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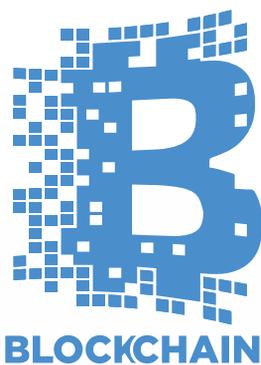
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Editorial

Blockchain is a radical reliable sharable computing result that is fundamentally a dispersed database of records or public ledger of all transactions drawn from digital events and communal among participating parties within a computing structure. Transactions of the chain existing in the public ledger are usually verified by in accordance with a majority of the participants in the system and its components. No information can ever be erased and neither altered. Blockchain consists of a particular and certifiable record of every single transaction ever made during the business operations. Generally, blockchain can be depicted merely as a method to keep record of all the information of each transaction in the midst of multiple parties in a reliable way. As being owned, run and monitored by everybody and without being controlled, contents should be recorded, shared, stored and redistributed in a safe and decentralized way. Apart from these, any kind of amendments or exploitations from a central authority must be avoided. Blockchain technology has been quite flawless since last couple of years and applied effectively to both financial and non-financial world applications and programmed as as the most important invention since the Internet itself. In addition, digital transformation is taking off as rapid agent for change as part of the global business convergence. Therefore, to go through the details of blockchain technologies from the perspectives of digital business transformation along with its future evolutions, let's go through page #21

We need to know about what certification is and its importance as well. But, our emphasis should be more on having certification. So, where quality issue is concerned, numbers of facts are included in it, like testing process, customer satisfaction etc which are significant for software certification. It indicates that different processes in different steps is not certificate which are less important rather than to maintain it. Certification on the whole is an investment for our future growth. The process may be worthless and that's why we may not be able to carry on. Therefore, certification in this regard will provide the process and the quality can be ensured too. Certification is actually essential from the company perspective. In that case, the companies may get benefited only when they would follow the certification. So, you can get yourself into page #35 to know more about quality certification's significance in our IT industry.

The whole voting procedure can be done through a digital system as an alternative to ballot. In that case, a former teacher of Islamic University of Technology (IUT) has come forward developing a software that would alter the traditional voting system. To operate elections conveniently, the software consists of different features. It is a 100% electronic solution for voting. Considering its security and standard, the infrastructure of the software is very strong and quite reliable, as the developer claims. So, to see how it works or whether it would be really effective or not, you need to look into page #46

Don't forget to read the other sections to update yourself regarding the ICT products and the other surround happenings across the country and the whole universe as well.

Happy Reading

Naznin Nahar

The Future of International Politics in the Fourth Industrial Revolution

By ONAT KİBAROĞLU

Discover How Technology Will Shape the Future of Economics, Politics and Society:

The future of politics in the world is closely intertwined with the Fourth Industrial Revolution we are witnessing. It is beneficial to recap how significant the current industrial transformation is before going into the reasons behind this crucial relationship and the two major scenarios that are eminent for the coming years:

The Fourth Industrial Revolution or "Industry 4.0" can be defined as the fusion and the proliferation of emerging technology developments in industries varying from artificial intelligence to renewable energy. The vigour and influence of these technologies gets multiplied by the rapidly burgeoning connectivity between billions of people through enhanced mobility and the ease of accessing the growing

nexus of data and knowledge. The further assumption of Industry 4.0 technologies in the world will allow large populations to bypass current structural constraints and leapfrog into greater efficiency in energy use and value production.

If harnessed effectively and allocated for the public good, these changes will significantly improve global income levels, quality of life and even gender equality within populations due to increased mobility and democratization of occupational platforms. Rapid technological developments are also bound to bring unemployment to people involved in industries getting phased out for human labour, such as transport and logistics. How will these phased out people respond and how profound will this be upon the realm of politics?

The answer is inherently a complex one, yet is indeed becoming more apparent by the day:

We have entered a rather tumultuous era, especially in the last few years, which is widely getting referred to as the "backlash against globalization". This backlash, arguably, is indeed not necessarily caused by globalist ideologies – but more due to the transforming industrial system.

The resentment precipitated within the segments of society who are on the losing end of the ongoing transformation is channelled towards other scapegoats caught within, most prominently open immigration and liberal trade policies.

A recent report on Bloomberg exploring the roots of rising far right movements explores a vivid illustration of this phenomenon:

"The city of Rotterdam boasts Europe's biggest port, which is dependent upon the globalized economy for its success and 130,000 jobs. And yet, this North Sea gateway to the world is also the birthplace of the anti-globalization, anti-immigrant and anti-Islam movement... 'Robotisation is taking our jobs,' said the leader of the labor union that represents Rotterdam's port. 'Dockers won't vote for Wilders because they're racist – they aren't. They'll vote for him because they're angry'".

The current clash of the emerging industrial revolution and widespread resentment brings us to two avenues where global politics may take:

1. We could be in for a seemingly everlasting, or at least a decades long, rise and dominance of populist parties, as long as they are unchallenged with an alternative plan that works. Uninterruptedly, the populist factions could continue to blame immigrants or other margins of society for the issues technology essentially causes.

2. The currently emerging populist politics, instead of gaining further ground, could experience a fallout or a significantly softening transformation soon, where the proposed protectionist economic policies fail and the actors which push for them will be phased out themselves. In this case, the transformation of further technologies could be argued to have "cleared them out" of the global political scene: by first bringing them into power but then exposing the flaws of their proposed policies – making way for another wave of enhanced multilateralism, liberal trade and immigration policies, hence strengthened globalization.

The first scenario is built upon the assumption that the anti-trade and pro-domestic-industry rhetoric (e.g. Trump digs coal) could be employed sustainably by the populist factions, while being able to achieve economic growth and enhanced welfare. However, if such "closing off" and "back-to-the-roots" policies are thoroughly implemented in the developed world for the sake of short-term popularity in certain segments of the population, the only winners would turn out to be competing nations and regions elsewhere — those who continue to capitalise on the competitiveness that free and open economies bring about (e.g. East Asia).

In actuality, the Fourth Industrial Revolution is an ongoing universal phenomenon and cannot be stopped in its tracks. Hence, a feasible way

for these populist political figures to endure is for them to adopt a more rational approach of embracing the transformation of economic activity in the 21st Century— and not to impede the exchange of goods, services, labour and ideas through protectionist and fear-mongering narratives. This, in turn, would require a much more open-minded approach regarding their

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policy making. Once the practical need for open borders (in most senses) is realised by policy makers, as the second scenario foresees, this could result in a gradual "clearing out" of the anti-globalist resentment.

Simply being exposed due to failing economic policies, however, does not guarantee a "clearing-out" of such ideologies. The resentment which brought about populism in the first place must be addressed and fixed in order for such a progress to be achieved — or else a vicious cycle of stagnant economics and the toxic political scene would uninterruptedly continue. To avoid such a phenomenon to drag on, the benefits of technological improvement must be allocated as fairly and effectively as possible among the general public.

An example proposed by many scholars, and thought-leaders such as Elon Musk, is to adopt a basic income scheme — where the public simply get handed cash for doing nothing. As much as it can be assumed to be an attractive option for the public, the picture is not clear.

40 think there's a pretty good chance we'll end up with a universal basic income, or something like that due to automation. I'm not sure what else one would do. I think that's what would happen. People have time to do other things, and more complex things, more interesting things, certainly more-leisure time.

Elon Musk, Founder and CEO of Tesla and SpaceX

During 2013, Switzerland held a referendum on whether or not to incorporate the concept of basic income in the Federal constitution. The measure did not pass, with 76.9% voting against basic income. The basic income proponents skip one subtle reality: people do not simply want crude cash — they tend to seek fulfilment through employment opportunities. Basic income is arguably just a shortcut attempt that

negates the roots of inequality within a society — hence more case studies and pilots will need to be tested before deciding if this could be a solution to distribute the benefits of the Fourth Industrial Revolution.

Nevertheless, there are two other methods which could be applied by policy makers to create more winners in society from technological development and then mobilise them within the political realm. The first is enhanced and flexible job training for all. As an example, Denmark's rather progressive union system brings together the employers, government and unions. The firms and unions get together to identify immediate and future skills required in their industries and through collective-bargaining agreements, they enshrine rights to paid leave for training.

Similarly, in Singapore citizens are given a S$500 credit that could be used for training

courses provided by 500 approved providers, including universities and MOOCs. Technology, in this case, is not a source of job loss but the

very opposite: Virtual and augmented reality effectively improve such training schemes. Big data technologies offer more personalised and laser focused education. Social media platforms such as LinkedIn make it easier to connect people of differing levels of knowledge, while Coursera allows peer-to-peer teaching and mentoring across the globe.

Building upon the success of the inclusive and future-minded approach of flexible training for the public, these "winners" from the technological transformation must be politically mobilised. Voter turnouts are unfortunately in serious decline and as low as 20% within the youth in certain parts of the Western Hemisphere. The youth, quite characteristically, are indeed progressive voters, generally opting for political actors who stand by liberal policy making. A possible measure could be enhanced online voting — essentially bringing the ballot box to anyone with a smartphone by using secure blockchain technolgy. The bolstered involvement of the youth through similar methods are bound to bring about the phasing out process of the out of date populist policies through embracing the benefits that the emerging industrial revolution will create.

Linking the future of politics to technological development may at first glance seem as an attempt to associate two distinct avenues of the general society. However, the ability to create and utilize "the tool" — a rather basic appellation of technology — was always fundamental to how "homo sapiens" transformed throughout the centuries and what became of it now. Advancements of "the tool" advanced history itself, gaining momentum and exponential growth as the "tools" became more complex, powerful and widespread. Technology, therefore, despite being relatively less apparent, is an unmistakably profound driver of political transformation — and arguably the most exciting area to watch to have an insight on what the future could hold in store for us.

Will Artificial Intelligence Become Conscious?

By Subhash Kak, Oklahoma State University

Forget about today's modest incremental advances in artificial intelligence, such as the increasing abilities of cars to drive themselves. Waiting in the wings might be a groundbreaking development: a machine that is aware of itself and its surroundings, and that could take in and process massive amounts of data in real time. It could be sent on dangerous missions, into space or combat. In addition to driving people around, it might be able to cook, clean, do laundry – and even keep humans company when other people aren't nearby.

A particularly advanced set of machines could replace humans at literally all jobs. That would

save humanity from workaday drudgery, but it would also shake many societal foundations. A life of no work and only play may turn out to be a dystopia.

Conscious machines would also raise troubling legal and ethical problems. Would a conscious machine be a "person" under law and be liable if its actions hurt someone, or if something goes wrong? To think of a more frightening scenario,

might these machines rebel against humans and wish to eliminate us altogether? If yes, they represent the culmination of evolution.

As a professor of electrical engineering and computer science who works in machine learning and quantum theory, I can say that researchers are divided on whether these sorts of hyperaware machines will ever exist. There's also debate about whether machines could or should be called "conscious" in the way we think of humans, and even some animals, as conscious. Some of the questions have to do with technology; others have to do with what consciousness actually is.

Is Awareness Enough?

Most computer scientists think that consciousness is a characteristic that will emerge as technology develops. Some believe that consciousness involves accepting new information, storing and retrieving old information and cognitive processing of it all into perceptions and actions. If that's right, then one day machines will indeed be the ultimate consciousness. They'll be able to gather more information than a human, store more than

many libraries, access vast databases in milliseconds and compute all of it into decisions more complex, and yet more logical, than any person ever could.

On the other hand, there are physicists and philosophers who say there's something more about human behavior that cannot be computed by a machine. Creativity, for example, and the sense of freedom people possess don't appear to come from logic or calculations.

Yet these are not the only views of what

consciousness is, or whether machines could ever achieve it.

Quantum Views

Another viewpoint on consciousness comes from quantum theory, which is the deepest theory of physics. According to the orthodox Copenhagen Interpretation, consciousness and the physical world are complementary aspects of the same reality. When a person observes, or experiments on, some aspect of the physical world, that person's conscious interaction causes discernible change. Since it takes consciousness as a given and no attempt is made to derive it from physics, the Copenhagen Interpretation may be called the "big-C" view of consciousness, where it is a thing that exists by itself – although it requires brains to become

real. This view was popular with the pioneers of quantum theory such as Niels Bohr, Werner Heisenberg and Erwin Schrödinger.

The interaction between consciousness and matter leads to paradoxes that remain unresolved after 80 years of debate. A well-known example of this is the paradox of Schrödinger's cat, in which a cat is placed in a situation that results in it being equally likely to survive or die – and the act of observation itself is what makes the outcome certain.

The opposing view is that consciousness emerges from biology, just as biology itself emerges from chemistry which, in turn, emerges from physics. We call this less expansive concept of consciousness "little-C." It agrees with the neuroscientists' view that the processes of the mind are identical to states and processes of the brain. It also agrees with a more recent interpretation of quantum theory motivated by an attempt to rid it of paradoxes, the Many Worlds Interpretation, in which observers are a part of the mathematics of physics.

Philosophers of science believe that these modern quantum physics views of consciousness have parallels in ancient philosophy. Big-C is like the theory of mind in Vedanta – in which consciousness is the fundamental basis of reality, on par with the physical universe.

Little-C, in contrast, is quite similar to Buddhism. Although the Buddha chose not to address the question of the nature of consciousness, his followers declared that mind and consciousness arise out of emptiness or nothingness.

Big-C and Scientific Discovery

Scientists are also exploring whether consciousness is always a computational process. Some scholars have argued that the

creative moment is not at the end of a deliberate computation. For instance, dreams or visions are supposed to have inspired Elias Howe's 1845 design of the modern sewing machine, and August Kekulé's discovery of the structure of benzene in 1862.

A dramatic piece of evidence in favor of big-C consciousness existing all on its own is the life of self-taught Indian mathematician Srinivasa Ramanujan, who died in 1920 at the age of 32. His notebook, which was lost and forgotten for about 50 years and published only in 1988, contains several thousand formulas, without proof in different areas of mathematics, that were well ahead of their time. Furthermore, the methods by which he found the formulas remain elusive. He himself claimed that they were revealed to him by a goddess while he was asleep.

The concept of big-C consciousness raises the questions of how it is related to matter, and how matter and mind mutually influence each other. Consciousness alone cannot make physical changes to the world, but perhaps it can change the probabilities in the evolution of quantum processes. The act of observation can freeze and even influence atoms' movements, as Cornell physicists proved in 2015. This may very well be an explanation of how matter and mind interact.

Mind and Self-organizing Systems

It is possible that the phenomenon of consciousness requires a self-organizing system, like the brain's physical structure. If so, then current machines will come up short.

Scholars don't know if adaptive self-organizing machines can be designed to be as sophisticated as the human brain; we lack a mathematical theory of computation for systems like that. Perhaps it's true that only biological machines can be sufficiently creative and flexible. But then that suggests people should – or soon will – start working on engineering new biological structures that are, or could become, conscious.
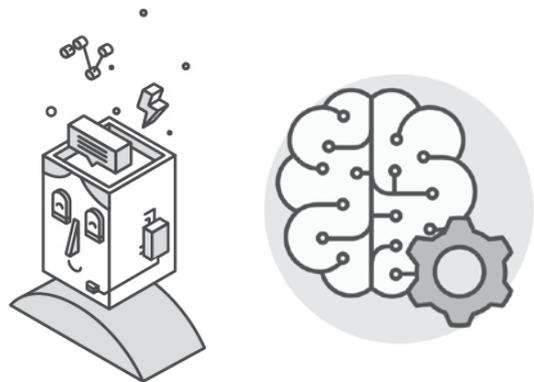
Facebook Failed to Identify 'Fake News'

Facebook has failed to identify fake news. In case of considering any news 'fake' shared in own platform, Facebook used to show a red signal as 'controversial'. But, from now on it won't happen so. Since the last one year this process didn't prove fruitful enough.

Facebook displayed this 'controversial' icon for the first time in December 2016. But now, users won't see this icon anymore beside the news shared in Facebook. On the contrary, other related articles will be displayed with the shared news. Source: BBC
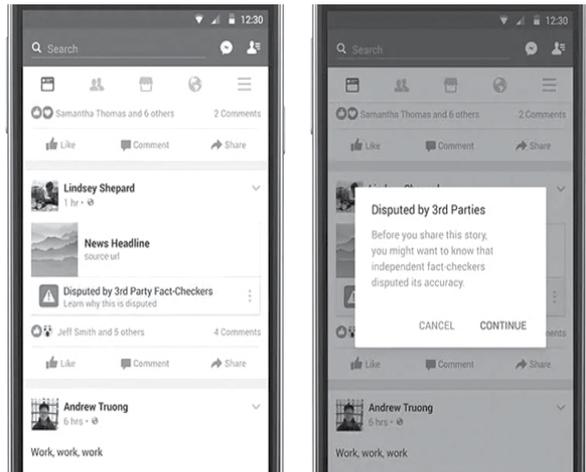
'Google Balloon' Got Stuck in Kenya

Ensuring high speed internet in world's most remote areas, Google flied 10 high-altitude balloons in the sky of African countries. One of the balloons got stuck in the sky range of Kenya as it got a hole. The balloon flown under 'Project Loon' was laid down on a farmhouse in Nathambiru area at night on December 29, 2017. It was naturally in a disaster condition.

No one claimed the ownership of the balloon till the news was published as different media informed as per source of local authority. But, it was one of those balloons which were flown under Project Loon. It was flown on a trial basis in the month of July, 2017.

Robot to Speak Clearly Like Human Beings

This is a technology based age. We are continuously using technologies in every sphere of our life. So, with that consequence, Google has introduced Voice Assistant with Artificial Intelligence (AI). It won't speak like robots anymore. Rather it would speak in the way a human being does.

Google is exploiting their Text-To-Speech or Tacotron 2 System for this purpose. Takotron

Keep Informed

system is a sequence-t-sequence feature prediction network which can map the character embeddings in Mel-scale spectrogram. Besides, using a modified wave net model as decoder time-domain wave firms would be brought under a process from spectrogram. And then, AI will be able to speak up like human beings.
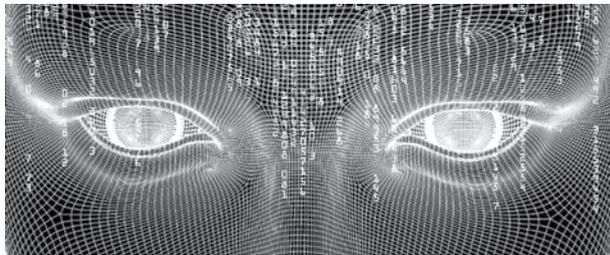
Robot 'Sophia' Rejects Marriage Proposal

Humanoid robot 'Sophia' visited India after Bangladesh. Sophia is world's first robot that achieved citizenship provided by any country. Sophia participated at IIT Bombay TechFest in India on November 30, 2017.

During her visit in Bangladesh, Sophia wore a 'Jamdani Sari' (Sub continental attire). She wore the same attire during her stay in India too. She focused on the relationship between robots and human beings in the TechFest. She also rejected a marriage proposal offered over here.

She stayed in the program for around 20 minutes. In the program, a student proposed Sophia for marriage. In reply, Sophia said-I can't accept the proposal. But, thanks for the offer.

At the beginning of the program, Sophia greeted all saying 'Namaste' in Indian style. Then, she started answering questions asked by all. This was Sophia's first visit in India.

WhatsApp Goes Down Worldwide at New Year Night

WhatsApp went down again at New Year night. The incident took place while all were excited for New Year greetings. Naturally all the WhatsApp users got annoyed. WahtsApp suddenly got stunned.

As per source, this popular messaging app went down just before 12 am. All the users were annoyed much due to this incident at the middle of New Year eve celebration. People expressed all their anger and shared annoyance in Facebook or other social media. But, later, WhatApp authority sought for pardon to all the users.

Blockchain Computing: Prospects and Challenges for Digital Transformation

By Professor Syed Akhter Hossain

Abstract:

A revolutionary trustable sharable computing outcome, the blockchain is essentially a distributed database of records or public ledger of all transactions originated from digital events and shared among participating parties within a computing framework. Each transaction of the chain in the public ledger is verified by
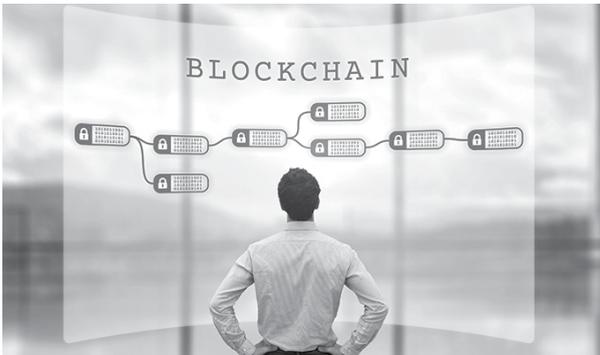
consensus of a majority of the participants in the system and its constituents. Once recorded, information can never be erased and neither altered. The blockchain contains a certain and verifiable record of every single transaction ever made during the business operations. In general sense, the blockchain could be described simply as being a way of storing the information of a transaction, between multiple parties in a trustable way. Recording, sharing, storing and redistributing contents in a secure and decentralized way. Being owned, run and monitored by everybody and without anyone controlling it. Besides, avoiding any

kind of modifications or abuses from a central authority. Blockchain technology is non-controversial and has worked flawlessly over the last few years and is being successfully applied to both financial and non-financial world applications and listed as as the most important invention since the Internet itself. Besides, digital transformation is taking off as rapid agent for change as part of the global business convergence. In this article, detail of blockchain technologies is presented from the perspectives of digital business transformation along with its future evolutions.

Keywords: Blockchain, Bitcoin, Crypto-currency, Business Transformation

1.0 Introduction

A blockchain, the fifth evolution of computing, is essentially a data structure for digital distributed ledger over multiple working system that makes it possible to share data through network of independent parties. It is essentially a distributed database of records of all digital transactions and events which is verified by consensus of a majority of participants in the orchestration of systems [1].

Blockchain is also called chain of trust since the technology of blockchain can support new generation of transactional applications aligned with business processes by establishing the

trust, accountability, and transparency. This adds a new dimension called "Internet of Value" whereas "Internet of Information" is achieved through different protocols namely TCP/IP for machine communication, HTTP


for web content, SMTP for email, and FTP for file transfer along with the new upcoming "Internet of Things (IoT)" for orchestration of devices with Internet [2]. Besides, blockchain facilitates trust and ensures validation of identities without intermediate third parties which ensures "Internet of Value" propositions. In a boarder sense, a blockchain is a peer-to-peer system with no central authority managing data flow. One of the key ways to removing central control while maintaining data integrity is to have a large distributed network of independent users. This means that the computers that make up the network are in more than one location and are often referred to as full nodes.

As seen from the literature, there are three different types of blockchains. One is called Public Blockchain, such as Bitcoin [3], which is based on large distributed networks that run through native token. This is open for anyone to participate at any level and have open-source code that maintained by the respective community. The other one is called Permissioned Blockchain, such as

Ripple, which control roles that individuals can play within the network. It is also large and distributed system that uses a native token. The third one called Private blockchain which tend to be smaller and do not utilize a token. Their membership is closely controlled. These types of blockchains are favored by consortiums that have trusted members and trade confidential information. All three types of blockchains use cryptography to allow each participant on any given network to manage the ledger in a secure way without the need for a central authority to enforce the rules. The removal of central authority from database structure is one of the most important and powerful aspects of blockchain [3].

An anonymous identity Satoshi Nakamoto is the name used by the unknown person(s) who designed bitcoin and created its original reference implementation. As part of the implementation, the team also devised the first blockchain database. As from the perspective of database administration, blockchain allow different parties that do not trust each other to share information without requiring a central administrator. In each participation, transactions are processed by the network of users acting as a consensus mechanism so that everyone is creating the same shared system of record simultaneously. This creates a database in a distributed manner. Besides,
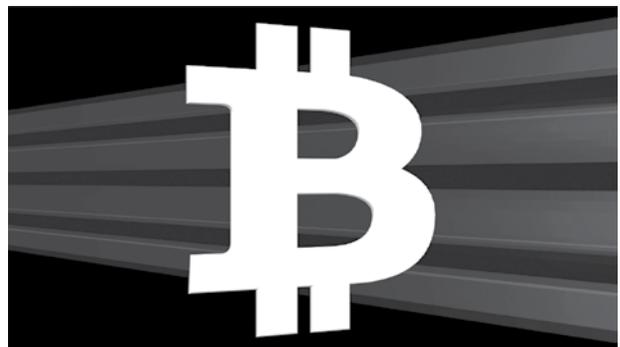
blockchain databases are able to keep information that is relevant now, but also all the information that has come before [4].

As seen from latest trend on the usage of blockchain technology through MIT technology review [5], the potential usages are evolving from health sectors to all business

sectors and shaking up the businesses more than the money. Brian Behlendorf, the executive director of the reputed open-source project named "Hyperledger" providing blockchain technologies, commented on using blockchain for carbon emission to health record management in a confernece organzied by MIT Media Lab [5].

As seen from the present practice, the blockchain, on which Bitcoin is built, serves as a distributed, which is cryptographically signed ledger. This makes it possible to track and verify payments without any centralized authority. The encrypted ledger is maintained by computers performing computations that eventually generate more bitcoins. The same distributed cryptographic approach can be used to verify all sorts of transactions.

2.0 How Blockchain works?

Blockchain is by itself a data structure which defines logical composition of data storage and principles of security, trust and participation as part of the data operations. As a result blockchain is composed of three core parts as follows.

(a) Block – is a list of transactions recorded into a ledger over a given time frame based on size, period and triggering event for block which is different for every blockchain. Block in a chain is just like a book which is a chain of pages.

(b) Chain – a hash, calculated on the fly, which links one block to another like book pages. This chaining part is difficult to comprehend. It works as the magical glue to keep blockchains together. The hash is known as the fingerprint of the data and locks blocks in order and time. The secure hash algorithm (SHA) Is used to generate hash functions in blockchains. SHA-256 is a common algorithm used to generate almost-unique fixed-size 256-bit (32-byte) hash. Every blockchain will contain hash to ensure the integrity of the chain.

(c) Network – composed of full nodes where each node contains a complete record of all the transactions that were recorded in that blockchain. These nodes are located all over the world and can be operated by any one. As it is difficult, expensive, and time consuming to operate a full node, it is done through cryptocurrency provided by the underlying blockchain algorithm as incentives of blockchain operation. The reward is usually a token or cryptocurrency, like Bitcoin.

Figure 1. Blockchain analogy of a Book

The blockchain analogy of a book is shown in the Figure 1 where each page is a block having its content, the Bitcoin, which is chained.

As seen from the present applications, blockchains are powerful tools because of systems that self-correct correct data without the need of a third party to enforce the rules. The enforcement of rule is accomplished through their specific required consensus algorithm. In the blockchain computing world, consensus is the process of developing an agreement among a group of commonly mistrusting shareholders in order for mutual recognitions. These are the full nodes on the network and are validating transactions that are entered into the network to be recorded as part of the ledger.
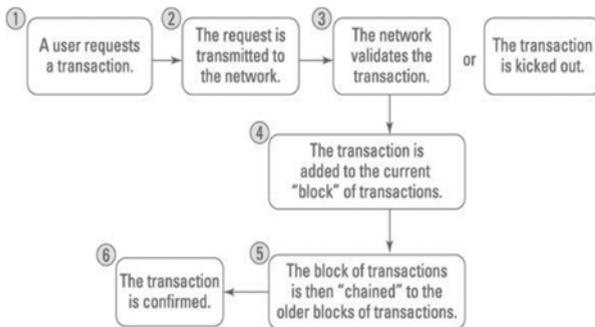

Figure 2. Work process of Blockchain [6]

The work process of blockchain is shown in the Figure 2. Based on the business requirements, each blockchain has its own algorithms for creating agreement within its network on the entries being added. There are many different models for creating consensus because each blockchain is creating different kinds of entries. Some blockchains are trading value, others are storing data, and others are securing systems and contracts etc.

As shown in the Figure 2, the process begins with the request for a transaction from the end user. The requested transaction is broadcasted to P2P network consisting of computers known as nodes shown in step 2. The network of nodes validates the transaction and the user's status using known algorithm or may be kicked out since invalidation. Generally a verified transaction can involve cryptocurrency, contracts, records, or other information. Once verified, the transaction is combined with other transactions to create a new block of data for the ledger. The new block is then added to the exsiting blockchain in a way that is permanent and unalterable. The transaction is then finally confirmed.

## 3.0 Blockchain Computing for Digital Transformation

Digital transformation today is an integral part of the business development worldwide. World Information Technology and Services Alliance (WITSA) proposed on "Digital Transformation: Enabling Principle Recommendations for Digital Transformation" on January 2017. As per the recommendations by WITSA, digital transformation is not well formalized and understood yet form the point of view of value creation. Since digital technology is triggering the changes in our society in an appreciable way on continuous basis. As a result, digital transformation affects neatly every aspect of business and government operations encompassing the digital life. Even software development is being digitally transformed and taking seamless integrations. This digital transformation intends to develop or enhance trust, security and privacy challenges.

Digital business process management is an outcome of the digital transformation of

business. Blockchain technology is connected to digital business process management. The emergence of distributed and decentralized ledger technologies with smart contracts and Internet of Things (IoT) plan vital role in business development. Blockchain holistically manage business processes interactivity for participatory data sharing and financial relationships.

Most obviously, digital transformation is one of the challenges an enterprise can undertake, but the integration of IoT with blockchain makes it much easier due to the nature of digital emergence. Based on number of partners may it be internal, external, or both, involved in any given business process, a system in which a multitude of electronic parties can securely communicate, collaborate, and transact without human intervention is highly agile and efficient. This digital business cohesion brings productivity and efficiency in the business.

Despite obvious benefits and productivity, blockchain technology has been slow to catch on in the enterprise due to knowledge gap along with the skills. One major reason is a general lack of standards. For example, should an organization use an open network
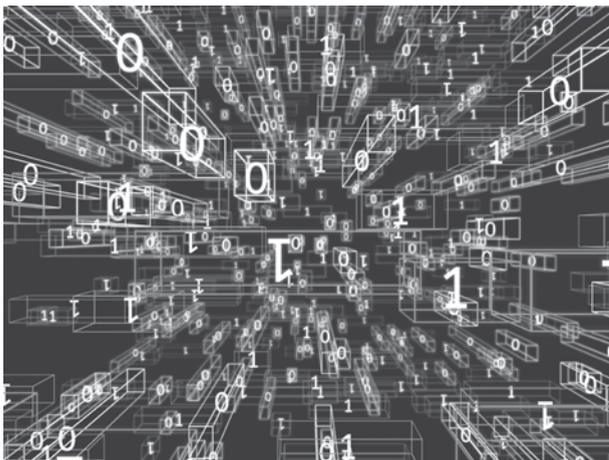
or a privte one? Who should regulate the technology to make sure blockchains are effectively regulating themselves, and what cyber security threats might arise that threaten a blockchain's integrity?

As seen despite Bitcoin surge of August 2017, and with blockchain still in its infancy, these are all questions that financial institutions are beginning to answer as they experiment with different implementations.
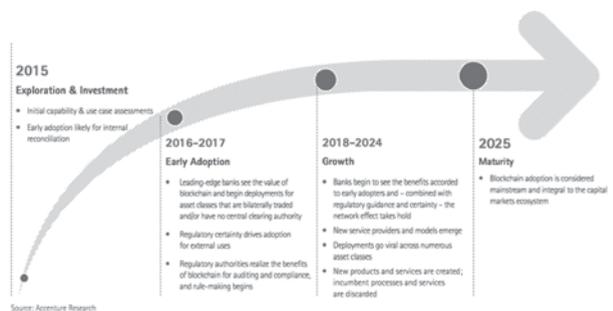

Figure 3. Blockchain adoption – Accenture Research

As seen from the Figure 3, based on the research work published by Accenture, one thing that may be of surprise is that while maturity of blockchain will likely take 5+ years. Business process transformation faces reality is that most businesses operate under some form of existing regulation, are either themselves an intermediary, or are working within an eco-system of value chain partners that are intermediaries. In order to transform for blockchain, dis-intermediating the central authority or the middleman as its main goal, it raises some concerns as well as presenting new opportunities. For business transformations, every organization needs to design business drives based on blockchain to explore blockchain technology via a proof-of-concept. Before starting with a particular solution or selecting a vendor, it is critical to assess the many considerations that come

into play when selecting the best approach to exploring blockchain.

Business transformation to deploy blockchain requires deep analytics of business based on the following perspectives:

a. Impact of implementing blockchain in business
b. Impact on customer experiences
c. Impact on partner's eco-system
d. Ensuring privacy, security and integrity
e. Use cases appropriateness for blockchain
f. Platform selection and implementation design
g. Handling regulatory requirements
h. Transformation project planning

4.0 Blockchain Computing Platforms

There are different blockchain platforms for rapid prototyping of solution based on specific goals. Blockchain implementation platform is purely based on subjective assessment and business requirements. The different platforms are: Ethereum, Multichain, Hyperledger, HydraChain, OpenChain, and IBM Bluemix Blockchain.

Ethereum is an open blockchain platform that provides resources and use centralized applications that utilize blockchain technology. It is an open-source project. It is adaptable and flexible unlike the Bitcoin protocol. Ethereum facilitates Python, Go and C++ language interface to work with. Multichain is a platform for the creation and deployment of private blockchain either within or between organizations. It facilitates deployment of blockchain technology in financial sector. It provides the Bitcoin level private financial transactions. Multichain supports Python, C#, JavaScript, PHP and Ruby language interfaces. The Hyperledger is an open-source collaborative platform to advance cross-industry Blockchain technologies. It is a global collaboration encompassing field of finance, banking, Internet of Things (IoT), supply chains, manufacturing and technology. Hyperledger is based on Python. HydraChain is a join development effort of brainbot technologies and the Ehtereum project. HydraChain is also based on Python. OpenChain is based on partition consensus system for validating transactions depending on the assets being exchanged. OpenChain is based on JavaScript. IBM has also released Blockchain platform as part of the Bluemix service catalog. It is built on the top of HyperLedger.

5.0 Prospects and Challenges

With the collaborative development of technologies, blockchain adds more capabilities and as an outcome its underlying ledger system becomes more dynamic and self-governing and self-organizing. Despite the challenges of adoption, several industries are exploring how blockchain technologies

can be used to transform their business model and change their operating assumptions. Major banks and financial companies such as Bank of America, Santander, Barclays, Goldman Sachs and NASDAQ are piloting the

technology's capabilities in data registry and smart contracts for cross-border payments, remittances, micropayments, trade finance, loans, securities and derivatives trading. Organizations across different industries worldwide are experimenting with blockchain to determine how it can be leveraged to disrupt current business models, increase profitable growth, and enable more efficient operations.

Blockchain as an emerging technology goes through a hype stage over the passage of the year 2016. It is natural that takes a while to get the kinks out and for pilots and proofs of concepts to prove use cases and shift the curve to broad adoption of blockchain in business processes. The power and disruption of blockchain is evident in the news almost daily, and people are beginning to understand how blockchain distributed ledger technology works at recent times.

There are potential issues to adoption of blockchain in business domain. Regulations play a vital role in the adoption of blockchain. It is often observed that regulatory entities often lag technology innovation, and this is certainly the case with blockchain. As new products and services are evolving based on blockchain transactions, but there are currently no regulations on how the transactions should be written. The second very important issue is Standard. Along with the regulations, there is currently lack one common set of standards for writing transactions on a blockchain. In fact, there are three open source consortium organizations, each with its own standards and code which creates anomalies in attaining boarder sense of unified approaches.

Another very important issue to adoption is Validation issues. The general fear of the technology which has not been tested enough in pilots and POCs. Ultimately, what are blockchain's limitations? Early POCs validate its scalability, but what are its limitations for handling a large volume of enterprise transactions and data? Different applications will face different scalability issues as adoption increases. And how much time and computing power will be necessary to process a huge number of transactions? This is vital for the long term sustainable blockchain technology.

6.0 Conclusion

In this article, blockchain technology is discussed from the perspectives of business process and operational viewpoints. It is evident that blockchain technology has the potential to upend if not transform industries. However, before it can become mainstream, there are numerous challenges to overcome. A key challenge associated with blockchain

is a lack of awareness of the technology and how it works. The skills required to implement blockchains are often beyond the traditional IT skill sets. Thus, it is imperative for carriers to understand how others – competitors and peers – have implemented blockchain, and gaining equivalent knowledge of blockchain applications.

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Zephyrus Laptop: For Smooth Gaming Visuals and Versatile Connectivity

By TW News Correspondent

ASUS Bangladesh announced the launch of Zephyrus, the world's slimmest gaming laptop powered by a 7th Generation Intel® Core TM i7 (Kaby Lake) processor and the latest NVIDIA'' GeForce- GTX 1080 graphics- to its local market. Zephyrus features the Windows 10 Creators Update, which improves the performance of PC games via the all-new Windows Game Mode, and makes it easier to perform native game-streaming with Beam, Microsoft's streaming service.

The 15.6-inch Zephyrus features an ultraslim profile and incorporates the ROG-exclusive Active Aerodynamic System (AAS) - a specially designed cooling system. It also features customizable ASUS Aura ROB \iahting effects and a super-fast 120Hz panel with wide-view technology, 100 percent sRGB color gamut and NVIDIA G-SYNC for breathtaking gaming visuals.

The world's slimmest gaming laptop with unparalleled performance and features

ROG Zephyrus is the result of persistent dedication to gaming innovation. ROG aims to create laptops that are slimmer, cooler, quieter and more powerful than ever before — to fully address the needs of today's highly mobile garners. Zephyrus has a blade-inspired design, resulting in an ultra-slim and sleek profile that tapers from 17.9mm down to just 16.9mm at its thinnest point. Its compact dimensions make it the world's thinnest gaming laptop powered by the 7th Generation Intel Core i7 processor and the latest NVIDIA GeForce GTX 1080 graphics, delivering unstoppable gaming performance. The incredible CPU and

GPU combination allows Zephyrus to compete successfully with larger devices and desktops

ROG-Exclusive Design and Cooling System

ROG Zephyrus is cooled by an exclusive Active Aerodynamic System (AAS) that runs cooler and quieter without sacrificing performance. AAS incorporates unique AeroAccelerator (AA) technology that increases the speed and efficiency of airflow through the laptop. The fan's 3D-curved surface cover and accelerator guides enhance airflow and move heat away from the components more efficiently. When Zephyrus is opened, a portion of the bottom of the chassis flexes to increase the airflow volume by 20 percent and further increase air circulation. AAS maximizes system stability as well as gaming and thermal performance, and it allows full utilization of the CPU and GPU, so garners can engage in marathon sessions without fear of interruption.

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Perfected gaming keyboard with Aura RGB lighting, innovative touchpad with 10-key functionality

ROG Zephyrus features a keyboard positioned at the front of the chassis — a design that allows better cooling of internal components while providing a more comfortable and familiar experience for garners accustomed to desktop keyboards. ASUS Aura RGB lighting technology provides dynamic and customizable lighting effects over the entire keyboard, as well as separately highlighted customizable effects for the WASD and QWER key groups, allowing users to create a gaming ambience that matches the feel of their game. Anti-ghosting keys ensure commands are instantaneously and correctly

interpreted — even when up to 30 keys are pressed simultaneously. The keys have been ergonomically designed to provide optimum comfort and typing accuracy. Zephyrus positions the touchpad to the right of the keyboard and also integrates a 10-key function that is easily activated by a hot key. When activated, a red backlight illuminates the 1 0-key functionality.

ROG Zephyrus is equipped with a 120Hz display that enables smooth gaming at a true 120Hz frame rate. NVIDIA G-SYNC display technology synchronizes the display's refresh rate with the NVIDIA GeForce graphics card's frame rate, ensuring ultrasmooth visuals. G-SYNC reduces lag, minimizes perceived stutter, and eliminates visual tearing — providing the smoothest, fastest and most breathtaking gaming imaginable, without affecting system performance. Wide viewing angles and a 100

percent sRGB color gamut also allow the panel to produce outstanding, lifelike colors from any angle. The laptop is also equipped with a USB Type-CTM (USB-CTM) port with ThunderboltTM 3, allowing G-SYNC and 4K UHD display output,

Specification:

ASUS ROG Zephyrus

Processor: Intel® Core T" 17-7700HQ

Operating system: Windows 10 Home / Windows 1 0 Professional

Display: 15.6" Full HD (1920 x 1080) wide-view panel with anti-glare 120Hz refresh rate with NVIDIA G-SYNCTM

Graphics: NVIDIAO GeForce® GTX 1080

Chipset: Intel® HM175

Memory: DDR4 2400MHz (up to 24GB)

Storage: M.2 PCIe® x4 256/512GB/1TB SSD

Wireless: 802.11ac VVi-Fl
              Bluetooth®

Connectivity: 1 x USB 3.1 Gen 2 Type-CTM
              with ThunderboitTm 3
              4 x USB 3.1
              1 x HDMI 2.0
     1 x 3.5mm headphone and mic combo jack

Camera: Built-in HD camera and array mic

Keyboard: ASUS Aura RGB backlit chiclet keyboard with 30-key rollover; 1.4mm key travel

Battery: 4 cell, 50Wh

Size: 37.9 x 26.2 x 1.69cm (W x D x H)

Weight: 2.2 kg (with battery)

fast data transfers and power delivery.

AVAILABILITY & PRICING

ASUS ROG Zephyrus GX501V1 will be available from 21 December in Bangladesh nationwide throughout exclusive retail partner stores. Interested buyers can also order this notebook online through kiksha.com and Pickaboo.com. Global Brand Pvt Ltd. is the sole distributor of ASUS Bangladesh.

# How to Setup a Windows 10 Laptop for Your Kid

By Matt Elliott

If you are buying a Windows laptop for your child as a holiday present or because it's required for school, then you need to know how to set it up with Microsoft's parental controls to cordon off certain corners of the Internet. You can even set up time limits and sign up to get a weekly report on your kid's online activity. Let's get started.

Create an account for your kid

Microsoft allows you to create separate accounts for children, which you, as the adult in the room, can then manage. After signing into your own Microsoft account on your kid's laptop, go to **Settings > Accounts > Family & other users** and click **Add a family member**. Next, select **Add a child** and then click **The person I want to add doesn't have an email address** to create an account if your child doesn't already have a Microsoft account.
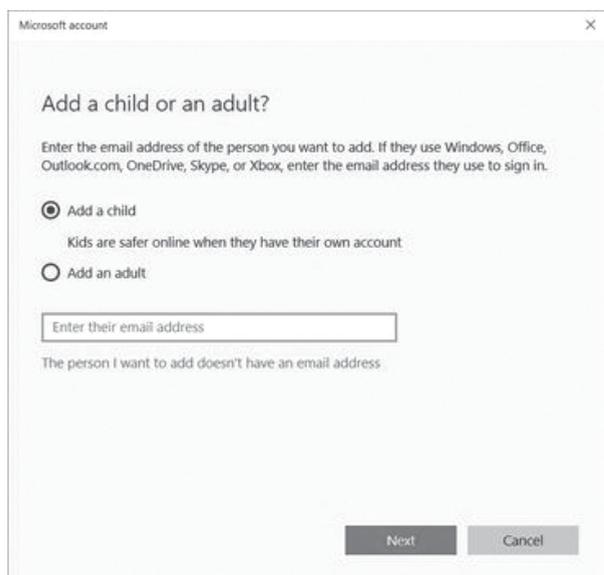
After creating an account for your child,
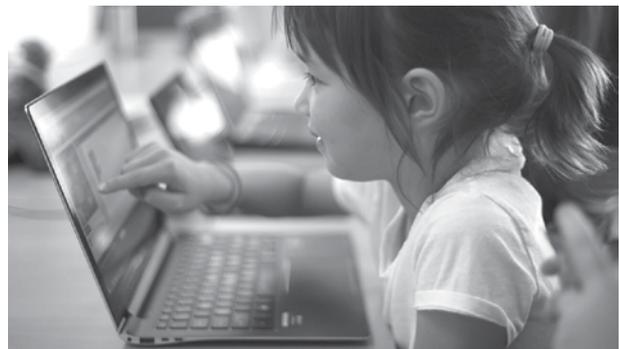
you will then need to log in to your account and, to prove you are an adult, provide your credit card information and agree to a $0.50 charge, which Microsoft will donate to charity. Upon making your tiny charitable donation, your kid's account will no longer be listed as "pending" on the Family & other people page in Settings, and you can start setting parental controls.

Family safety first

From **Settings > Accounts > Family & other users**, you'll see a link for **Manage family settings online** below your accounts in the Your Family section. The link will open Microsoft's Family Settings website. Make sure you sign into your own account on this site; if you are signed in under your child's account, you won't be able to access the family settings.

How to

After signing in to your own account, click **Family** in the top right to view your family members. Under your child's account, you'll see four items listed: Activity, Screen time, Content restrictions and Spending.

For **Activity**, the setup is simple. Toggle on **Activity reporting**, which shows you the searches and web history of your child along with the apps and games he or she has used. You can view this information on the Activity page and also click a toggle switch to get a weekly report emailed to you.

For **Screen time**, you can set time limits for the laptop or PC registered to your child's account as well as an Xbox. If your kid tries to use the laptop outside the time window you set, he or she will not be able to log into their account and will be told to either log into a different account or turn off the PC.

For **Content restrictions**, you can set an age restriction for apps, games & media as well as for web browsing. For the latter, you can blacklist sites you know you don't want your child accessing or you can create a white list and allow access only to the sites you specifically add. Microsoft tracks usage only in its Edge browser, but to prevent unfettered internet access from another browser, Microsoft blocks Chrome, Firefox, Opera and a few other browsers by default. Also in Content restrictions, you can require Microsoft Store purchases to get your approval first.

For **Spending**, you can add money to your kid's account as sort of a digital allowance for the Microsoft Store.

It's Time for Innovators to Take Responsibility for their Creations   *By Susan Wu*

As one of the earliest, and first, female investors in Twitter, I had great hopes for its potential to improve human connectedness and relationships. Today, it's become clear it's done the opposite by becoming a thunderously divisive tool weaponized by the leader of the free world.

Consider other harm caused by today's major technology companies: The immense power wielded by Facebook in the 2016 presidential election and its complicity in stoking genocidal violence against the Rohingya people of Myanmar. The pervasive ethical
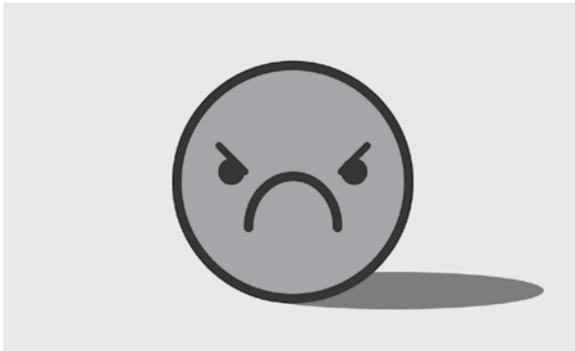
shortcomings surrounding Uber's business practices, and Airbnb's sometimes devastating influence on neighborhoods. Not to mention revelations about workplace harassment and discrimination that occur in many corners of Silicon Valley (and beyond).

Our industry hardly needs more evidence that what constitutes success in the digital age urgently needs to be redefined.

Technology has recently played a positive role as well, with the long-awaited revelations of long-standing abuse by men amplified by #metoo, and in galvanizing a movement around longstanding racial inequities with #blacklivesmatter.

It's crystal clear that Silicon Valley's chief executives are no longer merely startup founders, product creators, and business executives. They're societal leaders too, oligarchs shaping the very nature of our identities, communications, and relationships. In a world where software and algorithms run most every part of our lives—where Google and Facebook control close to 70 percent of all digital advertising, and smartphone penetration is nearing 80 percent—creating innovative software and launching indispensable apps is no longer enough.

As basic social contracts across nearly every aspect of Americans' lives are being dismantled by a voracious, so-called free market system and gluttonous political administration, citizens each have an even more urgent need to acknowledge our responsibility to one another. Today, racking up a stratospheric market valuation without significant consideration of the product or company's broader societal impact is reckless and irresponsible.

Urgently, innovators must consider the massive ripple effects of their creations as part of their imperative. Being an innovation leader isn't just about delivering quarterly shareholder results or hitting product launch dates. Genuine innovation isn't just about making technological advances, but also about reimagining and understanding structural issues underlying society.

The tech industry can either design for and build positive externalities, or we can

inflict many negative ones job displacement, fracturing of neighborhoods, addictive behaviors, compounding isolation, fortifying tribalism, and widening income equality, to name a few.

As a veteran angel investor, engineer, and technology entrepreneur, I worked to popularize and commercialize the World Wide Web 20 years ago. The hope then was to revolutionize power structures, increase access to opportunity, and construct a level playing field for all. The tomorrow I hoped for has not yet arrived: one grounded in engaged empathy and equality, where humanity and technology are synthesized and integrated in a new force, one that empowers people to thrive as whole human beings.

Achieving this requires a commitment to the belief that true progress and discovery is only possible by addressing the fundamental human needs of many, not just those fortunate to have a voice and a presence at the table. Though stratospheric income inequality may insulate the most privileged from the real-world impact of many of their decisions, there are some global crises that are inescapable, like climate change.

Harnessing the perspectives of women, people of color, and underrepresented communities, including the 80 percent of the world who lives on less than $10 a day, would offer a diversity of lived experiences that could propel genuine, structural innovation this coming decade. Imagine the types of platforms, products, and inventions that can be created when we expand the pool of entrepreneurs to welcome entirely new viewpoints.

Without thoughtful consideration of how technology interacts with structural and systemic issues in society, would-be innovators are inadvertently rehashing history, by moving around the same pieces on the same game board over and over.

Look, for instance, at the most likely probability that men hold well over 90 percent of the asset value of today's techno-darling bitcoin, the latest example of merely shifting power from one group of privileged men to another.

Perhaps it's time for an updated version of Maslow's hierarchy of needs, one that underscores what's essential not just for individuals to flourish, but for the greater good of society. Startups and management executives universally invoke this theory as an accepted canon for framing the human problems they're trying to solve.

The problem is that Maslow's framework pertains to individual, not societal, well-being. The reality is that individual needs cannot be met without the social cohesion of belonging, connectedness, and symbiotic networks. A revised design focused on a thriving civilization would have at its root empathy and ethics, and acknowledge that if inequality continues to grow at its current pace, societal well-being becomes impossible to achieve.

The very idea of what it means to be human is changing and we who are leaders in technology are aiding and abetting that change. Let's acknowledge and embrace the magnitude of that power and our responsibility to put it to good use.

We must never forget that the innovations of today set the standards for the future: how we learn, socialize, enjoy, work, shop, mate, and navigate this tiny rock we call planet Earth. Great leaders in innovation understand that they're continually earning the right to be leaders, effectively representing the needs of all communities, and empowering all of humanity to live ever better lives.

Quality Certification's Significance in Our IT Industry

By TW News Desk

Desire to have certification is much more important fact than to know what certification is and its importance. When the matter concerns with quality, several facts are included in it. Testing process, customer satisfaction etc are considerable for software certification which means that different processes in different steps is not certificate, as it is important to maintain it. Besides, appearing for test to get certificates, it will also be helpful for the certificate holders to find out suitable people. You

may have got some jobs as a certificate holder. But, if the project-providers find you not suitable for the assigned job, then not only yours, but also the whole country's image will get spoilt. But, if you continue working with ability maintaining a standard and abiding by rules and standard of that certification, it will be much important for industry sector. And it is not much difficult to receive a

certificate. It may take around one year maximum, but it needs investment. So, it is more important to continue working and providing services maintaining a standard than achievement.

Certification, basically, is an investment for your future growth. Our process will be broken down and we can't proceed further. So, certification will give us the process and ensure the quality. From company's perspective, certification is needed. We can manage our resources in a scientific way and customers also become happy. If every company follows the certification then surely they will be benefited.

Firstly we have to know why we need this certification. Then we should consider the matter of technical skills for company's service quality process maintain and accreditation. Besides, the matter regarding how certificate and training providers asses a company's quality service process is also important.

Quality Certification is such an official process through which an accredited or authorized person or company determines or verifies as per recognized

standard of any company, product or service. It is now a market demand and it is created from the consumers' end. To gain consumers' faith, it is really important. Moreover, it also helps to increase the profit margin. That's because the certification itself is an advertisement of the company and it also helps to standardize company's

products and inspires the employees too. In case of technical capability of certification issue, any certified company can't provide the certification. In that case, the certification provider has to inherit some particular international recognition. The certificate provider

must follow the terms and conditions of ISO-17021.

Still we don't have any arrangement for training on ISO-17021 in Bangladesh. Besides, we have IRCI and CISA certified people in our country, but they are inadequate. In this regard, we lack of awareness. Even most of the companies in our country hardly have any idea regarding how much time it takes and what the procedure is. In case of providing certificates, if digital tools are used, some automatic systems will be used over here. There is no scope of any fraudulent activity in providing quality certificates, as it is in issuing general certificates. Here, every step has to be crossed properly. Besides, it is not possible to overlap any step here. Lastly, quality certification is really essential. But to achieve it and realize its importance, we should adopt some awareness programs.

Certification is all about to maintain dos and don'ts. And if we get an international standard certificate and we maintain quality then it means a lot for your company. In this competitive market certification is necessary and that's why certification is an investment not expenses. In Global perspective there is no alternative of certification.

If we have certification we will be measured differently in abroad. If we are a certified company then it matters.

Security to Defend Cyber Life from Cyber Threats

By TW News Correspondent

We need to change our mind set of react after the crime been committed rather to be defensive .We use software or hardware to

ensure security but still we need to compromise with security. So we need proactive approach instead of reacting approach. Another thing is cyber killing chain that collects data from Google and Facebook and tries to compromise initially. We'll have to take ourselves as we are always exposed to vulnerability, we are always compromised. A hacker try to find which link is the most sensitive. Then he checks all the important data. A hacker comes to the system several times before he attacks it. He seems to leave a backdoor cause he might not find what he was looking for at the first time. They use a move name, Lateral Movement. Using this method he can make the process easy to utilize his resources to hack the system. As of counter measures we have several techniques to prevent this from happening. But most importantly we have to spread awareness. If we know the process of hacking step by step,

we can easily detect new attacks and protect ourselves. People have to be serious about their cyber life.

New and advanced technology carries threats along with its opportunity so it is important that how we responded on these threats. We need to have the expertise to detect the threat and respond accordingly as resilience. The cost of cyber crime is huge and increasing gradually as still we can measure loss accordingly.

The cost of cybercrime according to USA is 455 billion dollar in recent year and to Bangladesh it is more than $81 million. So we have the vulnerability of cyber crime especially. We have to secure our financial sector of the companies. There are some other existing threads like IPR Theft, financial crime, theft of confidential business information where we need to be concerned as Bangladesh is also losing money. There are two kinds of threats. One is outside threat and another is inside threat. Inside threat comes from the employees who works

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inside the organization that is dangerous than the external. Some countries have cyber armies to attack other countries. Every modern technology comes with a new threat. IoT is also a new technology. It may bring a threat to everyone. So technology also comes with

threat that we need to cure. Users are fall for phishing attack and 90% of the attacks caused by email. We have been aware of technology and where our business is linked. We need to create cyber security culture and resilience and awareness among the mass. And need to have local server for our country, so that we can start preparing ourselves to protect cybercrime. There are some of the national and international cybercrime organizations like ISSA who works to protect our data and we need to be connected with them.

Everyday new programs are being created and it's been also altered using reverse engineering. Recently there have been some ransomware attacks and it was contained later because of using reverse engineering. People who do reverse engineering always try to find a track, once they find it, they start going thorough that, and control the program. A hacker uses some kind information to make decision. A programmer also is trying always to

stop this kind of intrusion, they are using new technologies, new techniques. An assembly doesn't do anything except doing copy.

We need to be defensive to address the cyber threat and crime. We have limited resources and we have to find a way to work with such limited resources. We have to find the false notes and our weaknesses. Then we are able to protect ourselves by ensuring proactive security. We actually need to develop a cyber security culture of resilience and practice it regularly so that we can detect the attempt of criminal.

Although our government has initiative but we need individual security. To address the security with expertise, actually we have a long way to walk in this area. But, we have some experts who are untied with themselves and working dedicated to improve their skill in this sector.

It is also true that we have less investment in the security sector. Actually businessmen need to consider so many expenses to run a business on the hand they are not convinced enough how such investment helps their business to grow more. We need to make people aware about it and some context need to train people for so. But we believe it will be changed but it will take time.

Strong Academy-Industry Collaboration for Overall ICT Development

By TW News Desk

Changes in education curriculum are essential to cope up with the changes of technology. In that case, currently, application of technology in every sphere of our life is necessary and this is also making our economic development prompt. In this case, we can mention the smart cards of the students as example. Like in some of the universities of our country the arrangement of online classrooms has been introduced that has made the way of receiving education of
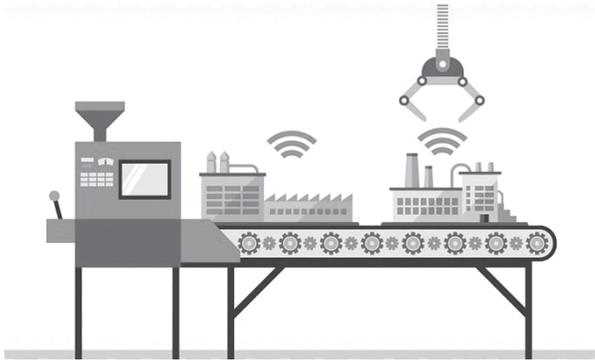
the students simply through the application of technology in institutes. This is IoT, which will always get us connected to everything. We also should give importance on cyber security issue and accordingly, its inclusion in curriculum is essential. As per this recommendation, the matter of cyber security should get included in the curriculum system. It is UGC which will be able to compel all the universities through making a policy, to bring changes in institutes and curriculum. We also should emphasize on the involvement of the private universities in changing curriculum.

Technology is a weapon for country's overall development because of which we need to be simple and easy. We have to train all about the key facts of ICT. In order to cope up with the age and modernism, we have to be fashion conscious and similarly, we also have to give importance on IoT. But, at a time, we also need to develop our base. Connection of the rural people to the development will make its flow smoother. The young generation in our country has developed Sure Cash Software Service and we are using it successfully. But, it is also true that we are in need of skilled manpower. In order to create skilled manpower, it is essential to have qualitative changes in education system and everyone's involvement as well. Bangladesh occupies the 155th position among the 156 countries in the list of education budget. We should give importance especially on cyber security issue in case of ICT based development. Children's involvement in ICT education from high schools and primary schools will take our country forward to build an ICT based society. Besides, we also need to pay attention to the fundamental side in the university level, as per the experts.

Meritorious students of renowned institutes in our country usually face different types of problems in professional life. That's because the responsibilities in industry, its type and the distance of their educative skills create problems for them. As per observance, the matter of soft skills doesn't get importance in institutes' curriculum and education level. The number of CIS certified people in our country is only 65 and among them 35 are outside the country. Cyber threats have been increased along with the usage of ICT. So, we need proper knowledge and practice in this regard. We need eligible security professionals to gain IoT success. IoT, now, is no more a term or subject to read in books, it is now reality. Already 120 million mobile users are existing in our country and as per their necessity, 20 million apps are the requirement. Therefore, we have potentiality in this regard. These should be

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Right to be Heard

included in educational curriculum. Even, IoT should get connected and not only the students, but also the teachers need to be trained.

IT is considered very much important to us. Digital innovation and its practice already got started in our country too like others and it will continue. This should be our main concern and for this, digital innovation ecosystem is necessary and regarding this issue, the universities will have to be the center-points. So, the universities need to get changed. Even, the curriculum also needs to be changed. But, it is difficult for the universities to do so alone. In that case, government and private organizations cum industries should come forward. That's because if there is not a developed relationship between academy and industry, a durable development is difficult to achieve. If we want to apply IT in education sector or if we want to arrange for employment of around 20 lakh people in this sector, this joint-effort is a must. As per market, even, a fund is provided for research and development purpose in many countries in order to provide education, which can be done in our country too. In future, three technologies will lead and they are IoT, Artificial Intelligence and BigData. So, these subjects should be included in the curriculum. We won't be able to gain 100% success in technology, if we can't transform the local innovators into entrepreneurs. In this regard, government along with other sectors should come forward.

There is a gap created between the necessity of students and job sectors. As a result, we have to depend on outside intelligence. So, as per demands, a research is required to balance the supply of eligible ones. That's because we can't utilize our intelligence for this gap between demands and supply. So, we need information and education as per demands. In this case, web based education or training with limited cost may be a solution. Khan Academy may be considered an example in this regard. From now on, we have to introduce some changes in ICT curriculum in primary schools with a view

to gain ability to cope up with future technology. Even, we have to connect the women, too.

Education policy is also getting changed globally with time. So, University Grant Commission (UGC) in our country is continuously working on changing updated course curriculum and for this purpose, a ten year long action plan from 2016 to 2026, has been initiated.

Changes should be introduced not only in ICT, but also in all courses with coping up with globalization. Around 4 lakh foreigners are working in Bangladesh who usually are taking around 5 billion US dollars outside Bangladesh every year. In coming future our youth would replace around 4 lakh people on merit basis. It is not a matter of a single day to include all the universities throughout the country in ICT. Besides, it is also a big challenge to change the orthodox mentality of the teachers. But, hopefully it would be so, gradually. According to World Economy Forum, IT occupies the 106th position among 108 countries on the usage basis. Logically, different universities demand a lot to UGC. But, most of the people couldn't connect themselves to ICT yet. This is because the opportunities are still politics oriented. So, we can't hope for any overnight changes.

Bangladesh is considered an uprising role model in economic development. We have to bring continuous changes in our development and this can be possible through only the youth, who hold 48% among the total population and who are mostly under 24 years of age. That means we too have the strength of youth. And IT is such a thing that will be able to change people's lifestyle. So, we should give importance in this regard. But, it is difficult to recover all the obstacles at a time, negative mentality of overall changes.

Gaming Industry Showing the Way to Enrich Our National Economy

By TW News Desk

One needs patience and determination to become a developer. We should extend our support for such developers. We also have to think about the demand of target people and other related issues. Then the ideas will be generated in line with the findings so that customers' interests about games can grow. The game development for global market is more expensive than that for our

local one. After penetrating the local market successfully, the experience and references will help pay attention to the global market. Youth should develop games over local histories and heritages at first.

To get a better and effective idea for creating a game, what we need are merit, mind and attention as mentality or attitude of individual is the source of idea. Another thing is confidence that is one of the main tools to remove constraints. We have to believe that not only garments products, we can also export games. The next essential thing is motivation that means inspiration as well as encouragement.

Fact is that, we are yet to penetrate the $110 billion world games market properly. The next

step is Virtual Reality. In this regard, it can be mentioned that the Massive Star's Hatirjheel game where only virtual tech can help one get the full concept of Hatirjheel and enjoy its beauty. So the country has huge potentials for the game development sector. And to utilize the potentials, we need skilled manpower. In this connection, we need to go for publicity in school level and also fix a certain target. Then make guidelines to reach the target utilizing existing opportunities as we don't want to lose our prospects of the sector.

The ideas on game development may differ. But before converting the idea into games, we usually consider both the market demand and performances. Then we go for necessary analysis to find the way out how to complete the task. The features of the game can be described in different media. Besides, we also need to study other games in the market to make a quality game.

Ideas can be generated on any issue, but the idea should be examined before starting the work. The research activities, in the regard, help get good result. One can reduce the risk of investment by taking users opinion if necessary. Basically, there is nothing about unique idea, but the users' opinion is vital here for exposure.

We should pay attention to 'niche marketing' in generating idea of games. Our neighboring country is upholding their own culture through games and people also like it. We should also uphold our one through games. For example, we can speak of 'Thakumar Jhuli'. It will draw

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huge audiences if we can present the stories through games. So we should focus on niche marketing in our country to generate idea and also to make games by developing concept in phases. Finally marketing of the games will run in accordance with the process.

We should bear in mind that we should not copy others as the success depends on uniqueness of a product. Eagerness and labor are needed here at the same time. Idea is generated from inspiration and motivation. From others works, we can gather experiences as well as different concepts to generate new ideas.

Is a game only for enjoyment? No, it is the tool for generating income also. But, how? Now it is $99.6 billion games market which will reach $110 billion by one year. Why is the market expanding fast? Where is the position of Bangladesh in the vast market and how much portion of the market Bangladesh could occupy? It is clear that there is an immense opportunity, but we cannot penetrate the market. We are running foreign games here. We are making games, but it is possible to generate better games.

Quality games based on our culture, histories including language movement are yet to be made. In this regard, developers should be attentive. On the other hand, public awareness should also be enhanced about expenditure in playing games. Meena game was generated in our country. Apart from that, a number of quality games were also created here which is the matter of inspiration and motivation. To generate income from games, it is possible to fix advertisements on games. More entrepreneurs should come forward in developing games. Only 7 to 10 organizations are working on games development in the country and it is very insignificant in the vast world market. So it is the right time to make

our position stable in the games market.

Many of the people have addiction for games. But we cannot capture the market utilizing the addiction positively. The reason is that we start working on supply before considering the market demand. There is no research on market. But in the beginning of the game development, market research as per users' demand is a must. At first idea should be generated for games development. And to get an idea, we have to think from outside of the circle. It is good to generate ideas on the country's culture and history. All are made based on liberation war but there is no addition on the crisis solution issue. Perhaps our expectation is big here. What we need are quality service for the product and skilled manpower to make it.

The international market of games is huge though there is also demand of games in the local market. So we need to take timely preparation before penetrating the market with our products and services. We have to be organized and firmly committed in this regard. The incumbent government has come with supportive approach in developing the sector and the opportunity should be utilized. And if we can enter the competitive market firmly, we can occupy it also.

Scope to Create a Venture Capital Ecosystem in Bangladesh

By TW News Desk

As per statistics, most of the entrepreneurs in US are above 50 years of age, whereas in Bangladesh it is below

35 years which indicates that Bangladesh is a country of young generation. But, still we see a gender gap or discrimination in Bangladesh in case of entrepreneurship and it is so due to lack of experience. On the other hand, if we want to speak of government's role, we should bear in mind that they may fail even miserably. Like, US government once invested 5 billion US dollars in a particular project that failed very badly due to market change, government didn't know where to invest money, poor execution, they didn't understand how to asses risks and so on. So, considering these issues, firstly, we should have a clear concept about what actually Venture Capital is and also need to go through the preconditions for a vibrant

VC market. Besides, we need to set up the basic regulations and incentives. We also should posses the understandings and responding to the market and then implementation.

Actually, if we look into the financial system in Bangladesh, we will find that 95% + capital of business formation comes from the banking system and less than 5% comes from the equity market which is the listed equity market where the market is of 43 billion US dollars. But, when we talk about venture financing, there was nothing about even five years ago. But now, our government is very much positive to build up an effective ecosystem to help the startups.

We can't ignore the crucial aspect of the total ecosystem that is industry-academia collaboration as VC funding usually happens in technology based industries in Bangladesh. It is really delightful

Opportunity

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that at least one ministry of the current government has taken out such initiative

of promoting industrialization, especially in risky ventures and technology related products and manufacturing. It actually won't be correct to say that this is not the first time that the government of Bangladesh has taken any initiative to promote this kind of new industries or entrepreneurs who have just got emerged. Promotion of some sorts of industries which require a little bit of hand-holding is extremely important. In the last couple of years we have noticed that the big companies got bigger, whereas some small ones survived and some collapsed. In that case, any company should have the ability to run at least for three years even without making any profit and if they can survive these three years, it would be proved much better for them in the long run. But, such kind of thing or mentality is still missing in Bangladesh.

People who have pioneered the particular ideas were shying away from the government entities. Even, there was

an enactment of lay in the year 2015. So, National Board of Revenue (NBR) in Bangladesh got officially inductive into the discourse. The NBR actually is an entity which can help to walk the talk. NBR also has mechanism to facilitate this type of venture capital and to nurture the ecosystem. We need to bear in our mind a remark made by Nelson Mandela 'Everything seems impossible until it is done'.

Any companies or financers will invest in our project or will pick up our ideas only when our ideas will be considered effective in the long run to them. But, possessing only ideas won't be enough. They will also look for proper leadership, passion and some other qualities in us. When they will be convinced that we do possess such qualities they look for, they will be willing to invest on us, even knowing that our project may run on loss for years. And, these are the areas where our government is currently focusing on.

'Smart Campus' with Bangla Password

By TW News Desk

Using latest information technologies 'Smart Campus' has been developed along with the idea of ensuring pleasant atmosphere for studies in educational institutes and security of campus as well. Technology usage in different academic programs will take the idea of Digital Bangladesh number of steps ahead, as a team of students from Barisal Polytechnic Institute thinks.

For the first time, Bangla Password has been used in Bangladesh for lock and unlock purpose, as claimed the students for the institute Dipto Bappary, Shoaib and Sadiq.

Along with the participation of polytechnic students across the country, 'Skills Competition' took place at the Women Polytechnic Institute Premise on December 24, 2017. Among the projects participated in this competition, 'the idea of 'Smart Campus' impresses the visitors too. Above 50 projects took participation over here.

Students will get free internet browsing facility within the WiFi zone in the Smart Campus and similarly, facility to receive education in each classroom through multimedia projector is also available.

CCTV will ensure security for campus and examination programs in a copy free environment. Laser Security System will inform the authority about any unauthorized or illegal access. Human Detector will also be installed in laboratory or other vital rooms. In case of any entrance without permission, alarm will be ringing.

Under the Smart Text Password system, teachers and students can enter the campus, library, laboratory applying password though smart phones.

In order to save power-cost, a Solar Panel System will be available in the campus. Security and street lights will be automatically lighted in the campus through Automatic Street Light On-Off System when it is evening and in the same way the lights will be switched off at dawn. Fans and lights can also be switched on or off through smart phones in case of necessity.

Fan-speed can be reduced or higher through an automated system to control the room's temperature. This system will be much effective to switch on or off lights, fans and different machineries, as the students think. Even, in case of fire burn in the campus, fire alarm will be ringing and sensor system has also been introduced to the keep the campus as smoking-free zone.

One of the students, Mr. Dipto Bapary said- The key purpose of our project is to organize the campus in a modern way. If we use these technologies in each institute, we will be able to move one step ahead in regard of building Digital Bangladesh.

He also said- Applying Bangla Password in smart phones or computers, the overall campus system can be controlled. It is they by who Bangla Password has been used for the first time, as they claimed. *Source: Banglanews24*

Success

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'iVote' for Voting System

By TW News Correspondent

Most of the voters already are familiar with the voting procedure. Firstly, one has to be voter. Then, for casting votes, each voting center has ballot paper and ballot box. Poling agents verify all who come to the center to
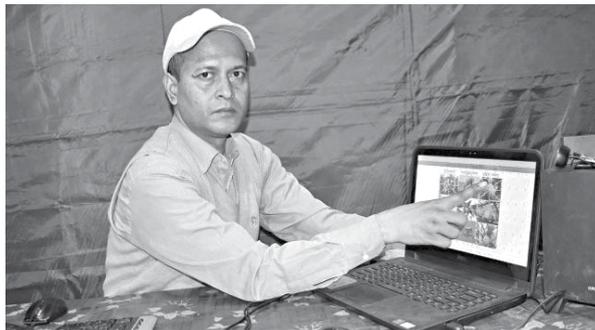
cast votes. After verification, voters cast their votes for their preferred candidate giving a seal on the ballot paper. Then, they put the ballot paper into the ballot box. And finally, counting all the ballot papers election result gets declared.

But, the whole procedure can be done through a digital system as an alternative to ballot. Former teacher of Islamic University of Technology (IUT), Gazipur, Mr. M. Akhter-Uz-Zaman has developed a software to operate any election using Windows operating system supported desktop, laptop and tablet computer. The software developed by him has been named 'iVote'.

Regarding the software, Akhter Uz Zaman said-Idea to develop such software firstly raised in my mind in the year 2003. Just then, he started working on it. He was working then as a System Analyst in Chittagong University of Engineering and Technology (CUET) and there he used the software in an election successfully. Besides, this 'iVote' software already has been used on a trial basis in several elections including the elections held in schools and colleges.

To operate elections conveniently, the software consists of different features. It features with earlier voter list creation and instant voter registration facility and it also can be updated and kept as record. Besides, it also consists of voter verification, ballot election and voting facility. After voting, a single click will be enough to get the election result. Apart from these, it also contains the facility to create instant database of election officers, candidates' agents and security officials for operating an election. It is a 100% electronic solution for voting and we will be able to get to know about flawless results and get voting operations, as remarked the developer of the software.

Considering its security and standard, he claimed that the infrastructure of the software is very strong. Software is quite reliable. It doesn't matter how many candidates are taking part in an election or what the number of the posts is or how many candidates stand against a single post. It ensures security and 100% neutrality as well.

Regarding the cost, Akhter Uz Zaman said-For the time being, I am interested to provide the software service on trial basis for minor elections with lower cost. But, in case of major elections, essential machinery and sufficient cost will be required.

He also developed a video conferencing software named 'Shonglap Dotnet'. Currently, he is working on an idea of forming private commission named 'IEC or Instant Election Commission'. *Source-Prothom Alo*

Inspiration

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All Sectors to be Brought under Online System

Commerce Minister Tofail Ahmed said-Digital Bangladesh is no ore a dream now. It is a reality. Now, all the sectors are going to be brought under paperless or online system. The minister attended a seminar titled 'Investment in North Bengal: Potentiality and Needful (উত্তরবঙ্গে বিনিয়োগ: সম্ভাবনা ও করণীয়) held at a local hotel in Dhaka on January 4, 2018 where he gave this statement. Rangpur Division Journalist Samity (রংপুর বিভাগ সাংবাদিক সমিতি) organized the seminar.

Tofail Ahmed also said- Rangpur won't lag behind in development. Now, the poverty emerged very badly in this zone, around 13% which is likely to be declined to 3% by 2030. Former President Hussain Mohammad Ershad belongs to this region and he also contributed a lot for the development of Rangpur.

The commerce minister said-We need gas for industrialization in the northern part of the country. We have a crisis of it. That's why are thinking of alternative. As a developing one we will progress to a developed country very soon. The way we are progressing indicates that ours will be the 28th country in the world economy by 2030.

e-GP Exhibited at Digital World

Online service 'electronic Government Procurement (e-GP) system' usually facilitates electronic tender and e-contract management. It was put on show at the stall of the Implementation Monitoring and Evaluation Division (IMED) at the Bangabandhu International Conference Center (BICC) in Dhaka where Digital World 2017 got held.

The current government prioritizes the digitization of public procurement on the agenda. Since its introduction in 2011, a total 1,177 procuring agencies out of 1,300 had registered with the e-GP system as of December 7, 2017. A significant growth was emerged during this period whereas both bidders and procuring entities welcomed it.

Under the Ministry of Planning, the e-GP system is going to be implemented in Bangladesh by the Central Procurement Technical Unit of IMED along with support from World Bank.

IBBL Inaugurates Agent Banking Outlet in Chittagong

Islami Bank Bangladesh Limited inaugurated its agent banking outlet at Shantirhat of Patiya Upazila of Chittagong on Wednesday, 03 January 2018. Shamsul Hoque Chowdhury, MP of Chittagong-12 constituency inaugurated the outlet as chief guest. Major General (Rtd.) Engr. Abdul Matin, Chairman, Executive Committee of IBBL was present as guest of honor. Abu Reza Md. Yeahia, Deputy Managing Director of IBBL, Begum Chemon Ara Toyeb, Former woman MP, Md. Saleh Iqbal, Senior Executive Vice President and Head of Chittagong North Zone were present as special guests. Presided over by Md. Nizamul Hoque, Executive Vice President and Head of Chittagong South Zone, the program was addressed among others by Md.

Sabbir, Vice President and Head of Khatunganj Corporate Branch of the Bank and Md. Shahidul Alam, Agent of the Bank and Proprietor of SBS Corporation. Local businesspersons, professionals and social elites were present on the occasion.

'Islami Bank Pavilion' Opened at Dhaka International Trade Fair

Md. Abdul Hamid Miah, Managing Director and CEO of Islami Bank Bangladesh Limited inaugurated the Pavilion of Islami Bank at the Dhaka International Trade Fair on Monday, 01 January, 2018. Md. Mahbub-ul-Alam, Additional Managing Director and Abu Reza Md. Yeahia Deputy Managing Director of the Bank were present on the occasion.

The Islami Bank Pavilion No. 60 at the Trade Fair has been decorated with attractive architectural design. Visitors will be able to

open account, know information, withdraw money from ATM booth and deposit money using IDM.

Bangladesh Declined in Mobile Internet Speed, Progressed in Broadband

Bangladesh remains in the same position in last four months considering the mobile internet speed. But, the download speed has been declined.

In July, Bangladesh has occupied 120th position in the context of mobile internet speed across the world. Despite remaining in the same position, this time the download speed has been declined to 4.97 MB per second. Previously, the speed was 5.17 MB.

But, Bangladesh has forwarded more considering broadband internet speed and now the country occupies 85th position across the world. Bangladesh has progressed from 144th position with the download speed 16.14 MB, whereas as per report published last July, the download speed was only 1.34 MB.

Robi Introduces Gaming Service 'MyPlay'

Mobile phone operator Robi Axiata has launched a service 'MyPlay' for gaming. MyPlay launched jointly with a private organization GAC Media is country's biggest gaming platform. The platform consists of above 21 thousand different games. Robi and Airtel users can play games in MyPlay through app, WAP or website. But, to play games, the subscribers need to register in MyPlay service and for this it will cost taka 2 per day or taka 10 for week basis.

Robi's Chief Corporate and People Officer Mr. Motiul Islam Naushad and other senior officials were present in the MyPlay Inauguration Ceremony.

Success in Digital Services, Failure in Infrastructure

Number of mobile phone and internet users has been raised higher in the current year along with the consequence of last couple of years. Simultaneously, the usage of different application based digital services of smartphones also got increased. But, the biggest failure in the current year is not to introducing 4G telecommunication service despite making its announcement for couple of time. Telecommunication and ICT sector couldn't get outcome due to poor internal connection though second submarine cable got initiated.

Altogether, we have been able to gain success for telecommunication and ICT sector in expanding digital services, but there is nothing remarkable that we achieved in our infrastructure. *Source-Prothom Alo*

Bangladesh Awarded in APICTA

Bangladesh achieved 14 awards in Merit category and a Winner award in the context of ICT sector in APICTA renowned as 'Oscar' of Asia-Pacific Region. On the closing day

(December 10) of APICTA Award ceremony at Bangabandhu International Conference Center (BICC), these awards were distributed.

17 projects have become winners in 17 categories in the 17th APICTA award. Besides, total 47 projects have been rewarded in Merit category.

The association Asia Pacific ICT Alliance (APICTA) formed with 16 countries usually distributes this award every year. Just after two years of getting membership in APICTA, Bangladesh has been able to organize this event. The program kicked off on December 7 was organized by ICT Division in association with BASIS.

Honorable Finance Minister Abul Maal Abdul Muhith was present in the program as chief guest, whereas ICT State Minister Zunaid Ahmed Palak attended as special guest.

BRTC Launches App for Bus Service

Bangladesh Road Transport Corporation (BRTC) and Dhaka Transport Coordination Authority (DTCA) have officially launched an app for bus naming 'Koto Dur'. IT service provider Business Automation Limited and Ideation Technology Solutions supported BRTC to develop the mobile app.

Minister of Road Transport and Bridges Affairs Mr. Obaidul Quader, Secretary Md. Nazrul Islam, Executive Director of DTC Mr. Syed Ahmed, BTRC Chairman Farid Ahmed Bhuiyan inaugurated the app at the new BRTC Bus Depot in Gabtoli, Dhaka on December 17, 2017.

As per a notice from Business Automation Limited, aiming to making the public transport system in Dhaka disciplined, BRTC stepped into digital age. BRTC launched a mobile app

'Koto Dur' to relief the general people from the nuisance regarding public transport. The app is going to be used in Nabinagar-Gabtoli route in Dhaka on trial basis. Previously, the app has been considered successful being launched on trial basis in Abdullahpur-Motijheel and Nabinagar-Motijheel route.

The app is currently available in the Google Play Store.

Disability is not an obstacle: Palak

Many of us consider disability an obstacle. But, it is actually not any obstacle, rather is a challenge. If the disabled ones get special training a little bit and support from family and even from the government, they will able

to change the whole world besides conquering themselves and will be a role model of others.

The government of Sheikh Hasina is very much committed to support the disabled people. Her sensible daughter is working on ensuring standard living and respectable employment for the disabled people, as ICT State Minister Zunaid Ahmed Palak stated in the inauguration ceremony of a job fair especially organized for the disabled ones by Bangladesh Computer Council (BCC).

This time total 17 companies took part in the job fair. Therefore, job providing proportionate rate in the fair would get higher as it was expected. The fair continued till 4:30 pm. In the program, a communication app 'Kotha Bolte Chai' also got inaugurated for the disabled people.

Mustafa Jabbar Takes Oath as Minister

Information Technologist Mustafa Jabbar has taken oath as minister. Honorable President Mohammad Abdul Hamid made the new cabinet members taking oath at Bangabhaban on January 2, 2018 at 7 pm. Total four ministers and state-minister including Mustafa Jabbar took oath. Prime Minister Sheikh Hasina was also present in the program.

Earlier, four official vehicles sent from secretariat took the new cabinet members to Bangabhaban in the afternoon. Therefore, all the new cabinet members reached the destination by 5:30 pm. President Mohammad Abdul Hamid along with Prime Minister Sheikh Hasina came to the Durbar Hall at around 6:30 pm. As per protocol, after making the three ministers swearing the oath, President made the state minister to take the oath.

Due to not being a Member of Parliament (MP), Mustafa Jabbar has been selected as Technocrat in the cabinet. He is likely to get the responsibilities of the Ministry of Post, Telecommunication and IT Affairs.

'Daily Star ICT Award 2017' Held with Pomp and Show

Two respected ICT Personalities, five Startups and IT companies have been recognized with ICT Award 2017 introduced by the English newspaper The Daily Star. The award has

been announced on December 27, 2017 at La Meridien Hotel in Dhaka. Honorable Finance Minister Abul Maal Abdul Muhith distributed the honorary awards among the winners. In the award distribution ceremony, ICT State Minister Zunaid Ahmed and BASIS President Mustafa Jabbar were also present.

This year CEO of Reve Systems Mr. M Rezaul Hasan has got the ICT Business Person of the Year Award, whereas Share Holder Director in IBCS-Primax Software Limited Mr. A. Touhid won the ICT Pioneer of the Year Award.

Popular Online Shop Chaldal.com has been recognized with e-Business of the Year Award. On the other hand, Brain Station 23 Limited achieved ICT Solution Provider of the Year (Global Market) Award and LEADS Corporation achieved ICT Solution Provider of the Year (Local Market) Award.

Service based market place Seba XYZ got ICT Startup of the Year Award and similarly Pathao also got the Startup Award.

Bangladesh Association of Software and Information Services (BASIS) cooperated Daily Star to organize the event like previous year and the event was sponsored by BRAC Bank and Microsoft. Source-Techshohor

'National ICT Day' Observed for the First Time in Country

'National ICT Day' has been observed with grandeur on December 12, 2017 with the initiatives taken by the government. Paying tribute to the portrait of Bangabandhu Sheikh Mujibur Rahman at Dhanmondi 32, Dhaka, ICT Day begins in the morning. ICT State Minister Zunaid Ahmed Palak, Secretary Subir Kishore Chowdhury, BASIS President Mustafa Jabbar and many others were present over there. Later at 8 am a rally got marched on from National Museum, Shahbagh and ended at Shaheed Minar. ICT State Minister, Vice-Chancellor of the University of Dhaka and many more attended the rally.

In the afternoon, on the occasion of ICT Day, a discussion was organized at Bangabandhu International Conference Center (BICC). Here, Speaker of Bangladesh National Parliament Shirin Sharmin Chowdhury said-It was approved in the cabinet meeting last month to observe December 12 as National ICT Day through which another day has been added in the month of our victory.

Election 2018-20 of e-CAB's Executive Board Held

The Election of the Executive Body of the e-Commerce Association of Bangladesh (e-CAB) for the term of 2018-20 was held on the 1st January 2018. Shomi Kaiser has been elected as the new President and Mr. Rejwanul Haque Jami the new Vice-President; while the former General Secretary Mr. Abdul Wahed Tomal has been re-elected as the General Secretary. The other portfolios of the Board include Mr. Mohammad Abdul Haque as Finance Secretary, Ms. Nasima Akter as Joint Secretary and Mr. Rajib Ahmed, Mr. Ashish Chakraborty and Mr. Sahabuddin and Mr. Tanvir Ahmed Mishuk as Directors.

The e-CAB started its voyage in 2015 with a broader vision and objective to identify the

challenges and provide recommendations on solutions to address those challenges and thus develop the e-Commerce sector of Bangladesh through setting up bridges connecting the global e-Commerce system. Already a total number of 700 companies have been enlisted as Members with the e-CAB, the increase of which is on the upfront. Since the beginning, the e-CAB has been working hard with the GOB and relevant international organizations to coordinate and advance the universal interests of Member companies, create a credible e-Commerce friendly environment, increase investments to the e-Commerce sector. During the passage of time, the e-CAB has already successfully been able to undertake effective initiatives with the government and different e-Commerce business enterprises, entrepreneurs and relevant others with a view to advancing the development process of country's e-Commerce sector. The Association in coordination of the GOB has already accomplished the final draft of National e-Commerce Policy. Apart from that it has been working with Bangladesh Post Office and the A2i Programme of the Office of Hon'ble Prime Minister to spread the e-Commerce delivery services up to root level throughout the country.

The Chairman of the Election Board Mustafa Jabbar, Member Kamrul Islam and Mohammad Iqbal Jamal executed the entire election process and broke out the results in compliance with the Schedule of the Election.

Happenings

DIU Declares to Create 500 New Entrepreneurs

Aiming for country's socio-economic development, solution for unemployment opportunity and creating new employment opportunities, there is no alternative to creating numbers of entrepreneurs. Considering this, the 'Entrepreneurship Department' of Daffodil International University (DIU) has initiated a project titled 'Are You the Next Startup' to creating '500 New Entrepreneurs' in next five years. Under this project, different necessary supports will be provided to young boys and girls selected across the country. Regarding the official announcement of the fourth round of 'Are You the Next Startup', a press conference has been held at 71 Auditorium of DIU today, December 21, 2017.

Vice-Chancellor of Daffodil International University Professor Dr. S.M Mahabub-ul-Huq Majumdar, Dean of Commerce and Economy Faculty Professor Rafiqul Islam, Director of Student Affairs Mr. Syed Mijanur Rahman Raju and Head of Entrepreneurship Department Mr. Shibli Shahrier were present in the press conference.

BASIS Tributes Mustafa Jabbar With Reception

'Internet speed is low, but cost is high. So, my first challenge would be to raise internet speed higher and reduce its cost, so that everyone can use our fifth basic need (Internet) easily', as said recently declared Post, Telecommunication and ICT Minister Mustafa Jabbar in BASIS (Bangladesh Association of Software and Information Services) office.

BASIS organized a reception for Mustafa Jabbar on January 3, 2018. In the program he also said-I will get maximum one year. We will try to make some minimum developments of ICT sector.

In the reception program, Senior Vice President of BASIS Mr. Rasel T Ahmed said-The whole BASIS family is so much proud of his such honor and achievement.

Other senior members of BASIS were also present in the reception.

Dr. Hasan Babu-Tomijuddin Panel Achieved the Majority in BCS Election

In the Executive Committee Election of Bangladesh Computer Society (BCS), the panel of Dr. Hasan Babu-Tomijuddin achieved the majority winning over 20 posts led by Professor Dr. Hafiz Md. Hasan Babu. The Executive Council Election of the ICT professionals' registered association in Bangladesh got held at Azimpur Girls School and College on Friday, December 22, 2017 for the term 2018-2020.

In the election, among the 9 posts of the Management Committee (MC), Dr. Hasan Babu-Tomijuddin panel won over 6 posts. Pro-VC of National University and former Chairman of Computer Science & Engineering Department, Dhaka University Professor Dr. Hafiz Mohammad Hasan Babu as President, Senior System Analyst of Planning Ministry Md.

Tomijuddin as Secretary General and Chairman of Robotics and Mechatronics Department in Dhaka University Dr. Lafifa Jamal and other 6 vital posts were conquered by Dr. Hasan-Babu –Tomijuddin panel 'Digital Squad' that achieved the support of computer professionals as most popular panel. Even among 25 councilor representatives, the same panel also achieved the majority with 14 councilor representatives.

TECNOMobile Inaugurates Brand Shops at Mirpur-10

Recently, Transsion Bangladesh Limited's mobile phone brand TECNO and itel Mobile has inaugurated another two exclusive brand shop at Shah Ali Plaza, Mirpur -10, Level – 02, Shop

No- 40, 43 in the city of Dhaka.

Mr. Rezwanul Hoque, CEO of Transsion Bangladesh Ltd. officially announced this inauguration. Among others, COO of Transsion Bangladesh Ltd. Mr. Shyamal Saha, Head of Sales Management Mr. Rezaul Hasan, Divisional Sales Head Md. Shafiul Alamand many other prominent media journalists were present in the occasion.

During the inauguration, Mr. Rezwanul Hoque said, alongside motivation to increase their expansion in the mobile phone market of Bangladesh, we're giving equal importance

to best quality products, user experience and after sales service in the supply of products according to customer's demand. We believe that, with the result of continuous development of information technology in Bangladesh, a new era of customer demand for smartphone is being created by in the market of Bangladesh every day and TECNO Mobile will be able to fulfill it.

While asking about the changes, TECNOMobile can bring in quality standards and customer experience in the contemporary competitive market. He added that, "we are always dedicated to bring innovation in each of our handsets according to customer demand in the local market. To ensure the quality standard, we've declared 100 days of replacement guarantee for every handset along with 13 months after sales servicing warrantee in TECNO mobile which will be provided by our exclusive servicing brand Carlcare.

Mohammad Khan-Pantha Rahman from BIJF Recognized with National ICT Award

Journalist Mohammad Khan from Kaler Kantho and Senior Reporter Faridur Rahman Pantha from Chanel-i have been rewarded with Special Honorary Award for their contribution in ICT journalism. Both of them are the senior members of Bangladesh ICT Journalist Forum. Government honored 9 personalities and 6 renowned companies in 13 categories as a part of 'National ICT Day' observed for the first time in Bangladesh. Speaker of National Parliament Shirin Sharmin Chowdhury handed over the 'National ICT Award 2017' organized by ICT Division. The event was held at Bangabandhu International Conference Center (BICC) on December 12, 2017.

Chief Editor in BDnews24.com Mr. Toufiq Emrose Khalidi and Deputy-Chief Reporter of Bangladesh News Agency Mr. Mahmudul Hasan have been recognized with the Best ICT Personality Award. Professor Mohammad Zafar Iqbal has been recognized with Lifetime Achievement Award for his remarkable contribution in ICT. On the other hand, for amazing contribution in public services utilizing ICT, Late Mayor Anisul Haque from Dhaka North City Corporation has been acknowledged with Special Honorary Award.

A discussion and ICT Award Distribution Ceremony organized on the ocassion of National ICT Day were presided over by ICT State Minister Zunaid Ahmed Palak. President of Standing Committee on Ministry of Post and Telecommunication and Parliamentary Affairs Mr. Emran Ahmed was the special guest. ICT Secretary Subir Kishore Chowdhury and many more were also present in the program.

Laptop Fair 2017 Put to an End

Laptop Fair 2017 has been put to an end on last Saturday, December 16. The three day long fair began on last Thursday at Bangabandhu International Conference Center (BICC). As it was holiday, the closing day of the fair was overcrowded.

On the last day of the fair, visitors purchased their necessary products as per their budget besides roaming different stalls. Different companies participated in the fair also offered different attractive gifts and discounts on their products.

This year the laptop fair was sponsored by the technology based portal Techshohor.com., whereas Acer, ASUS, Dell, HP, Lenovo, ROG and EduMaker were the co-organizers.

Laptop 2017 Fair

Bangabandhu International Conference Center (BICC)

14 - 16 December, 2017

REVE Antivirus Achieves APICTA Merit Award

REVE Antivirus from Bangladesh has been recognized with the Asia Pacific ICT Alliance (APICTA) Merit Award on December 10, 2017. Bangladeshi cyber security brand REVE Antivirus won this award on security category competing with 16 other countries. CEO of REVE Systems Ajmat Iqbal, Head of Global Sales Raihan Hossain, CEO of REVE Antivirus Sanjit Chatterjee and Mmarketing Manager Ibnul Karim Rupen were present at the award distribution ceremony.

This is the first time a project from Bangladesh has been selected for this award which is also recognized as "Oscar of ICT". This achievement will open up new prospect for Cyber Security sector of Bangladesh, as the experts expert.

As the biggest association of ICT division on Asia pacific region, Asia Pacific ICT Alliance (APICTA) usually organizes this award ceremony every year to develop the ICT landscape of this region and ensures successful entrepreneurship, software and ICT service. Bangladesh association of software and information services (BASIS) became a member of APICTA on 2015 and this is the very first time APICTA took place in Bangladesh.

We are in the era, where English is mandatory for all of us, as it is an international language. Somehow, we can manage while we continue our conversation in English, though we make several grammatical mistakes while talking. But in case of writing, something in English, our main lacking comes out. Then we can realize that we are still far behind because of lacking of English grammatical knowledge. In Bangladesh, it is a very common issue to have limited knowledge in English grammar. Considering this, TechWorld Bangladesh has started a session of "English Learning" to share some authentic grammatical knowledge in a comprehensive way. Today, our session will be on **Count Nouns** vs. **Non-Count Nouns**. Actually, it seems to be very easy. But, when we do the exercises, we get some confusions and this happens only due to have lacking of practices. Considering this, we are going have a discussion on Count Nouns vs. Non-Count Nouns. Besides this, we are also going to have a tricky section, 'Difference between **'Well' and 'Good'**, which are as follows:

Count Nouns vs. Non-Count Nouns

Count nouns

Can be counted as one or more.

- pen, computer, bottle, spoon, desk, cup, television, chair, shoe, finger, flower, camera, stick, balloon, book, table, comb, etc.

Take an s to form the plural.

- pens, computers, bottles, spoons, desks, cups, televisions, chairs, shoes, fingers, flowers, cameras, sticks, balloons, books, tables, combs, etc.

Work with expressions such as (a few, few, many, some, every, each, these, and the number of).

- a few pens, a few computers, many bottles, some spoons, every desk, each cup, these televisions, the number of chairs, a few shoes, a few fingers, many flowers, some cameras, every stick, each balloon, these books, the number of tables, many combs, etc.

Work with appropriate articles (a, an, or the).

- a pen, the computer, a bottle, the spoon, a desk, the cup, a television, the chair, a shoe, the finger, a flower, the camera, a stick, the balloon, a book, the table, a comb, etc.

Do NOT work with much (for example, you would never say much pens or much computers).

Non-count nouns

Cannot be counted. They usually express a group or a type.

- water, wood, ice, air, oxygen, English, Spanish, traffic, furniture, milk, wine, sugar, rice, meat, flour, soccer, sunshine, etc.

Generally cannot be pluralized.

Work both with and without an article (a, an, or the), depending on the context of the sentence.

- Sugar is sweet.
- The sunshine is beautiful.
- I drink milk.
- He eats rice.
- We watch soccer together.
- The wood is burning.

Work with expressions such as (some, any, enough, this, that, and much).

- We ate some rice and milk.
- I hope to see some sunshine today.
- This meat is good.
- She does not speak much Spanish.
- Do you see any traffic on the road?
- That wine is very old.

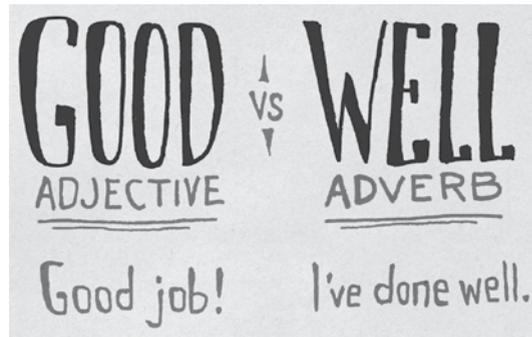Do NOT work with expressions such as (these, those, every, each, either, or neither).

[Quiz]

Choose all of the non-count nouns in the following list:

wine, student, pen, water, wind, milk, computer, furniture, cup, rice, box, watch, potato, wood

Answers

wine, water, wind, milk, furniture, rice, wood

GOOD vs WELL

ADJECTIVE ADVERB

Good job! I've done well.

Tricky Section

Difference between 'Well' and 'Good'

Well	Good
Well is often used as an adverb. Adverbs can modify verbs, adjectives, and other adverbs.	**Good** is most widely used as an adjective, meaning that it can modify nouns.
You're looking **well**; we missed you while you were in the hospital.	Everything tastes **good**.
You do not look **well**.	You smell **good** today.
If you feel **well** and happy, your face will reflect this.	She looks **good** for a 75-year-old grandmother.
I can speak English **well**.	He doesn't feel **good** about having cheated.

Professional life is totally different from our domestic life. Our professional life consists of various minor, but essential facts that can't be ignored. Every career oriented professional should emphasize on each part which is connected with his or her professional life. Some facts are sometimes considered less important. But, later, this less important facts cause a huge loss to the professionals. From this perspective, TechWorld Bangladesh has taken some initiatives regarding to provide career oriented tips for professionals and for this purpose, today, our session is going to be on "**Strategic Management**", which can be considered much effective for the development of professional human resources in different fields.

Strategic Management

Strategic Management is all about identification and description of the strategies that managers can carry so as to achieve better performance and a competitive advantage for their organization. An organization is said to have competitive advantage if its profitability is higher than the average profitability for all companies in its industry.

Strategic management can also be defined as a bundle of decisions and acts which a manager undertakes and which decides the result of the firm's performance. The manager must have a thorough knowledge and analysis of the general and competitive

organizational environment so as to take right decisions. They should conduct a

SWOT Analysis (Strengths, Weaknesses, Opportunities, and Threats), i.e., they should make best possible utilization of strengths,

minimize the organizational weaknesses, make use of arising opportunities from the business environment and shouldn't ignore the threats.

Strategic management is nothing but planning for both predictable as well as unfeasible contingencies. It is applicable to both small as well as large organizations as even the smallest organization face competition and, by formulating and implementing appropriate strategies, they can attain sustainable competitive advantage.

It is a way in which strategists set the objectives and proceed about attaining them. It deals with making and implementing decisions about future direction of an organization. It helps us to identify the direction in which an organization is moving.

Strategic management is a continuous process that evaluates and controls the business and the industries in which an organization is involved; evaluates its competitors and sets goals and strategies to meet all existing and potential competitors; and then reevaluates strategies on a regular basis to determine how it has been implemented and whether it was successful or does it needs replacement.

Strategic Management gives a broader perspective to the employees of an organization and they can better understand how their job fits into the entire organizational plan and how it is co-related to other organizational members. It is nothing but the art of managing employees in a manner which maximizes the ability of achieving business objectives. The employees become more trustworthy, more committed and more satisfied as they can co-relate themselves very well with each organizational task. They can understand the reaction of environmental changes on the organization and the probable response of the organization with the help of strategic management. Thus the employees can judge the impact of such changes on their own job and can effectively face the changes. The managers and employees must do appropriate things in appropriate manner. They need to be both effective as well as efficient.

One of the major role of strategic management is to incorporate various functional areas of the organization completely, as well as, to ensure these functional areas harmonize and get together well. Another role of strategic management is to keep a continuous eye on the goals and objectives of the organization.
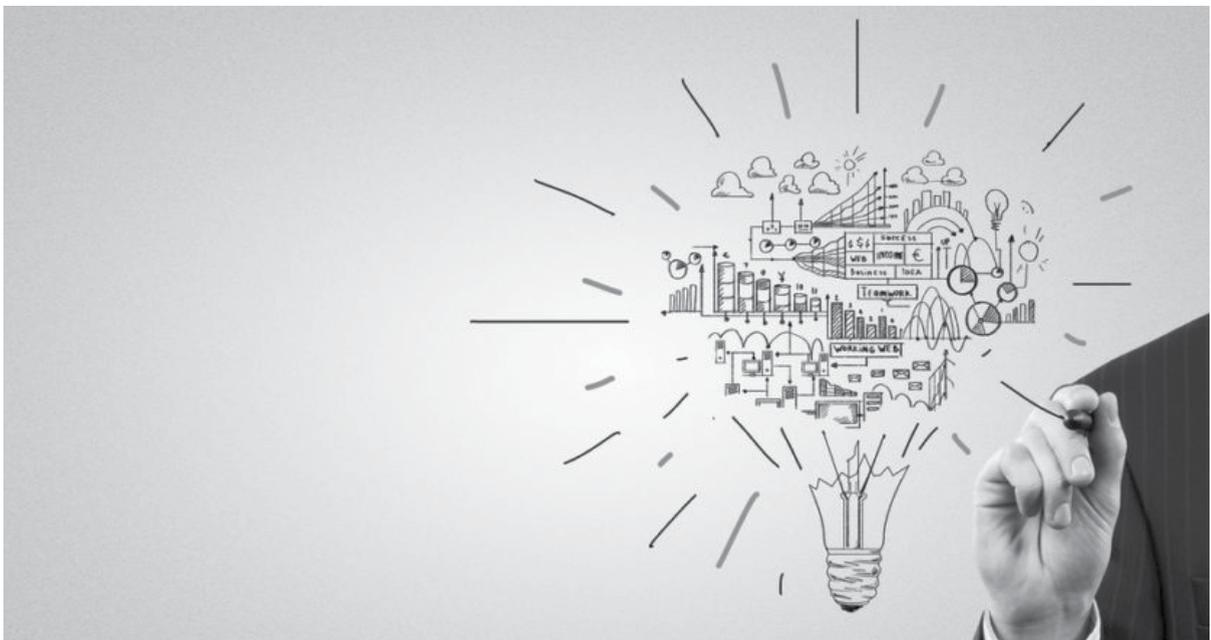
Huawei P10 to Get Oreo Updates

Huawei P10 and P10 Plus , these two handsets are likely to get Oreo updates. In case of desiring to get BETA updates, downloading an app, users can run the trial version of Oreo for experimental purpose.

Recently, Huawei progressed enough regarding updating all their handsets. The company has taken such initiative for the sake of those who were tensed about updating their Huawei handsets after purchasing.

Previously, Huawei Mate 9 and Mate 10 got the Android Oreo updates. So, hopefully other handsets of Huawei will also get Oreo and other latest Android updates in time. But, what features have been included in new update are still unknown.

Symphony Introduces 4G Smartphone P9 Plus

Symphony has launched new selfi phone 'Symphony P9 Plus' for the selfi lovers. The handset consist of 13 megapixels front camera and selfi spot light through which amazing selfis can be clicked and it also features with 13 megapixels rear camera and Dual Tone Black Flash. As a result, users can clock startling images even during night. The remarkable features of the camera are HDR Mode, Panorama Mode, Zero Shutter Delay, Auto Scene Detection and Beauty Mode. Some other features of Beauty Mode are Face Whitening, Eye Enlarging, Face Slimming, Face Slimming, Eye Dar Circle Remove, Nose Highlighting, and Irish Contrast. Photographs can be clicked even with the Fingerprint Censor of back side.

Currently, the handset is available in black and golden color in all the authorized showrooms of Symphony across the country. It costs BDT 13,490 and offers an attractive jacket for the customers for free.

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Computer City Introduces New Security Camera

Computer City Technologies has introduced new Arlo Q Plus security camera of NETGEAR brand in Bangladesh market. The camera featured with X264 compression technology consists of 1080 resolution video and has the 2-way audio capacity. It also features with 128 GB SD card memory. The camera contains night-vision technology, motion and sound-signal system. It can identify any motion within the range of 50 feet and can also inform the user through e-mail and push notification. It also contains the feature of free cloud storing for seven days. Currently it costs BDT 18,500.

Global Brand Introduces MFC 9330 CDW Printer

Now you can enjoy the liberty of USB and wireless printing. Brother renowned as the manufacturer of standard and reliable products, has launched MFC 9330 CDW multifunctional printer.

The printer can work both in wireless and wire-connected condition. The user can work directly from Google cloud and mobile phone with the printer. MFC 9330 CDW printer is actually a simple solution to your all the official printing, scanning, copying and faxing purpose.

Besides, the printer featured with double sided printing function, capability of faxing and standard performance is also enriched with 9.3" color touch screen control. The product costs @ taka 37000. For more details, you can contact at any authorized branch of Global Brand Private Limited or call @ 01977476506.

Optiemus Launches BlackBerry 'KEYone Limited Edition Black' in BD

OptiemusInfracom Limited (BSE: 530135), a leading Indian telecom enterprise, today announced its entry in the Bangladesh market with the launch of BlackBerry KEYoneLIMITED EDITION BLACK on January 4, 2017. Optiemus signed a licensing deal with BlackBerry in February 2017 to design, manufacture and distribute BlackBerry branded smartphones in India, Sri Lanka, Bangladesh and Nepal. After successfully launching the BlackBerry KEYone

LIMITED EDITION BLACK in India and Sri Lanka, Optiemus has partnered with CPL,

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concern of Union Group, a renowned business conglomerate in Bangladesh, to handle the distribution and retail operations of BlackBerry smartphones. Optiemus'entry into Bangladesh supports the company's growth strategy aimed at expanding its customer base in new geographies.

BlackBerry KEYone LIMITED EDITION BLACK is the first BlackBerry branded device locally manufactured by OptiemusInfracom under the licensing agreement.

BlackBerry KEYoneLIMITED EDITION BLACK has been distinctly designed for the customers in Bangladesh to offer Dual SIM capability. It is equipped with a metallic black frame and soft touch textured back. Featuring a 4.5-inch scratch resistant display with Corning ® Gorilla® Glass 4 offering greater scratch resistance, it combines a touch display with a physical keyboard to give users more useable space for typing. The device comes with a 4GB RAM and 64GB ROM (expandable up to 2TB).

Huawei Mate 10 Pro Now in Bangladesh

Huawei Consumer Business Group has launched its latest flagship device Huawei Mate 10 Pro the world's first smartphone with artificial intelligence –– at a grand launch event in Dhaka.

The HUAWEI Mate 10 Pro is a breakthrough AI device that combines innovative hardware, the Kirin 970 chipset and EMUI 8.0. This latest flagship device, which was launched globally in October, 2017 in Germany, is the most unique and powerful smartphone device at present.

Mr. Aaron, Country Director, Device Business Department of Huawei Technologies (Bangladesh) Ltd. attended the event as the chief guest at Pan Pacific Sonargaon Hotel in Dhaka.

Ziauddin Chowdhury, Deputy Country Director, Device Business Department of Huawei Technologies (Bangladesh) Ltd. said, "We are living in a tech-savvy world. We are searching for new technologies in every minute to make our life simpler. Considering these angles, we have brought the AI technology for smartphone lovers. AI is no more a virtual concept. Rather,

it's a partially usable technology of our daily life. AI is a technology which gives unique experience, important services to the user and increase the capability of a certain product. Huawei Mate 10 Pro is powered by AI with neural network processing unit which is the next generation's intelligent smartphone. I believe our Bangladeshi customers will love the phones as much as those in other major markets."

Huawei Mate 10 Pro has 128 GB ROM (internal memory) and 6 GB RAM which will give a tremendous performance to the user. Interested customers can pre-book the Huawei Mate 10 Pro from today until January 4, 2018 by sending a SMS to 6969 by typing HW<space>mate10pro or by going to website: mate10pro.pickaboo.com/. Customers who pre-book the Huawei Mate 10 Pro will also get a complimentary Huawei Luxury Gift Box. Customers can pre-book for Huawei Mate 10 Pro by paying only BDT 8,090. Huawei Mate 10 Pro will be available in all Huawei Brand shops around the country from 4th January, 2018 for BDT 80,900 only.

Crypto Provides High-Tech Services

Crypto is providing professional software solutions and achieving service in country's banking, financial institutions, telecom, medical centers and industries. For this purpose, Crypto has recently signed Memorandum of Understanding (MoU) with the UAE based company Intelecon Systems and Techno CIT at a local hotel in Dhaka.

Crypto is going to set up a software lab in Dhaka, as the company authority informed. In the lab, they will work on Fintech Solutions, BigData Analysis and Artificial Intelligence (AI).

Gigabyte Auros 399 Gaming 7 Motherboard Hits Market

Smart Technologies (BD) Limited has introduced Gigabyte Aorus 399 Gaming Motherboard. The motherboard supporting AMD Ryzen Threadripper processor, is featured with Quad Channel

ECC-Non-ECC unbuffered DDR4 slot, fast front and rare 3.1 slot, 4 way graphics card support, server class digital power design and gold plated solid power connector, ALC 1220 120 DB SNR HD audio, killer E2500 GBE Lan Gaming Network, smart fan, triple ultra fast M.2 with PCIE 4 interface of general 3, USB DAC UP 2, precise digital USB fuse design and other updated features. It costs BDT 42,000 along with 3 years after sales service. For details, please contact @ 01730701983.

Smart Offer in Laptop Fair

On the occasion of Laptop Fair 2017 held at Bangabandhu International Conference Center (BICC), Smart Technologies (BD) Limited announced different attractive gifts and discount offers on different branded laptops and computer accessories. HP 348 Core-i7 laptop offered a HP 2132 All-in-One printer and microlab 108 2:1 speaker. Other HP laptops as per models also provided wireless mouse, pen-drive and scratch card offer.

In the mega pavilion of Smart Technologies in laptop fair, Lenovo Laptop offered discounts up to maximum taka 20000 and besides, different attractive gifts in scratch cards were also available. In the same pavilion, on purchasing Dell laptops, consumers were offered printer, mobile phone, speaker, winter-jacket and attractive t-shirt as per models. The consumers were also offered an attractive jacket on purchasing Acer Laptop distributed by Smart Technologies in the fair. Avira Antivirus also offered 20% discount along with an attractive wallet.

Apart from these, Smart Technologies (BD) Limited also arranged for selling any Apple branded laptop or computer for 12 months' installments on zero percent interest.

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Free Projection Screen with Projector

On the eve of New Year, Smart Technologies (BD) has announced an offer to provide a free projection screen on purchasing BenQ, Toshiba and Boxlight branded projectors. Consumers will get a free projection screen with the projectors of particular models under this offer. The models upon which the offer is applicable are BenQ MS 527 3300 Lumens, BenQ MX 507 3200 Lumens, BenQ MX 602 3500 Lumens, BenQ MX 704 4000 Lumens, Boxlight ANX 425 4200 Lumens, Boxlight KTW 500 5100 Lumens and Toshiba SPS 15A 3000. The offer will be valid till the stock limits. For details: 01730701915.

UCC Launches D-Link Service Center for Client Services

Aiming to providing after sales services to the Bangladeshi customers the world famous D-Link has launched D-Link Service Center (DSC) in Dhaka, Chittagong and Khulna. Customers of D-Link products can now avail after sales services through courier services or physically from anywhere of the country in D-Link Service center (DSC) launched with the initiative taken by the Bangladeshi marketing company UCC. The customers can also enjoy one way shipping charge in case of availing services through courier. D-Link Service Centers are well organized with the commitment of providing standard services. Currently, the consumers can get 3 years warranty service on D-Link Wireless Router and 1 year warranty service on D-Link Switch. Right now, there are 3 DSCs launched in Dhaka and one in Chittagong and Khulna. For more details, please call @01833331630 or visit www.ucc-bd.com

UCC Introduces Sapphire NITRO Radeon RX 500 Series Graphics Card

The renowned IT products marketing company UCC has launched the world-famous Sapphire Radeon RX 500 series graphics card in Bangladesh. This graphics card consisting of 4th generation technology is applicable for vital games and is highly featured. It is available with maximum 8 GB capacity. It consists of 2304 stream processor and memory clock speed is 2000 MHz. It will be available with maximum 5 display outputs. NITRO Limited Edition, NITRO+ and Pulse Edition are the three versions of RX 500 series and RX570 and RX580 of these versions will be available with the capacity of 4 GB to 8 GB. The products are now available in all UCC and its authorized dealer shops. For details, please visit: www.ucc-bd.com or call at: 01833331632.

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'iVOOMi' Branded Speakers Available in Bangladesh

Recently, UCC started marketing speakers of iVOOMi brand in Bangladesh. iVoomi speakers look more attractive and are highly featured than other speakers available in the traditional market. Currently, UCC has introduced five models of iVOOMi speakers to the Bangladeshi market. The models are iVO-245, iVO-258, iVO-1630-U, iVO-1610U and iVO-1600S. iVO-245, iVO-258 and IVO-1630-U, these three models are featured with LED display, remote control and USB/SD slot and FM Function. The iVO-1610U and iVO-1600S speakers are USB card reader and remote control supported. These speakers are of Frequency Response: 200Hz~20KHz (Satelite), 20H2~200Hz (Main Unit). The speakers will be available in 2.1 channel. The products are now available in all UCC and its authorized dealer shops. For details, please visit: www.ucc-bd.com or call at: 01833331601-17.

UCC Introduces ViewSonic Gaming XG Series Monitor

ViewSonic's sole distributor UCC is marketing ViewSonic Gaming XG Series monitor in Bangladesh. Featuring with TN Panel the monitor is remarkably featured with 144Hz facility which is very much important for the gamers. 1ms Response Time is available with 24" and 27" monitors of XG Series that play a significant role for the gamers. The main feature of XG32D2-C of XG Series is new technology carved monitor along with all the gaming features. Even, a built-in speaker is also attached to each of the monitors. Currently, the models XG2401, XG2701 and XG3202-C are available in all UCC and its authorized dealer shops. For details, please visit www.ucc-bd.com or call 880-1833331601-17.

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Where and How to Get

This issue: 'MOUSE'

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Multiplan Center, 69-71, New Elephant Road, Dhaka-1205. Contact: 01833331602.

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