

Editors' message

Dear Members, we BCS Sri Lanka Section have decided to publish a news letter on behalf of the SL Section as a mark of 20th year of BCS Sri Lanka Section. This is with the intention to communicate with the membership periodically and update the members on the activities carried out by the chapter. Currently we are planning to release 2 newsletters per year and then increase up to 4 newsletters for a year. We hope you will support us on this initiative.

Please send us your feedback to nirmalan@bcssrilanka.org we will try our best to keep up with it.

Message from the Section Chairman

20 Years of National Service

20 years of continuous national service is no easy task for any organization. This remarkable milestone was achieved by BCS the Chartered Institute for IT Sri Lanka Section this year. BCS Sri Lanka Section was formed in 1996 as the British Computer Society Sri Lanka Section (BCSSL), with the intention of bringing in professionalism to, then building ICT Industry and providing BCS Sri Lanka Section members a platform to network and engage in the continuous professional development in the fast changing ICT environment. The formation of BCSSL was made possible by the untiring effort of Mr. K. Ramathas and Dr. Gamini Wickramasinghe and his dynamic Executive Committee. In 2010, the name of the BCS Sri Lanka Section was changed to BCS the Chartered Institute for IT – Sri Lanka Section to be in line with the BCS initiatives.

BCSSL promotes many initiatives in Sri Lanka annually. Some of these initiatives are, the National Best Quality ICT Awards (NBQSA), Young Professional Group, Women in IT, ICT Entrepreneurship Awards, ICT Lifetime Award, Most outstanding ICT Contribution Awards, Public Sector ICT Awards, Professionalism in ICT, ICT Business to Business Support for Local ICT organisations etc.

National Best Quality ICT Awards has been the flagship initiative of BCSSL, which was initiated in 1998 to promote better quality in ICT Products continuously. It recognizes the best products developed/created in Sri Lanka and nominate them to compete in the other world ICT competitions such as Asia Pacific ICT Alliance (APICTA) Awards that promotes better quality giving an opportunity to the local organisations to be recognized in the world arena. Along with NBQSA there are many Awards programmes that are conducted annually to promote ICT Products and recognize groups and individuals who are instrumental in the development of the ICT Industry.

Young Professionals Group of BCSSL is actively promoting the continuous professional development of our members by conducting series of Workshops, Seminars, Panel Discussions etc. with highly acclaimed professionals. Most of these activities are carried out either as free opportunities or self-funded projects so that the young professionals could obtain these added knowledge with a minimal investment. These events provide an additional opportunity to network with senior professionals as well as with other young professionals.

Women in IT is an initiative that was started to promote more and more females to get involved in the ICT industry.



Through the professionalism in ICT programme, BCSSL gets involved with the other ICT industry bodies and government to promote professionalism, high quality in products and services and provide advisory services and lobby for industry development initiatives.

Through the Business to Business support programme BCSSL promotes the business matchmaking and hosts the locally created ICT products in www.Biz2Biz.lk through which these products are promoted in the countries where BCSSL has industry or professional relationships while giving a window to the world to locate local ICT organisations and their Products & Services.

In addition to the above main initiatives BCSSL has continuously negotiated and has obtained many personal benefits to our members such as Education Loan facilities, Insurance facilities, Higher education facilities for members and families, library services and product discounts etc.

All these activities and benefits were initiated during the times of different Chairmen and their Executive committees. Our chairmen who have guided us to be at the forefront of the ICT industry are, Dr. Gamini Wickramasinghe, Dr. Bandu Ranasinghe, Mr. Jayantha De Silva, Mr. K. Ramathas, Dr. Dileepa De Silva, Mr. Sujeewa Dissanayake, Prof. Gihan Wikramanayake and Mr. M. G.. Tillekeratne.

Current Executive committee wishes to request all BCS Sri Lanka Section members to utilize these opportunities to get involved to network with professionals and other members while maintaining the professional development and obtain personal benefits in this celebratory 20th year and years to follow.

Ruwan Amarasekara Chairman – BCS the Chartered Institute for IT Sri Lanka Section



Articles

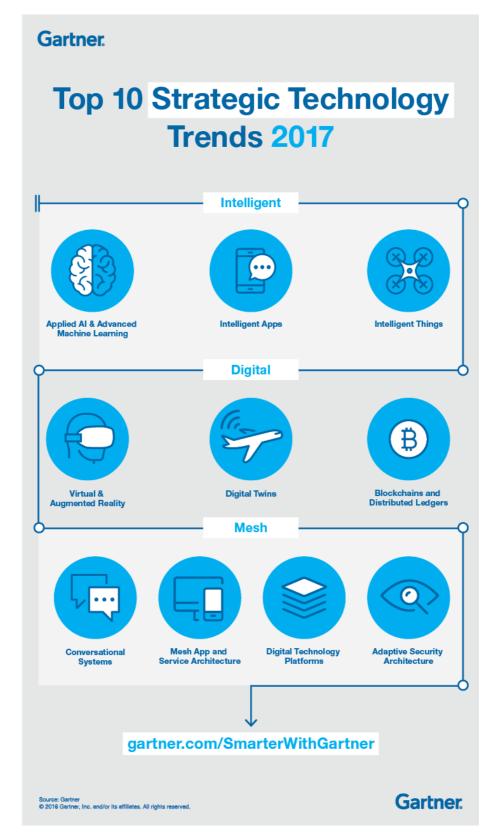
Top 10 Strategic Technology Trends for 2017

Today, a digital stethoscope has the ability to record and store heartbeat and respiratory sounds. Tomorrow, the stethoscope could function as an "intelligent thing" by collecting a massive amount of such data, relating the data to diagnostic and treatment information, and building an artificial intelligence (AI)-powered doctor assistance app to provide the physician with diagnostic support in real-time. Al and machine learning increasingly will be embedded into everyday things such as appliances, speakers and hospital Equipment. This phenomenon is closely aligned with the emergence of conversational systems, the expansion of the IoT into a digital mesh and the trend toward digital twins.

Three themes — intelligent, digital, and mesh — form the basis for the TOP10 strategic technology trends for 2017, announced by David Cearley, vice president and Gartner Fellow, at Gartner Symposium/ITxpo 2016 in Orlando, Florida. These technologies are just beginning to break out of an emerging state and stand to have substantial disruptive potential across industries.



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Intelligent

All and machine learning have reached a critical tipping point and will increasingly augment and extend virtually every technology enabled service, thing or application. Creating intelligent systems that learn, adapt and potentially act autonomously rather than simply execute predefined instructions is primary battleground for technology vendors through at least 2020.

Trend No. 1: Al & Advanced Machine Learning

Al and machine learning (ML), which include technologies such as deep learning, neural networks and natural-language processing, can also encompass more advanced systems that understand, learn, predict, adapt and potentially operate autonomously. Systems can learn and change future behavior, leading to the creation of more intelligent devices and programs. The combination of extensive parallel processing power, advanced algorithms and massive data sets to feed the algorithms has unleashed this new era.

In banking, you could use AI and machine-learning techniques to model current real-time transactions, as well as predictive models of transactions based on their likelihood of being fraudulent. Organizations seeking to drive digital innovation with this trend should evaluate a number of business scenarios in which AI and machine learning could drive clear and specific business value and consider experimenting with one or two high-impact scenarios..

Trend No. 2: Intelligent Apps

Intelligent apps, which include technologies like virtual personal assistants (VPAs), have the potential to transform the workplace by making everyday tasks easier (prioritizing emails) and its users more effective (highlighting important content and interactions). However, intelligent apps are not limited to new digital assistants — every existing software category from security tooling to enterprise applications such as marketing or ERP will be infused with AI enabled capabilities. Using AI, technology providers will focus on three areas — advanced analytics, AI-powered and increasingly autonomous business processes and AI-powered immersive, conversational and continuous interfaces. By 2018, Gartner expects most of the world's largest 200 companies to exploit intelligent apps and utilize the full toolkit of big data and analytics tools to refine their offers and improve customer experience.



Trend No. 3: Intelligent Things

New intelligent things generally fall into three categories: robots, drones and autonomous vehicles. Each of these areas will evolve to impact a larger segment of the market and support a new phase of digital business but these represent only one facet of intelligent things. Existing things including IoT devices will become intelligent things delivering the power of AI enabled systems everywhere including the home, office, factory floor, and medical facility.

As intelligent things evolve and become more popular, they will shift from a stand-alone to a collaborative model in which intelligent things communicate with one another and act in concert to accomplish tasks. However, nontechnical issues such as liability and privacy, along with the complexity of creating highly specialized assistants, will slow embedded intelligence in some scenarios.

Digital

The lines between the digital and physical world continue to blur creating new opportunities for digital businesses. Look for the digital world to be an increasingly detailed reflection of the physical world and the digital world to appear as part of the physical world creating fertile ground for new business models and digitally enabled ecosystems.

Trend No. 4: Virtual & Augmented Reality

Virtual reality (VR) and augmented reality (AR) transform the way individuals interact with each other and with software systems creating an immersive environment. For example, VR can be used for training scenarios and remote experiences. AR, which enables a blending of the real and virtual worlds, means businesses can overlay graphics onto real-world objects, such as hidden wires on the image of a wall. Immersive experiences with AR and VR are reaching tipping points in terms of price and capability but will not replace other interface models. Over time AR and VR expand beyond visual immersion to include all human senses. Enterprises should look for targeted applications of VR and AR through 2020.

Trend No. 5: Digital Twin

Within three to five years, billions of things will be represented by digital twins, a dynamic software model of a physical thing or system. Using physics data on how the components of a thing operate



and respond to the environment as well as data provided by sensors in the physical world, a digital twin can be used to analyze and simulate real world conditions, responds to changes, improve operations and add value. Digital twins function as proxies for the combination of skilled individuals (e.g., technicians) and traditional monitoring devices and controls (e.g., pressure gauges). Their proliferation will require a cultural change, as those who understand the maintenance of real-world things collaborate with data scientists and IT professionals. Digital twins of physical assets combined with digital representations of facilities and environments as well as people, businesses and processes will enable an increasingly detailed digital representation of the real world for simulation, analysis and control.

Trend No. 6: Blockchain

Blockchain is a type of distributed ledger in which value exchange transactions (in bitcoin or other token) are sequentially grouped into blocks. Blockchain and distributed-ledger concepts are gaining traction because they hold the promise of transforming industry operating models in industries such as music distribution, identify verification and title registry. They promise a model to add trust to untrusted environments and reduce business friction by providing transparent access to the information in the chain. While there is a great deal of interest the majority of blockchain initiatives are in alpha or beta phases and significant technology challenges exist.

Mesh

The mesh refers to the dynamic connection of people, processes, things and services supporting intelligent digital ecosystems. As the mesh evolves, the user experience fundamentally changes and the supporting technology and security architectures and platforms must change as well.

Trend No. 7: Conversational Systems

Conversational systems can range from simple informal, bidirectional text or voice conversations such as an answer to "What time is it?" to more complex interactions such as collecting oral testimony from crime witnesses to generate a sketch of a suspect. Conversational systems shift from a model where people adapt to computers to one where the computer "hears" and adapts to a person's desired outcome. Conversational systems do not use text/voice as the exclusive interface but enable people and machines to use multiple modalities (e.g., sight, sound, tactile, etc.) to communicate across the digital device mesh (e.g., sensors, appliances, IoT systems).



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Trend No. 8: Mesh App and Service Architecture

The intelligent digital mesh will require changes to the architecture, technology and tools used to develop solutions. The mesh app and service architecture (MASA) is a multichannel solution architecture that leverages cloud and serverless computing, containers and microservices as well as APIs and events to deliver modular, flexible and dynamic solutions. Solutions ultimately support multiple users in multiple roles using multiple devices and communicating over multiple networks. However, MASA is a long term architectural shift that requires significant changes to development

tooling and best practices.

Trend No. 9: Digital Technology Platforms

Digital technology platforms are the building blocks for a digital business and are necessary to break into digital. Every organization will have some mix of five digital technology platforms: Information systems, customer experience, analytics and intelligence, the Internet of Things and business ecosystems. In particular new platforms and services for IoT, AI and conversational systems will be a key focus through 2020. Companies should identify how industry platforms will evolve and plan

ways to evolve their platforms to meet the challenges of digital business.

Trend No. 10: Adaptive Security Architecture

The evolution of the intelligent digital mesh and digital technology platforms and application architectures means that security has to become fluid and adaptive. Security in the IoT environment is particularly challenging. Security teams need to work with application, solution and enterprise architects to consider security early in the design of applications or IoT solutions. Multilayered security and use of user and entity behavior analytics will become a requirement for virtually every

enterprise.

David Cearley is vice president and Gartner Fellow in Gartner Research and is a leading authority on information technology. Mr. Cearley analyzes emerging and strategic business and technology trends and explores how these trends shape the way individuals and companies derive value from

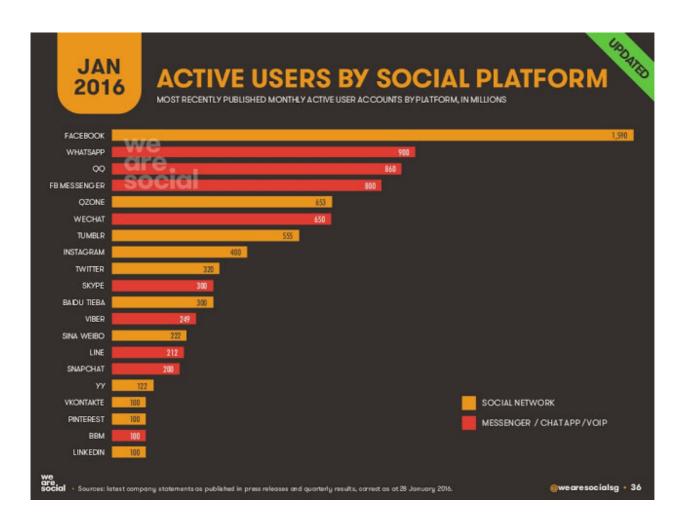
technology.

Source: Gartner



WHY YOU SHOULD INTEGRATE SOCIAL MEDIA INTO YOUR OVERALL MARKETING STRATEGY - by Dinesh Jebamani MBA (UK), AIB(SL), DIPM (UK), Dip in MKT(UK).

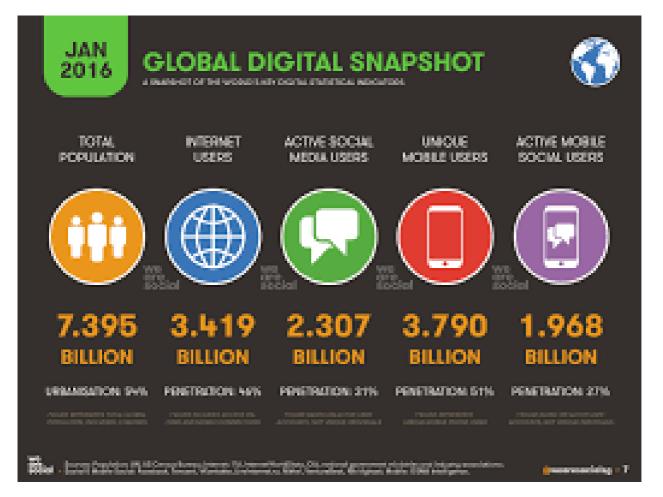
Evolution of Social media and growth in mobile internet has resulted in the need for marketing strategies to change. The image below shows the growth of social media channels and messaging apps.



Above states the huge potential on selected social channels and messaging apps have to reach your target audience, create brand awareness, engage and generate leads for conversion. Further Facebook owns WhatsApp, messenger and Instagram.

If you take the overall global snap shot there is huge potential for future growth of internet penetration and use of mobile which will be the primary source to seek information and reach your customers.





It's a no brainier that marketers need to rethink their overall marketing strategy and adopt social media channels into overall communication and engagement plan. Why it's simple <u>you need to be in</u> the right channel where your customer is mostly active on sharing timely relevant content that will create a call to action.

Gone are the days when marketing was a one way communication tool and today due to advent of social media , messaging apps and internet accessed thru mobile your customers want real time interactions and responses . Hence your social media strategy needs to be integrated to engage with your prospects, customers beyond likes and shares.

State below few benefits of integrating social media into to your overall marketing strategies.

The ability to build long lasting relationships.

When you start marketing through social media platforms you create relationships with customers and ability to engage more frequently and stay connected enabling your product, service to carry our



two way communication and feedback. It's easy for your customers to engage with your brand and seek further information prior to purchasing.

The customers can also share or talk about your brand on their social feeds thus creating user generated content that reaches to audiences you will not reach or new audiences which amplifies your brand further.

Your product or services is accessible to customers.

Your customers can now access your company real time 24/7 through social media or online chat service. If your company provides customer service via social channels this can provide a great customer experience and result in better sales, referrals online to your brand. You can earn more free media publicity.

You can engage your target audience through social channels

One of the key benefits of using social media compared to traditional is the engagement that can be measured. If you use print or television ads it's hard to measure the engagement unless you track calls to your hotline or call center which is offline.

On social channels the engagement can be measured real time and response can be given as well. Based on analytics and audience insights which are available on social media tools you can create relevant content preferred by your audience and create engagement. To be effective in engagement on social media one must clearly understand the preferred social media channels of your customers and how they access same.

You can carry out targeted advertising on social media at a lower cost

The cost to reach your customers on social media is far lower than traditional advertising and can be measured, tweaked real time. Further social channels such as FB , Instagram , Twitter , LinkedIn, YouTube or any other emerging channels such as snapchat, Pinterest have tools to carry out hyper targeting and your content can be optimized to be relevant to each segment thus you can generate leads to convert to your sales teams or business .

These channels have tons of data and high capability to provide you real time information of customers you intend to reach thru your message. One could use images, videos, GIFs to reach and engage with relevant messages that can create action. Further you can experiment and split test your ads and analyse what works best thus enabling further optimization.



Content that are posted on social channels is shareable

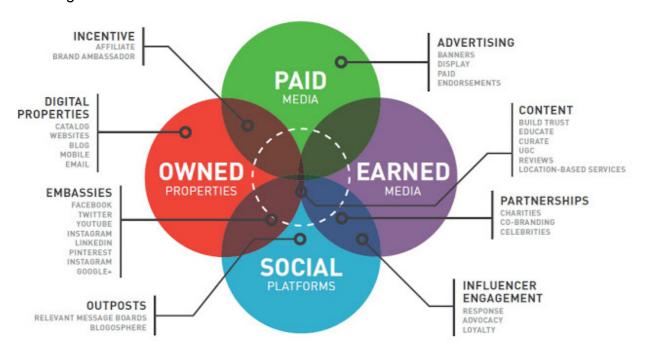
The content that is posted on social channels can be created by you or user generated. Your customers could be converted to content providers or you can create timely relevant content based on personas of users that will be shared across and increases reach organically.

Advantage here is your customers sharing content increases viral reach for which you do not pay Creating videos that talks about your product, or customers talking about your company can easily go viral and the ability to now post direct to multiple social platforms enables cross channel marketing.

You can capture customer information and generate leads

By carrying out promotions on social channels , you can capture your customers information such as mobile number , email address, profession etc and use such data later for re-targeting or reengagement which can result in new business or increase in businesses . By capturing leads based on relevance you can share such information to your sales teams to convert to business.

The cost of such leads, leads converted can be measured thru online CRM tools and enable marketing automation.



Social media allows your company to create user generated content and earn loyalty over time. The info graph above explains the overall snap shot of marketing channels and activities.



We need to accept the fact that social media is here to stay and will continuously evolve to remain relevant with customers. These channels will disrupt traditional mediums and create challenges for marketers in the future due to its overall scale and capabilities which makes it very easy to reach and create awareness in a cost effective and accountable manner.

Companies and marketers that accept and evolve will be in a better position to capture attention of prospects and customers.



The key activities

NBQSA 2016

The National Best Quality ICT Awards (NBQSA) competition is an annual event organized by the BCS The Chartered Institute for IT (BCS, The CIIT) Sri Lanka Section.

In this globally competitive era the competition serves to showcase and benchmark Sri Lankan ICT products. The competition has been conducted in Sri Lanka by the Sri Lankan section of the BCS The Chartered Institute for IT over the past 18 years.

Over the last two decades the BCS and NBQSA has had presence in Sri Lanka, the participation has increased tremendously as most of our ICT sources have identified the value of the NBQSA towards their innovations. NBQSA team acknowledge the outstanding talents of the ICT industry and the achievements of the past winners.

NBQSA as the only recognised award in the ICT industry in Sri Lanka has proven beyond any doubt that the products recognised here are indeed the best of the best developed in Sri Lanka and suitable for participation at an awards ceremony in the caliber of the prestigious Asia Pacific ICT Alliance Awards (APICTA) continuously for the past 15 years. The NBQSA programme is well aligned with the APICTA competition and the evaluation and decisions made by the distinguished judging panel are some of the best compared to the other member countries of the APICTA.

2016 NBQSA was held at the Hotel Galadari with over 500 key ICT decision makers, Public sector officials and private sector professionals with the presence of the hon. Minister Harin Fernando.

NBQSA has recognized over 60 products including Tertiary and Commercial categories from over 150 products participated to the evaluation process. This year too NBQSA has completed the evaluation by the distinguished panel of judges identified from the ICT industry and academic professionals in the country.

Currently NBQSA is the only competition that evaluated products online by the well proven online system introduced to the industry over 5 years and the system was endorsed by the APICTA judges at the APICTA competition held 2015 in Sri Lanka.

Vajeendra S Kandegamage Chairman - NBQSA 2016



Achievement by Sri Lanka in APICTA 2016

"Sri Lanka was able to win one Gold and six Merit Awards at the recently concluded APICTA 2016 ICT competition held in New Taipei City, Taiwan. Competing with over 235 entries from 19 economies in the APAC region, two Sri Lankan students grabbed the prestigious Gold Award and a Merit Award in the School Projects category while 5 Merit Awards were won by 3 Sri Lankan ICT companies in the Commercial category and 2 student groups from University of Moratuwa and Informatics Institute of Technology in the Tertiary Projects category."



Chairman of BCS SL Section receiving the APICTA Award on behalf of the Students Group

Sri Lanka nominated 23 products for the APICTA 2016 which were selected from the NBQSA 2016 national competition held in Colombo out of which 15 participated in the competition in Taiwan.

This is the third time that the Gold Award in the School Projects category was won by Sri Lanka after winning the first ever Gold in 2006 in the same category. Even in the Commercial and Tertiary categories, there has been a continuous increase in the number of awards won and this is the second time that 6 Merit Awards were won by Sri Lanka. In APICTA, a Merit Award is awarded to an entry which falls within 95 per cent of the marks scored by the entry that wins the Gold Award in a given category.

Apart from the competition, it has been a successful achievement for 'Biz2Biz' the business promotion initiative by the BCS Sri Lanka Section where a business matching web portal was promoted amongst the APICTA community. Direct links with economy coordinators of each and every economy and the APICTA marketing arm were established. These links were used to share business promotion material among the APICTA community. Already, positive responses from a few contacts including Taiwan Computer Association have been received. It was also possible to take part at the business matching event organized by the APICTA 2016 where a number of ICT companies from Taiwan & APICTA member countries were present and they were quite impressed with the idea.



YPG Activities

Young Professionals Group (YPG) of the BCS, The Chartered Institute for IT Sri Lanka Section is conducting seminar on different types of topics regularly to keep the membership aware about what happens around the world of information technology.

YPG is more focus on other domains which are integrating and adhering information technology into their domains. YPG team has been successful on getting following distinguished guests to enlighten the BCS Sri Lanka members and the public. The topics we covered are varying from Internet of Things, Convergence of Marketing and IT, Information Security, Data Anonymity and Basics of the Digital Presence.



Prof. Anura Jayasumana, Professor of Electrical and Computer Engineering at Colorado State University has presented great insights on use cases of IOT, research areas and current trends.



Mr. Charaka Perera, Director of Motorcycles & Power Products of Stafford Motor Company (Pvt) Ltd. Charaka shed some lights on how the Gen-Z becomes the main target group for household goods, while questioning the role of the CMO to be an IT professional or the CIO be a Marketer or would a CMT to be replace both of them.



Mr. Wasantha Perera, Former Head of Information Security & Compliance, Colombo Stock Exchange explained how organizations should structure their defense strategies based on what technologies are required and to identify the gaps of technologies.



Mr. Hisham Nazeem, Manager - Governance Risk & Compliance of the Strategic Group IT - John Keels Holding PLC talked about business perspective, whether there is sufficient, satisfactory governing mechanisms in place for entrusting the building blocks of situational insight.





Mr. Udana Wickramasinghe, Director / CIO for Sri Lanka Tourism discussed about advantages of active online existence during the rise of the Internet as the go-to research tool for consumers, a robust digital presence and businesses looking to reach new audiences and gain more customers.

Upcoming events of BCS SL Section



Sukith Nanayakkara, Manager - DW/BI Services will open discussion on today's context of organizations which are facing a data explosion.

Team YPG is looking forward to organize more events to educate the members and the public on convergence of information technology with unconventional domains.