

# *Innovation in Research Reporting with Special Reference to Academic Research*

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## **Abstract**

In this era of information overload, every piece of written material has to “sell” itself to the reader. A research report is a deliverable product. To “sell” it has to attract the attention of the reader. It has to trigger and sustain interest; it has to arouse a desire to seek more information. Conscious presentation efforts are required for this. Interestingly while such efforts are clearly seen in the research reports of the top consulting firms, no such efforts are visible in the research reporting of academic research. While business research is being reported with lot of innovation, academic research continues to report its outcome in the standard, orthodox and traditional format with very little consideration of the readers at large. Business research reporting has been relatively flexible adapting techniques like infographics and has shown considerable empathy for the readers of today’s information era. On the other hand, academic research reporting like the PhD thesis continues to report its content in a rigid, stereo-typed and redundant manner. This paper draws a reporting framework from 5 illustrative recent reports published by leading agencies - PWC, Deloitte, EY, Accenture and McKinsey. This framework is compared with the one followed by the academia in reporting the PhD thesis and the reporting assumptions are investigated. The academia is urged to switch over from its orthodox reporting style to fall in line with the business research reporting.

**Keywords:** Academic research reporting, Business research reporting, Consulting firms, PhD Thesis

## **Introduction**

Reference to latest research reports by agencies (Accenture, 2018, PWC, 2018, Deloitte report 2018, Ernst & Young, 2018, McKinsey, 2018) shows that the way you say what you want to say matters. Leading consulting firms undertake research and present its findings through their reports. Undoubtedly substance has a preference over form. But style adds value to the substance. A work very well done, yet if not presented well, will fail to generate interest and enthusiasm. On the other hand use of excellent presentation definitely creates a favorable impact and a positive outlook towards the report. And thanks to technology, today we have host of awesome reporting features like infographics, design templates etc. that makes a research report more readable. This study will understand the styles that are adopted by the leading research agencies in reporting their research. How much

text they put, where they put it, what is the role of images and graphics in their reports, how things are summarized – all these aspects will be discussed in this paper. The assumptions of academic research reporting would also be investigated. Premises for reporting a doctoral thesis would be scrutinized in the context of a comparison with business research reporting.

Consulting firms have peculiar styles of reporting their research. Not compromising on the content they present their findings in a way that triggers interest in the minds of the reader. They recognize the fact that there are different types of readers - one who want everything very short and others who have an eye for details. And in between these two extremes there are others who want limited details. Consulting firms deploy reporting skills that cater to the requirements of all these categories of users of their reports. This paper tries to find out exactly how they do this. A

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*The paper has been presented in the Tenth Conference on Excellence in Research and Education (CERE 2019) of Indian Institute of Management Indore.*

comparative analysis of reporting style would be done with that of academic research reporting.

### Objectives

The basic aim is to evaluate the reporting style of the research work by leading consulting firms. In this direction an objective was set for this paper in terms of identifying unique reporting style features of the research reports of leading consulting firms so as to get a perspective of the reporting style.

Additionally the paper also aimed at identifying the reporting features of academic research reporting so that these can be compared with those of the reporting style of consulting firms.

Academic research reporting is based on certain premises about the prospective readers. It was an aim of this paper to critically investigate the assumptions of academic research reporting.

Finally, the paper aimed at comparing and contrasting the two styles of research reporting in order to understand if academic research reporting can draw some cues from the leading consulting firms reporting styles.

### Scope of work

The project will adopt a "content analysis" approach for evaluation. The content of the reports will not be evaluated. Rather here we mean the reporting style of the reports as content. Reports, one each of the following five firms will be taken-up for study and evaluation –

- a. PWC
- b. Deloitte
- c. McKinsey
- d. KPMG and
- e. EY

We contemplate the following parameters to make-up the style of research reporting by the consulting firms –

- Structuring
- Use of infographics
- Use of images
- Text, font style etc.

A review of the academic research reporting would be

done with reference to around 30 PhD thesis randomly selected from Shodhganga (The Indian reservoir of PhD thesis).

The outline of the plan was to identify and collect 5 reports for content analysis, scrutinize their reporting style, identify unique reporting features and pattern, review academic research reporting with reference to 30 PhD Thesis, compare and contrast the two research reporting styles and come out with suggestions and draw conclusions.

### Review of Literature

Samuel A. Livingston (2012) states that "A good way to approach the task of writing the results section is to begin by making the tables and graphs." The writer has specified four minimum features of a good research report. One Focus - an effective report emphasizes the important information. Two Accuracy - an effective report does not mislead the reader. Three Clarity - an effective report does not confuse the reader. Four Conciseness - an effective report does not waste the reader's time.

Food and Agriculture Organization of the UN (n/d) has stated the following on research report writing – "Easy-to-understand tables and graphics will greatly enhance the readability of the written research report. As a general rule, all tables and figures should contain an identification number corresponding to the list of tables and the list of figures, a title that conveys the content of the table or figure, also corresponding to the list of tables and the list of figures, and appropriate column labels and row labels for tables, and figure legends defining specific elements in the figure."

University of Sussex (2016) in its guidelines state that "Graphs, diagrams and charts can help your reader to understand your findings and see how they compare with other data." University of Hull (2016) too encourages use of graphs, diagrams, tables etc. for presentation of the results in the research reports.

Mark Murphy (2016) has identified four unique styles of report-writing – "After years of research, my team and I have found there are four primary presentation styles: the Closer, the Data Scientist, the Director and the Storyteller."

C M Healey (2015) has justified the usage of graphics as under –

“Graphics play an important role in your data presentation. Graphics can play a major role in highlighting and clarifying results and data. Good graphics can aid the reader’s comprehension of the text. Graphics can convey trends, comparisons, and relationships more clearly than text and summarize the data by reducing it to a manageable size for presentation.”

Douglas Altman (2015) has mentioned that there are huge problem with journal articles. While reading published research reports, the systematic reviewers in particular actually face hardship to find key details of study methods and more often than not fail to extract the results they seek. Many research articles are thus quite clearly unfit for the purpose.

Aaron M. Orkin et. al (2016) have endeavored to help authors report their research in ways that are most suited to the readers. In presenting the updated Instructions for authors they believe that it will provide better access to reporting guidelines as measured to support best practices in reporting health research. The authors have expressed a hope that thoughtful application of the reporting guidelines would help in advancing the quality, application, and impact of research in primary health care.

Marion Heyeres et. al (2019) studied 25 papers published between 2000 and 2018 by applying a descriptive statistics to study characteristics. They performed thematic analysis of research translation activities and assessed reporting quality using the 10-point ISRIA statement. While papers scored well against the ISRIA statement on 5 domains of reporting quality, weakest scores were found due to factors like identification of stakeholder needs and stakeholder involvement, conflict of interest and ethics.

Turk T et. al (2018), studied 200 articles and found that there are major discrepancies in reporting results of survey-based studies. This, the author believe can be attributed to the lack of availability of updated standard checklists for quality of reporting standards.

Thus, the literature review tells us that generally use of graphics, tables, images etc. is encouraged in the research reports for various reasons like drawing attention, emphasizing points dramatically, ease of understanding etc. At the same time researchers have expressed their concerns over lack of universal standards in reporting

research results particularly with reference to articles.

### Methodology

The first task in the methodology involved selection of agency reports for study. Five reports of leading consultants were selected randomly without any bias for a particular sector. These were PWC 20th CEO Survey Being Fit for Growth, Accenture Banking – Top 10 Trends to watch in 2018, Deloitte – Deloitte 2018 Global Human Capital Trends, EY – 2018 Global Private Equity Survey and McKinsey & Company – Delivering through Diversity.

Next task was selection of the 30 PhD theses for the study. These were selected from the Shodhganga website. The website has 399 universities who have listed their thesis. The entire list was downloaded in an Excel file and the Universities were serially numbered. 30 random numbers between 1 and 399 were generated and Universities with these 30 numbers were selected. The first department listed under each of the 30 university was selected since the department lists for each of the Universities were found to be quite different. For example Acharya Nagarjuna University has Centre for Dr.Amberkar Chair as its first department. Adesh University has Department of Interdisciplinary Biomedical Research as its first department. Ahmedabad University has Department of Life Sciences as its first department in the listing. The differences in the departments ensured that a wide range of thesis got selected for the study. But it was ensured that all of them were submitted in 2019.

Content analysis methodology was adopted for the study based on views drawn from literature in this regard. (J Guthrie et. al, 2004 - Using content analysis as a research method to inquire into intellectual capital reporting, Dr. Greenhalgh et. al, 1997 - How to read a paper: Papers that go beyond numbers (qualitative research), Stemler Steve, 2001 - An overview of content analysis - Practical Assessment, Research & Evaluation). Based on these articles the content analysis methodology adopted for this study was divided into four parameters, namely, Structuring, Use of Infographics, Use of Images and Text, fonts etc. As a part of the content analysis all the five agency reports were analyzed based on these four parameters.

### Content analysis

The PWC 20th CEO Survey Being Fit for Growth report has

adopted a customized structure with the contents under the headings like - What's on the minds of CEOs in India?, India's CEOs continue to be confident of their growth prospects, Being Fit for Growth, A strategy that works in a digital world and Bringing together man and machine. The Accenture Banking - Top 10 Trends to watch in 2018 Report has reported the 10 trends straight with a small preface. The Deloitte 2018 Global Human Capital Trends Report has been structured exhaustively in eleven sections. The EY - 2018 Global Private Equity Survey Report starts with an Executive Summary and then elaborates on aspects like Technology, Talent Management etc. Interestingly the report has given the Background and Methodology at the end of the report. The McKinsey & Company - Delivering through Diversity Report has a structure somewhat similar to that of the EY - 2018 Global Private Equity Survey Report with the Methodology at the very end of the report. Collective evaluation of the structure of the five reports suggests that they have been well planned which is a recommendation by writers in this regard (Göran Svensson, 2012). The 30 thesis have more or less similar structure with the contents divided over chapters like Introduction, Review of Literature, Research Methodology, Data Analysis and Interpretation and Findings, Conclusions and Suggestions.

All the five reports have extensively used colorful and attractive infographics. This seems to very much fall in line with recommendations by researchers (Mohd Amin Mohd Noh et. al, 2014, Dunlap and Lowenthal, 2016, Cheryl Conner, 2017). The 30 thesis have old-fashioned bar, line and pie charts mostly used for data analysis.

Similarly all the five reports have made use of lot of images. All the five reports have attractive full-paper size images as their cover pages. They are quite intelligently designed and effectively convey the theme of the report. Images are also used extensively inside the reports for communicating the main content. Prominent Journal websites were referred for information on their images policy. It showed that the publications actually welcome images from the writers. (www.bmj.com). Images are hardly used in the PhD thesis. Generally the results are reported only with the help of graphics, but images are very sparingly used.

As regards usage of fonts, all the five reports have made use of highly colorful fonts. A wide variety could be seen.

On the other hand in case of the PhD Thesis, 29 had used Times New Roman font with 12 point size.

## Findings and implications

### Findings

Regarding structure of business research reporting we don't find any fix pattern. While some of them have things like preface, introduction and an executive summary others have directly touched the topic. For academic research reports we follow the structure of introduction, review of literature, conceptual discussion, study methodology, data analysis, findings and conclusions. However, we could not come across this structure with the five business research reports.

Infographics of a lot of variety are extensively used in the business research reports. Use of conventional and plain graphs has been replaced by infographics that are more attractive. The small icons or images add value to the readability and interpretation of the information. Academic research continues to rely more on use of textual reporting and a sparing use of graphics.

Use of images is quite extensively done in the business research reporting. Some of the reports have even used full-paper size images. The images convey the theme of the report or of a particular section of the report. In most of the images we find human faces or human face like animation. In contrast images are very sparingly used in academic research reporting.

Colorful fonts of a lot of variety that too with colorful background are a common feature of business research reports. Use of bold colors like a full black background is also seen. In most of the reports, the text has not been justified for alignment. Language is quite simple and easy to understand. The proportion of use of text and non-text is almost equal. On the other hand, in case of the academic research reporting the proportion of non-text formats like tables, graphics, images etc. is not more than 5%.

### Implications

Structures of the business research report are flexible and are customized according to the reports. Taking into account the readers and their interest things like methodology are given at the end. Academic research reports are characterized by a rigid reporting style that



hardly reflects any consideration for the readers for such reports beyond the researcher, guide and the evaluation committee.

In case of business research reporting it is clearly seen that efforts are made to trigger interest of the reader through use of eye-pleasing and catchy cover pages, images, infographics, colored text, colored background etc. Such features definitely add value to the report. No doubt contents are important. But in this era of information overload, every piece of written material has to “sell” itself to the reader. To “sell” it has to attract the attention of the reader, it has to trigger and sustain interest, it has to arouse a desire to seek more information etc. Conscious presentation efforts are required for this. And these are clearly seen in the research reports of the top consulting firms. Academic research reports should not have any reservations in adopting a more contemporary reporting style instead of its age-old traditional style formulated some 50 years back.

Interestingly, the firms that we had chosen for the analysis are well-known consulting firms with a lot of reputation. Yet they take so much of efforts to make their reports better in terms of presentation. It is not a case any ego like we are the best in business so people will read it anyhow. On the other hand, they take every possible measure to make the report more attractive and interesting to read. In contrast, the academic research reports baselessly assume that those who are reading the report will anyhow read it. This assumption of there is untenable in the modern context.

Quality of presentation is an intangible factor which has an indirect yet significant impact on the reader. If the report is presented poorly it can put off the reader or it can make him loose interest. On the other hand an effective presentation has a significant positive impact. While we see a lot of conscious effort from the business research fraternity in this direction, ironically academicians continue to pay no heed at all to something called as quality of presentation. This is not in their interest.

### **Suggestions and Conclusion**

#### ***Suggestions***

Based on the comparative analysis of the business research reporting and academic research reporting and also on the literature reviewed in this regard we propose some

suggestions for the consideration of the academic fraternity.

There is a case for considering a customized reporting structure for the PhD thesis. It is observed that a flexible structure gives lot of scope for creativity in presentation. For instance if a particular researcher wants to give prominence to his findings, he should be allowed to report those much earlier and with a heightened emphasis. That is what has been seen in the consulting firms reporting style. In fact, a couple of them have put the methodology used for their research as the last thing in the report.

Presentation style of the academic research reporting certainly deserves a makeover by way of usage of infographics, images and attractive fonts. Standard publications actually encourage researchers to make use of image, photographs etc. Their only concern is that the usage should be duly authorized. But in no ways they prohibit writers from using attractive presentation styles. An improvement in the presentation style will definitely add value in terms of readability.

#### **Conclusion**

It is high time that the academic research reporting falls in line with the more readable reporting style of business research. Their assumption that the readers will be able to digest the content whichever way they present no longer holds good. Rigidity in reporting needs to be substituted by customization; rotten textual methods should be substituted by eye-catching infographics and images and the self-centered thinking should be substituted by empathy for the readers.

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*The paper has been presented in the Tenth Conference on Excellence in Research and Education (CERE 2019) of Indian Institute of Management Indore.*