

ISSUE

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NOVEMBER 2020



# AB4IR

## NEWS

**Innovation, Incubation  
and Technology**

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# Everything AB4IR

## Global Entrepreneurship Week

From 17-20 November 2020 we presented three virtual webinars and one live workshop where we hosted our stakeholders on our premises for the first time. The webinars and workshop were part of the Global Entrepreneurship Week (GEW). GEW is intended to spark conversations about and around entrepreneurship with the aim of empowering participants with more knowledge. The theme for this year was inclusion, ecosystem, education and policy.

On day one of the GEW celebration, the conversation with the director of safety at UAV Aerial Works & Drone Guards Ms Kim James and Ms Keneilwe Malotle, the project manager Digify Africa, was about the challenges faced by entrepreneurs and reminded people in attendance that sometimes getting involved in a sector not designed for you is a challenge on its own. They reiterated that one needs to put in the work and strive for success in the field to be considered and included.

On day two the discussion around ecosystems was had with Ms Nothile Mpisi, the General Manager for EkasiLabs at The Innovation Hub, and with the Innovation Investment and Commercialisation Portfolio manager at Technology Innovation Agency, Ms Malese Ndhlovu. There was a brief discussion on how the ecosystems particularly in the township work and how to be a part of the ecosystem in the field that you wish to join as an entrepreneur. TIA also indicated their products and services that are of use to the entrepreneurs.



Day three focused on Education and Policy where school manager Mr Simon Masango from the Tshwane South TVET College and the managing Partner at the Innovative Knowledge Worx Mr Mphela Raphesu shared their knowledge and experiences on the subject matter.

The fourth and final day was hosted at the AB4IR premises where some of their stakeholders had arrived to attend. There were representatives like the learning & development specialist from Liquid Telecoms (Mr Kodisang Wessie) and the managing Partner at the Innovative Knowledge Worx (Mr Mphela Raphesu) who joined the talks and shared their wisdom with the youth. Both speakers spoke to the participants about the initiatives that they are partaking in and how they intend to be of assistance in the ICT space to help expand the reach of technological solutions throughout Africa.



Liquid Telecoms' learning & development specialist Mr Kodisang Wessie speaking about program development



IK Worx Students and AB4IR Stake Holders



Innovative Knowledge Worx Managing Partner Mr Mphela Raphesu speaking about Innovation

## Pitching Session

AB4IR held a series of pitching sessions with the applicants that had shown interest to be a part of our incubation programme. We received a good number of applications. We therefore scheduled for pitching sessions to take place from 12-17 November 2020. A lot of great ideas and products were presented during the pitching sessions. Congratulations to the applicants that were approved, we look forward to working with you.

## AB4IR Hosts Transport Education & Training Authority's 20<sup>th</sup> AGM



On Friday, 27 November 2020, AB4IR had the honour of hosting the Transport Education Training Authority's (TETA) annual general meeting (AGM). This was TETA's 20<sup>th</sup> AGM and their first hybrid and the needed technical assistance which AB4IR offered. AB4IR was tasked with making sure that both physical and virtual members can fully participate in the AGM. The event was successfully hosted.



TETA Chairperson: Samuel Zungu, CEO: Maphefo Anno-Frempong,  
CFO: Simon Ndukwana and COO: Famanda Shirindza



Corona Safety kit with event program and note pad



TETA CFO: Simon Ndukwana



TETA Chariperson: Samuel Zungu and CEO: Maphefo Anno-Frempong



TETA COO: Famanda Shirindza



TETA Board with adherence to COVID-19 Rule and Regulations

# | Technology

## Smart SSDs could squeeze 12TB onto a 4TB drive



Samsung has unveiled its new range of Smart SSDs, also known as Computational Storage Drives, at the 2020 Flash Memory Summit, which is taking place virtually this year for some reason or other.

This SSD has its own processor where the CPU can offload work to in the same way it does to a GPU (Graphics Processing Unit), accelerating database management and virtualisation in data centres, with video processing and (most frighteningly) Artificial Intelligence. Samsung says this gives a 100x improvement in search speeds, as well as increasing compression to fit more on a drive.

The tech comes via Xilinx, an American semiconductor company recently acquired by AMD for \$35 billion. It specialises in Field-Programmable Gate Arrays (FPGAs)—essentially chips that can be reconfigured after being built. These are mainly used in data centres for search engines, as well as artificial neural networks, speech recognition, and high-frequency stock trading.

This is going to be enterprise-class technology for a while but will inevitably trickle down to the home desktop eventually.

# | Animation

Analysing the Pros and Cons of 2 Dimension (2D) vs 3 Dimension (3D) animation

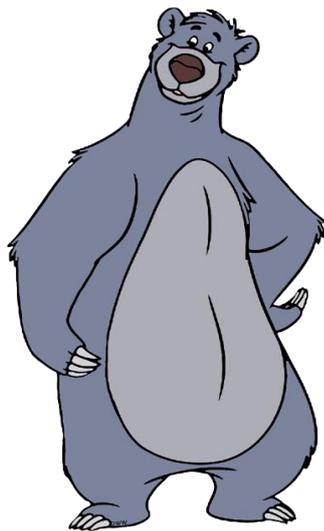


Around the world, thousands of 2D and 3D models and animations are created every day by animators, graphic designers, game artists, and other creative people. It would be impossible to measure the ratio of total work created in 2D animation vs 3D animation, but we can compare the two styles in other ways. Thus, let us proceed with the analysis of the pros and cons of 2D animation vs 3D animation.

Area of comparison	2D	3D
<b>General Uses</b>	<ul style="list-style-type: none"> <li>• Extraordinary types of Animation</li> <li>• Superpowers display</li> <li>• unrealistic motions</li> <li>• More fictional elements of character creations</li> </ul>	<ul style="list-style-type: none"> <li>• Product showcasing</li> <li>• Personification</li> <li>• Realistic movies</li> <li>• Long-term character development</li> <li>• Prototyping</li> </ul>
<b>Cost</b>	<p>It is cheaper to have for a short period of time than it is to have long term.</p> 	<p>Character or object creation is expensive, but once that has been done, the expenses begin to decline as you can use 1 character or object more that once at less cost.</p> 

**Demand.** This is a tricky quality to measure, but we can make a general assessment by looking at current trends. For example, there is a huge demand for 3D animation in video games, film, product presentations and virtual reality. In contrast, 2D animation holds a stronger position in television shows, mobile and PC applications, websites, and advertisements. Both 2D and 3D are used prominently in all the visual mediums.

**Quality.** Quality is a very subjective term, so everyone will have their own take on which style gives better quality. Obviously, there is a big difference between 2D and 3D graphics wise, so if you prefer detail and realism, you may find 3D animation to be right up your alley, while those who prefer inventive and otherworldly visuals may like 2D best. In the end, the quality will depend on the impression of the content and not on which content was used to create it.



### **Advantages of 2D animation:**

- Easy to learn
- Comparatively low production cost
- Quick to create in comparison with 3D
- Greater artistic freedom

### **Disadvantages:**

- Difficult to achieve a high level of realism
- Relies heavily on creativity and originality
- Demand is comparatively smaller

### **Advantages of 3D animation:**

- Superior visualization and accuracy of movement
- Detail and realism can be imparted on all animation elements
- Completed 3D models can be reused and applied elsewhere
- Good prospects of modernization in the future

### **Disadvantages of 3D animation:**

- Production costs can be high
- More creative limits to movement and action
- Takes much longer to learn and master

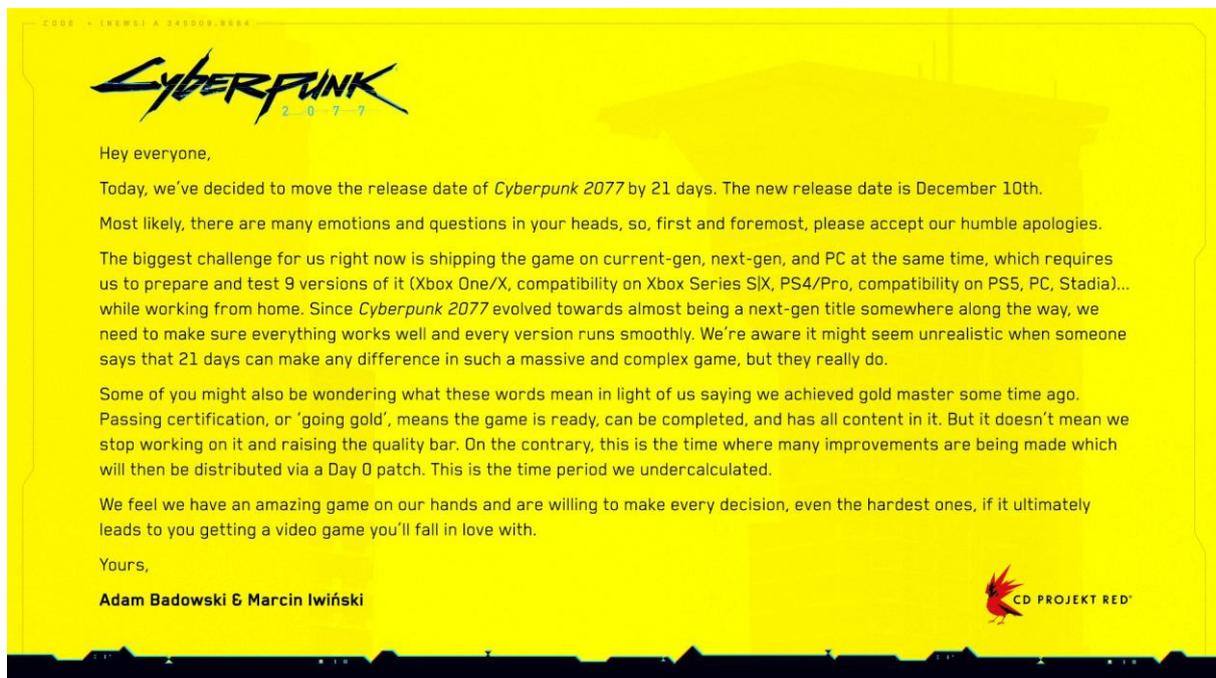


# | Gaming

## Cyberpunk 2077

Not to be the bearer of bad news but, Cyberpunk 2077 is being delayed yet again, this time until December 10th. Developer CD Projekt Red says it is still working on a launch day patch for the game, which was previously slated for November 19th. It attributes the delay partly to its multiplatform release — which will see the game launch across two generations of console hardware, PC, and Google Stadia.

The company said in a tweet that they need to make sure everything works well and every version runs smoothly and that they are aware it might seem unrealistic when someone says 21 days can make any difference in such a massive and complex game, but the 21 days would really help in making sure that they deliver a complete and properly executed game for people to play.



## Xbox boss Phil Spencer says things with Halo Infinite are going fine, actually

In an interview with GameSpot, Xbox boss Phil Spencer told fans not to worry about Halo Infinite, despite the reports of departing developers.



"Sometimes what hits the press or when certain things get announced internally have actually happened months before. It's not always accurate when these things line up," he said.

He also said that he really has a lot of faith in Bonnie Ross and the team and that they are always going to see turnover. He went on to mention that in the long run, turnover is a healthy thing because we want people who are really motivated by the things that they are working on.

Spencer's reassurance comes after several developers left 343 Studios in what appeared to be the span of months. Creative director Tim Longo left 343 in August 2019, and was replaced by Mary Olson, who left in October of the same year. Back then, the quick turnover prompted community manager John Junyszek to issue a reassuring statement on Reddit. Halo Infinite Studio Director Chris Lee then took over and has since also left the project. Halo: The Master Chief Collection head of publishing Pierre Hintze and veteran Halo writer Joseph Staten were added to the project in August 2020, following Halo Infinite's underwhelming performance at Xbox's July showcase.

Spencer emphasises that while the team takes the fan feedback to the reveal seriously, unfortunate timing, and not the feedback itself, led to the delay being announced soon after.

<https://www.gamespot.com/articles/phil-spencer-on-xbox-and-japan-halos-future-playing-elden-ring-and-more/1100-6484316/>

# | Around Africa

## How technology empowers unemployed youth



Samsung has been working with South African Government and educational institutions to empower those who envision a future in the sector. As part of the company's wide-ranging programmes, Samsung has prioritised education and training in software development, engineering, business management and entrepreneurship skills.

These skills are sought-after in the digital economy. Through its partner approach Samsung has been working with Universities, Digital Precincts, Colleges and SETA accredited engineering institutions to bring market relevant training and development to unemployed youth. Together, the initiatives harness the power of technology to train and inspire young people to pursue their ambitions.

<https://www.iol.co.za/business-report/partnered/how-technology-empowers-unemployed-youth-81bb57ec-0677-485e-9280-03a73dad90ec>

## Kenyan tech start-up provides opportunities in data-harnessing innovation in Africa



Data-driven decision making is essential for businesses especially during tough economic times like now. It is essential to be able to track operating costs to the penny, as well as assets, to find ways to keep costs low and to boost performance.

For the past 10 years, Upande Limited, have been perfecting IoT sensors to ‘measure’ key factors: water level in tanks/ponds, water consumption of different units in a premise, moisture and temperature of soil/ponds, temperature and humidity of the air, and power consumption, to name a few.

Olootepes Aquaponics Farm in Kenya, for instance, are using the sensors to maintain optimal farm conditions. Their technology is making it easier for young people to start commercial farming. They are in talks with potential partners empowering youth, as well as ex-convicts and street children to become smart farmers.

<https://www.iol.co.za/technology/techsperts/kenyan-tech-start-up-provides-opportunities-in-data-harnessing-innovation-in-africa-208f12ef-d660-4021-bcf0-eb98e20fc897>

# News Around the World

## PayPal to Sell and exchange Crypto.

All users in the US buy, sell, and hold cryptocurrencies right from their PayPal account. The news came in an update to a press release from October announcing that the new functionality was on the way.

There is a banner about the ability to buy cryptocurrency right at the top of the main screen, and if I tap that, I can choose to buy Bitcoin, Ethereum, Bitcoin Cash, and Litecoin.



Buy, sell, and securely hold cryptocurrencies with PayPal

	Bitcoin	↑ 1.56%	<input type="button" value="Buy"/>
	Ethereum	↓ 3.11%	<input type="button" value="Buy"/>
	Bitcoin Cash	↑ 0.24%	<input type="button" value="Buy"/>
	Litecoin	↓ 2.41%	<input type="button" value="Buy"/>

<https://www.theverge.com/2020/11/12/21562771/paypal-cryptocurrency-buy-sell-bitcoin-ethereum-litecoin-us-users>

PayPal's support of cryptocurrency is a significant vote of confidence in the digital currencies and could encourage everyday users to adopt them. However, PayPal is not the first financial tech company to support cryptocurrencies; Square's Cash app added support for Bitcoin in 2018, for example.

PayPal plans to expand cryptocurrency features to Venmo and to "select international markets" in the first half of next year.

### Learn more about crypto

Getting started with crypto



1 min read

Understanding volatility and risk



5 min read

## LG begins trials for indoor robot delivery service



LG Electronics has started trials for its indoor robot called Cloi Servebot that can carry up to 15 kgs of items in its three drawers and deliver them efficiently and hygienically to its destination without remote control.

The company said that LG Cloi Servebot will deliver products from convenience stores run by local store chain GS25 to the customers within LG Science Park, the company's headquarters in Seoul.

The company earlier deployed the robot assistant at Seoul National University Hospital where it has been tasked with picking up and delivering equipment, blood samples, prescription drugs and other items, freeing up busy staff to concentrate on patients.

<https://www.iol.co.za/technology/gadgets/lg-begins-trials-for-indoor-robot-delivery-service-230f250d-3f45-43d4-9215-beab9a53164c>

## Sponsorship

A Special thank you goes to **Rugged SA** for their sponsorship of two LG Monitors and two 55-inch Hisense UHD TV's for the center.



## Past Events

**AB4IR**  
AFRICA BEYOND 4IR

**GLOBAL ENTREPRENEURSHIP WEEK**  
17 - 20 November 2020  
INCLUSION | ECOSYSTEM | EDUCATION | POLICY

<p><b>DAY ONE</b> Theme: Inclusion Date: 17 November 2020 Time: 10:00am (Virtual)</p>	<p><b>DAY TWO</b> Theme: Ecosystem Date: 18 November 2020 Time: 10:00 (Virtual)</p>
<p><b>DAY THREE</b> Theme: Education &amp; Policy Date: 19 November 2020 Time: 10:00 (Virtual)</p>	<p><b>DAY FOUR</b> Theme: Consolidation Date: 20 November 2020 Time: 10:00 (Physical)</p>

Join us live on Zoom, Facebook and Youtube.  
Go to [ab4ir.org/events](https://ab4ir.org/events) to register and receive updates.

LIVE 
 YouTube

## Upcoming Events

International AIDS Day awareness  
Sixteen Days Against Women and Child Abuse awareness  
Arrive Alive Awareness

## Our Partners

