

How 4IR will benefit South Africa (Part 2)

By  Alan Knott-Craig

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South Africa, Africa and the rest of the world is in the middle of the Fourth Industrial Revolution. 4IR is happening all around us.

In [part 1](#) of this article, Alan Knott-Craig started with the 13 ways that 4IR will impact South Africa. Here in part 2, he continues...

7. We'll travel better

If there's another thing that does our head in, it's traffic. Everything about it, from the amount of it, to the other drivers, to taxis who treat road marking like a suggestion, to waking up at 4am to get to the office by 9am, to the stress it causes, to... Well, you know these things. We have too many people driving too many cars far, far too badly.



Source: pixabay.com

Smartphones with Google Maps, Waze or the TomTom app have map books redundant, and next, 4IR will transform the driving part of daily travel.

Driverless cars will remove the part of our cars that kill us – us. Every year thousands of people die on our road due to human error – more than any other cause. Fact. In the same way that a plane's autopilot removes the human factor, reducing accidents and deaths, so driverless cars will keep us safer by keeping us less involved. They'll also talk to each

other, making decisions that minimise travel time by maximising on route information.



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Whether you're a die-hard petrolhead or someone who relies on transport to earn a living, driverless cars are coming. Get used to it. In 20 years from now, most people will view driver's licences in the same way they view gun licences – dangerous and unnecessary.

The kids born in the last few years will be passive passengers, working while the car drives itself. The number of deaths, congestion and insurance premiums will drop as much as our productivity will increase.

8. We'll have more

Connecting more things in your house and life to the internet will make us more efficient and therefore less wasteful.

There is no point in your lights, heater and air conditioner being on when no one is home, so allowing them to start turning themselves on and off to save electricity makes a lot of sense.

Water usage will be monitored and analysed. You will get alerts when you have a leaky tap or a broken toilet before they become bigger problems. Your fridge will order only the food you need, and no more. Gone will be the days of throwing away uneaten bags of lettuce and tomatoes. Smart homes are where we'll live.



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Self-driving cars will plan trips and drive more efficiently than humans, saving petrol and cutting carbon emissions, while digitizing previously paper-based information will require less water waste and deforestation.

Wasting less means there's more for everyone. Especially those who have little.

9. We'll shop globally

Amazon Prime has transformed the way many people in America and Europe shop. It is possible to order almost anything and have it delivered within a day with, at times, the literal click of a button. But convenience isn't the only benefit.

By analysing purchasing habits, retailers can predict pregnancy before the mother knows. They are then able to advertise baby nappies to future parents before they even knew they were going to need them.

This plays a bigger role as (responsible) advertising informs people of what they actually need – healthy formula, biodegradable nappies, or even the safest playgroups in the area.

Advertising, for the first time in history, will have a use beyond driving the economic engine. As the delivery mechanisms evolve, anyone will have the ability to order anything, so they can get what they actually need, not just what's on the shelves at the local. As trends are analysed, companies can better work out what people actually want, and R&D the required solutions, improving the validity of the products on offer.

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Places like Dunoon will have a window into the global market. We will spend less time walking around malls making decisions on what to buy. Most shopping will be done online and some will even be done behind our backs by our things so we can better spend that time elsewhere.

10. ... and a revolution in distribution

Email displaced the written letter and reduced the number of items that needed to be delivered to your door. As e-commerce becomes more dominant, effective delivery from the place of origin - within South Africa or outside our borders - to someone's home will become more efficient. Right now, one of the biggest barriers to delivery is our own post office, which the revolution will make less and less viable.

Drone delivery means that you can get that new, European supplement right to your door in Khayalitsha. Driverless trucks will be able to haul 24/7, and with the new electric and biofuel technology, all of this will be cleaner and safer than ever before. And always-online embedded trackers on individual items will mean that you can monitor the delivery of said goods in real-time, increasing the likelihood that you'll actually receive it.



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Sean Young 9 Oct 2018



Faster, reliable, global and local shipping of almost anything? Right here in South Africa? Yes, please.

11. Growing the sharing economy

Airbnb is the largest accommodation provider in the world and they own no real-estate. Homeowners make extra money by renting our spare rooms to people looking for accommodation.

The same can be done for cars, power tools, books, bicycles or anything else you can think of.

The result is a much lower marginal cost to society, lower waste, and more disposable income. But the result is also, access. The tools you need to have for a handyman gig, as an example, is a massive barrier to entry (even if only a once-off barrier). In a 4IR world, everything, especially underutilised assets, can be shared on a needs basis, and monetised for the owner. Everyone wins.



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Jacques van Embden 16 Oct 2018



The 'village bicycle' won't only be an insult, but a transport tool for the community, that can be tracked via an app, so anyone can use it when they need to. Peer-to-peer business lending will take some of the power back from our financial institutions as we set our own rates on loans. Crowd-based capitalism.

This extends past things and cash and will be the way we share skills, too. Apps like MySmartFarm share information with rural farmers, allowing them to be as effective as their more educated counterparts, and there are a hundred others that

barter skills in the same way you'd barter for anything else.

"This is mine and you can't have it" is very much a European sentiment, and if there's one thing South Africans are good at it's sharing. 4IR is going to allow us to do it better, and more often.

12. We'll all be able to access finance

Smartphones, blockchain and social media are introducing new ways to make sending and receiving payment, and storing and investing money without physical cash easier, cheaper and more transparent.

New fintech companies are using mobile phone usage and social network data to build credit scores for the previously unbanked via social signals. There are even companies, like Ubu, who are creating their own cryptocurrencies to be used in informal markets.



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27 Sep 2018



This means that street vendors can now accept secure payment from mobile wallets and reduce the risk of having their day's earnings stolen, and there's almost no traditional banking backbone to tie it down with regulations or bureaucracy.

13. Inflation will fall

4IR is removing frictions (e.g. transaction costs when banking), introducing transparency and accountability (e.g. see how banks are stealing money) and is lowering marginal costs (e.g. an online course on personal finance can be shared between millions of people).

At the same time, our reliance on oil will drop as we drive less and our rides are more efficient. As we waste less food, prices will drop there, too. As we use more of our resources, skills and talent, we're more productive and earn more, which further drops inflation. This, in turn, drives the economy ever upward and a virtuous cycle spins with renewed vigour.

Conclusion

It is almost as if The Fourth Industrial Revolution was almost designed for us in South Africa. It allows us to deal with divisive issues, like race and geography, giving access to anything to anyone, while allowing us to take advantage of that African ingenuity we've becoming so famous for. It will see prices trend towards zero.

There are other, most list-worthy benefits:

- Less friction - more productivity
- Lower marginal costs - deflation
- More transparency - better behaviour
- Speedier economic growth - more jobs
- Better politics - better presidents
- Safer cities - safer citizens
- Better classrooms - better educations

It's happening. And there's nothing we can do about it. But we have a decision to make: do we want to be washed over by the wave, or do we want to build a surfboard, and ride it?

Much of this will be up to our government and the policies they develop. It is vital that enabling mechanisms are put in place,

to make the revolution sustainable. The biggest part of this is access – for everyone - to the technologies that will make it happen.

We don't need cheap internet, we need free internet; what's the point of getting excited about the revolution if more than half of us are barred from it?

The way things are now are just not good enough; we have one of the highest data costs in the world and one of the most hand-to-mouth societies. 'Internet as a basic human right' is happening across the world, but it needs to happen here.

Right now. We will also need cheaper smartphones, tablets and devices on which to access it. And, lastly, a continued push from our innovators – traditional and non-traditional – who will write the name of our country, firmly and indelibly at the top of the 'Fourth Industrial Revolution' Wikipedia page of the future.

ABOUT ALAN KNOTT-CRAIG

Alan Knott-Craig is a South African entrepreneur and author. He is the founder of Project Isizwe as well as executive chairman of Hero Telecoms, Ever Africa, and Happim NPC.

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