Print and Packaging

Forum

A Report on the Print Industry's Review of Its Own Performance

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The Print and Packaging Forum

A Report on the Print Industry’s Review of Its Own Performance

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2. **EXECUTIVE SUMMARY**

This report is presented to the Print and Packaging Forum in fulfilment of the activities envisaged under Research Agreement signed between the Leadership, Innovation and Knowledge Research Centre DCU and the Irish Printing and Packaging Forum dated 15 July 2010.

The remainder of this report sets out our research findings and response to the requirements set out in the Research Agreement.

Section 3 sets out our approach and research methodology including limitations on this study and subsequent findings.

Section 4 details the research findings. A survey was conducted of the industry to provide information on various aspects of its performance. Unfortunately no firms operating in the newspaper or paper sectors responded thus impacting on the representativeness of the survey. The main findings are summarised below.

The vast majority of companies surveyed continue to be private Irish-owned firms. Sales performance of surveyed companies is in decline. The Industry faces competition internationally; the overwhelming majority of companies surveyed do not export. The respondents considered themselves relatively capable against Irish competitors however less competitive across nearly all areas against International competition. Particular factors in their lack of competitiveness are seen as raw material costs and access and overall relative cost position.

Average employment is 20 persons, inferring a significant decline when compared to the 2005 Report. This confirmed supporting data from Forfas. On average over 55% of employees of respondent companies are operatives or crafts people. Less than 20% of respondent companies had vacancies compared to over half reported in 2005.

Both overcapacity and low capacity usage remain features of the industry however expected lead times and time lost due to breakdowns has improved when compared to the 2005 Report. Average capacity utilisation for companies in the survey was 69% with over a third operating at below 60%. Over 80% of companies surveyed indicated that they undertake benchmarking; this is a significant increase on the level reported in the 2005 Report.
In comparison to both other Irish companies and International competitors, respondents continue to perceive their strengths as delivering best on quality and turnaround time. In comparison to International competitors, respondents also indicate that they consider advantages in customer service/marketing. As per the 2005 Report, respondents perceive themselves as weakest on raw material costs and access.

Respondents indicate widespread broadband use and Internet technologies are used extensively for a variety of administrative activities however many respondents indicate that they have not adopted technologies for industry-related activities such as digital workflow. While respondents indicate that technological developments will have a negative impact on apprenticeship numbers, craft skills and employment numbers, they recognise that technology will reduce unit costs and also have positive impacts by increasing capacity, production flexibility, sales, marketing, customer service, and quality.

Despite the 2005 Report emphasis on the need for greater investment in sales and marketing, those surveyed indicate a low usage level of digital marketing and other modern marketing techniques.

Section 5 outlines our recommendations to the Print and Packaging Forum regarding further studies and actions at an industry level.

If you have any queries about this report please do not hesitate to contact Theo Lynn (theo.lynn@dcu.ie)
3. BACKGROUND AND RESEARCH METHODOLOGY

3.1 BACKGROUND

The Print and Packaging Forum was formed in 2004 with a view to devising a strategy, which would champion the needs of the Irish Print and Packaging Industry at national level and promote a culture of change at industry level. Its members include employer and industry groups (such as the Irish Printing Federation and the Institute of Packaging), trade unions, FÁS, Enterprise Ireland and individuals from third level education. In 2005 the Forum published a report into the Printing Industry (hereinafter referred to as “the 2005 Report”), which identified threats to the long-term viability of the sector.

The Print and Packaging Forum is arguably the first example of a particular Irish sector bringing together representatives from the main interest groups (employers, trade unions, semi-state bodies and educational institutions) on a tripartite basis to attempt to resolve jointly the challenges facing that sector of the economy. As such, it offers an innovative and practical example of mutual-gains partnership at sectoral level, and may provide insights for other industries experiencing similar competitive challenges. The Print & Packaging Forum was funded by FAS but that funding ended in September 2010.

In July 2010, the Print & Packaging Forum entered into a Research Agreement with DCU’s LINK Research Centre to conduct a study by means of an online quantitative survey to decision-makers in the Irish paper, print and packaging industry on the following:

- Employment levels
- Export activities
- Use of technology
- Recruitment and training activity
- Firm perception of performance
Initially, it was envisaged that the study would be supplemented by additional research by the Printing and Packaging Forum by means of a pre-existing survey and by interviews with large print, paper and packaging companies operating in Ireland. Due to budget, resource and time constraints, this data did not materialise and the findings in this report are limited to the online survey carried out by DCU. The response rates, and the self-reporting nature of the survey, suggest that the results should not be considered to be definitive.

3.2 AIM OF THE STUDY

The aim of the study is to provide a snapshot of the Irish Print and Packaging industry’s view of its own performance. It examines the activities undertaken by the sector and the issues it is currently facing and where possible provides the basis of comparison with the 2005 Report.

Due to the limited budget and response rate, the utility of the study is limited to informing the Print and Packaging Forum’s strategy for the industry and specifically in achieving future survival and competitiveness. The study also serves to review, identify and prioritise the key factors in respect of the provision of a sufficient level of skills for the future development of the industry.

3.3 DEFINITION OF THE INDUSTRY

The 2005 Report identified two main challenges from a methodological perspective. Firstly, the Paper, Print and Packaging industry was not clearly defined in terms of the statistical codes and secondly, no complete database of the industry in Ireland existed in 2005 from which to calculate a representative sample for research purposes survey.

When approaching this study, similar challenges were faced. While the 2005 Report did seek to define the Paper, Print and Packaging industry using specific NACE codes, the NACE code system was updated in 2008 and is now based on the "International Standard Industrial Classification of all economic activities" (ISIC) of the United Nations. As such, within the resources available it was difficult
to make a consistent comparison across the timeframe under consideration. A consistent comparison of base data has been therefore difficult. This problem was exacerbated by the impact of information and communication technologies in the Paper, Print and Packaging industry since 2005 and in particular in the pre-press process. For example, many printing companies offer value added services which might not have been considered “printing” or “packaging” e.g. graphic design and photographic services. In addition, 2010 industry figures and in some cases 2009 industry figures by NACE code were not available. Given the global economic downturn, an extrapolation based on 2008 data would be imprudent.

Secondly, while an unstructured database of print companies had been kept from 2005, the contact details of actual respondents had not been retained and therefore it was not possible to conduct an exact comparison with the 2005 Report.

To address these weaknesses, recommendations are made in relation to further research in the definition of the industry and the maintenance of data on an ongoing basis.

3.4 RESEARCH METHODOLOGY

The research comprised an online quantitative survey emailed to 711 companies. The industry survey was based on the survey used for the 2005 Report with amendments to accommodate changes in technology. As in 2005, the industry survey was designed to give a detailed picture of the current activities of paper, print and packaging companies, including their employment levels, their exporting activity, their use of technology and their recruitment and training activity. As in 2005, the survey was designed to elicit some information on the employers’ views of their relative performance under a number of key indicators. A copy of the industry survey is attached in Appendix 1.

The online survey was e-mailed to decision-makers of 711 firms provided to DCU by the Print and Packaging Forum. An initial e-mail requesting participation in the project was distributed to this email addresses in early August 2010 and was
followed by a second e-mail in late August 2010. In September 2010, companies identified by the Print and Packaging Forum and respondents who had not fully completed the survey during their first interaction were called by phone and the survey instrument completed by phone. A third e-mail and follow-up phone-calls took place throughout September. While the final response rate was 14.9% (106 of the 711 companies contacted), only 9% (64 companies) completed the entire survey. Respondents to the survey were senior management, primarily Owner Managers or Managing Directors of the firm.

While the 2005 Report had a much higher overall response rate of 33%, the actual number of responses used in the 2005 Report was only 94. It should be emphasised, that similar to the 2005 Report, the survey was not designed to be a representative sample and therefore comparisons with the 2004 Report may not be useful. For example, no firms whose primary business activity was newspapers or paper responded.
4. THE INDUSTRY REVIEW OF ITS OWN PERFORMANCE

4.1 PROFILE OF RESPONDENTS

4.1.1 Primary Business Activities

Respondents to the online questionnaire were asked to select which business activities best described their business. Respondents selected packaging, paper, pre-press, printing process, newspapers, services and other, to include signage, games manufacturing, and 3D digital publication conversion.

Printing Process

64.5% and 63% of respondent firms selected sheet fed offset printing and digital printing respectively as their primary business activity. 32% consider their main business activity to be the finishing of the printing process. Nearly 10% describe their business as web offset printing. Flexographic printing and screen printing equally were selected by 5% of respondents. No respondent firms described their business as gravure printing.

Services

In the services segment, design services (43.5%) were the most prevalent primary business activity selected followed by book binding/finishing (16%); 14.5% describe their business as a total solution provider and a further 10% as fulfilment or turnkey service providers. Only 8% of respondents described their business as a print broker. Nearly 5% of respondent firms described their primary business activity as supply chain management. No respondent firms described their business as forme making.

Pre-press

Only 16% of respondent firms would describe their business activity as providing pre-press digital solutions. A further 16% identified computer-to-plate pre-press printing as their business activity.
Packaging

Only 6.5% of respondent firms describe their business as being in the packaging industry and specifically cartons; 3% are in the packaging business, in particular for labels. None of the respondent firms describe their business as having activity in manufacturing or producing corrugated cases, flexible packaging, or other packaging.

Paper

No respondent firms would describe their business as being in the paper industry, including paper wholesaling and manufacturing, paper conversion or paper bags and sacks.

Newspapers

No respondent firms would describe their business activity being in national newspapers, provincial newspapers, free-sheets or community papers.

4.1.2 Nationality of Companies

Approximately 98% of firms surveyed are wholly Irish owned. Just over 1% of respondent firms are US firms and one firm stated that they are a UK franchisor.
4.1.3 Ownership Structure

The majority of companies (74%) surveyed are privately owned. Almost 13% are Public Limited Companies, 11% of companies are sole traders and over 1% are multinational companies. No respondent firms stated that they were co-operatives. Other responses indicated that two companies surveyed were franchises and one was a partnership.

A limitation of the survey is that categories of organisational structures are under-represented in the sample used.
4.1.4 Age of Companies

The average age of respondent companies is 22 years, having been established in 1989; 17 companies indicate that they were established between 2000 and 2010.

4.1.5 Company Turnover

Of the respondent companies, 37% stated they have a turnover under €500,000. The majority of companies (46.8%) have a turnover between €500,000 and €2m. Almost 5% of companies have a turnover of between €2m and €5m. Just under 10% of companies have a turnover between €5m and €20m. If extrapolated, this would indicate a highly fragmented industry. Larger companies may have been more likely to respond to the survey, so the ‘real’ average turnover may be even less. But this small average size of firm and high fragmentation is likely to exist in this industry in other countries, too.
4.1.6 Distribution of Sales - Countries

The Irish print and packaging industry is very much dependent on the domestic market. Results of the survey show that 98% of respondents identified the Republic of Ireland as a source for a majority of total turnover in 2009. The most notable export markets are Northern Ireland, the UK, and Eastern Europe, however the highest percentage (23%) exported by one firm is to the UK. Small amounts exported go to a wide variety of different locations, such as Central Europe, other EU states, the US and one firm exports to New Zealand. No company surveyed indicated that they were involved in heavy export activities.

4.1.7 Distribution of Sales - Sectors

Companies surveyed were asked to estimate what percentage of total turnover in 2009 came from the following sectors: food and drink, ICT, pharmaceutical, security/form printing, media, online enquires, public bodies, print management companies, financial institutions, and semi-state.
The chart below illustrates the percentage of respondents who supply each sector, however, as some firms supply more than one sector, the distribution of sales per sector is in excess of 100%.

The majority of respondent firms attributed a percentage of total turnover to sales to the public bodies sector. Following the public sector, print management and the food and drink sector were identified as being a source of turnover in 2009. Notably, five firms identified the media sector as contributing to over 50% of their total turnover. Four firms stated that over 50% of their sales are from print management companies. One firm indicated that 95% of sales are attributed to what was described as the Not for Profit sector.

Other sectors and sources of revenue as noted by respondent firms in 2009 were specified by as follows:

- Office supplies
- Self-employed trades
- Design agencies
- Small service companies
- Communications agencies
- Religious organisations
• General public
• Not for Profit sector

The percentage of turnover per sector cannot be determined from survey data, as many firms did not allocate 100% of turnover to one or more sectors. Therefore, weighted measurement of distribution of sales per sector cannot be determined. Analysis is based on frequency of response rather than weighted response, as indicated in the previous chart.

4.1.8 Trends in Sales

Industrial production and turnover indices by Industry sector which have been published by the Central Statistics Office show there has been a decline in both indices in the Print, Paper and Packaging Industry over the period 2000-2006. The turnover index for publishing, printing, and service related to printing (NACE 221, 222) experienced a decline of 6.4 percentage points between 2000-2006. There was a slight increase in 2007. This increase in turnover indices was experienced across the following sectors: pulp, paper and paper products; publishing, printing and reproduction of recorded media (NACE Rev 1.1 21, 22). Turnover declined again in 2008 and further in 2009.

Of the respondent companies, 76% reported decreased sales in 2009. Only 9% reported sales remained the same, while 16% saw an increase in their sales.
4.1.9 **Trends in Sales - International**

Nearly 53% of respondent companies do not export at all. Only 2.6% of companies surveyed are exporting more than 75% of their total sales. Export sales account for between 10% and 20% of total sales of less than 20% of respondents. Approximately 16% of respondents reported export sales of under 5% of total sales.

The Irish market has seen increased foreign competition over the past few years; particularly from Eastern European and Asian markets. Companies surveyed were asked to estimate, in euro, how much sales they had lost to foreign competitors in 2009. Respondents indicated lost sales to international competition ranged from €2,500 to €6m. Nearly 10% of respondent firms believed they lost €10,000, a further 10% believed they lost €100,000 of sales to foreign competition and 23% of the respondent firms stated that they did not know or could not estimate sales lost to foreign competitors. A further 21% stated that they had lost zero or no sales to foreign competitors.

4.1.10 **Number of Employees**

*Average Employees per Firm*

In 2010, companies surveyed employed an average of 21 employees per firm (compared to 45 in the 2005 Report). The sum of employees of respondent firms is 1,281; 67% male and 33% female.

*Full-time Employees*

The sum of full-time employees in respondent firms was 833; 65% male and 35% female. On average, respondent firms have 14 full-time employees. Respondent firms were asked approximately how many full-time employees they had in 2005; on average, firms employed 25 people in the 2005 Report. The sum of employees of respondent firms in 2005 was 1,496. These responses in the 2010 survey
suggest an approximate decrease of 14% in the number of employees per firm between 2005 and 2010.

**Part-Time Employees**

The sum of part-time staff employed by respondent firms was 120. It may be of interest that here there are significantly more female (57%) than male (43%) employees reported. On average, respondent firms employ 2 part-time staff.

### 4.1.11 Age Profile of Employees

The overall age profile of employees in the respondent companies is relatively young. The graph below is not indicative of the age-spread of employees in the industry as many firms provided the number of employees in each age bracket, rather than the percentage of employees in each age bracket. Therefore an accurate age profile can not be determined. However, 14 firms stated that 50% or more of employees fall within the 30-40 age bracket, 6 firms stated that 50% or over are under 30 and, 6 firms stated that 50% or over are aged 40-50. 2 firms noted that 50% or more of employees are aged 50+.

![Age Profile of Full-time Employees](image)

### 4.1.12 Employment by Occupation

As previously noted, there was an average employment of 21 people per respondent firm. The operational structure of the average firm in this sector is as
follows: 31% operatives, 29% craftspeople, 13% management, 10% administration, 6% sales, 5% computer operations staff, 3% professional/technical staff, 0.4% marketing and 3% other.

4.1.13 Organisation Skills

The following skills are considered to be weak by the respondent companies: e-commerce skills, digital marketing skills, general marketing skills, human resource management, sales representative skills, and language skills. Respondents answered “yes” if they considered a particular skill to be a weakness in their company.
4.1.14 Apprenticeship Programme and Training

A total of 19 apprentices were hired by 13 respondents over a three year period between 2007 and 2010. When asked where companies had sourced new recruits over the past three years, the majority stated that they had not hired any new recruits or that the people they hired received in-house training, were recruited by advertising the job, or from FÁS.

Although many companies stated that they provide in-house training, over 91% do not have a written training plan in place. Of all the companies surveyed, only one company spent over 2% of total payroll expenses on training. This company stated that they allocate 40% of their total payroll to training.

Of respondent companies, 22% stated that they have assessed their training needs in the past 12 months. Over 63% of respondent firms believe their training needs are being met. Those who felt training needs were not being met justified their answer by saying that they either are not involved in training or have not received training. Customer Relationship Management was identified as a training need which is not being met.

The average rating for respondent companies of the apprenticeship programme was relatively neutral at 2.83, where 1 is poor and 5 is excellent. Nevertheless,
73.5% believe that the DIT Printing School is a vital resource for the Printing Industry.

Over 81% were aware of the Design, Print and Packaging Skillnet, however, over 65% had not participated in it. When asked what factors prevented them from participating, ignorance of its existence, costs involved, and lack of time were mentioned.

4.1.15 Level of Vacancies

The vast majority of respondent companies (82%) did not have job vacancies over the course of 2009. This figure supports the general statement from companies that they did not hire many new recruits or apprentices over the previous three years, 2007-2010.

4.1.16 Level of Labour Turnover

The highest labour turnover was in sales (35%), operatives (35%) and craftsmen (15%). The lowest turnover rates were among professional/technical personnel (1%) and administrative staff (1%).
4.2 KEY PERFORMANCE INDICATORS

4.2.1 Capacity Utilisation Levels

The minimum capacity utilisation level of companies participating in the survey was 30% during 2009. Over 58% of the companies indicated that they were operating at less than 70% of capacity with over 36% between 30% and 60%. Approximately a quarter were operating at between 70%-90% capacity. Only 1% said they were operating at 91-100% capacity utilisation. Nearly 14% of firms provided no answer or could not determine their capacity utilisation. When compared to the 2005 Report this indicates lower overall capacity utilisation.
4.2.2 Expected Lead Times

Expected lead time was on average three days. The minimum lead time was one day with a maximum lead time of 28 days. This is a significant reduction in expected lead time when compared to the 2005 Report. This may be explained by efficiencies and productivity gains resulting from new equipment and the use of web-based technologies and technological developments such as web-to-print, especially for short print runs. There may also be an element, in the context of recession, of margins being sacrificed to meet turnaround pressures.

4.2.3 Lost Time Due to Breakdowns

Time lost due to breakdowns ranges from zero to 15%. Although the sample size and population differ from those of the 2005 Report, there is evidence of a 5% decrease on the maximum time lost due to breakdowns in comparison to the 2005 Report.
4.2.4 Percentage of Companies Undertaking Benchmarking

Over 80% of companies surveyed undertake benchmarking. In general, when compared to the 2005 Report, this implies a significant increase (43%) in the number of firms reporting the use of benchmarking. However, it is likely that if 'benchmarking' was clearly defined the proportion of respondents claiming to undertake benchmarking would be lower.

<table>
<thead>
<tr>
<th>Companies that Undertake Benchmarking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

4.2.5 Average Capability Ratings

Companies were asked to rate themselves against their Irish and overseas competitors on 10 different capabilities.

In comparison with other Irish companies, companies surveyed rated themselves stronger in turnaround time, quality and production skills. The weakest capabilities are deemed to be in financial resources, costs, raw materials and access. This does not represent a significant change from the 2005 Report.

<table>
<thead>
<tr>
<th>Average Capability Ratings Against Irish Competitors (1=Weak, 5=Strong)</th>
<th>Average Capability Ratings</th>
</tr>
</thead>
</table>
In comparison to foreign competitors, companies rated themselves as having strong capabilities in turnaround time, quality, and customer service/marketing. They feel the weakest capabilities against foreign competition are relative cost position, raw materials cost and access, and financial resources. Again, this does not represent a significant change from the 2005 Report.

<table>
<thead>
<tr>
<th>Average Capability Ratings Against Foreign Competitors (1 = Weak, 5 = Strong)</th>
<th>Average Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials cost and access</td>
<td>2.04</td>
</tr>
<tr>
<td>Products</td>
<td>2.78</td>
</tr>
<tr>
<td>Quality</td>
<td>3.56</td>
</tr>
<tr>
<td>Productivity</td>
<td>3.07</td>
</tr>
<tr>
<td>Turnaround time</td>
<td>3.73</td>
</tr>
<tr>
<td>IT Solutions</td>
<td>2.80</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>2.66</td>
</tr>
<tr>
<td>Production skills</td>
<td>3.23</td>
</tr>
<tr>
<td>Customer service/marketing</td>
<td>3.28</td>
</tr>
</tbody>
</table>
4.2.6 Quality Awards and Standards

The majority of respondent firms (63%) do not have industry related or quality related standards or awards associated with their business. Only 15% have IS9002 and 10% have IS9001; 6% have FSC (Forest Stewardship Council) accreditation; 4% have Q-mark award associated with their business and 2% are members of the Waterless Printing Association (WPA).

In order to create quality benchmarks within the Industry, the representative industry bodies should consider enforcing quality standards amongst firms. In order to establish resource sharing amongst Industry players, a common quality standard and requirements will need to be established so that trust is not an issue for sharing resources, workload and capacity.

<table>
<thead>
<tr>
<th>Quality Standards or Awards of Resondent Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPA</td>
</tr>
<tr>
<td>Q-Mark</td>
</tr>
<tr>
<td>IS9002</td>
</tr>
<tr>
<td>IS9001</td>
</tr>
<tr>
<td>FSC</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

Financial resources 2.45
Relative cost position 1.95
4.2.7 Value Added Services

Considering that respondent companies believe that industry capabilities in customer service and marketing are strong, it is surprising that only just over half the respondent companies intend to introduce value-added services by the end of 2010. In order to compete in the market, firms will have to increase their capacity to identify, integrate and provide value-added and tailored services to customers.

4.2.8 Impact of Technological Development

The Internet, developments in web-based technologies and digital printing are considered to be the main technological developments that will impact company development over the next two years. Among other technological developments mentioned are the digitization of documents and print specific developments such as wide format printing and web-to-print technologies.

Companies surveyed were asked what impact they think technological developments will have on a specific list of industry factors (see questionnaire). Technological developments are expected to have a negative impact on apprenticeship numbers, craft skills and employment numbers. However, it is felt that technology will reduce unit costs, increase capacity, improve MIS, enhance management/supervisory skills, increase production flexibility and sales, and improve marketing, customer service and quality.
The chart below illustrates respondent’s attitudes towards the implications of technological developments on industry factors. The height of the columns in the chart is indicative of the number of firms responding in each case.

4.2.9 Use of Internet Technologies

Since the 2005 Report, the use of broadband for business purposes has increased sharply with over 98% of businesses now using broadband. The most popular online facilities are online banking (57.4%), online proofing (45.9%), and the use of MIS systems (34%). This confirms wider industry trends relating to the digitisation of the prepress process. While the use of industry-related technologies has increased since the levels reported in 2005, many of these technologies are still not in use by the majority of companies e.g. digital workflow (32.5%), online ordering (23%) online tracking (21%), web interface (18%) and web-to-print (11%).
4.2.10 Digital Marketing

Further analysis was undertaken concerning those using Internet technologies for marketing purposes.

General Digital Marketing

The vast majority (87%) of respondent firms have a company website. While 29% have had this website for five years or more, 12% of companies had set up their company website in the previous year. A remaining 13% do not have a company website.
Maintenance of websites is poor. Only 34% of firms surveyed had updated their website in the previous month; 28% had updated their site in the previous 6 months; 23% had updated their site in the previous year; 6% in the previous two years and 9% had not updated their website in the previous two or more years. This indicates a low level of usage of websites for commercial transactions.
Only half of the respondent firms engage in email marketing. This may reflect the lack of CRM (Customer Relations Management) skills reported earlier and represents a significant opportunity for marketing in this sector.

Although 41% of respondent companies claim to engage with online commerce, only 23% said they use online ordering for their business. The difference between these two may be explained by the fact that some firms use online commerce to purchase inputs, but not to sell their own products or services (or vice versa). It may also be explained by the possibility that some of the respondents did not understand the questions.
Most (69%) companies surveyed do not engage in online PR. This may signify that there are opportunities for companies to use online PR as a free online marketing tool. Companies may need to be educated on how to use online PR most effectively for their businesses.

The majority (54%) of companies surveyed do use e-tenders as a sales source. This is positive, but there are still 46% who are not using e-tenders as a potential source for clients. There is potential for information sharing amongst firms in the industry on how to find tenders on-line and also how to respond to e-tenders. This may also represent a lack of knowledge or confidence in responding to tenders.

**Online Advertising**

Most (61%) companies surveyed are not using online advertising such as Google Adwords, Facebook advertising etc. Only 39% of firms are using online advertising as a marketing tool. This is lower than expected. Again, informing companies within the industry of how they can use online advertising for their business would be of benefit.
Of the respondents who use online advertising, 50% found it to be a successful marketing tool for their company. However, 36% said they found online advertising neither successful nor unsuccessful. This may be because they do not monitor and perhaps do not know how to monitor the effects of their online advertising.

The percentage of marketing budget allocated to online advertising is minimal. Of companies who do engage in online advertising, 51% allocate between 0-5% of their marketing budget to the activity.
Although 87% of respondents have a company website, only 39% engage in SEO activities. This suggests a great deal of unexploited potential to engage in SEO activities and enhance company visibility online. Of the companies who do engage in SEO activities, 59% said that this activity is managed externally.

**Social Media Marketing and Social Networking**

Of the companies surveyed, 63% do not engage in social media or social networking activities; 22% of respondents said that their firm had created several
social network accounts, but do not update them regularly. Only 9% of companies surveyed actively use social networks for networking and generally keeping in contact with clients, suppliers or partners. Just over 3% use social networks to find new customers and improve relationships with stakeholders. Only 1% of companies surveyed devote marketing budget to social networking activity in order to improve business activities, disseminate information about the firm and its products, reach and retain customers, and have been successful in doing so.

Companies surveyed are relatively new to social media marketing (SMM); 41% had been using SMM tools for less than 3 months and 32% had been using it between 3 and 6 months prior to the survey. Only 9% of firms have been using SMM for at least two years.

Respondents were asked to tick the relevant statements which applied to their company’s use of social media. The majority of respondents (57%) said that none of the uses listed in the survey were relevant to how they use social media. None of the respondent firms use social media for monitoring competition or brand sentiment. There is clearly a great deal more potential in the application of social media for marketing than is currently being exploited by this sector.

Over 38% use social media for generating exposure for their businesses. Over 31% use social media to drive traffic to their company website. 23% use the tools
for staying in touch with business contacts, and a further 23% stated that they use it for informing customers about promotions and special offers.

Please tick all relevant boxes. My firm uses social media for:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Response Percent</th>
</tr>
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<tbody>
<tr>
<td>Generating exposure for the business</td>
<td>38.3%</td>
</tr>
<tr>
<td>Paid advertising/ customer acquisition</td>
<td>6.4%</td>
</tr>
<tr>
<td>Increasing website traffic</td>
<td>31.9%</td>
</tr>
<tr>
<td>Partner acquisition</td>
<td>2.1%</td>
</tr>
<tr>
<td>Staying in touch with business contacts</td>
<td>23.4%</td>
</tr>
<tr>
<td>Getting together with special interest groups</td>
<td>10.6%</td>
</tr>
<tr>
<td>Managing customer groups</td>
<td>2.1%</td>
</tr>
<tr>
<td>Informing customers about promotions and special offers</td>
<td>23.4%</td>
</tr>
<tr>
<td>Keeping up with industry information</td>
<td>17.0%</td>
</tr>
<tr>
<td>Disseminating industry information</td>
<td>6.4%</td>
</tr>
<tr>
<td>Monitor competition and sentiment to your brand</td>
<td>0.0%</td>
</tr>
<tr>
<td>None of the above</td>
<td>57.4%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

Over 58% of companies surveyed spend no time on SMM at all; 25% spend less than 1 hour per week, over 12% spend 1-2 hours per week, and only 4% spend 4 hours or more per week on SMM.
The most popular social networks used by respondents using social media marketing are Facebook (90%), LinkedIn (70%) and Twitter (35%). 15% of these firms use YouTube; 10% are engaged in blogging; 5% use Digg, a social bookmarking tool, and 5% use MySpace. No companies use Flickr, Slideshare or Scribd. It may be that companies are not aware of the features and benefits of using some of these platforms for online marketing.

Nearly all (96%) of the respondent firms do not use a social media aggregator such as Hootsuite or Tweetdeck to manage and monitor their social media activity. Such tools reduce the perceived workload of SMM and enable a user to manage a number of accounts and social networks from one location.
5. RECOMMENDATIONS

5.1 INTRODUCTION

This chapter contains the major conclusions and recommendations of the report. They are presented under six headings:

- Defining the industry
- Overcapacity and industry structure
- Costs and investment
- Technology
- Marketing
- Representation

A number of weaknesses in each of these areas have been identified. These should not be viewed in isolation. Research at the European level indicates that our findings reflect trends across the EU. The formidable obstacles to the capacity of the Irish industry to survive and prosper identified in the 2005 Report not only would seem to have remained but may in fact be exacerbated by our geographic isolation and economic position within the EU. As such, some of the recommendations presented in the report have been adopted from similar and more extensive research carried out by Paper, Print and Packaging industries in the EU.

5.2 DEFINING THE INDUSTRY

Romano and Broudy (2010) have emphasised the increasing complexity and diversity of the printing industry alone.\(^1\) When coupled with the packaging industry, this complexity and diversity is further exacerbated. While there may have been some commonality in 2005 between the sectors, it is no longer certain whether it is appropriate or prudent to treat both sectors as one homogenous industry. Since

2005, these sectors have fragmented further and indeed have been reclassified by NACE.

Among the issues that may need to be considered are:

(a) whether one forum should represent both the print and packaging sectors,

(b) how those sectors should be defined, and

(c) how the sectors should be analysed and tracked over time, for example which companies should be included in surveys.

5.3 OVERCAPACITY AND INDUSTRY STRUCTURE

The Irish print and packaging industry remains highly fragmented; the majority of the industrial structure is composed of micro-enterprises employing less than 15 employees. Over 80% of the companies surveyed generated less than €2m each in annual turnover. The industry is largely focussed on servicing the Irish and UK markets. Internationalisation outside of these markets is limited.

While improving slightly, the overcapacity or low capacity usages rates identified in 2005 have continued to persist in the Irish print and packaging industry. The causes of overcapacity are complex and include efficiencies resulting from new machinery and equipment, changes in customer behaviour and demand, increased competition and the current economic downturn.

In line with recent European industry recommendations, it is essential that the industry is made aware of the scale and implications of overcapacity and that a shared vision for the industry which includes reduction in capacity (without infringing EU law) be developed.

It is recommended that a comprehensive audit of capacity within the industry be carried out to identify the exact scale of the overcapacity issue.

A socially responsible approach to restructuring the Irish printing and packaging industry should be adopted, in line with the recommendations of the report: "The
5.4 COSTS AND INVESTMENT

Since 2005, companies in the paper, print and packaging industry are facing higher business costs. While health and safety and other business-related costs have increased, labour costs may be in decline since 2009. Raw materials are largely a global market for the print industry and as labour costs make up approximately one third of the cost structure, Irish companies are largely at a disadvantage in comparison to Eastern European economies within and other low cost economies outside the EU. Recent research by Facta Consult et al (2010) suggests those companies adding services are in a better financial situation. However, investment by Irish companies would seem to focus on equipment and machinery in order to enhance capacity and productivity rather than on differentiating through value added services. Regardless, the perception by the industry is that the Irish industry is not competitive internationally.

It is recommended that investment in (i) communication and (ii) training for senior management and owners of printing and packaging firms be undertaken. This follows the conclusion that there is overinvestment in equipment for efficiency rather than service innovation. Printing and packaging firms should be encouraged to avail of innovation programmes. The industry should consider coordinating and establishing a National Competence Centre in Next Generation Printing (and Packaging) to identify a roadmap for future value added services for the industry.

5.5 TECHNOLOGY

Technology has impacted consumers and suppliers of print and packaging. Information and Communications Technologies have reduced the importance attached to printed media, and raised expectations on customisation of printing and packaging and delivery times.

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2 http://www.intergraf.eu/AM/Template.cfm?Section=The_Future_of_the_European_Print_Industry_In_our_own_Hands
3 Ibid.
Digitisation is modifying the value chain and democratizing the industry resulting in less business for printing and packaging firms. The entire prepress process can now be carried out digitally and innovations in press technology are resulting in improvements in automation, speed, and set-up times. Companies can offer greater levels of customisation to a wider variety of markets. New technical standards have further commoditised the print sector. While there are significant improvements in efficiency and in labour-related costs, technology has also introduced a need for staff with different profiles than the traditional print industry craft profile.

However, the same technology is available within Europe and beyond and so no competitive advantage in the use of technology can be expected. Companies that do not develop new applications and/or integrate new technologies to offer value added services will be at a disadvantage.

It is recommended that an audit of key technology options be undertaken to assess the variety of technical equipment, print processes and value added services being offered. As these technologies can be categorised by quality, quantity, time, environmental impact and costs, this may establish potential opportunities for repositioning. This will inform capacity building, marketing and funding requirements at a firm and industry level.

5.6 MARKETING

The 2005 Report identified marketing as a weakness. The weaknesses identified were primarily related to exporting, new product development and industry representation to government. It is clear while these weaknesses largely remain present, there is now a further weakness in the capacity of the companies surveyed to utilise technologies for sales and marketing at any level. This is manifested in low budget allocation to sales and marketing but also within that budget of allocations to digital marketing. Many companies in other economies, both low cost and higher, are making use of search engine optimisation, search engine and other digital advertising, social media, online PR and other low cost, success-based digital marketing techniques to good effect. Again, while the global availability of these technologies means that the use of these technologies is
unlikely to result in a competitive advantage, it may result in a disadvantage to those firms who fail to exploit them.

As per the 2005 Report, it is recommended that the provision of strategic marketing capacity-building measures be provided to owners and managers of companies operating in the sector. It is also recommended that sufficient funding be provided to upskill existing marketing staff with digital marketing skills and to seek State aid and support for the placement of graduates in the printing and packaging industry with new digital marketing skills.

5.7 REPRESENTATION

While the Printing and Packaging Forum has established a forum for the industry, companies may not be aware of the forum or its activities. Recent European research carried out by Facta Consult et al (2010) has recommended the establishment of forums, similar to the Printing and Packaging Forum, to liaise with (i) national policy makers and agencies, (ii) EU authorities including Directorate General Employment and Directorate General Competition and (iii) other EU consortia with similar interests e.g. Intergraf, UNI Global Union. In line with the report on “The Future of the European Print Industry – In Our Own Hands”, activities may include:

• Bringing constituent firms together to share views
• Building a shared vision for the industry
• Managing capacity while precluding discussion of clients, division of markets and prices (which would be illegal)
• Seeking government and EU support for upskilling and reskilling inside and outside the industry, enabling staff whose jobs are redundant to seek alternative employment
• Providing supports for innovation and competency building within the industry
• Providing supports to businesses seeking to restructure
• Creating a cohesive campaign to highlight the benefits of the Irish print industry focussing on quality, time to market etc.

While the Forum has been involved in many such activities, as recommendations from European level research they confirm the need for the Forum to continue. A properly funded Forum for the industry could expand its portfolio of activities to cover more of these recommendations.