed to secure formal employment, did not sit back and wait for a hand-out. Instead, they became entrepreneurs years ago. But, they **lacked** the **digital knowledge and skill** to take their businesses to the next level.

- The City in partnership with the I-CAN facility piloted a digital and entrepreneurship project to empower these women. As part of the programme, they have learnt how to design their own business cards, flyers and website. The entrepreneurship training that was included has helped them to **use technology to drive their business ideas.**

- Previously Memory Muvirimi would write her contact details on a piece of paper. Now she proudly hands out flyers and business cards that she has learned to design as part of her training. She also plans to start advertising her business online through the website she has created.

- Adelle Davis has learned how to market her business at the I-CAN Centre. She has learned how to design her own flyers, business cards, website; and how to use Social Media as an advertising platform.

- The Open Data Portal which promotes the use of the City's datasets for broader social and economic benefit - is being used as a source for events such as hackathons, data quests and data challenges.

- During the hackathon earlier this year, it was amazing to see young people developing apps, in such a short space of time – as we know today, apps are the order of the day

- There are numerous such stories – and I once again stress that business and governments need to start collaborating further and with a renewed sense of urgency

- **How do we pool our resources to make an even bigger and better impact?**

- We often say that young people are fearless when it comes to all things digital, but the mums and grannies of Mfuleni have bucked this trend – they too want to be a part of the digital revolution.

- To date, those who have gained the most from the 4th industrial revolution have been consumers who are able to afford and access the digital world. But the harsh reality is that the majority of our residents cannot afford the access

- Technology has made possible new products and services that increase the efficiency and pleasure of our personal lives: Ordering a cab, booking a flight, buying a product, making a payment, listening to music, watching a film, or playing a game—any of these can now be done remotely.

- So, how do we ensure that we leave no one behind? How do we work together, to give residents access to this technology and make them a part of the 4th Industrial Revolution?

- As with all industrial revolutions, the impact is huge on industries, businesses and communities, affecting not just how we work, but also how we live and relate to one another.

- The difference with this revolution is that it's advancing at extraordinary speed, driven by technologies that's developing at an exponential rate

- With great power comes great responsibility—and disruptive technologies are potentially some of the most powerful forces in the business world today. So, how can businesses use exponential technologies to drive transformative change and positive social impact?

- Our mind-sets and conversations need to change from 'how do we develop business products and increase productivity,' to 'How do we develop **innovative** products and services, as well as **increase**

productivity, by using new technologies and/or the **data** created by connected objects.'

- **Governments write the law on behalf of their people, but I think big business has a responsibility to 'catalyse the conversation'**

- **Business leaders**, **need to get this debate going** - Each of your organisations will be affected in the coming years

- As strategic discussions increasingly focus on how business can evolve and capitalise on innovation, executives cannot be myopic and think only of near-term business growth. Rather, it is important to take a more encompassing and longer-term perspective that recognises the enhanced role organisations can play in the responsible use of disruptive technologies

- Disruption is a topic everyone is talking about. While many organisations fear it, others realise the many opportunities that disruptive technologies, processes and social norms present.

- **Becoming more collaborative with regulators and policy makers is one of the priority development areas for executives such as yourselves**

- **Technology is advancing at an unprecedented rate**, but many organisations retain industrial-age structures and practices that are long outdated. Forward-looking leaders have an opportunity to help their organisations adapt to technology, help people adapt to new models of work and careers, and help business adapt to and encourage positive changes in society, regulation and public policy.

- While the **Fourth Industrial Revolution** has the power to change many things across a broad spectrum—work, operations, society—one thing is certain:

  It's here, and we all need to be ready. It is clear that the old way of doing things isn't enough anymore, and those who make the most impact will be the ones who embrace all facets of Industry 4.0 and all the opportunities it will bring.

- To do this, however, we must develop a **comprehensive** and **globally shared view of how technology is affecting our lives and reshaping our economic, social, cultural, and human** environments. There has never been a time of greater promise, or one of greater potential peril.

- Some of today's decision-makers, however, are too often trapped in traditional, linear thinking, or too absorbed by the multiple crises

demanding their attention, to think strategically about the forces of disruption and innovation shaping our future.

- In the end, it all comes down to people and values. We need to shape a future that works for all of us by putting people first and empowering them. In its most pessimistic, dehumanized form, the Fourth Industrial Revolution may indeed have the potential to "robotize" humanity and thus to deprive us of our heart and soul.

- To conclude: it is time to take Africa to the World!

  It will take courage, vision and ingenuity. The lion is waking up and Africa is rising.

  As the Captains of business, what are you going to do?

Thank you.