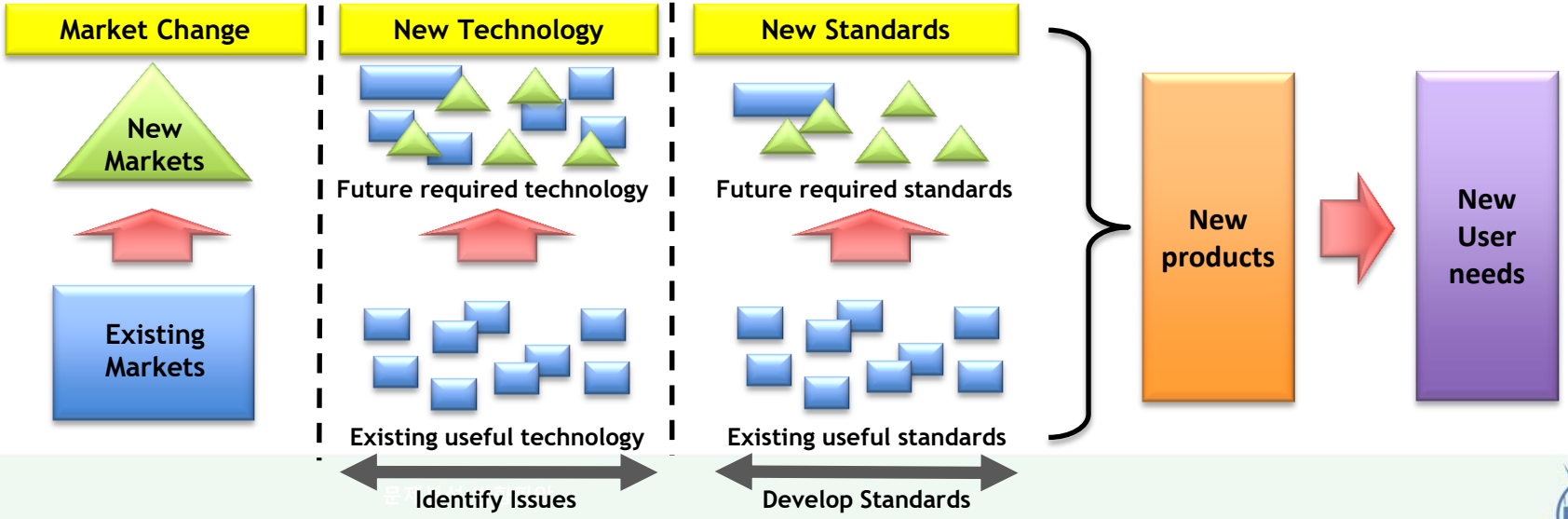
International standards & International Trade

Standards Matter - BSI
22 June 2017, Edinburgh

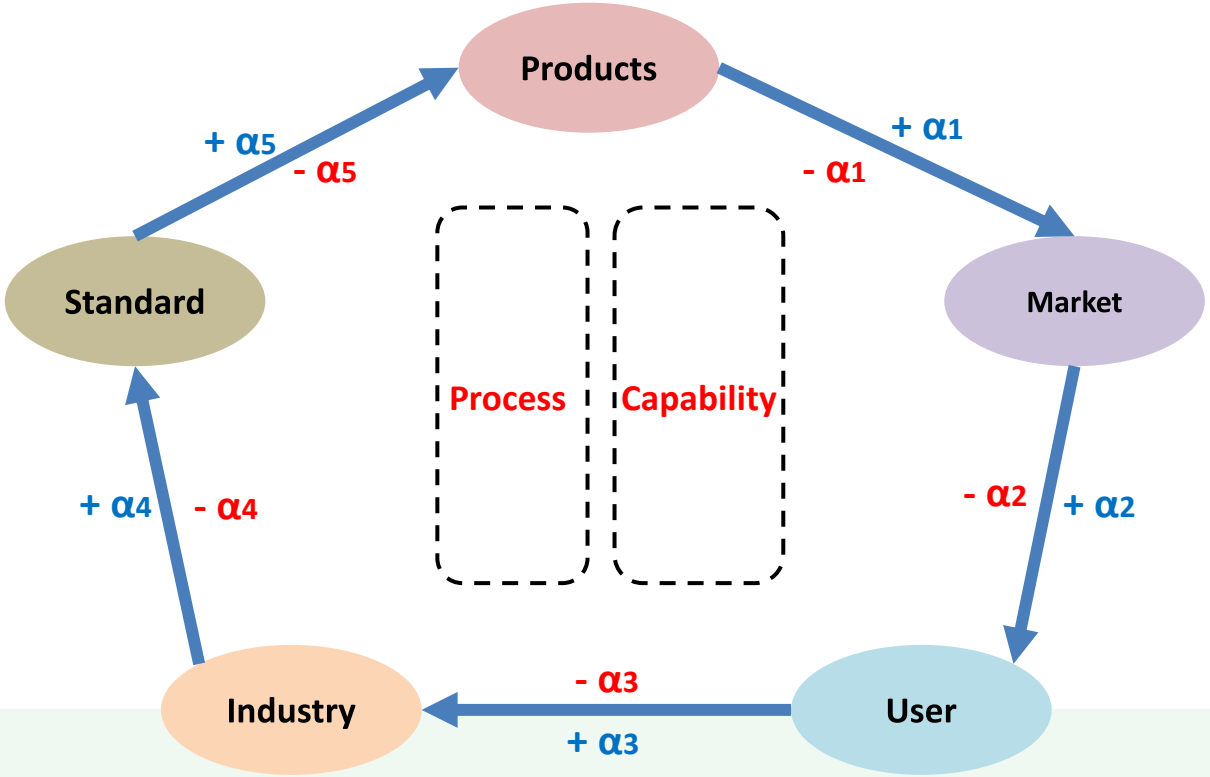
Chaesub Lee, TSB Director
ITU Telecommunication Standardization Bureau

Standards and Standardization Process

- Not an objective (target or goal): A TOOL
- Enabler, coordinator and Facilitator
- A part of circulated movement: Market → Technology → Standard → Product → User need → Market



Value Chains of Standards Eco-system



International Trade Barriers

WTO TBT (Technical Barrier to Trade) recommends **4 principles** to clarify and strengthen the concept of **international standardization**:

- **Impartiality:** All countries should be afforded equal opportunity to influence or participate in international standards processes, ensuring that standards do not favour any particular companies, markets or regions
- **Effectiveness and relevance:** An effective international standards process responds to relevant demands for technical standards driven by technological advance as well as regulatory and market needs
- **Coherence:** Cooperation and coordination among international SDOs is essential to avoid the development of conflicting international standards caused by duplications/overlaps of standards work
- **Development dimension:** International standards should reflect the needs of all the world's regions and measures should be taken to encourage developing countries' participation in international standardization

ITU as a International Standard Organization

Consensus based operation with Our Members

193
MEMBER STATES

800-
PRIVATE-SECTOR ORGANIZATIONS

150+
ACADEMIA MEMBERS

EUROPEAN STANDARDS – WHAT DOES INDUSTRY NEED?

- Brexit
- Digital and low carbon challenges
- Can the Commission help?
- What does industry need ?

Dr Howard Porter
BEAMA Chief Executive
Immediate past Chairman ORGALIME

Howard.Porter@beama.org.uk

High level of involvement

- Between BEAMA and GAMBICA in the UK we have Membership of 200 standards committees through BSI
- The 2 TAs are the founding members of a new Strategic Standards group ESSAC
- Rodney Turtle, Schneider Electric is on the IEC council and is chairman of ESSAC
- Anne Humberstone is on the IEC SMB
- Andrew Evans is on the IEC CAB
- David Dossett on the CENELEC board

Also in Europe

Howard Porter (BEAMA) is the immediate past chairman of ORGALIME, Graeme Philp (GAMBICA) special standards advisor ORGALIME and other staff are on many Orgalime Task Forces and the European Accreditation Advisory Board.

The views expressed today reflect a combined view from BEAMA, GAMBICA and ORGALIME

- The UK is heading out of the EU
- No-one is sure what the rules will be.. especially post June 9th!
- UK manufacturers and importers from the EU will still need to adhere to the single Market regulations and the relevant Standards
- The full membership of CEN and CENELEC for the UK industry is vital ..
- For the UK economy and large parts of the EU industry 100% compatibility with European standards is vital
- The advantages of UK involvement in committees all through CEN and CENELEC should not be lost
- The UK will of course need to stay fully involved in IEC and ISO

- The direction of product and system development across the world is clear:
- A rapid digitisation of industry, buildings and energy networks
- The evolution of low carbon energy production and products and systems
- In combination they provide opportunities for industry, but also great challenges, not least in standardisation
- The speed of product development is increasing all the time – standardisation is too slow, and standards often lag innovation

Examples:

The digital factory – needs digital enabled products, and interoperability

The smart house and smart electricity – products need to be low carbon, using appropriate digital solutions – interoperability key

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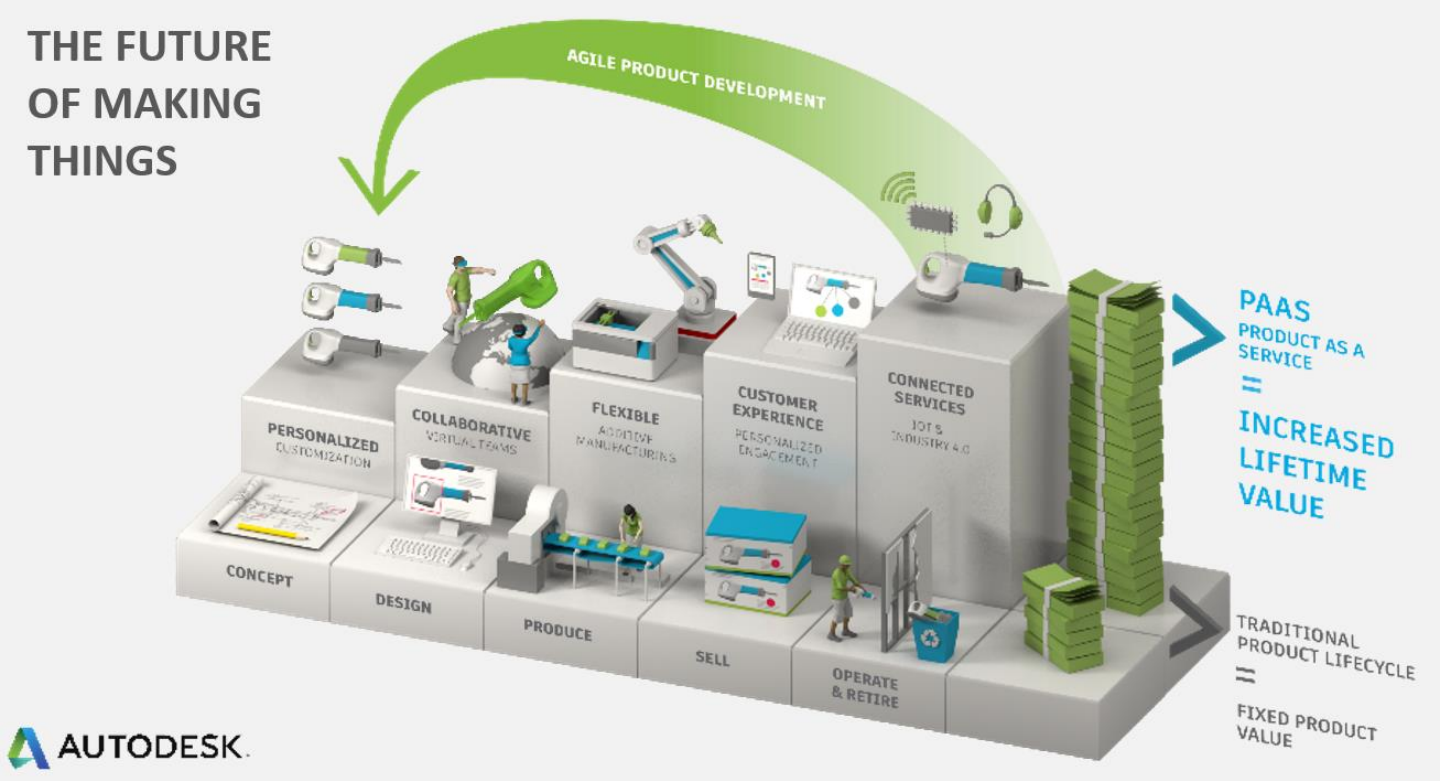
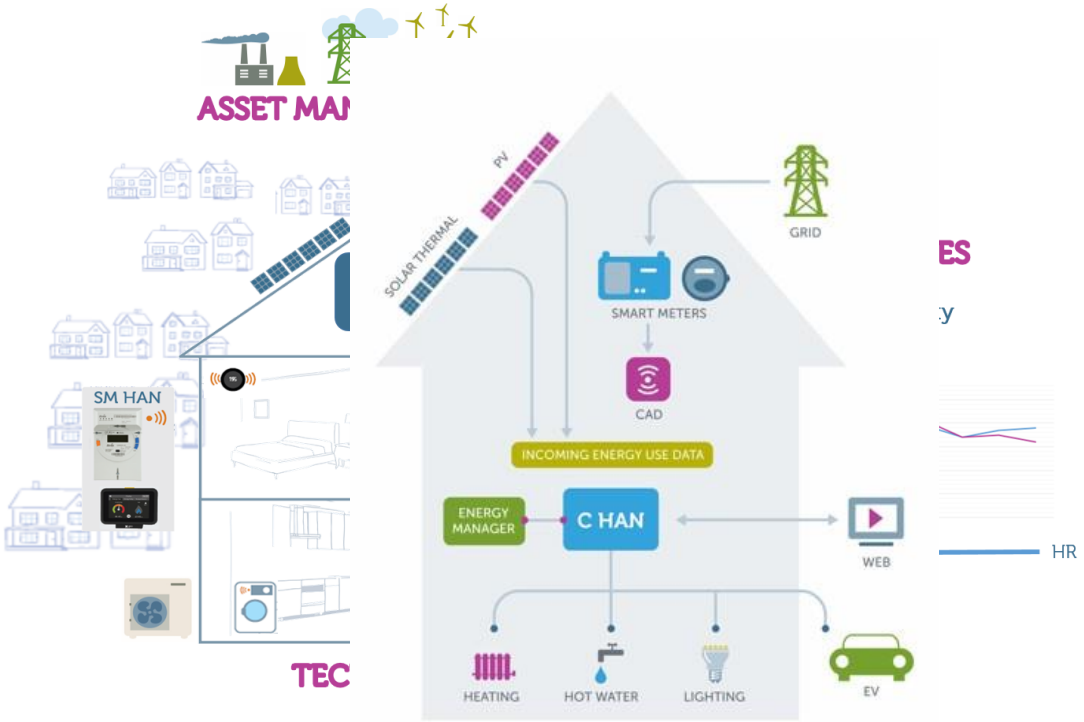

THE FUTURE OF MAKING THINGS
AGILE PRODUCT DEVELOPMENT
PERSONALIZED
CUSTOMIZATION
COLLABORATIVE
VIRTUAL TEAMS
FLEXIBLE
ADDITIVE MANUFACTURING
CUSTOMER EXPERIENCE
PERSONALIZED ENGAGEMENT
CONNECTED SERVICES
IOT & INDUSTRY 4.0
CONCEPT
DESIGN
PRODUCE
SELL
OPERATE & RETIRE
PAAS
PRODUCT AS A SERVICE
=
INCREASED LIFETIME VALUE
TRADITIONAL PRODUCT LIFECYCLE
=
FIXED PRODUCT VALUE
AUTODESK.

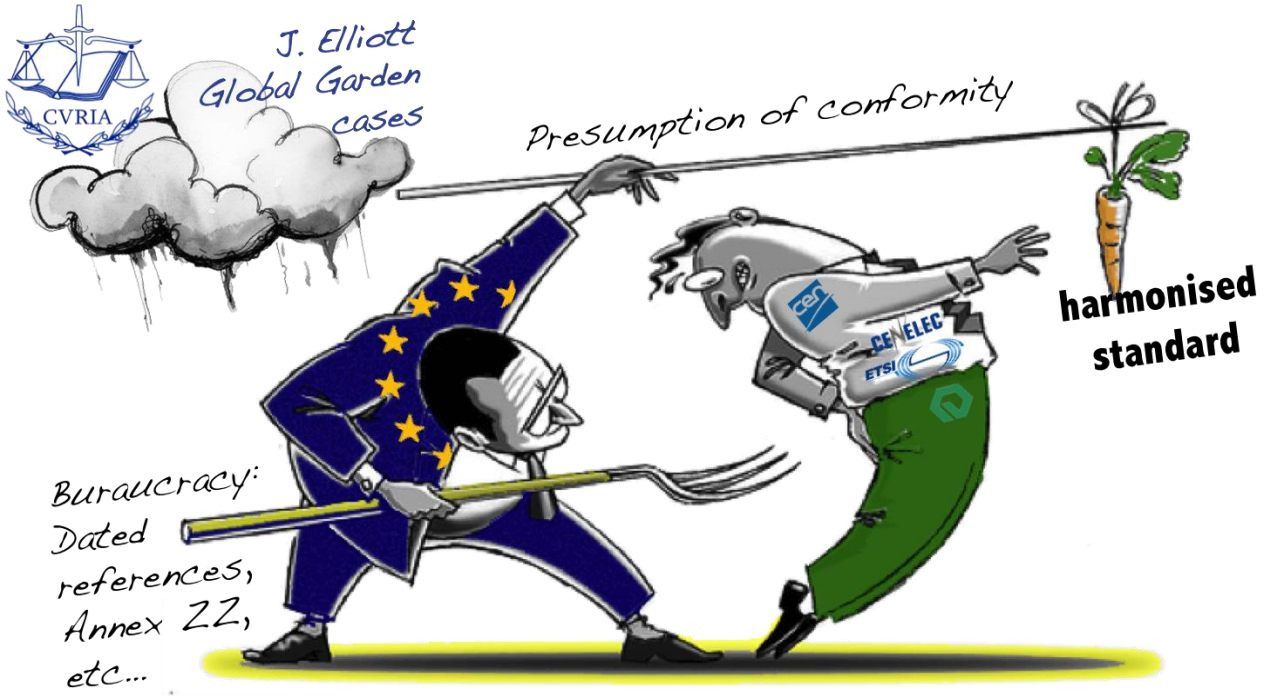

ASSET MA
SM HAN
TEC
PV
SOLAR THERMAL
GRID
SMART METERS
CAD
INCOMING ENERGY USE DATA
ENERGY MANAGER
C HAN
WEB
HEATING
HOT WATER
LIGHTING
EV
ES
HR

- Full inclusion in the structures and work programs of European and international standards bodies of Industry
- The establishment of Strategic standards forums within National Committees for relevant industry sectors, linking with national strategic groups
- Maximum use of smart working practices – allowing more rapid decision making
- Development of efficient but democratic voting structures
- Industry needs to continue to develop skilled standards experts, from the strategic to the detailed

Can the European Commission help?

- YES!!
- The Commission needs to understand and respect the difference between standardisation and legislation
- The European regulators need to be fully behind the solutions that industry needs:
- during and after Brexit
- in the development of the digital and low carbon future
- The future strength of European industry, including the UK relies on the effective and timely development of standards
- The Commission should do all it can to provide clarity and if possible funding to help companies develop their skill sets to deliver the standards needed for the future.
- And remove barriers as in the following current example:

Delayed citation of harmonised standards in the Official Journal of the EU



What does industry need?

- A recognition that industry funds and resources the standardisation system
- A reaffirmation of the principle of “presumption of conformity” as embodied in the New Approach
- The continuation of the current voluntary, consensual process of standards writing
- A push back against political involvement (particularly of the European Commission) in the writing of standards
- A reaffirmation of the Chinese wall between Standards writing and the drafting of legislation (although the one may, of course, reference the other)
- BUT the challenges of BREXIT, Digital and low carbon futures on the standards community must be met as outlined.

Standards Council of Canada
Conseil canadien des normes

Canada

Supporting Global Growth Through Standardization

John Walter, Chief Executive Officer, SCC

The Standards Council of Canada (SCC)

- Federal Crown Corporation established in 1970:
  - Reports to Parliament through the Minister of Innovation, Science and Economic Development (ISED)
  - Canada's national standards & accreditation body
  - As a Crown Corporation, SCC can be responsive to both government and industry needs.

- SCC leads the development and use of national and international standards.
  - i.e. SCC provides $1M in support to Canadian technical experts participating in ISO and IEC technical committees

Innovation

- SCC is increasing opportunities for Canada in new and emerging sectors to support innovation, commercialization & market access.
  - 43,800 enterprises in Canada export their products abroad

- Canadian Innovation Pilot Projects: supporting commercial opportunities for Canadian innovators using standards development.
  - Three new standards being developed at ISO and IEC

- Looking for future projects: innovations in CleanTech to support Canada's climate change policy objectives.

Infrastructure

- Development of standards to improve the resilience of infrastructure in Canada's North.
- Phase 2 of the Northern Infrastructure Standards Initiative (NISI): development of 7 new Northern infrastructure standards over 5 years
- Development of a state-of-play report on standardization guidance for weather data, climate information, and climate change projections

Free Trade Agreements

- Canada-EU Comprehensive Economic and Trade Agreement (CETA)
  - Conformity Assessment Protocol - implemented through Cooperation Agreement between SCC and the European cooperation for Accreditation (EA)
  - SCC-CEN/CENELEC Cooperation Agreement
  - SCC is a CEN Companion Standardization Body (CSB)

- Canadian Free Trade Agreement (CFTA)
  - Incorporates strengthened standards-related obligations, including:
    - use of international standards
    - mutual recognition of conformity assessment procedures
    - use of Canada's national standardization network to develop new standards.

SCC-Accredited Standards Development Organizations

AHRI
we make life better™

CSA Group

BNQ
Bureau de normalisation du Québec

ASTM INTERNATIONAL

NSF International

CGSB ONGC

UL

ULC Standards

North American Harmonization

- SCC accreditation of U.S. SDOs means more options for regulators and industry.
  - 132 ASTM committees (out of 143) had Canadian participation in 2014
- Continue to work closely with ANSI and DGN.
  - Industry-driven process for standards-alignment
- Working with industry to develop joint Canada-US standards to reduce duplication and lower transactional costs.

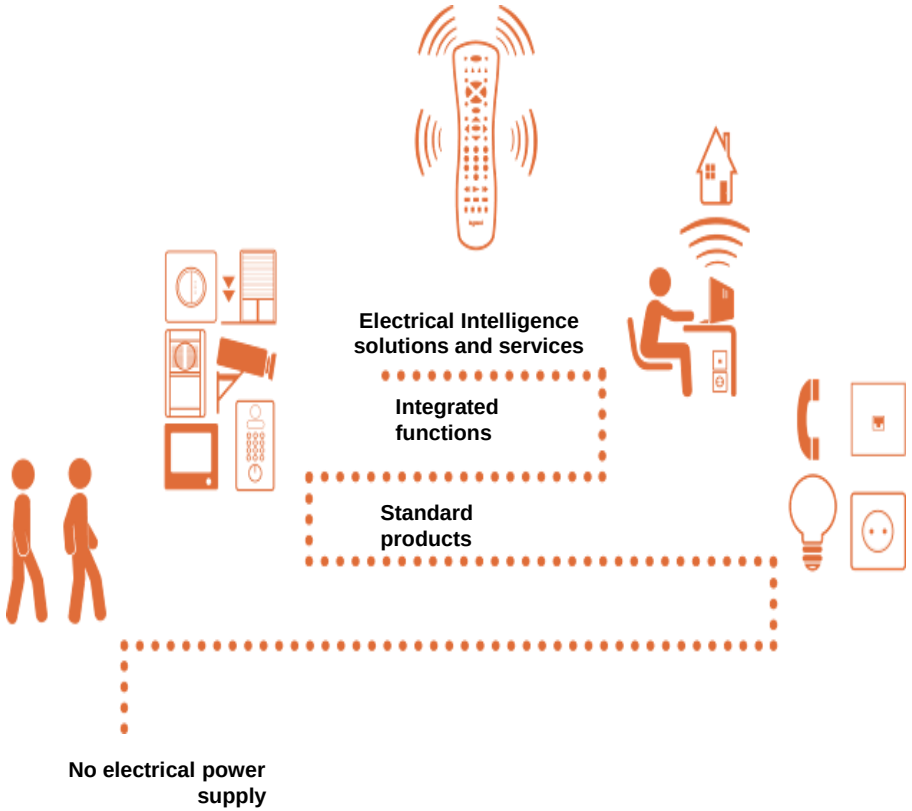
CEN/CENELEC

The practical use of standards :

A manufacturers perspective

Edinburgh : 22/6/2017

An International Group



€5 billion of sales in 2016

Operating profit in 2016 of **€934** million

30% of sales made in new economies in 2016

Established in more than **90** countries
and products sold in nearly **180** countries

200,000+ SKU's(exc specials)

Over **36,000** employees

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legrand® | UK & Ireland

POWERED BY SPECIALISTS

Connecting people and buildings for over 35 years ...

MANUFACTURING IN THE UK SINCE 1980

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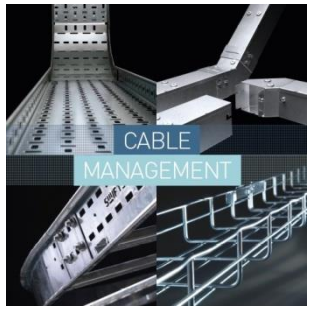
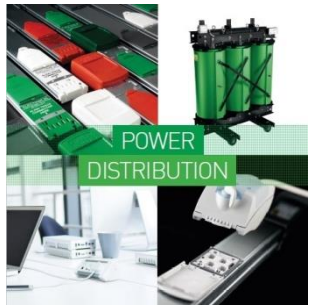
Legrand UK... SIX SPECIALIST BUSINESS UNITS





Aidcall
Jontek
tynetec

CABLOFIL
SALAMANDRE
SWIFTS

C2G
MINKELS
SOLUTIONS TO RELY ON
ORTRONICS
Raritan.

CP electronics
green-i

ELECTRAK
ZUCCHINI

bticino
NUVO
VANTAGE

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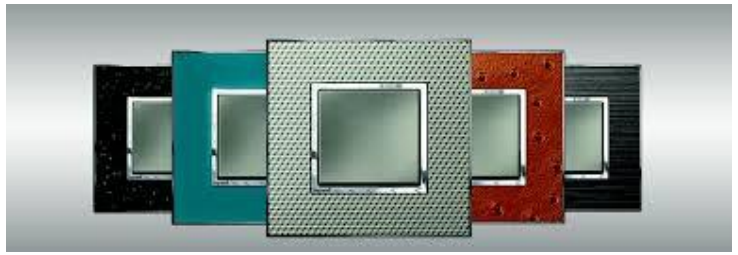
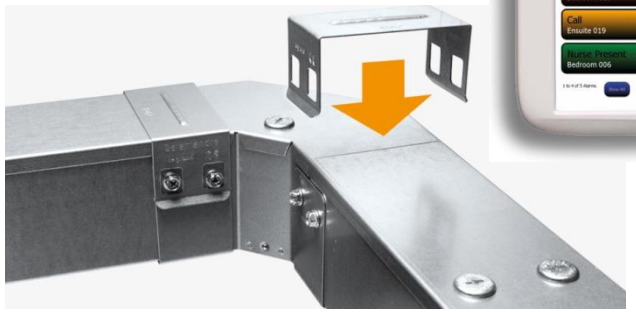
Innovation: one of our main growth drivers





5% of 2016 sales invested in Research & Development (250 ME)

Circa **3,900** active patents globaly

Over **2,000** experts dedicated to R&D

Recent new products launched in the **UK** include:

- Swiftclip (Swifts cable tray)
- Touch Safe Pro wireless nurse call system
- Intersoc-R workstation solutions
- Salamandre distribution trunking
- Arteor home automation and wiring accessories

A Journey ..

Mechanical/
Electrical/
Electronic/Digital

Products /
Systems/Solutions

B to B /B to C

Fast Clockspeed

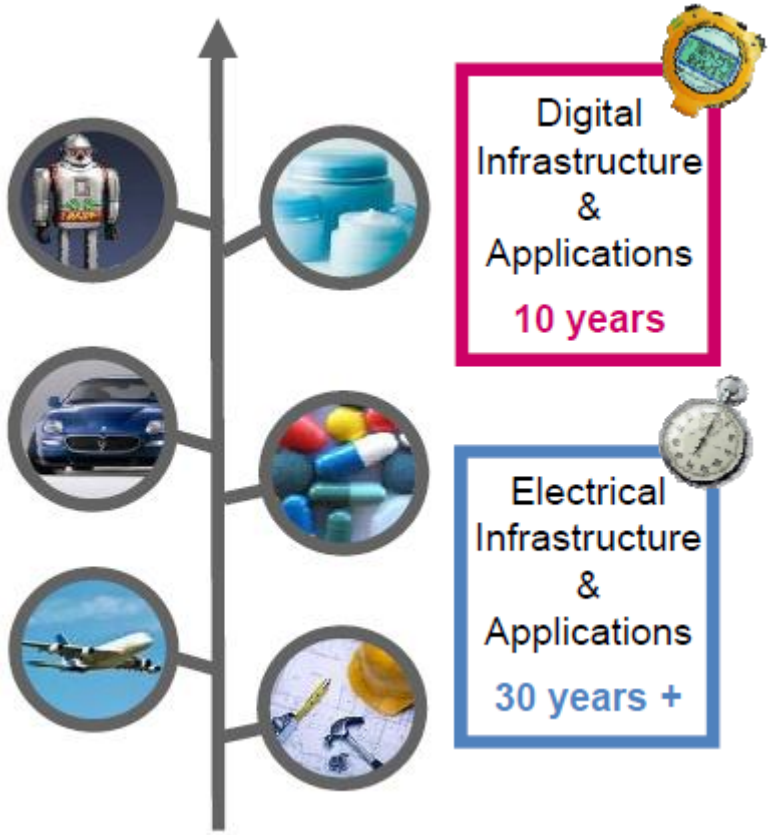
Toys & Games Industry	< 1 year
Semi-Conductors Industry	1-2 years
Cosmetics Industry	2-3 years

Medium Clockspeed

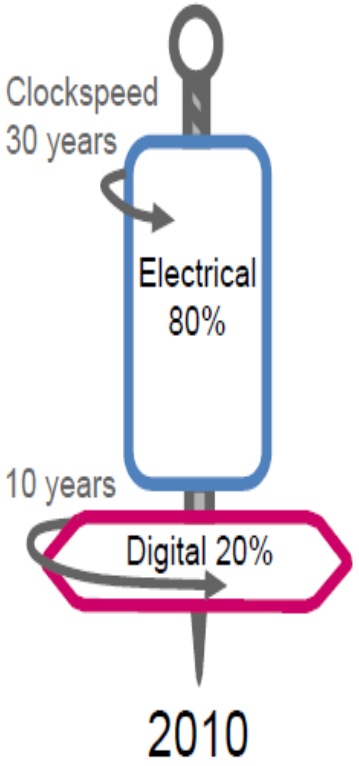
Car Industry	4-6 years
Beer Brewing Industry	4-6 years
Machine Tools Industry	6-10 years
Pharmaceuticals Industry	7-10 years

Slow Clockspeed

Aircraft Industry	10-20 years
Steel Industry	20-40 years
Building Materials	20-40 years



Challenges of transition to digital...
We all need to keep pace...



•More Products

•More Data

•New players

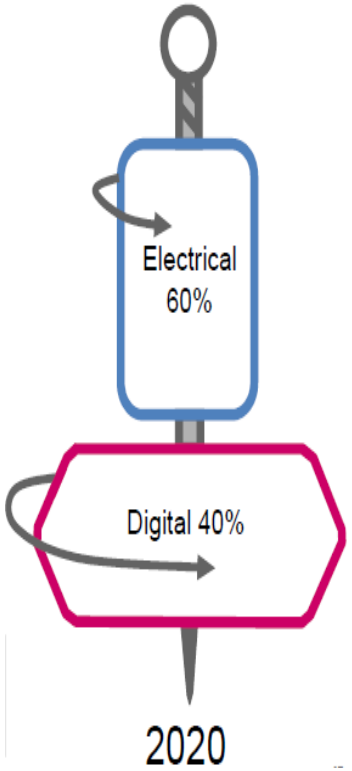
•White papers become de facto standards

Interoperability/Backward Compatibility

Privacy/CyberSecurity

Ageing resource /Changing skill sets

Non compliant product/ anti-counterfeit



Why are standards important to Legrand UK?

Improve/Innovate
Inform /Harmonise
Influence
Interoperability
Implement/ Phase in and out

We are very aware that digital and electrical infrastructures are increasingly interlinked/inter-dependant and will need to evolve at an even faster pace in the future

UK Team : 8 + 1 consultant

ELIOT … Electrical and digital infrastructure at the heart of IoT in buildings

Cloud, Service Providers

Infrastructure Electrical & Digital

User interface
Assisted living
Home systems
Door entry systems
Emergency lighting
Hotel room control
Lighting management
Energy management
UPS
Metering
Modular switchgear
PDU
Chimes
and more

Connected Objects

and more

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