Media Analysis Report

Press Analysis – Representations of Engineering and Engineers in the Irish Media

Period: January 2011

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Objectives

It is by now widely recognised that prospective and current students absorb a perception of the field of engineering through sources other than their lessons and career advisors. A large proportion of that influence can be contributed to the general media to which students and their families are exposed. It is important, therefore, to investigate how the ‘Engineer’ is defined through the press, and if (and how) this portrayal should be amended. This definition was extended to include all aspects of the ‘Engineer’, including their professional, social and political life, as well as their attitude or response to any global or regional issues – both as an individual and as an organisation.

In response to the press coverage analysis initiated by the IST, a similar task was undertaken with regards to the media coverage of engineers and the engineering field in three main sources in Ireland. The objectives defined for this analysis were not only to determine the level of visibility of engineering within the media, but also the perception which this visibility was conveying to the consumer. The period of time selected for the analysis was the calendar month of January, 2011.

Methodology

The publications targeted for the purposes of this analysis were the primary national newspapers; The Irish Times and The Irish Independent, as well as the main radio station; RTÉ ([Raidió Teilifís Éireann](http://en.wikipedia.org/wiki/Raidi%C3%B3_Teilif%C3%ADs_%C3%89ireann)).Collection of data was conducted through a review of both the online content and text archives of the sources. The ‘ENG’ radical was initially used during source reviews, but due to the inordinate amount of resulting articles concerning motoring, this was amended to the root term ‘engineer’.

Codification

The IST report on press analysis was utilised as a template as regards the codification for the data review. The data collected from the source review was initially scanned and either retained or discarded with respect to the articles’ relevance to the engineering field. One inherent problem with the data review was that quite often persons mentioned within an article were identified through their profession (i.e. an engineer), although the article concerned would have no other mention or relevance to the field. These articles were therefore disregarded for the analysis.

The standardised media analysis structure was therefore employed, as follows;

Date – date of article publication

Media – the name of the overall media source concerned

Title – the title of the source article being reviewed

Field – how the media source internally classified the source article, where applicable

Tags – any tags or indexing applied to the article source, through the main media

IA – the ‘institutional actor’, or overall organisation/institute concerned in the article

CA – the ‘collective agent’, the keywords/root terms used for sourcing the resulting media

Type – upon evaluation of the article, a judgement was made on how the engineering field is portrayed through the article in question. This evaluation resulted in a ‘grading’ of this portrayal in three discrete sections; 1 – positive, 2 – neutral, and 3 – negative.

AInd – where applicable, any individuals/positions named in the article

Theme – main theme of the article concerned

Type – the classification of article being referred to (Ie. Press release, interview etc)

1. Outcomes

| **Media analysed** | | | |
| --- | --- | --- | --- |
|  | | | |
| Media | | Frequency | Percentage |
|  | Irish Times | 54 | 61.4 |
| Independent | 23 | 26.1 |
| RTÉ | 11 | 12.5 |
| Total | 88 | 100 |

Table 1 – Breakdown of news items per media type

88 news articles were reviewed, which were produced between 1 and 31 January 2011.

| **Valuation of News Items** | | | |
| --- | --- | --- | --- |
|  | | Frequency | Percentage |
|  | Positive | 51 | 58 |
| Neutral | 11 | 12.5 |
| Negative | 26 | 29.5 |
| Total | 88 | 100 |

Table 2 – Valuation of representations of engineers and engineering

It is clear from the resulting data that the predominant amount of mentions of engineers and the engineering field are in fact positive, at 58%. Most articles were biased in some direction when discussing the aspect of engineering, with only 12.5% remaining neutral in their discussion. Drawbacks due to the short term nature of this media review can be countered with the fact that the results show such a strong inclination towards positive mentions – therefore validating the overall result.

| **Themes Aggregated** | | | |
| --- | --- | --- | --- |
|  | | Frequency | Percentage |
|  | Home News: | 34 | 38.6 |
| Employment | 16 | 18.2 |
| Manufacturing/Industry  Social/Political  Business/Markets  Technology/Innovation/  Renewable Energy/ Science Today  Education/Bang.com  World News | 12  6  22  11  9  8 | 13.6  6.8  25  12.5  10.2  9.1 |
| Arts / Health | 4 | 4.5 |
|  |  |  |
| Total | 88 | 100 |

Table 3 – Aggregation of the 50 initial categories in 11 subject groups

The majority of articles regarding engineering were discovered under the ‘Home News’ sections of each publication. As a result, this title was sub-divided under the headings ‘Employment’, ‘Manufacturing and Industry’, and ‘Social and Political’. Considering the recent interest in emigration and the state of the Irish economy, it is not surprising that employment-related articles are ranked as most frequent, after business and marketing. It is noteworthy, however, that recent developments in technology and renewable energy – as well as health and bio-medical diagnostic devices – account for a very small amount of the articles discovered when engineering was reviewed.

The primary subject matter in the articles reviewed, therefore, were business, market-rates and employment – topics which tend to amass more attention when a negative view of the general fields is discussed, rather than a positive. Subjects that have not appeared as frequently throughout the month in question, (health-related engineering, bio-engineering etc) and scientific innovation tend to gain attention when the articles concern a more positive issue.

While mentions of engineering in sectors regarding employment, manufacturing and business are primarily positive (as shown in Table 4), it is this tendency which can account for the inordinate amount of negative mentions of engineering through these sectors. As regards areas such as innovation, science and education – engineers are clearly portrayed in a primarily positive light by these media, but the articles do not occur with as much frequency.

| **Cross-checking of news items valuation by the theme categories** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Theme Code | | | VALUATION | | | Total |
| Positive | Neutral | Negative |
|  | Employment | Count | 9 | 2 | 5 | 16 |
| % of Total |  |  |  | 18.2% |
| Manufacturing/Industry | Count | 5 | 1 | 6 | 12 |
| % of Total |  |  |  | 13.6% |
| Social/Political | Count | 5 | 0 | 1 | 6 |
| % of Total |  |  |  | 6.8% |
| Business/Markets | Count | 13 | 2 | 7 | 22 |
| % of Total |  |  |  | 25% |
| World News | Count | 4 | 3 | 4 | 11 |
| % of Total |  |  |  | 12.5% |
| Education/Bang.com | Count | 5 | 3 | 1 | 9 |
| % of Total |  |  |  | 10.2% |
| Tech/Innovation/Sci | Count | 7 | 0 | 1 | 8 |
| % of Total |  |  |  | 9.1% |
| Arts/Health | Count | 3 | 0 | 1 | 4 |
| % of Total |  |  |  | 4.5% |
| Total | | Count | 51 | 11 | 26 | 88 |
| % of Total | 58% | 11.4% | 30.7% | 100% |

Table 4 - Articulation of news items valuation with each theme area

Overall, from these results it can be concluded that engineers are represented in a generally positive light by the primary media in Ireland, with 58% of the articles reviewed considered as positive. Several aspects of the review are also noteworthy:

* For the purposes of this media analysis, articles regarding major accidents or engineering-based faults are considered as portraying the engineering field as ‘negative’. For example; hip replacement recalls by the DePuy corporation due to faulty components.
* There are also two articles of interest due to strong statements made concerning the engineering field;

*"A good example would be Mark Flanagan, who is doing engineering. Some courses are more demanding than others and engineering would be one of the most demanding.”*

This quote is taken from an article “The School of Hard Knocks” in the Irish Times, under the topic of sports. The article concerns the subject of semi-professional rugby players returning to college studies before continuing with their sporting career, and clearly portrays the study of engineering as especially challenging.

*"Page, who has the engineer's dislike of public speaking and social engagements, will now be thrown into the spotlight at Google."*

This quote is also taken from the Irish Times, this instance from the Business section of the publication. The article is “Page thrown into the spotlight at Google”, and concerns the new position of Larry Page in the company. This article is also not concerning engineering, yet delivers a very strong image of an engineer as an introverted, social misfit – a portrayal definitely not accurate or desirable for the field.