

Women's Business and Smart Technology Seminar

28 June 2016

Why Digital Literacy is Smart Business



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WEF 2016

➤ 2015 Leaders' Declaration:

- *Underscored the potential of the internet and digital economy for inclusive and sustainable growth;*
- *Stressed the potential of the internet and digital economy to participate in GVC*
- *Drivers for SMEs & MSMEs to reach a wider consumer base;*
- *New business models, truly global marketplace for the exchange of goods, services, capital, knowledge and ideas*



- **Need for Digital Literacy for work and life!**



Who is being disrupted?



Digital Literacy

➤ Not just computer literacy!

Digital literacy is the *knowledge, skills, and behaviours* used in a broad range of digital devices such as smartphones, tablets, laptops and desktop PCs, all of which are seen as a **network** rather than individual computing devices.



Digital Literacy

Our biggest challenge

in digital literacy is taking organizations and moving them to a position where they can interact with, communicate with and work with the community that is digitally enabled.

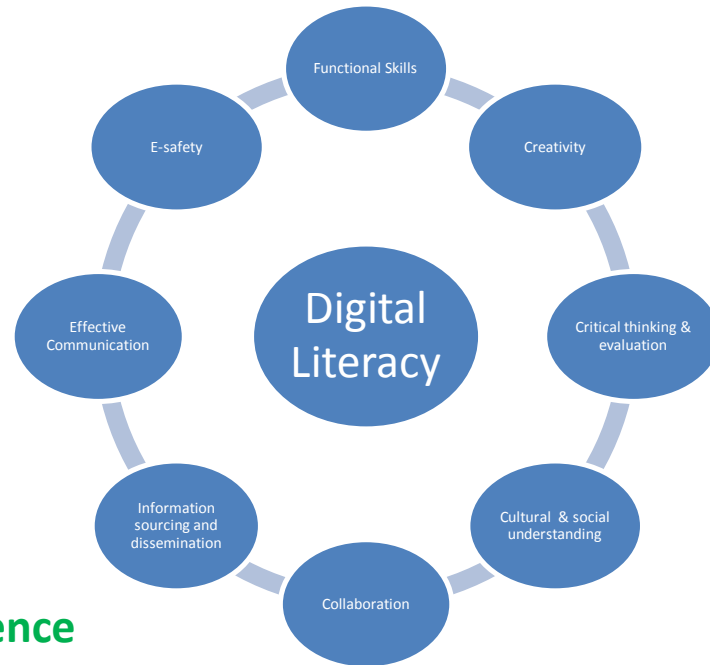
- Earl Mardle, NetHui

aspects of digital literacy

- Key 21st century skill which significantly enhances employability and business performance

- **Cultural**
- **Cognitive**
- **Constructive**
- **Communicative**
- **Creative**
- **Critical**
- **Civic**

- **Combined = Confidence**



aspects of digital (media) literacy

➤ More than understanding how to use and work with ICT

➤ **Access**

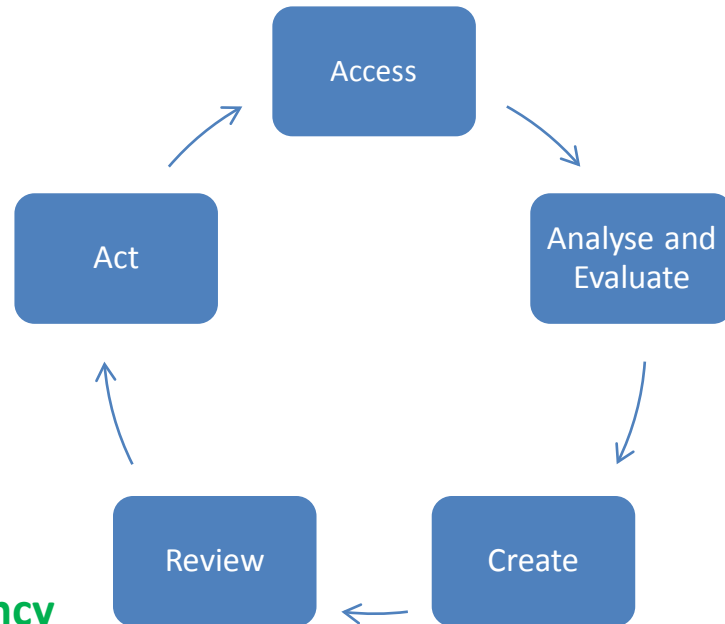
➤ **Analyse and Evaluate**

➤ **Create**

➤ **Review**

➤ **Act**

➤ **Continuous loop = DL consistency**



cultural literacy

- Requires technology use in different contexts and an awareness of the values and concepts specific to varying contexts
- What is the culture of your customer base? Millennials vs. digital immigrants
- Industry-specific culture and knowledge
 - Scope of industry information;
 - Partially or entirely web-based, e.g. tourism;
 - Electronic buying and selling of goods;
 - Online marketing, individual or cooperative;
 - Sourcing/sharing relevant industry data in online forums (SIGs,COPs)



cognitive literacy

- Digital literacy is dynamic, not static
- Mastery of the use of ICT tools, software, platforms
 - Rapid changes in technological advances;
 - Apply/source technologies appropriate to your business needs;
 - Understand purpose of certain technologies for information sharing/knowledge transfer, analysis, review and communication.



Constructive literacy

- Re-using and remixing existing resources
- Adapting into new resource
 - Analyse and evaluate information – comprehending messages and determine quality, accuracy, credibility;
 - Understand potential consequences and impact of messages, creating new data;
 - Transmit knowledge, skills, ideas to others;
 - Collaborate and share creations with others digitally;
 - **Data, Data, Data** - informs good business decisions – but there is more



communicative literacy

- Awareness of use of different communication devices, platforms
- Communication, Navigation, Information Management Skills
 - Finding, accessing and using media and technology tools skilfully;
 - Sharing appropriate and relevant information with others (public vs. private use);
 - Using data and targeted technologies to disseminate information.



creative literacy

- Mental process involving new ideas and original concepts
- Courage to dare and take risks
 - Thinking outside the box
 - Composing/generating content using creativity and confidence in self-expression (e.g., blog);
 - Awareness of purpose, audience, and composition techniques;
 - Developing new skills based on personal interests;
 - Searching for and producing new products/modes of engagement;
 - Innovation!



critical literacy

- Looking at aspects from various perspectives
- Critical Thinking
 - Analyse and evaluate information for a range of activities;
 - Recognise complex relationships among audiences and digital media content;
 - Appreciate that content is produced within social circumstances and cultural contexts;
 - Understand the commercial nature of digital media;
 - No 'one size fits all' – use digital media to communicate to specific audiences.



Civic literacy

- Global citizenship through digital technologies
- Local/global responsibilities
 - Act and reflect on concepts of democracy, equality
 - Apply social responsibility and ethical business principles in online communication and conduct;
 - Work individually and collaboratively to share knowledge, solve problems;
 - Participate at local, regional, national and international levels.



DL confidence

- Awareness creates confidence
- Creates competence environment
 - Understand your strengths;
 - Act-reflect for self-learning;
 - **Insourcing/outsource where needed;**
 - Use emotional intelligence and design thinking approaches.

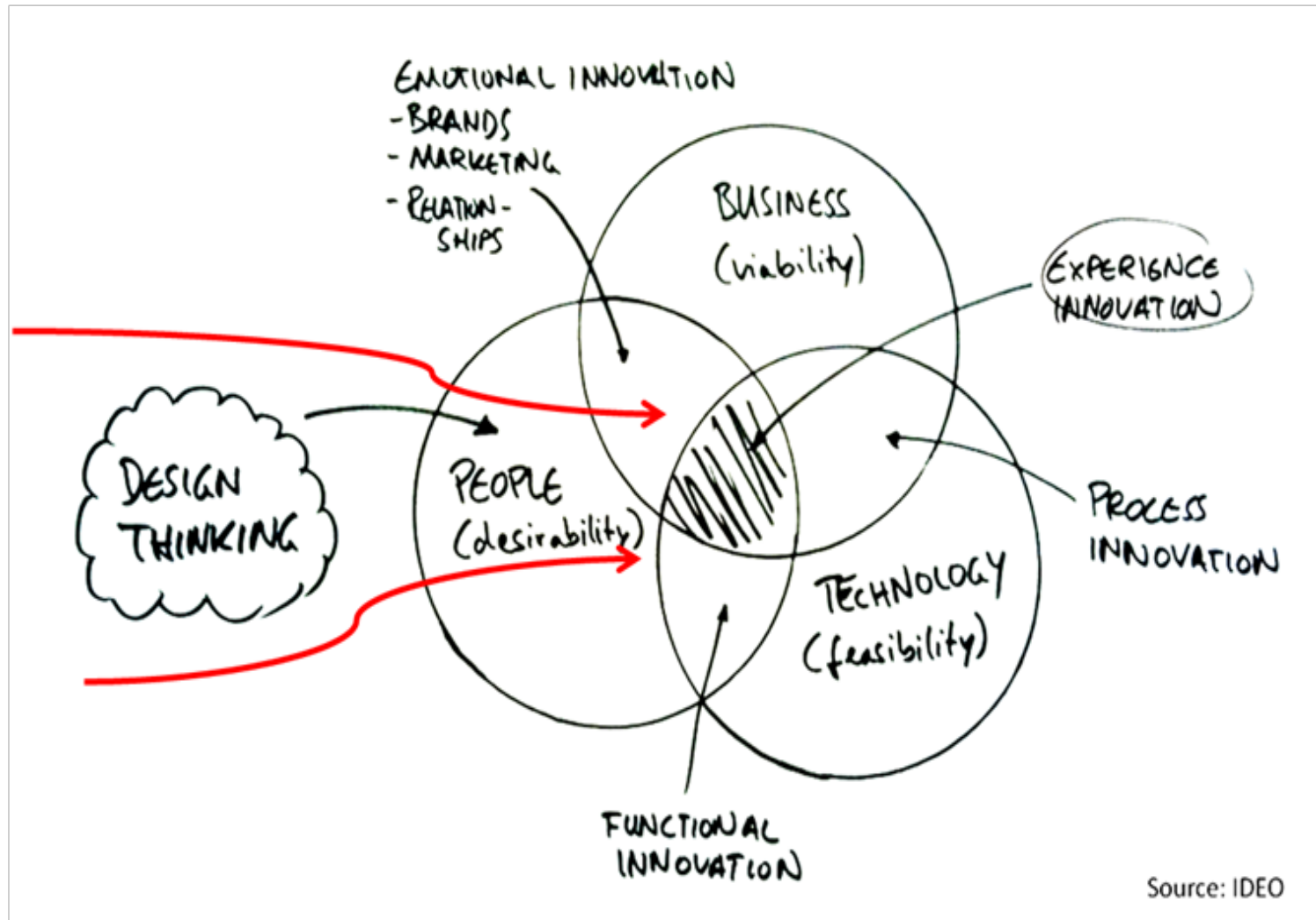


"mindset" {noun}

a set of beliefs or a way of thinking that determines one's behavior, outlook and mental attitude.

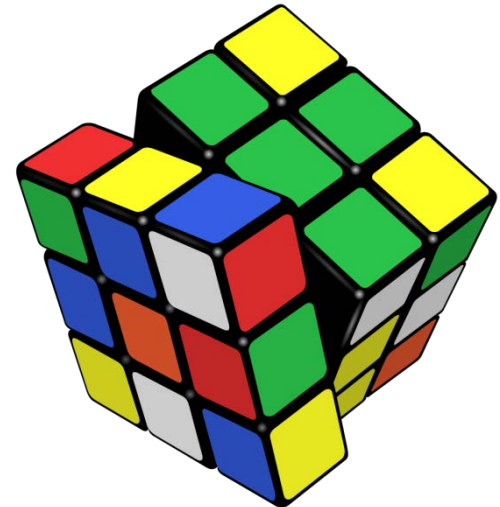


Design Thinking



digital literacy for smart business design

- Clearly involves much more than the ability to use software or operate a digital device
- Great platform for problem solving, new initiatives and honing of enterprise skills
 - Use interactivity of the web;
 - Use customer base for ideas/innovation;
 - Effective engagement of customers;
 - Life-long learning.



digital literacy for smart business design

- Learning, teamwork, and self management
 - Collaboration, interpersonal skills and interactive communication
 - Source millennial help if you're a digital immigrant;
 - Navigation, information management and negotiation skills;
 - Think about digital literacy as a set of skills for business and personal management.



why digital literacy is smart business

- Build your own Digital Literacy Roadmap
 - Strengthens both you and your business;
 - Presents opportunities for more effective, efficient business practices and collaboration;
 - Potential to transform your business model
- Do your research to keep up-to-date on technology trends !!

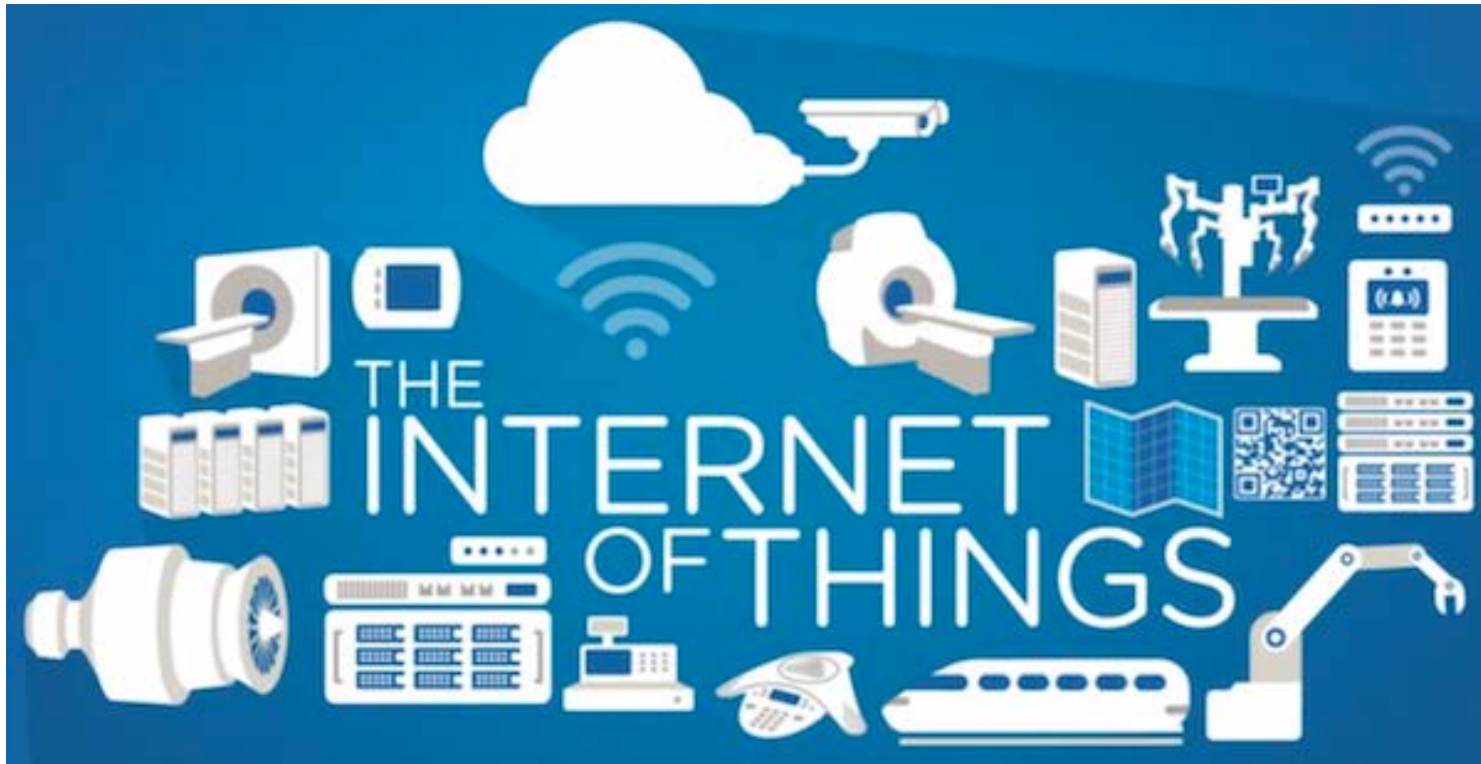


emerging trend: speed of adoption

- Speed of innovation – adoption of new technologies has sped up
- Acceleration of technology – amount as well as speed of innovation and volume of innovation is increasing and rate applied into society (adoption) is much quicker



Internet of Things (IoT)



- global market worth up to \$11trillion by 2025
- Convenience most important reason people use devices – issues of interoperability between devices/services
- Generating enormous amounts of data – no overview of own situation – need convenience, but also control, privacy, security

emerging trend: Internet of Me (IoM)



- Each user at the centre of their data
 - Digital Self-Determination

emerging trend: IoM profile

- Internet of things – fridge talking to grocer – not about connectivity and data creating everyday applicable things – not just devices being connected but data being connected;
- Internet of me – IoM – self as a ‘thing’ – every piece of data we create – heartbeats, movies you watch, foods you eat is **all IoM data**;
- Two trends:
 - getting the data to make your life easier with services, devices –
 - you can monetise your data out there with people who want to interact with you – build your IoM profile – **Integrity not for sale !**
- **Control your own data !**



emerging trend: big data protection

- Today data is seen as the 'new oil' of the economy
- Next 6 years pure physical data size:
3 zettabytes to 40 (1 zettabyte=billion terrabytes)
- Incredible new tools to harvest this data – big industry, critical industry – number one natural resource of US;
- EU regulation (2016) strengthens citizens' fundamental rights in the digital age and related business rules for companies in the Single Digital Market.



emerging trend: big data protection

- On the business side, organisations are being forced to change their online behaviour — by regulation but also by soaring popularity of ad blockers;
- Danger of stockpiling customer data — hacking pay 4% of turnover — database also static — needs constant work!
- Businesses should hold only what data they truly need, while being totally transparent about what they do with it
- New ways of organising own data emerging: customer holds own data and giving permission — accurate and current !
- The base models of Google and Facebook are on fire!



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By JOHN ELJONN 14 minutes ago

The shootings occurred after a crowd gathered outside police headquarters in Ferguson, Mo., as news spread that the city's police chief had agreed to resign. A spokesman said that the officers' injuries were serious but not life-threatening.

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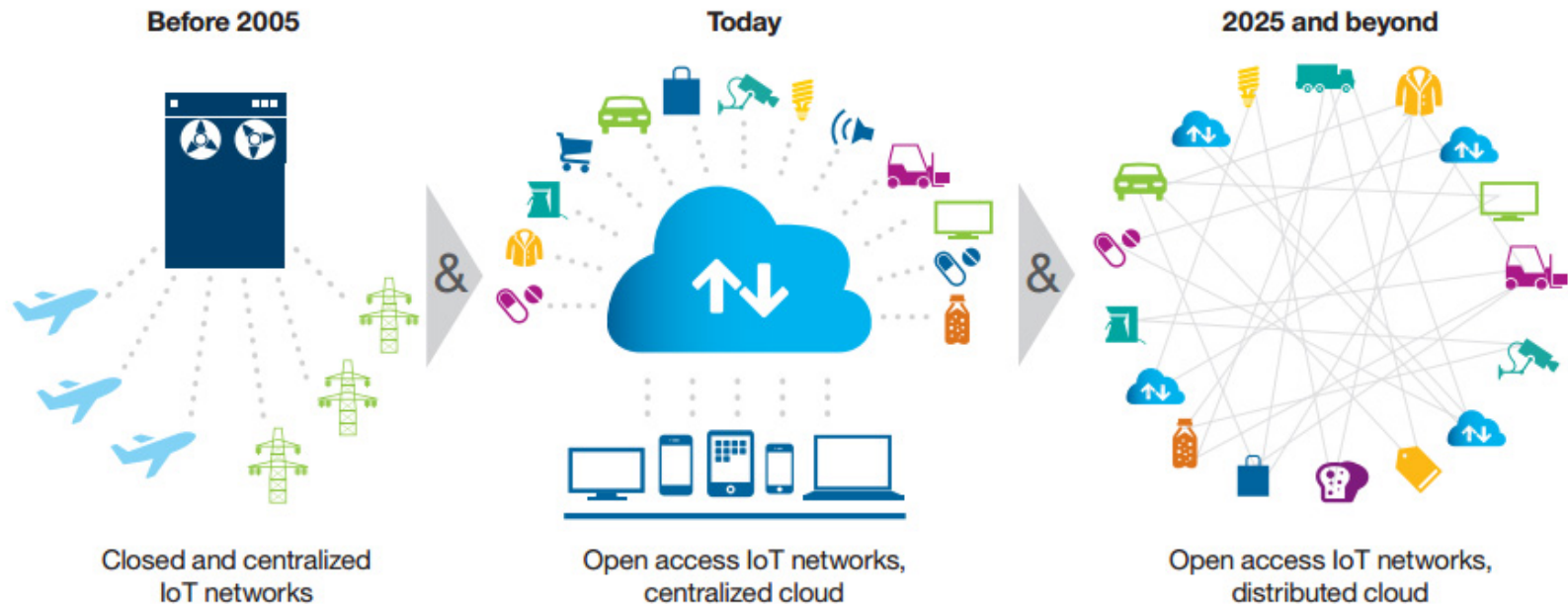
emerging trend: digital trust & transparency

- Cryptocurrency and its technological platform the blockchain has gone 'exponential'
- A form of money that can be transferred securely and anonymously across a widely distributed peer-to-peer network
- **Blockchain** as permanent database – making all transactions more transparent !
- **Blockchain** is seen as major **technological** innovation
- Blockchains are NOT restricted to monetary transactions -- they could be used to track and verify **any kind of digital exchange!**

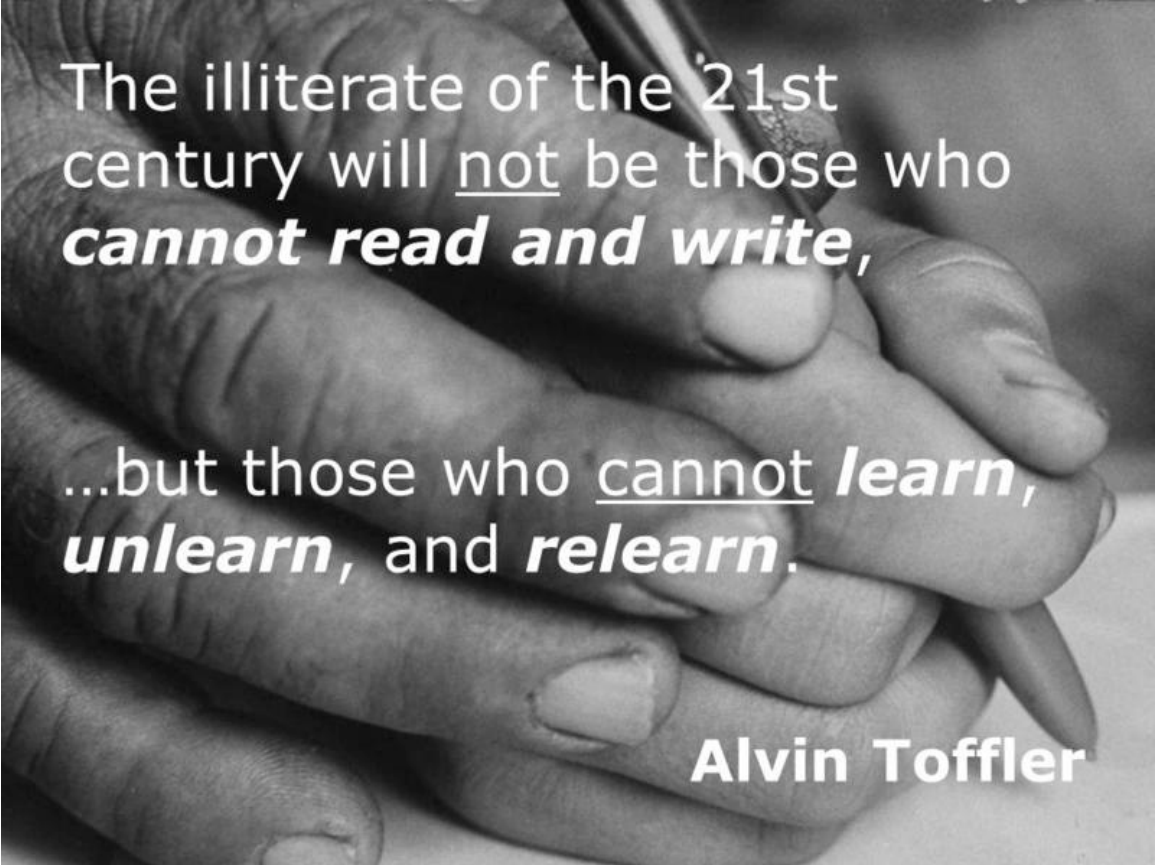


Blockchain Applications for IoT/loM and Smart Systems

- Blockchains can enable smart devices to become independent agents, **autonomously** conducting a variety of transactions.
 - Smart Home
 - Vending machine
 - Vehicle that can diagnose, schedule and pay for its own maintenance
 - Autonomous devices like **drones** are becoming a **major trend!**



Digital Literacy – A must!

A black and white photograph of a hand holding a pen, with text overlaid. The hand is positioned as if about to write on a surface. The text is in white, with some words in bold and some underlined.

The illiterate of the 21st century will not be those who ***cannot read and write,***

...but those who cannot ***learn, unlearn, and relearn.***

Alvin Toffler

Thank you for your attention!