



Rise of the Machines: Could the Internet of Things signal the *termination* of all human input?



“You are terminated!”. Famous words from the 1984 science-fiction action movie, *The Terminator* starring renowned actor Arnold Schwarzenegger. In his role as a cyborg assassin, the actor was sent back in time to perform a deadly mission. Arnold's blockbuster film *Terminator 3: Rise of the Machines*, which followed in 2003, unlike its predecessor was seen as both a hit and a miss, and is the inspiration behind our lead story.”

Our story, however is not about cyborgs or assassins, at least not directly. Truth be told the Internet of Things (IoT) may well yield both beneficial and detrimental results. This article will attempt to prepare its readers for both.

So what is the Internet of Things?

In San Francisco, USA, a young engineer hopes to “optimise” his life through sensors that track his heart rate, respiration and sleep cycle. In Copenhagen, Denmark, a bus running two minutes behind schedule transmits both its location and passenger count to the municipal traffic signal network, which extends the time of the green light at each of the next three intersections long enough for its driver to make up some time. In Davao City in the Philippines, an unsecured webcam overlooks the storeroom of a fast food stand, allowing anyone to peer in on all the storeroom's comings and goings. What links these wildly different circumstances is a vision of connected

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devices now being sold to us as the “Internet of Things”.

What if office equipment could recognize for itself when it's getting low on supplies? What if having done that, it could go out and order paper and ink cartridges for itself? Beyond mere computers, the IoT is a concept that involves all types of traditionally non-computing devices - objects, animals and people, office equipment, washing machines, coffee makers, headphones, lamps and even equipment components like the jet engine on an airplane. All of these objects are already network-enabled anyway.

However, in the world of IoT, the scenario will be a little different. These things will be able to work together with other things and living creatures. They will be able to transfer data among themselves without any direction by humans, even via computers. In other words, with the ability of a computer system to transfer data over a network there will no longer be the need for human to human or human to computer interactions.



History

The term 'Internet of Things' was coined in 1999 by technology researcher Kevin Ashton and was popularized with a 2009 article on the subject that he wrote for "RFID Journal." Ashton's major selling point for the concept was the reduction of waste if machines can automatically track and count everything. The concept originated with the idea of adding Radio-frequency identification (RFID) tags to a wide range of objects. RFID would then use electromagnetic fields to automatically identify and track these tags which contain electronically-stored information. The idea has now evolved to giving objects tiny Internet-connected chips with unique IP addresses or identifiers.

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OURIC Virtual Space

OURIC is moving a step closer to creating an **online environment** which will facilitate online interactions with users and stakeholders. Our first step is to implement a library management system which will make the collection available online. More to come!

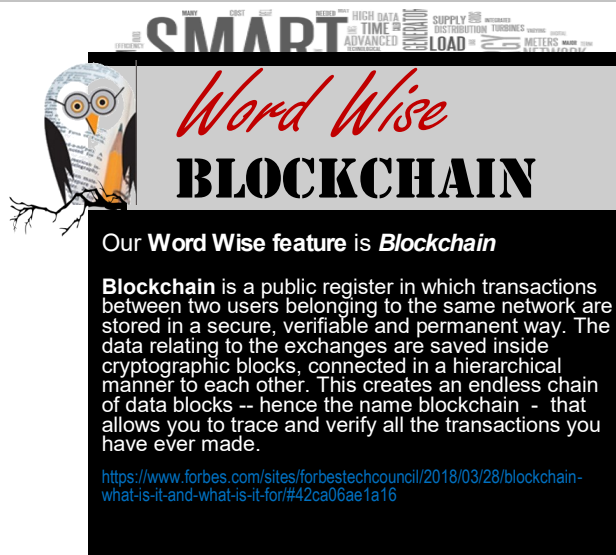
OURIC Open House

OURIC Open House will expose users and potential users to the OURIC Collection and provide an opportunity for meaningful interactions with your OURIC Coordinator.

ASK a Librarian

Plans are now underway to implement the **Ask a Librarian -Virtual Reference Service** at OURIC. This will allow the librarian and patrons to communicate with each other in real time through the Internet by e-mail, chat or instant messaging.

Have a question?



Word Wise BLOCKCHAIN

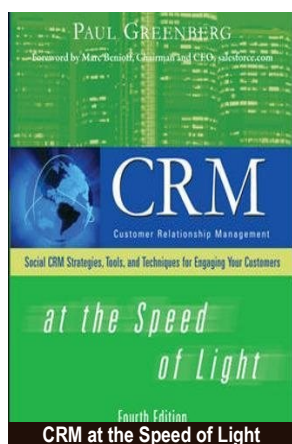
Our Word Wise feature is **Blockchain**

Blockchain is a public register in which transactions between two users belonging to the same network are stored in a secure, verifiable and permanent way. The data relating to the exchanges are saved inside cryptographic blocks, connected in a hierarchical manner to each other. This creates an endless chain of data blocks -- hence the name blockchain - that allows you to trace and verify all the transactions you have ever made.

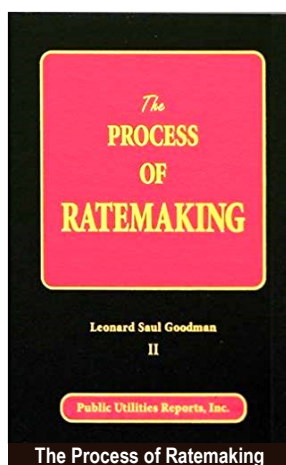
<https://www.forbes.com/sites/forbestechcouncil/2018/03/28/blockchain-what-is-it-and-what-is-it-for/#42ca06ae1a16>



WHAT TO "CHECK OUT" AT OURIC



Written by Customer Relationship Management (CRM) guru Paul Greenberg, *CRM at the Speed of Light, 4th ed*, reveals best practices for a successful Social CRM implementation. Greenberg explains how this new paradigm involves the customer in a synergetic discussion to provide mutually beneficial value in a trusted and transparent business environment. Throughout this definitive volume, you'll find examples of the new strategies for customer engagement and collaboration being used by cutting-edge companies, along with expert guidance on how your organization can and should adopt these innovations.



The Process of Ratemaking by Leonard Saul Goodman remains one of the most complete texts available on setting rates for regulated entities, taking the reader through rate proceeding protocols step-by-step and providing him or her with historical context on the evolution and theory of utility regulation. This unique 2-volume reference presents a cross-industry perspective of the methods and principles of rate-setting, drawing upon the decisions rendered in the transportation, insurance and gas utility sectors. Understand how the principles governing the

setting rates guide trial courts and practitioners. Get more than 5,300 citations of court cases, administrative proceedings, rules, regulations, books and law review articles. Gain access to more than 1,600 pages of text, 6,800 footnotes, 300 charts, tables and formulas. Topics covered include: The rate proceeding, discretion and judgment, expected and project revenue, cost of service, depreciation, operation ratio and profit margin methods.

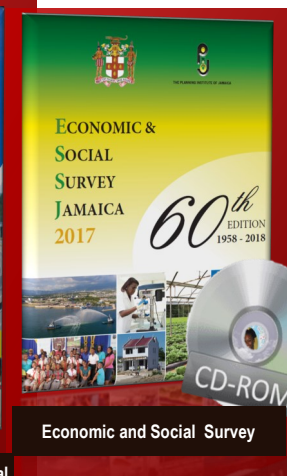
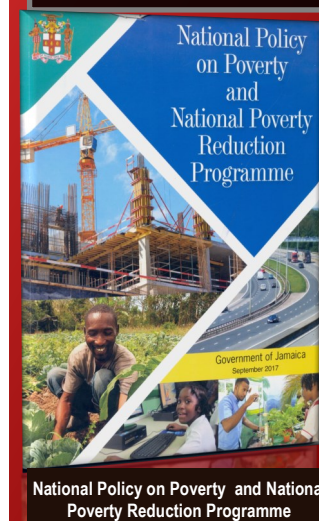
2015. One of the most important benefits that this report brings is an international perspective on the most popular Call Center KPIs. The publication provides a complete hands-on experience in working with KPIs, as it contains not only 2 pages of detailed documentation for each metric, but also interesting articles on best practices in terms of KPI selection and documentation.



The "Top 25 Call Center KPIs - 2016 Extended Edition" report compiles the most popular 25 KPIs used by call centers worldwide throughout 2009 and



Also available - PIOJ publications



RISE OF THE MACHINES ...

The Internet of Things (IoT) cont.

The Time is Ripe

According to popular international publication, Forbes Magazine, the time is ripe for the dawn of an IoT. Broadband Internet is now widely available and connectivity costs keep falling. Smartphone use is skyrocketing. Application-enabled devices with built-in sensors and Wi-Fi connectivity are prevalent.

The "Rise" of Connected Things - How many are There Anyway?

Many studies have estimated the rise of connected devices by the year 2020 and the results are stunning. It has been predicted that there will be between approximately 30.73 billion connected devices by that time! What is clear is that when the IoT comes to pass many things will become possible.

How and Where can IoT be Utilised?

Smart Homes

Smart Home products are expected to simplify our lives, saving us time, energy and money. Switching on air conditioning before we get home; switching off lights, and even unlocking doors to friends for temporary access when we are not home. [Watch video.](#)

Wearables

Wearable devices are installed with sensors and software which collect data and information about their users. This data is later pre-processed to extract essential insights about users. Among other things these devices cover fitness, health and entertainment. [Watch video.](#)

Connected Cars

A connected car is able to optimize its own operation and maintenance as well as the comfort of its passengers using on-board sensors and internet connectivity. [Watch video.](#)

Industrial Internet

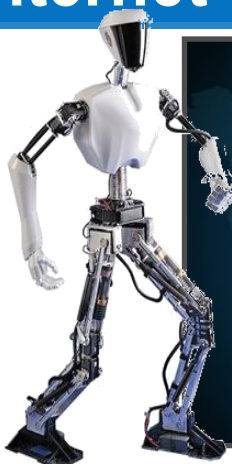
With the IoT industrial engineering can use sensors, software and big data analytics to develop state-of-the-art machines. [Watch video](#)

Smart Cities

Smart cities mean smart surveillance, automated transportation, smarter energy management systems, water distribution, urban security and environmental monitoring. IoT will solve major problems faced by the people living in cities like pollution, traffic congestion and shortage of energy supplies etc. [Watch video.](#)

IoT in agriculture

Governments are helping farmers to use advanced techniques and research to



increase food production. [Watch video.](#)

Smart Retail

IoT provides an opportunity for retailers to connect with customers to enhance the in-store experience. [Watch video.](#)

Energy Engagement using smart grids

Smart grids are able to collect data in an automated fashion and analyse the behaviour of electricity consumers and suppliers for improving efficiency as well as economics of electricity use. Smart Grids will also be able to quickly detect sources of power outages. [Watch video.](#)

IOT in Healthcare

IoT in healthcare is aimed at empowering people to live healthier lives by the wearing of connected devices. The collected data should help in personalized analysis of an individual's health and provide tailor made strategies to combat illness. [Watch video.](#)

Yes, you read it correctly. The vision of the Internet of Things is to make machines smart enough to reduce human labour. The idea of inter-connected devices where the devices are smart enough to share information with us; to cloud based applications; and to each other (device to device) is definitely one that will change life as we know it forever. IT experts such as Jamaican Christopher Reckford, are however calling for greater awareness about IoT (The Gleaner, 2016).

Security/Privacy Concerns

Reckford warns of the need to take into consideration the security risks involved as in the case of cyber attacks which target web cams, smart TVs, thermostats and toys connected to the Internet which form part of the Internet of Things.

"If your smart TV has a camera on it, you need to start thinking about it a little more. You need to start asking, what if someone is using the camera to watch me? That is why security-conscious persons have started to disconnect the camera on their computers, simply because you don't know who is watching," he said. According to Reckford, the sophistication of attacks has evolved with the advent of the IoT. Security and privacy are among three of the major concerns that accompany the IoT, the others being over-reliance on technology and loss of jobs. In addition to the risks to your personal information your company could also misuse the information that they are given access to. The privacy issue also leads to the question as to who will control the IoT. Will it give rise to monopolies?

Loss of Jobs

We are already witnessing jobs being lost to automated machines in the Merchandising and Banking sectors. With the rise of more connected devices via the IoT this will increase exponentially in the coming years. So what's your take? Will human effort as we know it be terminated as we witness before our very eyes - the rise of the machines?

References:

- (The Gleaner, 2016). Retrieved from <http://jamaica-gleaner.com/>
- What is the Internet of Things? Retrieved from <https://www.reference.com/technology/internet-things-b98dc331adfc0317aq=internet+of+things&qo=cdpArticles>
- 10 Real World Applications of Internet of Things (IoT) Explained in Videos Retrieved from <https://www.analyticsvidhya.com/blog/2016/08/10-youtube-videos-explaining-the-real-world-applications-of-internet-of-things-iot/>

WATCH
OUT

TECHupdate

koha Comin'

In our last issue we hinted at our plans to transform OURIC into a virtual space. The good news is we have moved a **level up** towards automation that will facilitate online access to the records of items in our collection. **Betta out!!**



YARD STYLE Trivia

1. The longer it tan the shorter it get.
2. One slice a yam serve di whol' worl'...
3. Roun' like a biscuit, busy like a bee...what am I?
4. Why wi have to go to bed?
5. Prime Minister, Doctor, Governer General - Which one wear di biggest hat?
6. Why trains and clothes related?
7. Patch by patch and nuh have nuh seam
8. King tek off him crown to only one man. Who?

Email answers to colleen.mignott@our.org.jm by 2018 October 30

FIFA WORLD CUP
RUSSIA 2018



10
QUESTIONS

Well the results are in and by now you know that France is the winner of World Cup 2018. Big ups to all the fans! Here are the answers in our **10 questions segment** from last issue.

1. Francis Lee, David Beckham, Wayne Rooney
2. Germany's Miroslav Klose scored 16 in 24 matches; Brazilian Selecao legend Ronaldo Luis Nazario de Lima is second on the all-time list, having netted 15 goals in 19 matches; Former Germany striker Gerd Muller is third with 14 goals in 13 matches.
3. Czechoslovakia
4. Colombian goalkeeper Faryd Mondragon
5. Former Italian goalkeeper and captain, Dino Zoff (1982)
6. Lothar Herbert Matthäus
7. The match would have gone to a penalty shootout.
8. Estadio Azteca in Mexico City (1970 and 1986)
9. Ghana, 2006
10. Landon Donovan

How many did you get right?



We're on the Web!
www.our.org.jm

A "Snip" in Time

Joe "Three-Finger Jack" Mansong



Joe 'Jack' Mansong became known as Three-Finger Jack after he lost two fingers on one hand during a fight with Quashie, a Maroon. The night before his hanging, he escaped and hid in the mountains. He robbed and killed soldiers until he was captured by Quashie and beheaded.



SOURCE: <https://jis.gov.jm/>



Look out for... MIND & BODY

THE OUR Information Centre (OURIC) presents ...



OURIC Coordinator, Colleen Mignott engages an attendee to an exhibition mounted by OURIC on the evolution of telecommunications in Jamaica.

WE WANT TO HEAR FROM YOU!

Drop us a line at:

The Office of Utilities Regulation Information Centre (OURIC)
3rd Floor, PCJ Resource Centre
36 Trafalgar Road
Kingston 10
Tel: 876-968-6053
Email: ouric@our.org.jm

