

Boom or Fake?

Outlook study reveals continued bullish expectations: ♦ demand up ♦ prices and costs up ♦ top priority on innovation for the first time ♦ Industry 4.0 gaining importance

Results from the 2017 pulp and paper outlook and European competitiveness survey

Similar to previous years StepChange Consulting conducted a survey among participants of the 19th Annual RISI European Conference. The results of this survey were compared to results of the previous four years.

The outcome of the survey provides an indication about the perception of current market and economic developments in the industry, and highlights what the priorities in the industry currently are. In addition, the survey addressed the industry's perception on innovation.

Highlights of the survey

- 58% of participants expect the economy in their region to strengthen within the next 12 months. 40% expect the economy to stagnate (move sideways) while 2% expect the economy to decline – most positive sentiment within the last four years.
- With regards to the expected development in the pulp & paper segments for 2017, participants have similar positive views: 65% of respondents from packaging, paper & board, 55% from uncoated woodfree paper and 50% from pulp manufacturing expect a positive economic development. A predominantly negative outlook can only be observed by the converting, printing & merchanting segment.
- On the cost side, the majority of participants foresees a cost increase in raw material, transportation and energy, with less than 10% believing that they will decrease.
- On the sales side, the demand outlook gives contradictory views: Two thirds of participants expect demand growth and one third does not, and 42% expect price increases whereas 15% do not. Overall, required levels of customer service is still expected to go up.
- Top company priority mentioned to be product development and innovation for the first time followed by pricing & margin management. Cost reduction

dropped from highest priority to 3rd place compared to 2016.

- Another area that gained significant importance in the priority list vs. 2016 is diversification/new business models
- Industry 4.0/Smart Manufacturing have significantly gained in importance in the priority ranking
- The single most important driver perceived to change the industry in the next five years are change in demand / consumer behavior and capacity development / consolidation

Innovation as key priority

- Innovation is a priority for the majority of companies according to survey respondents
- The overall perception is that the pulp, paper and packaging industry is performing almost similarly to other industries in terms of innovation
- A paradox finding of the survey: 90+% of respondents believe their own innovation performance is stronger than that of their direct competitors
- Companies are investing in innovation mainly by collaborating with suppliers and customers, allocating sufficient R&D budget or collaborating with universities and research institutes
- Overall, 46% of the participants report an increase in the innovation budget compared to 5 years ago, while only 4% claimed a decrease. The innovation budget of half of participants has remained constant compared to five years ago.
- The highest benefits from innovation are expected in revenue increase and process efficiency improvements

Survey Demographics

Survey participants represent a wide spectrum of the industry including suppliers, manufacturers, converters, distributors and printers & publishers as well as financial services.

38% of the survey respondents are from the paper or paperboard manufacturing sector, 26% from financial and technical services and consulting, 11% from pulp manufacturing, 6% from merchanting and distribution, 6% from converting and 3% are from printing and publishing.

Within the group of participants from paper & paperboard manufacturing (multiple answers were allowed), 73% are from the packaging sector, 40% from specialty and engineered papers

and 37% from uncoated woodfree. In addition, 17% of respondents operate in the tissue sector, and 13% in the newsprint, uncoated and mechanical papers segment.

Overall, respondents have a predominantly positive outlook on the economic development in Europe. 57% of participants foresee an upward trend in the economy. The positive expectation for the next 12 months represents a massive change of the negative trend since 2014.

Historical macroeconomic development

Where do you see the economy in your region heading in the next twelve months? [%]

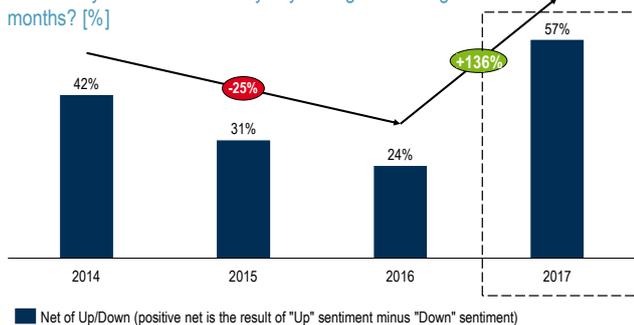


Figure 1: Historical development of macroeconomic sentiment

Taking a closer look by sub regions, most optimism comes from Eastern and South East Europe. 75% of the respondents from Eastern and South East Europe expect the economy to increase (compared to 33% last year). 25% await a sideways development. None of the respondents think a negative economy development will happen, compared to a more pessimistic outlook in the previous year (29% expected a negative development). Western & Southern European participants have more fragmented views: The majority (55%) believes a sideways trend will occur, 36% expect a positive development and 9% predict a negative trend as seen in Figure 2.

Macroeconomic development

Where do you see the economy in your region heading in the next 12 months? [%]

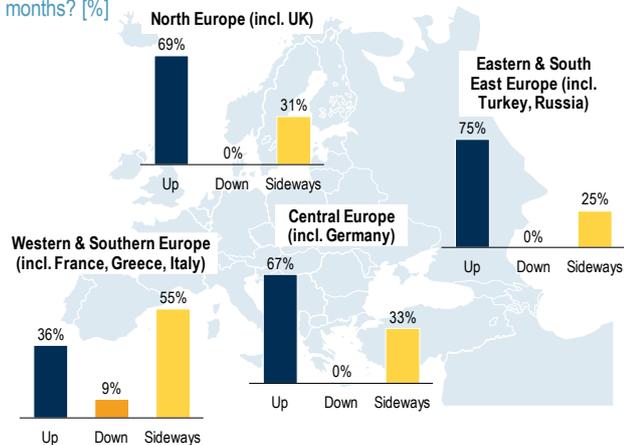


Figure 2: Economy development expectations by European region

69% of respondents from Northern Europe incl. the UK expect the economy to grow, and only 31% expect it to move sideways. Compared to last year, expectations for this region have improved by 10pp (59% expected upwards development and 15% downwards development). Central Europe reports similar trends to Northern Europe.

Looking into the sub-segments in pulp and paper manufacturing, respondents foresee more positive developments as well compared to the previous year (see Figure 3). More than half of the sub-segment respondents foresee an upwards trend in their region, the remainder expecting stagnation (sideways). Only 8% of the specialty & engineered papers respondents have more negative views.

Macroeconomic development

Where do you see the economy in your region heading in the next twelve months? [%]

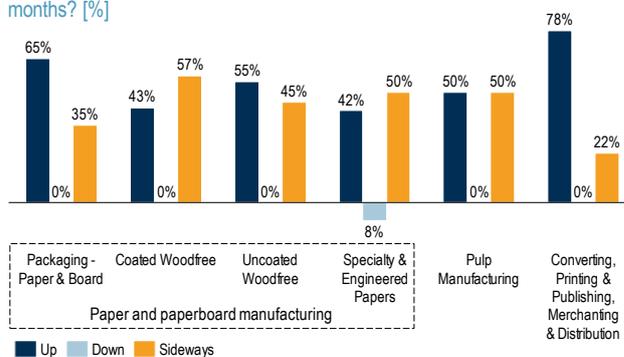


Figure 3: Pulp and paper 2017 economic development expectations by paper and paperboard manufacturing sub-segments

Consequently, the overall sentiment regarding economic development has predominantly turned to the positive in all regions and segments compared to last year.

Turning Tables: Positive industry development expected

The specific view on the paper industry has improved significantly compared to last year. 64% of respondents believe their segment of the industry will increase or reach a peak (compared to 45% last year). Only 26% of respondents perceive their respective business segment to be declining or reaching a trough compared to over 43% of respondents in 2016.

Industry development

How will your sector of the pulp and paper industry develop in 2017? [%]

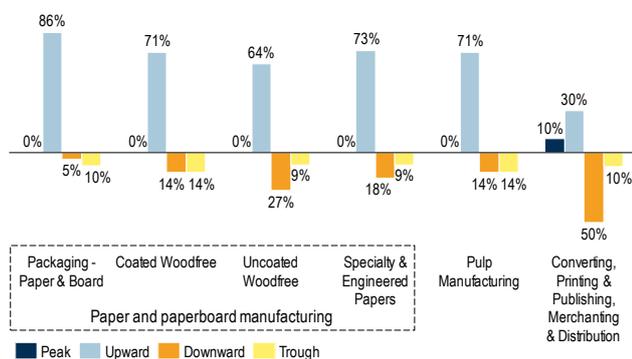


Figure 4: Pulp & paper 2017 development by industry segment

By sector, packaging, paper & board, specialty & engineered papers, coated woodfree and pulp manufacturing have the most optimistic views in the industry, with more than 70% in each segment expecting a positive segment development in 2017. A predominantly negative outlook can only be observed by the converting, printing & merchenting segment as seen in Figure 4.

Demand is up, and so is price

The survey covered questions inquiring how respondents see the development of market parameters and which priorities have been defined to deal with business challenges.

On the sales side, respondents were asked which trends are expected in 2017 vs. 2016 (Figure 5), 62% responded that customer service level requirements are expected to increase further (compared to 67% in 2016).

For customer demand, there are more diverging views. 53% foresee a demand growth and 22% a decline. These views are more optimistic than in the previous year but nevertheless, uncertainty in demand development persists within the industry.

Views on increasing late payments and bad debts have improved in 2017. Only 15% of respondents believe that it will remain a challenge compared to 30% in 2016.

Looking at the selling prices, the outlook is gloomy: 42% of respondents believe that prices will increase in the coming year and only 15% foresee a price drop. This stands opposed to 29% and 34% respectively in 2016.

Customer complaints are predicted to significantly decrease from the previous year.

Industry development

Sales side: What trends are you seeing in the market for the coming year? [%]

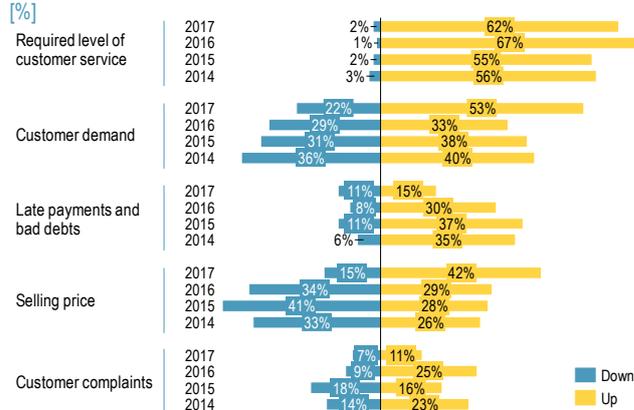


Figure 5: Historical comparison of sales related trends

Change in cost trends

On the cost side, the trends indicate changing views on cost development. Unlike in 2016, the majority of respondents see most costs increasing in 2017 as seen in Figure 6.

Looking into more detail on the cost side shows there is a shift in cost trends. Especially, raw material costs are predicted by 64% to further increase in 2017. During the last year, the majority has believed that transportation costs, energy costs and the availability of financing will predominantly go down. In 2017, the majority foresees a cost increase in these categories (55% for energy costs, 49% for transportation costs and 18% for availability of financing).

Industry development

Cost side: What trends are you seeing in the market for the coming year? [%]

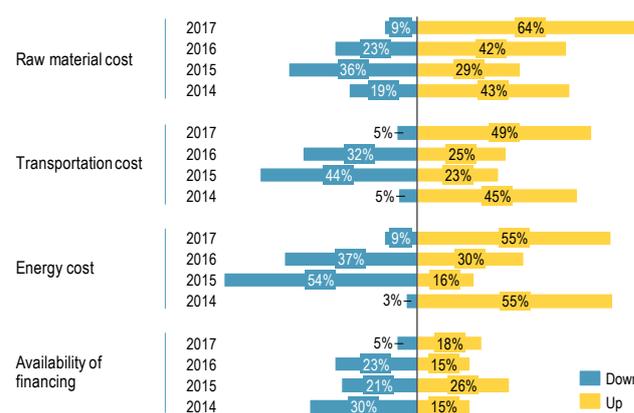


Figure 6: Historical comparison of cost related trends

Company priorities largely focusing on product development and innovation

Companies take both internal and external measures in order to manage profitability. For the first time in the past four years, pricing and margin management or cost reduction is not the

top priority as seen in Figure 7. For 2017, the key priority is expected to be product development and innovation (56% of respondents), followed by pricing and margin management in second place (53% compared to 48% in 2016). Cost reduction (51%) and customer acquisition & retention (35%) follow on place three and four. Mergers & acquisition was ranked as more important than in the previous year with 24% vs. 13%. Also, Industry 4.0/Smart Manufacturing had a steady increase in responses, from 8% to 15%. The priority of cash flow and working capital has significantly decreased over the past 4 years, from 46% to 18%. Workforce reduction is not a priority by any of the respondents.

Industry priorities

What are your company's current priorities? [%]

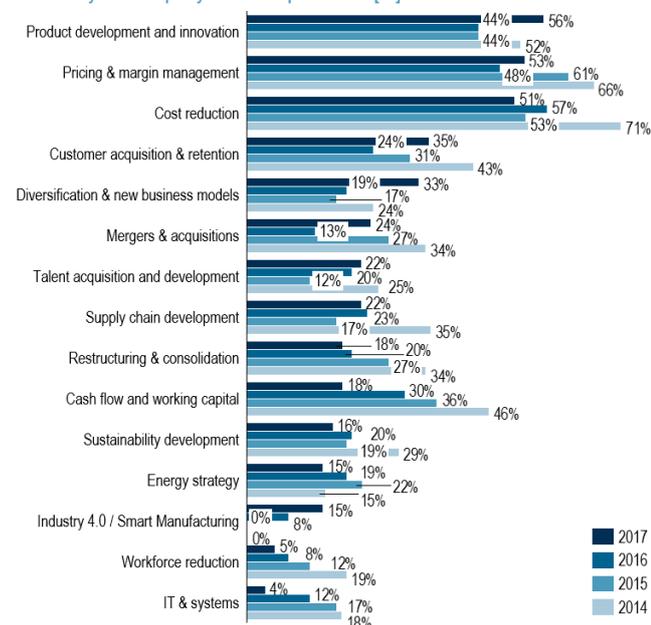


Figure 7: Historical comparison of current priorities

Participants consider changes in customer demand and behavior as the single most important driver that will impact their segment in the next 5 years (Figure 8). Similar to the previous year, 28% of participants noted changes in customer demand as the main driver, followed by capacity development and consolidation (15%). Digitalization/media/IT and macroeconomic factors are in third place.

Industry drivers

What is the single most important driver for change that will impact your area over the next 5 years? (open question) [%]

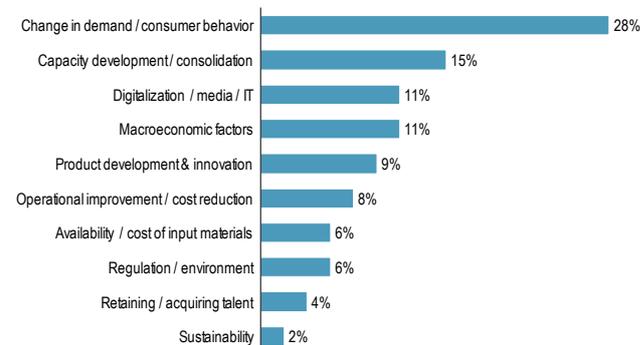


Figure 8: Single most important driver of business in next 5 years

Industry drivers - Outlook for the next five years

The majority of the industry continues to expect a positive influence of capacity consolidation (52% compared to 53% in 2016) in the next 5 years (Figure 9). As top driver over the next five years, changing customer behaviors & requirements were named by 66% of respondents. This marks the same trend as in the previous year. On the other side, the impact from new capacities, energy costs and legislation, fiber costs, regulations and certifications and change in demand due to electronic substitution is seen as threat to the industry. Compared to last year, competition for talent and workforce qualification, is increasingly seen as a challenge by the industry.

Industry drivers

What influence do you expect the following drivers to have on the industry in the next 5 years? [%]

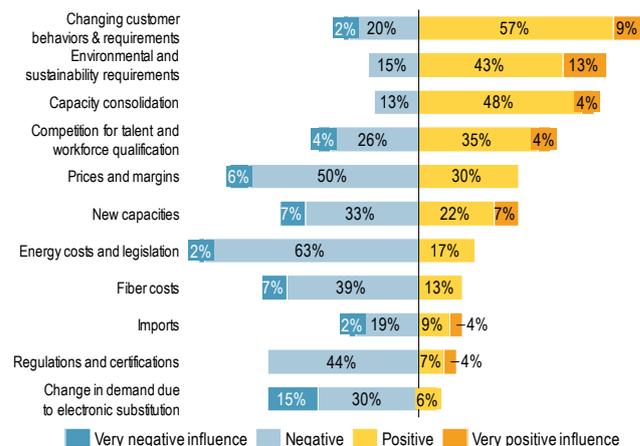


Figure 9: Expected influence by external drivers

Customer focus still has a high priority in 2017. Environmental and sustainability drivers are on the rise. Regulation and certification is expected to increasingly impact the industry in a negative manner.

Innovation – Hype or Reality?

The second part of the survey addressed the industry’s perception on innovation. Among the survey participants, the vast majority agrees that innovation is treated as priority in their companies as seen in Figure 10. Only a few exceptions occurred: 5% of the packaging, paper & board segment disagrees. Most pessimistic is the converting, printing & merchanting segment, with 20% disagreeing.

Innovation

Innovation is a priority in my company [%]

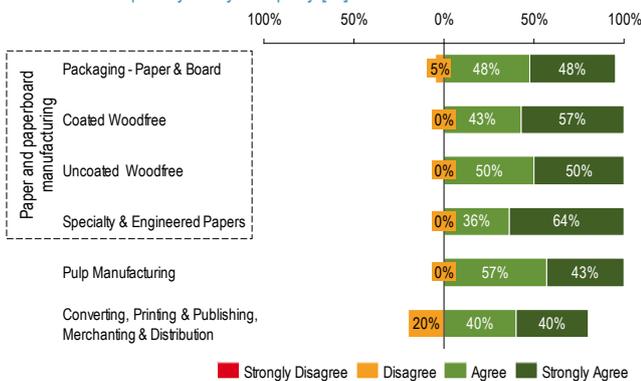


Figure 10: Priority of innovation among survey participants

Comparing innovation levels in the pulp, paper and packaging industry, a more negative sentiment becomes visible as seen in Figure 11. The majority of respondents believe that their industry is performing worse in comparison to other industries in terms of innovation. Most striking, 71% of the pulp manufacturing segment, 60% of the uncoated woodfree and 57% of the coated woodfree believe their industry to be worse than other industries in terms of innovation. The only exception is specialty & engineered papers, where 55% believe that their performance is stronger compared to other industries.

Innovation

How do you consider your industry to be performing compared to other industries in terms of innovation? [%]

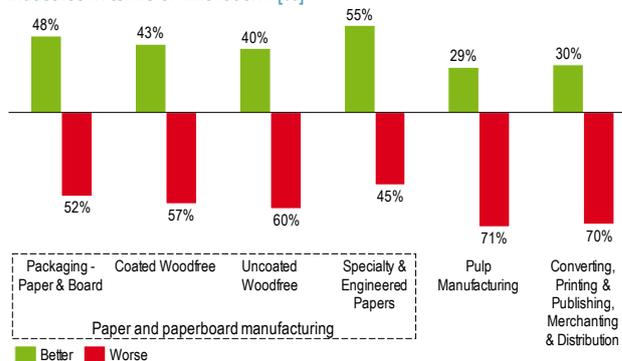


Figure 11: Innovation in the pulp, paper and packaging industry vs. other industries

A very different view is presented when comparing innovation levels to direct competitors. Whereas respondents believe that they are performing worse compared to other industries, the majority also believes that their own companies are leading in terms of innovation when compared directly to their direct competitors (Figure 12). Paradoxically this belief is extremely high across all segments as can be seen in Figure 12.

Innovation

How do you consider your company to be performing compared to your direct competitors in terms of innovation? [%]

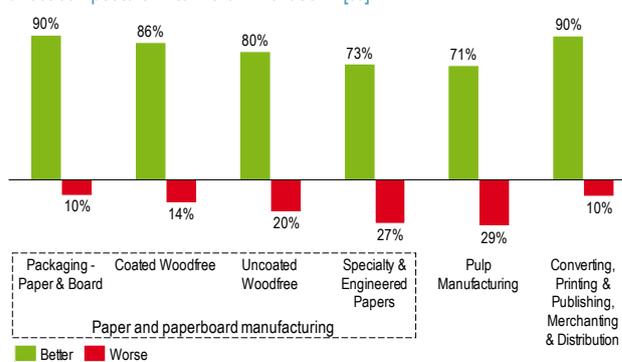


Figure 12: Innovation in pulp, paper and packaging industry compared to direct competitors

Looking into detail at company investments regarding innovation, it becomes clear that emphasis is put on collaboration with suppliers and customers as seen in Figure 13. According to 77% of respondents, this is the case. In this question, multiple answers were possible. 46% of participants state their company invests in innovation by allocating sufficient R&D budget and through collaboration with universities, research institutes and think-tanks (38%). Acquisition of innovative companies is only considered by 15% as an alternative to become more innovative.

Industry drivers

My company invests in innovation by [%]

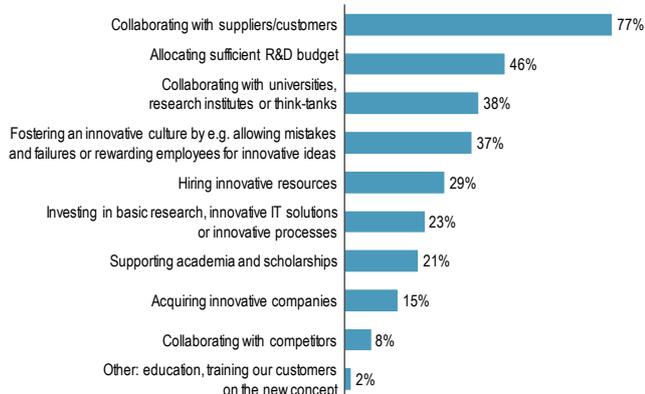


Figure 13: Innovation investments by companies

Diverging views exist when looking into R&D investments of the industry compared to 5 years ago. Half of the respondents state that the budget has not changed. However, also a substantial portion (46%) of respondents believe that it has increased as seen in Figure 14. In pulp manufacturing the majority believes that investments have increased, and 14% think that a decrease occurred.

Innovation

Our R&D budget in comparison to five years ago has: [%]

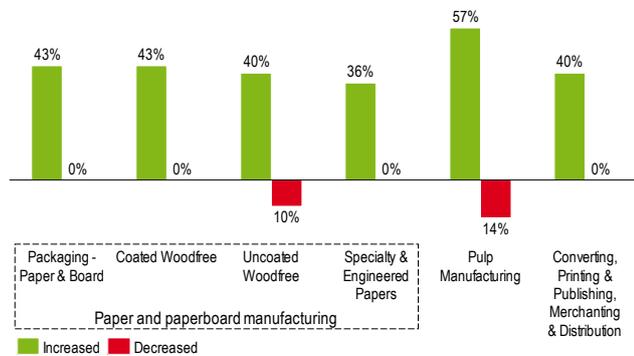


Figure 14: R&D budget of the industry

The majority of companies track, measure and communicate the success of innovation (Figure 15). For instance, 86% of respondents from the coated woodfree segment, 76% of the packaging segment and 71% of the pulp manufacturing segment state that they have tracking methods and communication channels in place.

Innovation

We measure and communicate the success of innovation [%]

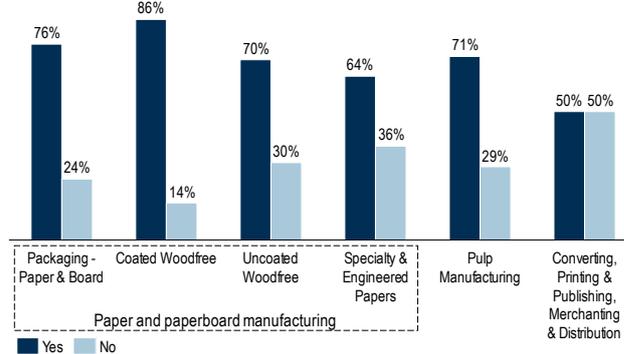


Figure 15: Innovation tracking and communication

When investigating the perceived benefits of innovation differing views across the different segments. Multiple answers were possible in this question (Figure 16). The top benefit for the paper and paperboard manufacturing segment is expected to be an increase in revenue (70%), followed by process efficiency (52%). For the pulp manufacturing segment, the main expected benefits are revenue increase (100%) and cost reduction (71%). For the converting, printing & merchenting group, process efficiency and sustainability were ranked highest with 70% and 40% respectively.

Innovation

Please select the areas where you expect the highest benefits from innovation? [%]

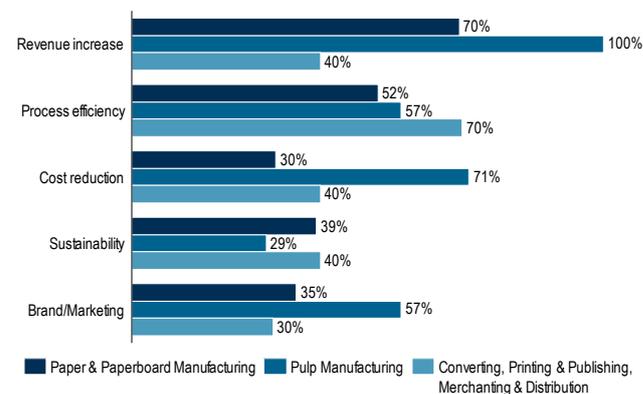


Figure 16: Perceived benefits from innovation

Summary and Conclusions

The pulp and paper survey revealed a very positive view about macroeconomic developments in 2017. In particular, Northern Europe and Eastern and South Europe as regions are most optimistic about the economic developments. The sentiments have further improved compared to the previous year. The expectations can be even considered to be very bullish.

The survey shows some interesting continuations of various trends from the previous year. The increasing cost trend is expected to continue during 2017. The picture is clearest in raw material where the vast majority of respondents anticipate a cost increase in 2017. A growing share of participants also expect energy and transportation costs to increase further.

Industry priorities have changed compared to previous years with innovation and product development taking the clear lead for the first time in 2017 followed by pricing and margin management and “housekeeping” topics declining in priority. Change in demand and consumer behavior are perceived to have the biggest impact on the industry over the next 5 years.

With regards to innovation, the topic is a key priority for the majority of participants. The understanding is that innovation is comparatively weaker than in other industries. Paradoxically almost all respondents believe they performing better in terms of innovation than their peers. The majority of investments in innovation are considered to be collaboration with suppliers and customers. The highest benefit drawn from innovation is expected to be an increase in revenue and improvements in process efficiency.

All in all, the outlook survey shows an extremely bullish expectation for the current year. An expectation that may be hard to meet considering the many challenges that exist from a macroeconomic, political and societal point of view.



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With an international team of industry experts StepChange can hit the ground running. StepChange provides innovative and yet pragmatic solutions, placing an emphasis on delivering measurable business results.

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