n° 2 - 2016

NEWS

FEDERATION IDEA

May/June 2016

Associations

AREI - South Africa
Association of Representatives for Electronics Industry

ASPEC - Russia
Association of Suppliers of Electronic Components

ASSODEL - Italy
Associazione Nazionale Fornitori Elettronica

CEDA - China
China Electronics Distributor Alliance

ECAANZ - Australia
Electronic Components Association Australia and New Zealand

ECIA - United States
Electronic Components Industry Association

ECSN - United Kingdom
Electronic Components Supply Network

ELCINA - India
Electronic Industries Association of India

FBDI - Germany
Fachverband der Bauelemente Distribution

FEDELEC - Tunisia
Tunisian Federation of Electric and Electronic Industries

SE - Sweden
Svensk Elektronik Trade Associations

SPDEI - France
Syndicat Professionnel de la Distribution en Electronique Industrielle

IoT - Today

You "Plug and Pray"…

by Adam Fletcher
Chairman of IDEA and ECSN
www.ecsn-uk.org

Despite many claims to the contrary the Internet of Things (IoT) remains in an early growth phase and semiconductor manufacturers, system integrators, existing and new service providers face many false starts in their quest for commercial opportunities. The market is being hampered by the lack of a consensus and agreement on industry standards, particularly relating to privacy and end-to-end security. IDEA Chairman Adam Fletcher believes that when a broad consensus is arrived at the market will develop very quickly and over the next decade may overtake mobile telephony as the leading industry sales revenue growth driver.

As we transition from a centralised structure to a more complex network of decentralised 'smart' devices, making decisions based on both central and local commands and combining inputs from multiple sensor networks, it was inevitable that there would be some mistakes and failures along the way.
Obviously organisations don't set out to design new products that fail but in a new, rapidly evolving and increasingly hostile environment some variables are unknown or get overlooked.
Sometimes the product gets accessed by an idiot with unimaginable strength.

Among today's strongest idiots the *"hacker"* reigns supreme. Whether operating alone from a back bedroom, as part of a hacking community, or as part of an organised crime gang or hostile government agency, hackers are directly responsible for numerous security breaches on early IoT products.

> ***"Among today's strongest idiots the "hacker" reigns supreme"***

Whilst rarely welcomed, their hacking activities have however highlighted many shortcomings in the design of new products and a woeful lack of security in the systems in which they operate. Whilst damaging in terms of reputation to the organisations affected, finding these IoT security problems early is not nearly as damaging or expensive as finding them much later in the market development cycle or after a large installed product base has been established.

Your Microsoft PC is good and easy example with which to aid understanding of the potential for security breaches… Most PC users understand just how vulnerable their data and system is to outside attack.
A portable PC that is routinely removed from its secured office or home network

is even more likely to be subjected to some form of attack. Fortunately the industry has done quite a good job in convincing PC users to put their faith and money into some form of automatically updating security software to protect them.

> *"Reaching workable industry-wide agreement on IoT standards is proving to be difficult"*

In contrast, a mobile phone network has significantly more levels of security infrastructure and as a result is more robust against attack.
That said, today many smartphones swap between mobile networks and have access to conventional Wi-Fi, Bluetooth and other wireless protocols, which increases their susceptibility to attack. Additional built-in security software is mitigating the risk but as researchers recently demonstrated when they were able to gain remote access to the *"connected car"* systems of a moving vehicle, being on a mobile network does little to reassure about IoT security.

Further, the plethora of competing communication standards in short range, medium to low data rate applications i.e. OnRamp, Sigfox, Z-Wave, 802.11ah. ZigBee, LTE Cat.01, Bluetooth et. al., are hindering progress. With strong and very well financed industry consortia representing their interests and all striving to establish a dominant market position for their technology, reaching workable industry-wide agreement on IoT standards is proving to be difficult.

ALL SORTS OF CONSUMER DEVICES

The IoT market today is essentially a large number of fragmented or niche markets, collectively destined to put communications and sensors into all sorts of consumer, home, industrial, infrastructure and transportation devices. Surprisingly it's the lowest cost IP enabled wireless module in the network that presents one of the biggest threats to IoT security.

Today that module is available for less than $1, something that belies the fact that it needs to be as secure as the rest of the system.

Further vulnerability is presented by the need for operators to have access to the networks and their devices in order to maintain and upgrade their systems. These "backdoors" need sophisticated security to maintain the safety and integrity of the overall network when accessed, which can be difficult to achieve without exposing the network to malicious damage or unnecessarily impinging civil liberties especially as governments authorities increasingly seek to access them.

Semiconductor manufacturers are able to design and manufacture their products with a wide range of "on silicon" security features, ranging from additional

non-volatile memory for encryption and device authentication to processor partitioning, secure serial numbers etc. If the software is correctly defined these features help make their products and therefore the systems in which they operate very secure.

The problem is that adding these security features significantly increases the complexity and therefore the price of the product. As average selling prices reduce and margins shrink there is very little incentive for a semiconductor manufacturer to add more security features or do more security engineering until it's absolutely necessary.

> *"Adding security features significantly increases the complexity and therefore the price of the product"*

To drive cost down and ensure commercial viability semiconductor manufacturers need to meet the needs of clearly identified high volume applications and service the requirements of greater than **50 million devices per year**.

In previous industry cycles when an industry standard is close to agreement semiconductor manufacturers have been able to rapidly ramp up production, reduced prices and driven market standardisation around a particular product by attempting to maximise their market share. Today it will not be possible to achieve these high volume applications unless clearly defined global industry standards are negotiated and agreed.
It is likely that many semiconductor manufacturers will need to provide software that supports both the development and embedded, in-system secure use of their devices within IoT products. Whether they will be successful at monetarising this software remains to be seen, but they will need to recover their investment, something that they have often failed to do in the past.

Ambitions of semiconductor manufacturers to move up the **"value chain"**, can probably only be achieved via collaboration, merger or acquisition with other partners in the overall IoT software stack.
This is one of several reasons for all the M&A activity in the semiconductor market over the last 18 months.

USER RESPONSIBILITIES

Integrating strong security features in the hardware and software is only a part of the solution. A major weak link is often introduced by users who fail to recognise the risks of poor security and are apparently content to use common, easily remembered passwords for multiple applications etc.

If your home thermostat, lighting or surveillance system is compromised by a hacker it's bound to be annoying and inconvenient but as IoT applications gain acceptance in industrial applications and transport systems the risk of widespread disruption, potential loss of life and significant financial damage increases exponentially.
It has been suggested by security industry analysts that all operators and users of the first generation of IoT products are essentially operating in a **"plug and pray" environment**.

> *"System security is woefully inadequate"*

They believe that system security is woefully inadequate and that the likelihood of multiple security breaches occurring is increasing as millions more devices are added on to the existing networks.

As all organisations across the electronic components supply network are going to be impacted by the roll out of IoT enabled services the need for active engagement with the relevant standards bodies for their market, with their suppliers and with their customers is paramount.
If we can achieve strong secure standards in IoT then we will all be able to play safely and the "prayers" or aspirations of many organisations for an improvement in trading conditions by a strong growing market driver will be answered.

EID NEWS

MARKET

- For the year ended 31 March 2016, **Electrocomponents** sales adjusted for trading days and currency movements grew by 2.8 percent at £1, 291.1million with strong growth in Europe offsetting weakness in North America & Asia Pacific. Reported profit before tax was down 63.7 percent at £34.9 million. Group eCommerce sales grew by 6.1 percent. The distributor's own brand, RS Pro, grew by 3.8% in the year, with 5.6% growth in the second half.
- **ARM has acquired Apical**, a British company involved in imaging and embedded computer vision technology that will allow next generation devices to understand and act intelligently on information from their environment. Its advanced imaging products are used in more than 1.5 billion smartphones and approximately 300 million other consumer/industrial devices including IP cameras, digital stills cameras and tablets.
- **Richardson Electronics** announced a new franchise agreement with **Global Power Technologies** Group, a full-service manufacturer of low-cost, silicon carbide (SiC) semiconductors for the commercial power market. The agreement aligns with Global Power Technologies Group's efforts to identify new opportunities using SiC technology, as market demand continues to expand for power electronics and green energy technologies.

Q1 2016. A superb quarter to start 2016! The best for over 8 years!

by Gary Kibblewhite
www.ideaelectronics.com

A really good Quarter with total European billings up by **5.9%** on the same quarter last year and booking up **5.8%**.

This is the highest European Q1 bookings and billings for at least the last 8 years! The primary driver for this growth is the super German performance growing the billings by **7.5%** which is by **€76 million**.

A quarter's growth of more than some individual countries! I said last quarter that the strong Q4 bookings performance should herald a strong billing in Q1 and it sure did!

> ***"This is the highest European Q1 bookings and billings for at least the last 8 years"***

Just to remind readers. If you would like to have the original graphics used in this article just email to the IDEA secretary at *segreteria@ideaelectronics.com*

The IDEA statistics are taken from actual bookings and billings returns made by a substantial percentage of the electronic component distributors in Europe, including all the major distribution groups.

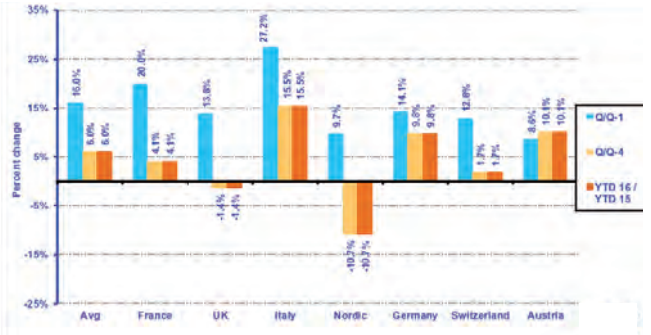
1ST QTR. TOTAL COMPONENTS booking, billing & book: bill ratio *Graphic T1*
Total distribution electronic components booking, billing and Book: bill ratio for Germany, France, Italy, UK, Sweden, Norway, Denmark, Finland, Switzerland and Austria

www.ideaelectronics.com

As one can see from *Graphic T1*, not only are the bookings and billings at record levels but the book:bill ratio is positive in the quarter.

> ***"Both Nordic and the UK are showing a drop in both bookings and billings"***

1ST QTR. TOTAL COMPONENTS Billing Trend *Graphic T3*
Distribution sales for Electronic components by country comparing current qtr with prior quarter (Q/Q1) and same quarter prior year (Q/QY-4) and YTD 16/15



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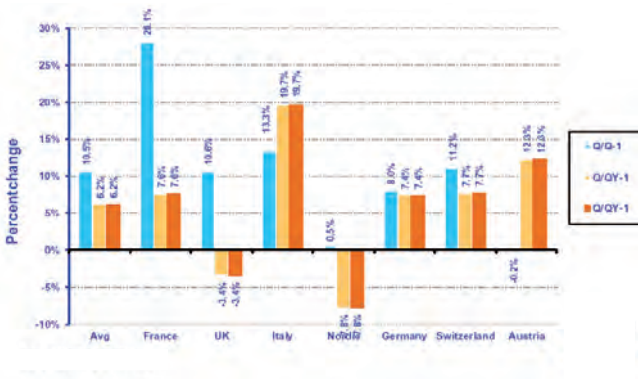
The billings trend by country in *Graphic T3* shows where the billings growth is coming from…and where it isn't! Austria, Germany and Italy are all posting at least 10% Growth but at the other end of the scale, both Nordic and the UK are showing a drop in both bookings and billings.

1ST QTR. TOTAL COMPONENTS Booking Trend *Graphic T2*

Distribution orders for Electronic components by country comparing current qtr with prior quarter (Q/Q1) and same quarter prior year (Q/QY-4) and YTD 16/15



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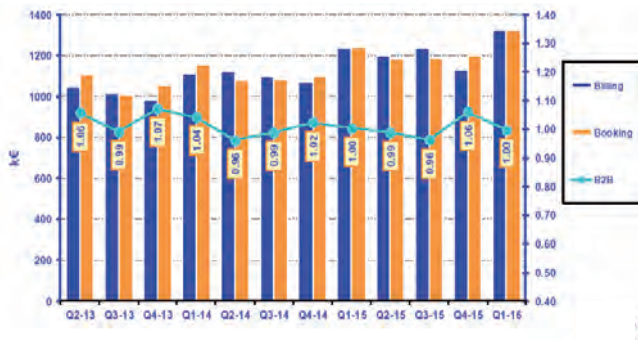
The bookings trend by country in *Graphic T2* shows that France has shown a massive 28% bookings growth when compared with Q4 last year and a very healthy 7.6% bookings growth compared with the same quarter last year. Again, this highlights the problems facing both Nordic and the UK.

1ST QTR. 2016 SEMICONDUCTOR booking, billing & book: bill ratio *Graphic S1*

Semiconductor components booking, billing and Book: bill ratio for Germany, France, Italy, UK, Sweden, Norway, Denmark, Finland, Switzerland and Austria



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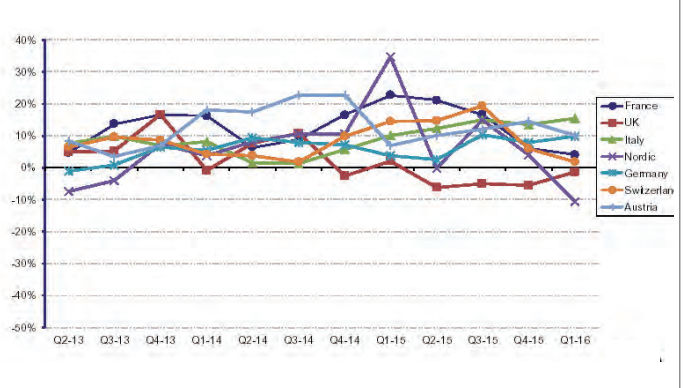
Graphic S1 covering semiconductors shows that, where last quarter they didn't perform well, this quarter they have led the market growth in both bookings and billings.

> ***" Again, it is Germany that is leading the market with a strong, stable quarterly growth "***

1ST QTR. 2016 TOTAL COMPONENTS TENDENTIAL INDEX BY COUNTRY (Q.QY-1) *Graphic T6*

Trend showing groeth/decline % in quarterly sales of all components through distributin split by country compared with same quarter prior year



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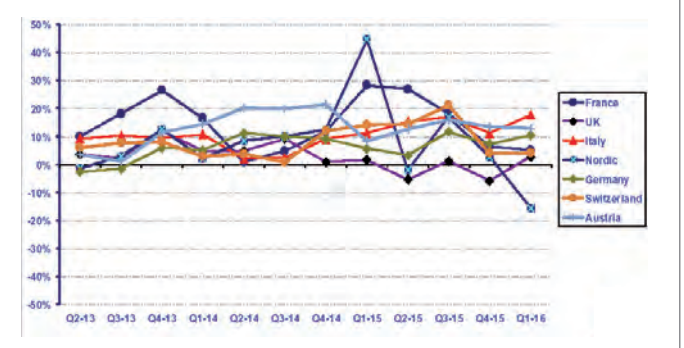
The continued "above the line" percentage growth in revenues each quarter for most of the countries apart from UK and Nordic is clearly shown in *Graphic T5*.
This will be the fourth consecutive quarter's drop in billings for the UK.

1ST QTR. 2016 SEMICONDUCTOR TENDENTIAL INDEX (Q.QY-1) *Graphic S6*

Trend showing groeth/decline % in quarterly sales of all components through distributin split by country compared with same quarter prior year



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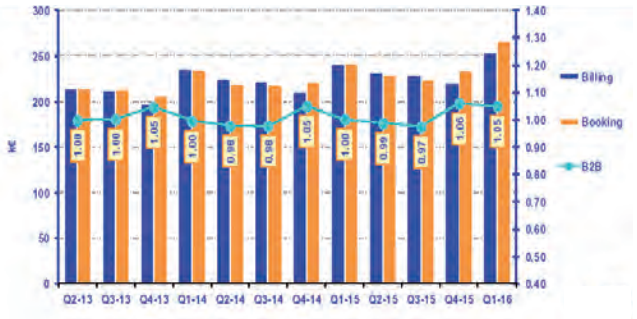
Graphic S6 shows that all regions apart from Nordic have shown a growth in semiconductor revenues in the quarter with every region apart from UK and Nordic showing a growth in revenues for the quarter for the last 10 quarters

1ST QTR. 2016 PASSIVES booking, billing & book: bill ratio *Graphic P1*

Passive components booking, billing and Book: bill ratio for Germany, France, Italy, UK, Sweden, Norway, Denmark, Finland, Switzerland and Austria



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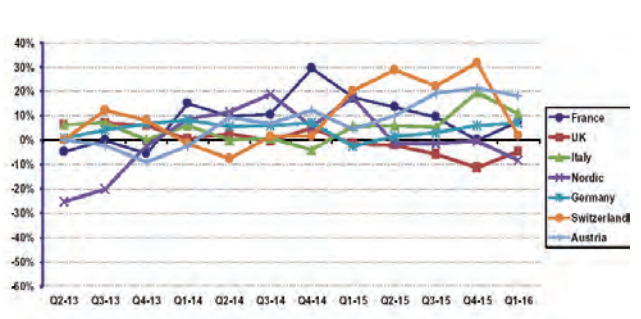
Graphic P1, which covers passive components shows that this quarter, in common with semis, passives showed a strong growth in the quarter in both bookings and billings and maintained a positive book: bill which should produce another strong billings quarter in Q2.

1ST QTR. 2016 PASSIVE TENDENTIAL INDEXBY BY COUNTRY (Q.QY-1) *Graphic P6*

Trend showing groeth/decline % in quarterly sales of passives through distributin by country compared with same quarter prior year



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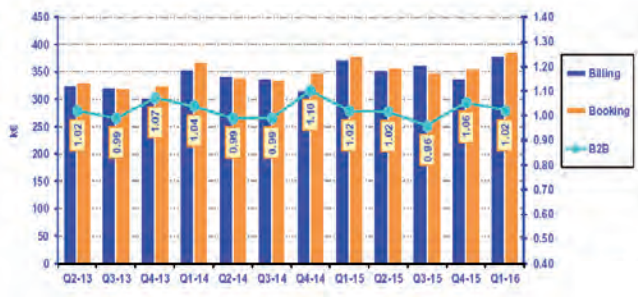
The regional *Graphic P6* shows that the overall positive growth trend continues with all countries apart from UK and Nordic showing consistent growth for the last 5 quarters.
Again, it is Germany that is leading the market with a strong, stable quarterly growth.

1ST QTR. 2016 EMECH COMPONENTS booking, billing & book: bill ratio *Graphic E1*

EMECH components booking, billing and Book: bill ratio for Germany, France, Italy, UK, Sweden, Norway, Denmark, Finland, Switzerland and Austria



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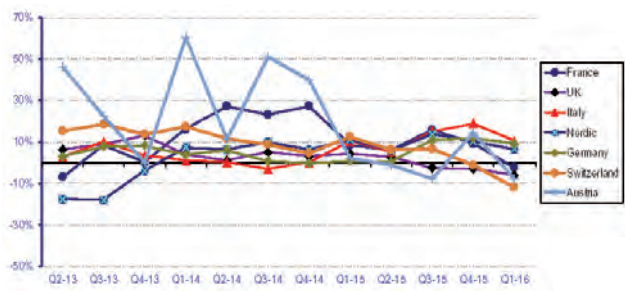
Graphic E1 covering electromechanical components shows that their performance mirrors that of semis and passives with the strongest bookings and billings since at least 2012. Also with a positive book:bill for the quarter!

1ST QTR. 2016 EMECH TENDENTIAL INDEXBY BY COUNTRY (Q.QY-1) *Graphic E6*

Trend showing groeth/decline % in quarterly sales of semiconductors through distributin split by country compared with same quarter prior year



www.ideaelectronics.com

Once again, the poor performance of the UK, together with a drop in Billings in both Switzerland and Austria, have pulled down what could have been a good quarter for electromechanicals.

> *"A superb German performance grow ing total component billings by 36 million euro"*

2015 Automotive market unit volume increased 1% worldwide

by Ron Bishop
Bishop & Associates
www.bishopinc.com

The latest numbers show that automotive unit volume increased 1% in 2015, and TE tops the list of connector suppliers to the market

The worldwide demand for connectors in the automotive market was $11.8 billion in 2015, down 4% from 2014. North America and Europe consumed 62% of those connectors by dollar volume. Vehicle production worldwide in 2015 was approximately **90.7 million units** according to OICA. China produced about 27% of those units (but its connector costs are significantly lower than in North America or Europe). North America and Europe produced approximately 40% of the units.

Out of the top 100 connector companies, the top 10 companies that supply connectors to the automotive market provide 90% of the worldwide demand for that market (based on 2014 sales). **TE** has the largest market share at **37%** of the automotive market. It is followed by **Yazaki** at **19%** and **Delphi** at **13%**.

> **"Automotive connector sales decreased 4% in 2015"**

Bishop follows 14 public companies in the automotive market on a quarterly basis. In 2015, sales for these companies declined 2.7% over their 2014 sales. Profitability, however, increased 5.7% year over year.

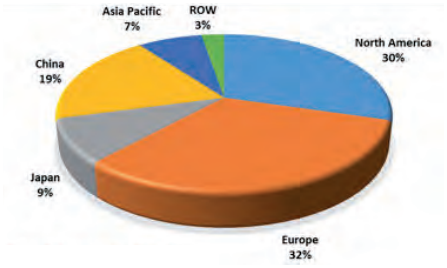
Of the 14 companies, Tesla had the largest increase in sales in 2015 at 26.5%. Automotive connector sales decreased 4% in 2015. Automotive production worldwide increased 1%. Sales for the 14 automotive OEMs that Bishop follows declined 2.7% in 2015.

Sales information for these companies and others can be found in Bishop & Associates' Top 100 Connector Manufacturers report. For more information, contact *bishop@bishopinc.com*

AUTOMOTIVE-MARKET-TOP-10-SHARE-2015 *Table 2*

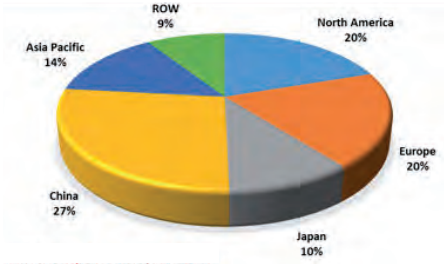
Company	Share of Market
Te Connectivity	37%
Yazaki	19%
Delphi	13%
JAE	4%
Sumitomo	4%
JST	3%
AVX	3%
Rosenberger	3%
Amphenol	2%
Korea Electric Terminal	2%
Others	2%
Total	**100%**

2015 AUTOMOTIVE MARKET FOR CONNECTORS Sales by Region of the World



Bishop & Asocates, Inc © 2016

2015 AUTOMOTIVE PRODUCTION Units by Region of the World



Oica & Bishop & Asocates, Inc © 2016

Do you have what it takes to be a supply chain super hero?

by Pascal Fernandez
SPDEI France - VP Avnet Velocity - VP Business Development
www.spdei.fr

When was the last time you heard a child say that he or she wanted to become a corporate raider or a tyrannical despot when they grow up?

No, children, with all their naiveté and enthusiasm, generally aspire to more noble callings: astronaut, doctor, superhero. For all but a lucky few, however, the practicalities of adult life – responsibilities, financial obligations, gravity – often compel more pragmatic career choices.

> *"The supply chain's role in corporate social responsibility (CSR) deserves more recognition"*

That doesn't mean that as adults we must abandon our quest to save the world; just that we have to think differently about how we will make our mark.

Once considered an anathema by the likes of economists such as Milt Friedman ("The only social responsibility of business is to increase profits"), businesses today are proving that not only is it possible to do well while doing good, but that taking a "net positive" approach to both social and environmental issues is the key to future business success.

Furthermore, it is becoming increasingly clear that few professions are better positioned to influence and drive meaningful corporate sustainability efforts as supply chain management. *"Supply chain owns sustainability,"* according to SCM World Chief Content Officer Kevin O'Marah in the **2015 Future of Supply Chain report**.

SUSTAINABILITY ALONG THE SUPPLY CHAIN

Stan Aronow, vice president, Supply Chain Research, **Gartner** also believes supply chain's role in corporate social responsibility (CSR) deserves more recognition. Aronow reported that Gartner has begun placing more explicit emphasis on CSR in the peer voting and within the Gartner analyst evaluation process for the annual Supply Chain Top 25 rankings. *"Many companies are proud of their CSR initiatives, and have observed that supply chain leadership includes running a responsible, sustainable business, and that our ranking should explicitly reflect this dimension,"* wrote Aronow in his 2015 report *The 2015 Supply Chain Top 25 Methodology: To Change or Not to Change*.

> *"Don't do what you think is most interesting, instead, do what will actually make a positive difference to your business and to the world"*

"We have always recognized, and often written, that CSR is an important aspect of leadership and wholeheartedly agree that it should be a consideration for how high or low they rate on the annual ranking."

THE CSR QUEST

Today, however, there is mounting evidence that integrating social, ethical, and environmental considerations into the core business strategy *"is not something that will cost your business, but something that will enhance your business,"* according to Michael Beer, Cahners-Rabb Professor of Business Administration, Emeritus, at Harvard Business School and a director of the Center for Higher Ambition Leadership.

So, you're ready to join the CSR quest and claim your calling as a supply chain superhero, but where do you start? Mark Horoszowski, co-founder and CEO of MovingWorlds.org, a global platform that helps people volunteer their skills around the world, offered this advice in a recent blog: *"Pilot more initiatives aligned with core business outcomes."* CSR initiatives, he wrote, *"scale or die based on their ability to drive business outcomes. Don't do what you think is most interesting, instead, do what will actually make a positive difference to your business and to the world."*

Are Catalogue Distis really gaining market share?

by Franco Musiari
Technical Director, Assodel
www.assodel.it

by Silvio Baronchelli
President, IDEA
s.baronchelli@tecnoimprese.it

Rank	Company	2014	2015	(15/14)%
1	Avnet Inc.	28,10	27,35	-2,7%
2	Arrow El.	22,80	23,30	2,2%
3	WPG Hold. Ttd	14,90	16,24	9,0%
4	Future El.	7,70	5,00	-35,1%
5	Macnica Inc.	3,40	3,25	-4,4%
6	• Electrocompnents PLC	2,11	1,94	-8,1%
7	TTI Inc.	1,95	1,95	0,0%
8	• Digi-Key Corp.	1,76	1,70	-3,4%
9	• Newark	1,60	1,50	-6,3%
10	• Mouser El.	0,91	0,94	3,3%
	Top 10	85,23	83,17	-2,4%
	• HVS Disti	6,38	6,08	-4,7%
	HVS share on Top10	7,5%	7,3%	
Data from Global Purchasing reports on 2016 and 2015 top distis.				

There is the perception, widely diffused in the community, that catalogue distis are gaining market share but statistics do not confirm such a feeling.
At least in Italy, among the electronic distributors community, there is a quite widespread feeling that catalogue distis – actually they prefere to be called 'high value service' (HVS) - are gaining share within the distribution market.
One of the main considerations to support this thinking is that lead and delivery times tend to be almost zero which is appreciated in an end market where a quick reaction time is a must but visibility on the business horizon and planning comes only from the consultation of a crystall ball.
But this is not the only reason: no minimum order quantity required, a limitless line card coverage that makes the 'one stop shop' a reality, availability of new products at the time of the suppliers announcements, are also good triggers to steer customers toward HVS distributors.

> *"In the end event, 2015 has not been a particularly exciting year"*

BUT THE W/W STATISTCS ARE SAYING SOMETHING DIFFERENT

Recently Globalpurchasing.com, *"the website for sourcing and supply chain managers"*, has published the '2016 Top distributors list' that details the W/W revenues for the major distributors.
This reports follows an equivalent report published in 2015 and makes reference to the 2014 revenues.
Taking these two reports in considertion we built table 1 where the 2014 and 2015 revenues of the top 10 distributors including four HVS distis (marked with a bullet).

For more familiar names in Europe please translate Electrocomponents plc as **'RS Components'** while **Newark** reflects the european sales of its parent company, British-based, **Premier Farnell**.

The bottom lines of *table 1* show the comparison of the Top10 total and the total of the four HVS distis RS, **Digi-Key**, **Farnell** and **Mouser**.
In the end event, 2015 has not been a particularly exciting year either for the top-10 or for the top4-HVS but for the latter.

> *"Availability of new products at the time of the suppliers announcements, is a good trigger to steer customers toward HVS distributors"*

The decline has been greater: -4.7% againts -2.4%. If we accept these numbers we must accept, with all the limitations that affect this kind of statistics, a reality that is opposite, as happens quite often, to the perception mentioned at the beginning of this short notes.

> *"There is a quite widespread feeling that catalogue distis are gaining share"*

There can be many reasons for this but most probably, the number one is the fact that other distis, lets say traditional ones, have, in the meantime, participated to a much greater extent in web sales, or e-commerce. eg **Avnet Express** to mention just one.

News from FBDi Germany

by Wolfram Ziehfuss
Executive Director FBDi e.V.
www.fbdi.de

Eu directive on Electromagnetic Fields- Changes as of July 2016

IMPLEMENTATION IN GERMAN NATIONAL LAW

The EU member states are required to implement EU occupational health & safety **directive 2013/35/EU on electromagnetic fields** in national law no later than 1 July 2016. Directive 2013/35/EU defines minimum regulations for the protection of the health & safety of employees from hazards presented by electromagnetic fields (EMF), thereby avoiding unnecessary burdens and costs – especially for small and medium-sized enterprises. Even if the electrical or electromagnetic fields at most workplaces subject to EMF are so low that no measures are necessary, employees at particular risk (such as those wearing implants) must always be given due attention.
At workplaces with strong EM fields (e.g. welding, magnetic resonance therapy), a hazard assessment and record-keeping is necessary, and suitable protective measures must be taken.
EU member states specifically have until **1 July 2016** to implement this.

> *"EU member states are required to implement EU occupational health & safety directive 2013/35/EU on electromagnetic fields in national law no later than 1 July 2016."*

In the course of the implementation, the accident prevention regulation DGUV regulation 15 and the associated DGUV rule 103-013 will be abolished by government decree and a set of technical rules to define specific terms.

LITHIUM BATTERIES AS FREIGHT IN AIR TRANSPORT - CHANGES SINCE APRIL 2016

Due to their potential as a fire and explosion risk, lithium batteries and cells require particular attention to complex regulations relating to transport (including packaging, loading and shipment). Accordingly, there have been new binding regulations from the ICAO *(International Civil Aviation Organisation)* /IATA (International Air Transport Association) in effect since **1 April 2016** for shippers and packagers of lithium-ion batteries (UN3480) and lithium metal batteries (UN3090):
Lithium ion batteries (UN3480): (including lithium ion polymer batteries)
Limited **charge**:
They must not exceed a charge of 30%.
This does not include batteries enclosed with or installed within accessories.
Limited **package quantities**:
For batteries packaged in accordance with Section II of Packing Instruction 965 (only batteries), the shipper must not send more than one Section II package per shipment (this corresponds to 2.5 kg net weight!).
Repackaging: Shipments with lithium-ion batteries in accordance with Section II of Packing Instruction 965 may only contain one Section II package – 8 cells or 2 batteries (only batteries) – when repackaged.
Lithium metal batteries (UN3090): (including lithium alloy batteries)

Limited package quantities:
The shipper must also not send more than one Section II package per shipment for batteries packaged in accordance with Section II of Packing Instruction 968 (only batteries).
Shipments with lithium metal batteries in accordance with Section II of Packing Instruction 968 may only contain one package.

Separate shipment of batteries: The shipper must dispatch shipments containing such UN3080 / UN3480 lithium batteries (only batteries) as freight separately from other shipped goods. A document must also be enclosed with every shipment specifying that the shipped item contains lithium-ion cells or batteries.
Where shipments consist of packaged items with lithium batteries and normal (unrestricted) freight, the number of packaged items with lithium batteries must be specified on the air waybill.
If this specification is missing, the entire shipment will be declared with shipment items with lithium batteries.
The FBDi also advises that where information specified in the air waybill is not consistent with the labelling of hazardous goods shipments, these **cannot** be accepted for air cargo transport.

> *"Since 1st April 2016 there has been a ban on the transport of lithium-ion batteries as freight on passenger aircraft"*

Additionaly, a new addition since 1 April 2016 is a

transitional ban imposed by the Governing Council of the ICAO on the transport of lithium-ion batteries as freight on passenger aircraft. This does not include lithium-ion batteries in the electronic devices of passengers or crew.

GERMAN PRODUCT SAFETY ACT (PRODSG) – FOCUS ON SAFETY AND HEALTH PROTECTION

The European Union has enacted a number of legal instruments with a view to protecting the public from risks represented by hazardous products. These have been implemented into German law by means of the Produktsicherheitsgesetz *(Product Safety Act, ProdSG)*, which governs the process of making products available on the European domestic market. According to the ProdSG, manufacturers, importers and traders may only place such non-food products on the market that fulfil statutory requirements in respect of safety and the protection of health of persons. It applies where products (with the exception of antiques) are made available, presented or used for the first time on the market on a commercial basis. If a product is already subject to specific sector-based stipulations (e.g. the Machinery Directive), then such stipulations take priority. Nevertheless, the ProdSG may apply in a supplementary capacity. The ProdSG is of crucial importance for the European domestic market regarding the marketing of and safety aspects of consumer products as well as the market supervision that this entails.

According to the ProdSG, a product may only be made available on the market if it presents no danger to safety or health of persons when used as intended or as may be expected. As assessment criteria, the product properties, the way a product affects and/or interacts with other products, product related statements and the consumers and/or user groups that are at special risk are taken into account.

> *"ProdSG defines that manufacturers, importers and traders are obliged to fulfil the requirements of a comprehensive list of items"*

The FBDi points out that manufacturers, importers and traders are obliged to fulfil the requirements of a comprehensive list of items that includes, amongst others, unambiguous labelling for the identification of the consumer product, guarantees for suitable monitoring measures (e.g. random sampling according to risk), cooperation with market surveillance authorities and the CE marking. They must also undertake responsibility for regular inspection and controlling measures and supply surveillance authorities with internal documentation on all inspections and control measures.

This will cause a number of changes in 2016. The FBDi Umwelt&Compliance working group will be addressing this topic in detail.

Non-compliance with the ProdSG will be sanctioned by, amongst other things, fines of up to 100,000 euros, a levy on profits and notification to the commercial central register. Gross negligence or malicious intent may be punished by means of fines or imprisonment.

The **RAPEX** *(Rapid Alert System for Non-Food Products)* system has been put in place to provide information to the public about products that authorities believe to represent serious risks for the safety and health of persons.

South African electronic industry market

by Arnold Perumal
Chairman AREI
adec@icon.co.za

2016 has started off with some challenges for the South African electronics industry market, with a very weak Rand against the Euro and Dollar, local imports are costing distributors more Rands and the impact is passed onto customers.

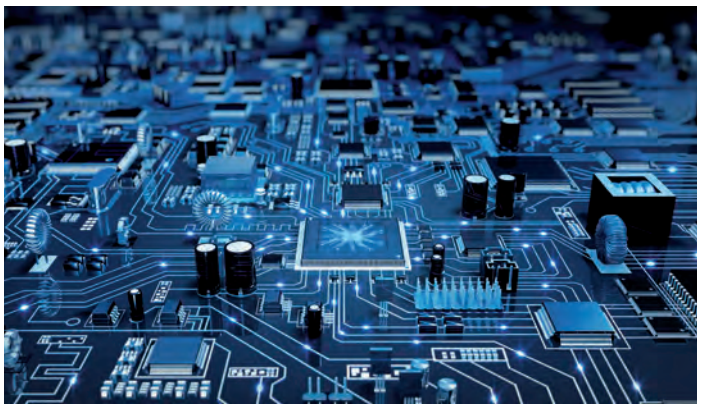
> **"Foreign companies who wish to participate in the South African market go to www.arei.co.za/events.htm"**

Graphic 1 shows for the last 6 months a 30% decrease in the strength of the rand against the Euro, thus the challenge for distributors in most cases are to justify the higher pricing to customers, that even though most suppliers have not increased their local pricing the Rand pricing has increased purely based on exchange rate. Customers exporting goods on the other hand are enjoying more Rands for the Euro which somehow offsets the importation side. South Africa always has had to juggle currencies and in this period it has really become a major concern, customers' acceptance of the increases needs to be validated, by constant education by the distributors.

> **"We see a huge increase in the marketing of IoT"**

Thus one could argue the exchange rate impact may show large growth in South Africa, currency hence the ideal method of evaluation is the foreign Euro growth or decline, AREI will publish the 1st half of 2016 results in a few weeks' time, so we all await in anticipation to see the impact.

On the business front we have our annual expo about to take place in June 22-23 and this year we anticipate a broader industry participation as already noted by some of the exhibitors participation. AREI are completely co-ordinating the expo on their own for the first time in many years, and it has been a great learning curve for us. We encourage any foreign companies who wish to participate to contact us or go onto http://www.arei.co.za to find out more. If you are looking to tap into the great potential of the South African market this surely has to be the premier event you will not want to miss.



Market in general has been buoyant for many distributors and suppliers with certain Vertical still outshining the rest, specifically Military, Automotive, and Security. We see a huge increase in the marketing of IoT by many suppliers and distributors, so we are all keen to see what propositions we can add to our customers to take them to the next level. The market is very excited about what realisations can be achieved. Distributors who position themselves with solid easy to use offerings will stand a good chance of gaining market leader share.

> **"Rand pricing has increased purely based on exchange rate"**

As we keep our eye on the currency moving forward we will no doubt experience more surprises in our exciting colourful, economy, but that's what makes South Africa the rainbow nation as we are called.

Graphic 1 Source: x-rates.com

Vision coming true: Smart Cities in India

by Rajoo Goel
Elcina
www.elcina.com

The Indian Government has launched major programs to shape India as a modern and developed society. These include among others, Digital India, Skill India, Make in India and more recently the **Smart Cities** project for establishing 100 urban centers for organizing the life of citizens and businesses in an efficient and sustainable eco-system.

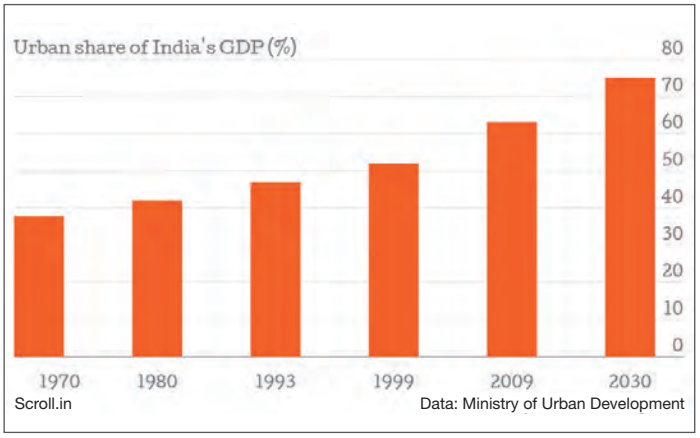
> *"The Smart Cities project is to establish 100 urban centers for organizing the life of citizens and businesses in an efficient eco-system"*

The Smart Cities initiative aims to create cities where basic infrastructure is built on an environmentally viable model. One of the obstacles in the way of India's development has been its infrastructure which has always lagged behind the needs of the nation. Cities are engines of growth for the economy of every nation, including India. Nearly 31% of India's current population lives in urban areas and contributes 63% of India's GDP (India Census 2011). With increasing urbanization, urban areas will grow rapidly and are expected to house 40% of India's population and contribute 75% of India's GDP by 2030.

This requires comprehensive development of physical, institutional, social and economic infrastructure. The Smart Cities project is a step to address the challenges that are being thrown up by burgeoning urban centers.

There is no universally accepted definition of a Smart City. It means different things to different people. The model of a Smart City therefore, varies from city to city and country to country, depending on the level of development, willingness to change and reform, resources and aspirations of the city residents. A Smart City would have a different connotation in India than, say, Europe or USA. Even in India, there is no one way of defining a Smart City.

Cities require huge supplies of potable water, electricity, sanitation and solid waste management, and an effective law and order machinery. To upgrade "Cities to Smart Cities" and enhance the quality of life and improve efficiency and productivity, additional requirements include urban mobility, efficient public transport, robust IT connectivity, good governance, especially e-governance, health and education and citizen participation in local governance. Indian government has selected 100 cities and towns as future smart cities – every Indian state has at least one such city.



> *"India has set aside US $7.2 billion for the Smart Cities mission"*

The Smart Cities Council of India has been formed and will collaborate with the U.S.-based Smart Cities Council – a pool of smart city experts and organizations operating in over 140 countries.
India has set aside US **$7.2 billion** for the Smart Cities mission, and the money will be released to local urban bodies over five years. This funding will translate into job creation and sectoral growth, raising the profile of respective Indian states as ideal business and investment destinations.
In order to succeed, the Smart Cities mission will require close cooperation between the Central and State Governments, financial accountability, bureaucratic efficiency, effective public-private partnerships and investment flows.

This is also a big opportunity for industries and service providers operating in business segments catering to development of Smart Cities.
Why does India need Smart Cities? India is urbanizing at an unprecedented rate, so much that estimates suggest nearly **600 million** Indians will be

living in cities by 2030, up from 290 million as reported in the 2001 census.

A **McKinsey Global Institute** study estimated that cities would generate 70% of the total new jobs by 2030, produce more than 70% of the Indian gross domestic product and drive a fourfold increase in per capita income across the country.

"India is urbanizing at an unprecedented rate"

The purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing

technology, especially technology that leads to Smart outcomes.
Area-based development will transform existing areas (retrofit and redevelop), including slums, into better planned ones, thereby improving livability of the whole City. New areas (greenfield) will be developed around cities in order to accommodate the expanding population in urban areas. Application of Smart Solutions will enable cities to use technology, information and data to improve infrastructure and services.

The Mission will cover **100 cities** and its duration will be five years (FY2015-16 to FY2019- 20). The initiative is likely to be continued much beyond 2020 as this is a long term project with continuous learning.

It is predicted, establishment of smart cities in India will lead to a better business and investment environment in the country. It is expected that Smart Cities will enable easier movement of people from one center to another within the country catering to economic opportunities and also from other nations.

Smart cities will surely enhance business opportunities and drive demand for electronic and hi-tech products and services and support growth of the Electronics Sector.

Reduce to recover

by Ivan Pokrovsky
Executive Director
ASPEC

The volume of electronic components sales in Russia decreased by approximately **7%** in the first quarter compared to last year.
A positive trend is the following. The volume of electronic equipment production for the "open" commercial markets increased by **5%**.

At that time, the volume of equipment production for the military and government markets fell by more than **15%.**

"The cost of labour in Russia is now lower than in China"

This means that the Russian electronics market began to recover.
These changes are caused by objective reasons.

Low oil prices lead to a reduction in the state budget and reduce military and government spending. The change in the ruble rate made profitable production of electronics in Russia.

Now the cost of labor in Russia is lower than in China.
Although low labor cost is not our target.
However, it is the way to another economics, which based on human resources not on oil and gas only.

Fig. 1. Quarterly monitoring of Russian distributors sales.

IDEA NEWSLETTER
INTERNATIONAL DISTRIBUTION OF ELECTRONICS ASSOCIATION

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PUBLISHER: Silvio Baronchelli

INTERNATIONAL PROMOTION BY:
CONSORZIO ELINT

PUBLISHED BY:
Tecnoimprese Scarl - Via C. Flaminio, 19 - 20134 Milan - Italy
PRINTED BY: Servizi Tipografici Carlo Colombo - Rome

LUMEN

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The Elint Consortium acts in the SSL (Solid State Lighting) and Electronics area to promote "made in Italy" products and applications internationally. Elint is a member of Federexport-Confindustria and actively cooperates with several public Institutions for matters regarding export

2016 PROGRAM

>Showroom

temporary showroom of lighting/LED solutions and design products

>International fairs

participation to the most important fairs and events in Italy and abroad

>Workshops & Events

conferences, events and forums devoted to new technologies

>Communication

Web, directories, newsletters, magazines

in partnership with

assodel

>Roadshows

itinerary events to promote smart technologies for lighting and home automation

>B2B meetings

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