

The drupa logo consists of the word "drupa" in a lowercase, sans-serif font, positioned above a large, stylized graphic of a grid of white squares on a red background, which is part of the overall header design.

Global Trends



4th drupa Global Trends report 2017 Executive Summary

Introduction

Welcome to the executive summary of our 4th drupa Global Trends report, tracking key economic and market developments across the global printing industry. Following the very successful drupa held in the spring of 2016, Messe Duesseldorf refreshed its expert panel of printers and suppliers from amongst the visitors. The survey conducted in October 2016 had nearly 1200 participants with a good cross section from all the main market sectors and regions. Our thanks must first go to them for participating.

Each Autumn we circulate two separate surveys for printers and suppliers, sharing some common questions, but also asking more specific questions relevant to each group. 839 printers participated and whilst the majority were from Europe (525), the rest of the world was well represented in all regions (314). Given the relatively smaller number of suppliers, we were pleased to receive responses from 331 of which 220 were from Europe, but again all the other regions were well represented.

Messe Düsseldorf, in its role as drupa organiser, thanks our two partners for conducting and authoring this report series - Printfuture (UK) and Wissler & Partner (Switzerland).

We hope you find the resulting report informative. We would be pleased to receive any feedback, so send us an email to drupa-expert-panel@drupa.de.

The drupa team
March 2017

drupa Global Trends March 2017



Executive Summary

A positive story from most printers and suppliers in most regions

Two years ago we were able to report an almost universally positive picture from both printers and suppliers reporting on their own companies' economic health, described as the 'drupa barometers of economic confidence'. Last year the picture was more variable between the regions, with some doing well and others struggling. It is a similar picture in 2016, however the variances are even larger.

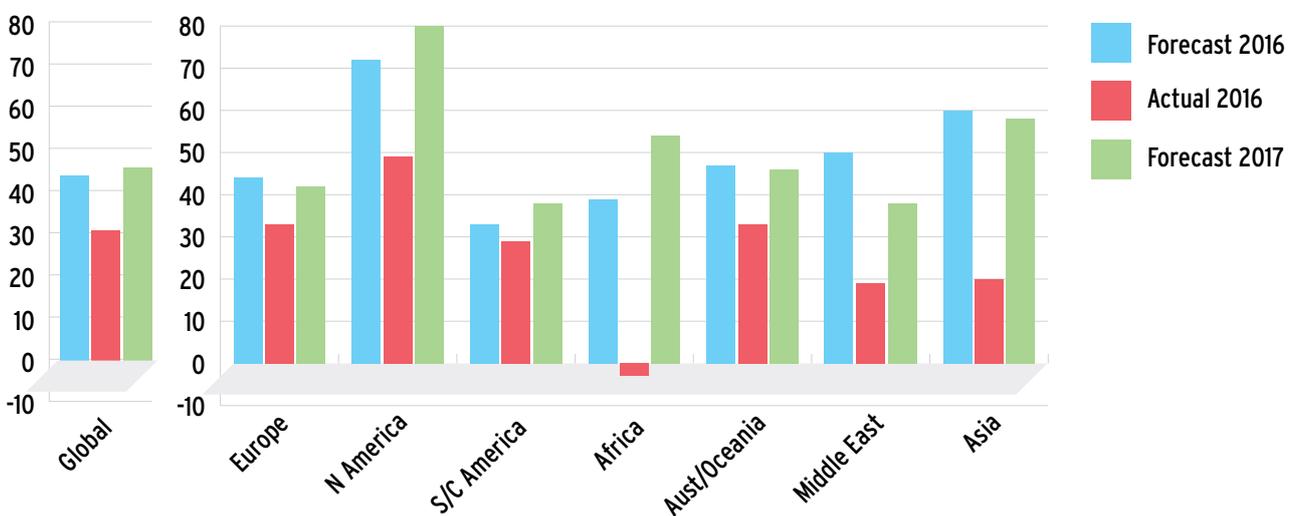
Nevertheless in global terms, 42% of printers¹ described their business as in a 'good' economic state, whilst 11% described it as 'poor'. So a

positive net balance of 31% and it is that 'net balance' that we show in the chart below and is used in many of the subsequent charts. As always the forecast for next year is somewhat more optimistic than the reality the following year, whilst in some cases the difference is striking eg Africa, which reported a net decline in confidence, the first time for any region since this report series started in 2013.

1. Numbers of printer participants by market sector and region are given in the Appendix. Supplier participants reporting for a region may or may not be based in that region. As most suppliers serve multiple markets in most cases there is no attempt to analyse by market.

drupa Printer Barometer 2017 - economic confidence

% net balance positive v negative



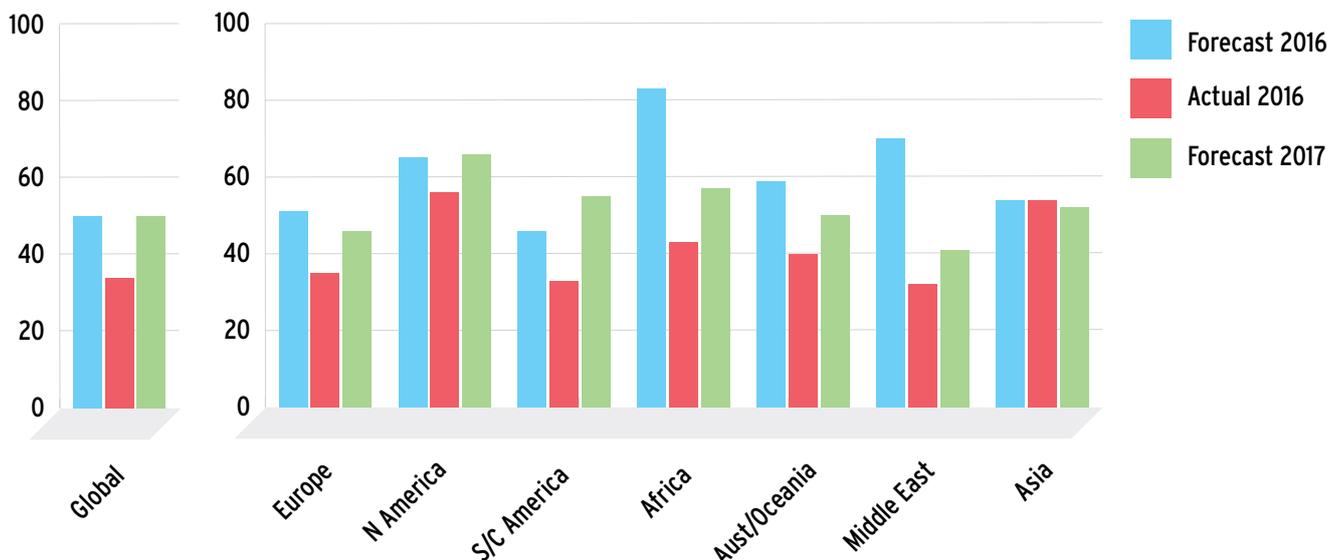
How do you rate the current economic situation of your company? and What are your expectations of your company's economic situation for the next 12 months?

Drilling down into end market sectors, Functional and Packaging printers globally are more confident than Commercial printers who are in turn more confident than Publishing printers, a pattern that has been present since 2013. However that global summary masks significant variations at regional level. Publishing printers in Africa and Asia were more confident than those in Commercial print and it was the reverse of that in Australia/Oceania and the Middle East.

In general it is a similar positive story for suppliers in general with 56% reporting their company in a 'good economic condition and just 6% stating it was in a 'poor' state, a positive net balance of 50% - the same as last year. Curiously the regional variations are less than last year.

drupa Supplier Barometer 2017 - economic confidence

% net balance positive v negative



How do you rate the current economic situation of your company? and What are your expectations of your company's economic situation for the next 12 months?

Perhaps amongst both printers and suppliers in general a more cautious (and perhaps more realistic) outlook is emerging. The economic summary in the main report indicates there is good cause for that caution.

The printers' and suppliers' own more detailed financial performance figures support this

more conservative view. Printers globally report continuing falls in prices which are compensated for by increasing utilisation and hence raising overall revenues at a cost of falling margins.

Global printer financial performance measures

% net balance positive v negative



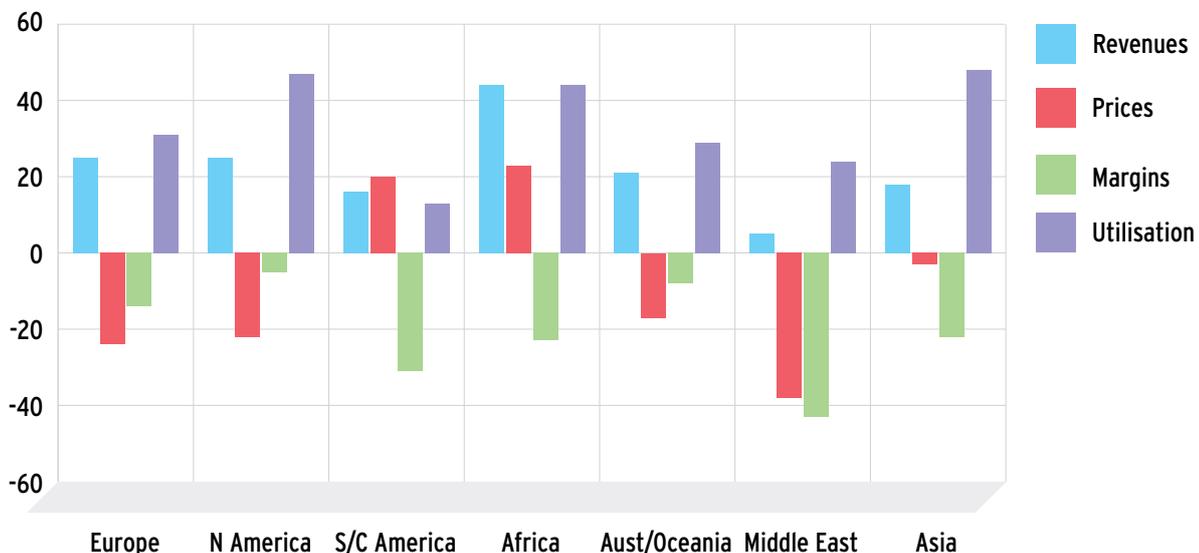
How have your company's revenues, prices, margins, utilisation and paper/substrate prices changed over the last 12 months?

Drilling down into the data both by region and by market sector, the picture is more complicated eg South/Central America and Africa reported net positive price increases whilst the Middle East reported severe price and margin falls. Similarly

whilst Publishing printers in North America show falls in revenues, prices and utilisation; in South/Central America and Africa rises were reported in all three measures.

Printer financial measures by region 2016

% net balance positive v negative



How have your company's revenues, prices, margins and utilisation changed over the last 12 months?

Despite the general squeeze on margins, employee numbers continue to rise globally with a +9% net balance, ranging between +21% North America and 0% South/Central America and Australia/Oceania. Whilst production employee numbers increase globally +9%, there is a small decline in administration employees of -2%. In the more developed regions numbers employed in publishing printers are falling sharply eg -21% North America.

Globally for suppliers the pattern is similar with revenues up 17% but prices down -24% and margins down -27% (nevertheless the best i.e. least negative, net balance in three years). Again the picture is patchy regionally with the Middle East and South/Central America struggling.

Supplier financial performance measures - net balances

% net balance positive v negative



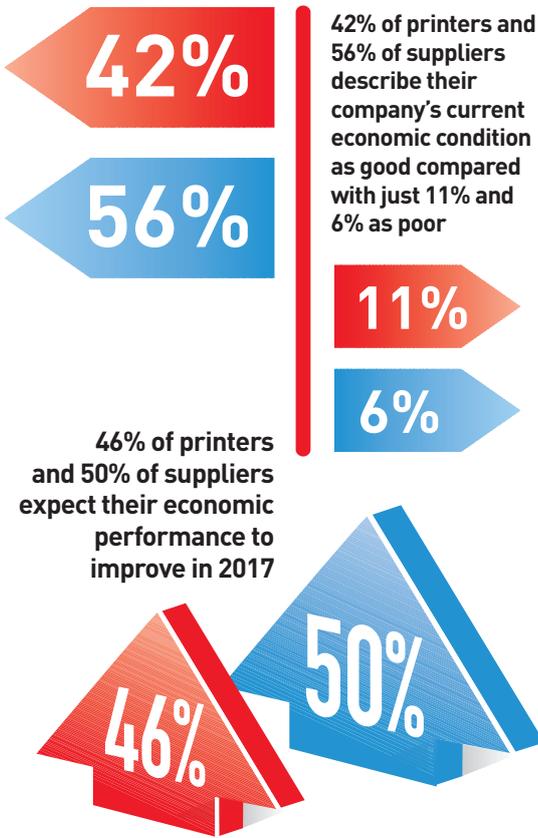
How have your company's revenues, prices and margins changed over the last 12 months?

You might expect that global and regional financial market conditions would affect printers and suppliers alike. Not so. Globally printers report better financial conditions this year on all topics (except average debtor days where they like suppliers reported a worsening picture). Whilst globally suppliers report a worsening on all topics; with terms getting worse particularly in South/Central America, Africa and the Middle East (printers agree in these regions).

Printing is a very diverse industry when it comes to the print technologies used. Fourteen out of sixteen technologies listed scored a 10% or

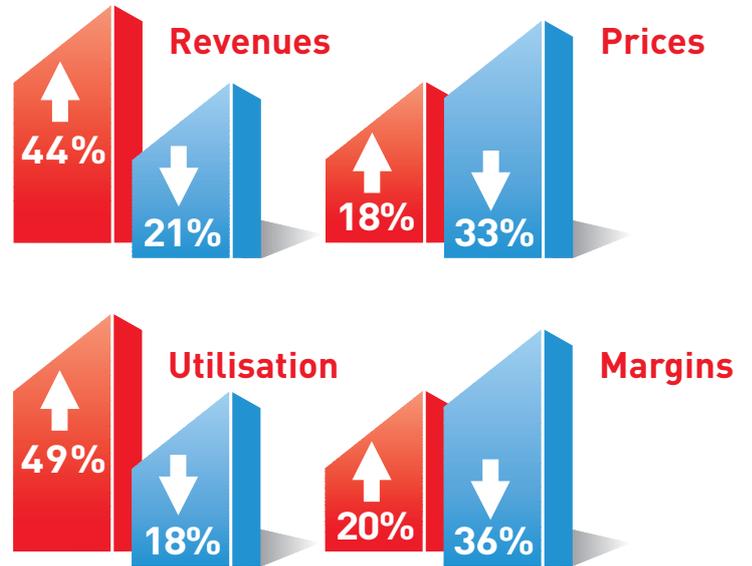
above penetration in at least one of the market sectors. Overall Digital toner cutsheet colour presses led by a wide margin in terms of the positive net balance of print volumes in 2016 at +25% followed by Digital inkjet rollfed colour at +11%. The picture is more complex when you drill down into the market sectors, where for example there is 8% growth overall in Sheetfed offset thanks largely to Packaging and Publishing markets and an 8% growth overall in Flexo due to Packaging and Functional markets.

How are companies doing?



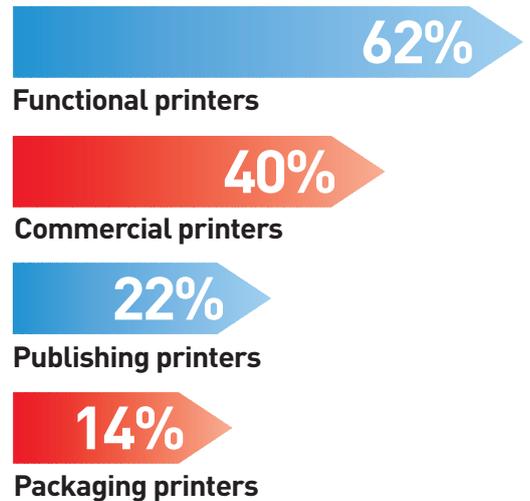
Key financial measures for printers

Reported rise
Reported fall



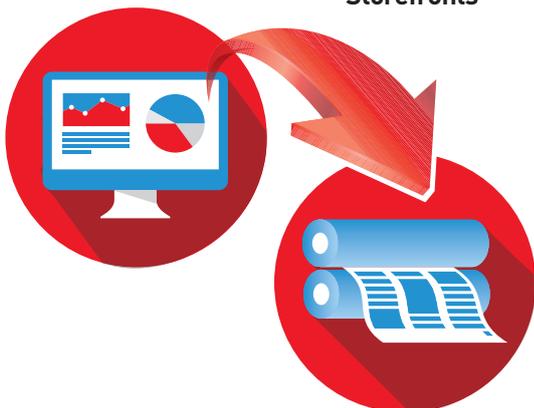
Digital print

Proportion of printers reporting that more than 25% of turnover was digital

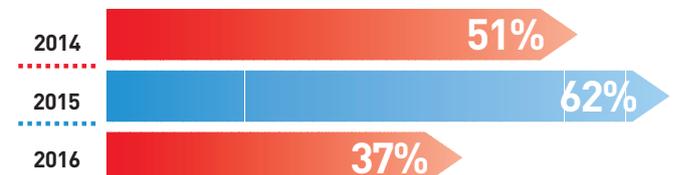


Web to Print

Proportion of printers operating Web to Print/Storefronts



North America



Past trends in the production mix of conventional print continued this year with ever-shorter run lengths, ever-shorter lead times and an ever-increasing number of jobs. However there was a major surprise in the apparent irreversible transition to digital print; as for the first year there was a small but distinct reduction in the proportion of turnover that was digitally printed. Drilling down into market sectors, digital print is clearly having the greatest impact in Functional markets followed by Commercial then Publishing and then only modestly to date in Packaging.

Disappointingly the proportion by value of digital print that is variable stubbornly refuses to rise. In 2013, 19% of the printers then using digital print reported more than 25% of their digital print was variable, while the figure for 2016 is 18%. As variable data is the major added value component of digital printing this is an alarming trend.

Another striking figure this year was the clear fall in the proportion of printers who reported they have a Web to Print/Storefront installation. After several years of steady increases this year there was a significant fall - down 3% globally. Not all regions fell but some were decisive eg North America down 25%.

Capital expenditure

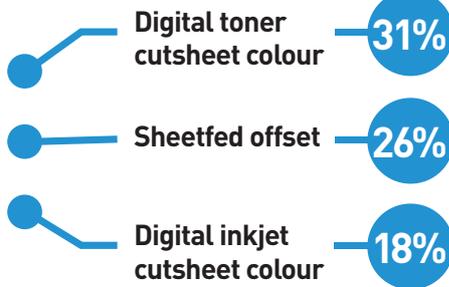
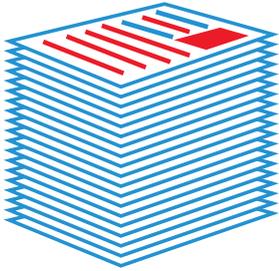
The drupa expert panel was recruited afresh from attendees after the very successful drupa in Spring 2016. There they saw an incomparable technical demonstration of the future of the print industry, so it is natural that they hold ambitious plans to invest in that future. Printers in all regions, except the Middle East, reported growing levels of capital investment. Functional and Packaging printers were more confident of rising investment levels than those in Publishing and Commercial sectors. For the first time investment in Finishing is the top priority, closely followed by Print Technology. However there is greater investment in PrePress/workflow/MIS as printers begin to realise the need for greater automation.

As for plans for investment in print technology, Sheetfed offset has knocked Digital toner cutsheet colour off overall top place, with Digital inkjet cutsheet colour growing rapidly to take equal third place alongside Flexo. Drilling down into market sectors there is for the first time in this report's history i.e. since 2013, a different market leader in each market sector with Digital toner cutsheet colour in Commercial, Sheetfed offset in Publishing, Flexo in Packaging and Digital inkjet rollfed colour in Functional.

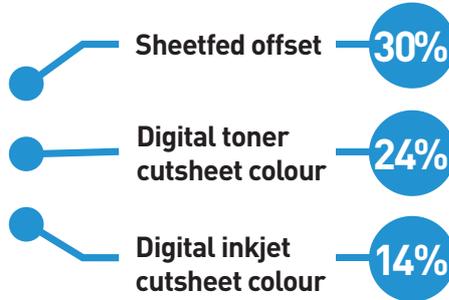
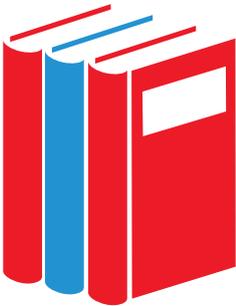
Suppliers' capital investment plans remain strong globally with most regions forecasting a net increase. The exceptions are those regions struggling in performance terms eg South/Central America and the Middle East. By far the most popular investment type is the development of fresh sales channels (46%) but even Research and Development, the least popular type of investment is up to its best level yet at 20%. Suppliers will spend more next year on marketing and whilst trade shows and product training remain the most popular uses of that budget, online content and education is almost the fastest growing customer support tool.

Top print technology investment plans

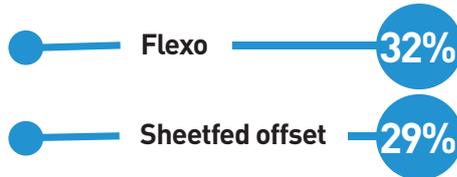
Commercial



Publishing

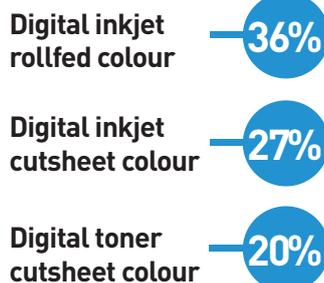
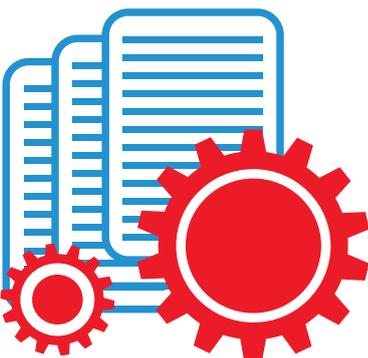


Packaging

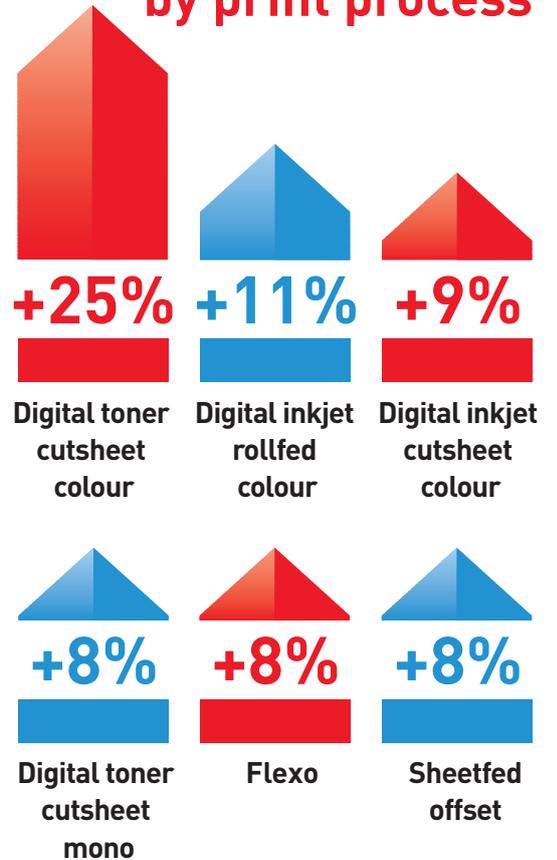


Three technologies share 3rd place:
 Digital toner cutsheet colour
 Digital inkjet rollfed colour
 Hybrid offset/flexo/digital

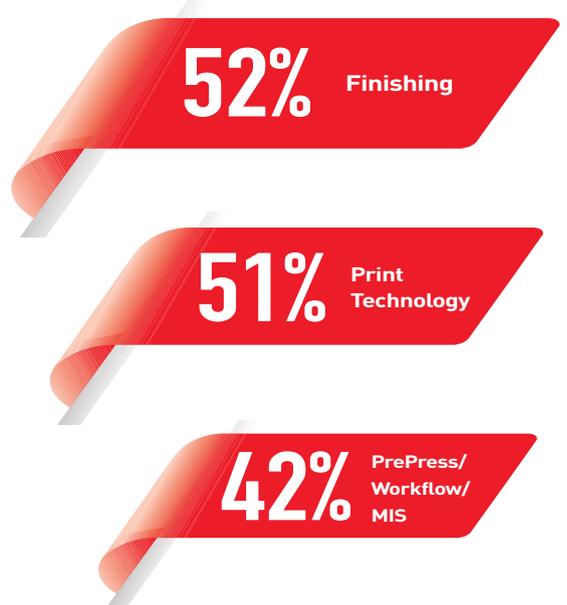
Functional



Changes in volume by print process



Top investment priorities



Strategically both printers and suppliers agreed the biggest constraints to growth were a lack of demand creating strong competition. But drilling down into the causes of the lack of sales, printers were agreed that finding new customers was the most difficult whilst for suppliers it was competitive pricing. As to how best to drive improved profitability, printers put their faith in a combination of reduced staffing/improved productivity and new print technology whilst suppliers will rely on new products and new sales channels.

Market specific trends

Commercial printers facing the impact of digital communications have been encouraged to find new revenue streams with fresh added value services. With four years of data now available it must be reported there is no evidence of any such growth, with the notable exception of wide format print up from 37% in 2013 to 50% in 2016. North America leads the way in adding new services, but even in that region there is some evidence of a fall in the range of services offered. Multi-channel or cross media services are still a minority application (18% globally), although again North America is well ahead (38%).

Publishing printers are having the hardest time in adjusting to digital media as evidenced throughout the report. An increasing number of titles have online editions with the consequent reduction in circulation, although the number of titles lost to online-only editions remains very low. Other means of creating added value such as personalisation, versioning and variable content are growing but slowly (once again North America showing the way). Yet relatively few publishing printers are adding fresh added value services beyond the historic prepress, design and storage/fulfilment options.

Packaging printers have seen a relatively small impact of digital media to date at least and remain generally confident across all regions. On the other hand the level of adoption of added value SKUs remains modest in most cases, with interactive features the most common to be

adopted. It is clear that digital print is starting to have a real impact (32% offer it globally), most commonly for labels but with flexibles and folding cartons following and some signs for corrugated.

For Functional printers the story remains very positive, with those in this market sector putting ever more resources behind it as they enjoy good growth rates in most applications. Inkjet is the dominant print technology for most applications (up from 61% in 2014 to 74% in 2016).

In conclusion

Following the successful drupa in Spring 2016, this survey has provided the statistical support that shows print is recovering from the double hit of the global recession and the impact of digital communications. Printers report sustained improvements in revenues to offset reductions in pricing and margins and strong capital investment plans. Whilst for suppliers, improving revenues and margins coupled again with strong investment plans show a positive future.

The good news is not universal; while Functional and Packaging print are in expansive mode, Publishing print is in a more defensive mode with Commercial print somewhere in-between. In regional terms, the Middle East has chronic problems undermining performance and Africa and South/Central America remain fragile.

All print companies must continue to adapt and meet the market challenges head on. This will mean a ruthless approach to efficiency and automation while at the same time learning new skills and developing new added value services. Nevertheless it is pleasing to report that overall, print has got its 'mojo' back.