"Reverse Engineering" the Pitching Research Template: A Simple Tool to Help Understand the Academic Literature

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“Reverse Engineering” the Pitching Research Template: A Simple Tool to Help Understand the Academic Literature

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Abstract: Academic literature can be wordy and hard to understand. This letter discusses the application of the “pitching research” template by Faff (2015, 2016) as a useful tool to help PhD students in understanding the literature – and particularly the “key” papers – that they read for their research. The authors also offer personal reflections on the experience of using the pitch template for this purpose and encourage other PhD students to use it to aid their research.

Keywords: Pitching research, Reverse Engineer, Literature Review

JEL: I20, Y20

1. Introduction

“The noblest pleasure is the joy of understanding”
Leonardo da Vinci

This letter examines an extension of the use of Faff’s (2015, 2016) pitch template to aid PhD students and new researchers in reviewing the literature used as the basis for their own research. Faff (2015) originally proposed the pitch template to help novice researchers (e.g. PhD students) to succinctly communicate the essential elements of their research proposal to an academic expert. Moreover, researchers have also applied this template for other purposes. One notable example, Wallin & Spry (2016) applied the template to facilitate communication between collaborating

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researchers. Given that the original purpose of the template is to facilitate PhD students in communicating the essential elements of their research proposal to an academic expert, the reverse would also be true. Accordingly, this letter argues that PhD students can also use the template to extract essential information from texts written by academic experts. The idea is that the key elements that need to be communicated succinctly in a proposal are more or less similar to the elements that need to be extracted from an academic article, in order to properly comprehend its content. In other words, PhD students can use the pitch template to aid them in identifying key information of a scholarly article.

As a context for this letter, the author started his PhD at the University of Queensland in 2016 and took RBUS6914 as a preparatory course for his research. One module in that course explores how researchers can use the pitch template to reverse engineer a scholarly article. The purpose of this practice is to help students in understanding better, what salient information is the paper trying to convey. In the course of their study, a PhD student will most likely need to extract essential information from a broad range of scholarly literature. So, the ability to read and process academic articles is a pre-requisite for the successful completion of a PhD.

Unfortunately, not all students are fully equipped with the necessary tools to perform sufficiently rigorous literature reviews. Alpert and Kamins (2004) raise this issue when they highlight the importance of preparatory coursework for PhD students in Australia. Furthermore, this issue is also especially true for non-native speaking PhD students (Braine, 2002). Consequently, jumping straight to independent research without a basic foundation of academic literacy skills will usually lead to lower quality research and lower research productivity. In addition, PhD students usually allocate a significant amount of their time for reading the relevant literature. Therefore, the potential use of the pitching template as an initial framework to process academic literature is a potentially useful tool to improve the quality of literature reviews by PhD students.

The structure of this letter is as follows: The first section introduces the motivation and idea behind the paper. The second section describes the step by step process of how to reverse engineer an academic paper using the pitch template. The third section elaborates the personal reflection of the first author in using the process to perform the literature review. The last section concludes.

2. Step by step process

As in the original research pitch template (Faff, 2015), there are eleven substantive aspects covered in the reverse engineer template. Nevertheless, researchers do not have to finish the process of identifying these points in a linear fashion. However,
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for ease of explaining the process, this section describes them sequentially in the points below. The author provides an illustration of its application in Table 1. The example given here is a conceptual paper published in the European Journal of Marketing about the classification of customer co-production activities in manufacturing.

The first point in a reverse engineer pitch is the actual paper reference details (rather than a “Working Title”). In the example, instead of writing only the title of the article, the author put the full APA citation as the working title. This way, template users can easily refer to the reverse engineer pitch later during the actual writing of the literature review.

The second point is the Basic Research Question. Identifying this item is the key information of any academic paper. Our understanding of a piece of literature would be incomplete without a clear identification of what is the research question being asked. Usually, readers will find this element in the abstract or the introduction.

The third point is the Key Papers. Identifying key papers are important in exploring other literature relevant to the paper being reviewed. Usually, the authors mention key papers early in the introduction section and repeatedly throughout the article. According to Faff (2015, 2016), key papers should be state of the art, so most likely they are published less than five years from the date of publication of the paper being reviewed.

The fourth point is the Motivation/Puzzle. This part relates to the background of the research question and the overall purpose of the paper. Some papers cited real-world phenomenon as their motivation while others referred to some gap in the theory. Papers usually describe the motivation in the introduction section and also refer to it again in the conclusion.

The fifth point is the Idea. This part focuses on the core “intellectual drive” of the paper. In a quantitative paper, this idea will appear in the literature review or the methodology section as research hypotheses. In a more qualitative paper, this idea will appear in the introduction section as the aim and objectives of the paper in question.

The sixth point is the Data. This part highlights the data used in the study. As an exception, conceptual papers do not use any data. However, in most cases, research papers will describe in detail the type, size and source of the data in the method section.

The seventh point is the Tools. This part focuses on the analytical method used to generate the findings. For quantitative papers, the authors usually focus on the statistical analysis; while for qualitative papers, they usually describe the analytical framework. It is important to note that citing the software used in the study (i.e.
SPSS) does not constitute identifying the analytical tool since most statistical software can aid in multiple analytical methods. Papers usually describe this information in more detail in the method section.

The eighth point is the What's New. This part delineates the novelty of the paper being reviewed. The novelty of a paper should be on the idea of the study, but sometimes it focuses on the data or tools used in the research. Most likely, the authors will identify this part clearly in the introduction and conclusion. If not, the reader also must carefully sift through the literature review or the methodology section for it. Researchers can also present this novelty in a Mickey Mouse Venn diagram (see Figure 1).

The ninth point is the So What. This part elaborates the impact and implication of the paper for stakeholders. A single study may have different impacts and implications for each identified stakeholder. In some cases, readers can easily identify this part in the introduction and the conclusion. However, more often, the paper did not identify this part explicitly. Therefore, the reader must construct possible impacts and implications as inferred from relevant information in the introduction, discussion and conclusion.

The tenth point is the Contribution. This part identifies the academic contribution of the paper. It answers specifically what is the research implication of the paper and what further questions can be asked based on the findings of the study. Similar to the previous part about the impact and implication, readers may have to construct their own understanding of the contribution of a paper. Sometimes, the actual contribution of a paper as perceived by the reader is different than what the paper being reviewed states in the introduction or conclusion section.

The eleventh point is the Other Consideration. This final part focuses on additional reflections from the paper. In the case of a reverse engineer template, this part identifies the key findings of the paper being reviewed. Key findings include support or refutation to existing theories and new insights on the phenomenon being explored. Most likely, readers can find this information described in the results and discussion section.
### Table 1. An example of the completed 2-page pitch template of a key paper

<table>
<thead>
<tr>
<th>Pitcher’s Name</th>
<th>Purpose</th>
<th>Reverse Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imam Salehudin</td>
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</tbody>
</table>

(A) **Working Title**

(B) **Basic Research Question**
1. What defines a customer co-production in the manufacturing of goods?
2. What is the limit of its domain?
3. How do we categorise its activities?

(C) **Key paper(s)**

(D) **Motivation/Puzzle**
Customer co-production is the active involvement of customers in the generation process of the core offering itself. Research on customer co-production focuses largely on the delivery of services. On the other hand, the application of co-production in the manufacturing of goods in the academic literature is mostly nonexistent. Existing definitions and classifications of customer co-production activities lean heavily in the context of services so that their application in the context of goods is less relevant.

THREE
Three core aspects of any empirical research project i.e. the “IDioTs” guide

(E) **Idea?**
This paper aimed to fill the gap by defining and classifying the customer co-production activities in the manufacturing of goods. This paper used the general systems theory to create a taxonomy of customer co-production activities of goods. This paper identified no dependent or independent variable and tested no hypothesis.
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</thead>
<tbody>
<tr>
<td>(F) Data?</td>
<td>This is a conceptual paper, so it uses no empirical data. However, the study uses definitions and activities described in published academic literature to formulate the proposed classification schemata.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(G) Tools?</td>
<td>The study used the logical partitioning approach in developing the classification. Compared to the alternative, this approach produces taxonomies with better generalisation outside the data set. The paper used no statistical software or measurement items.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWO</td>
<td>Two key questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(H) What’s New?</td>
<td>This paper is the first classification of co-production activities in the manufacturing industry. This classification reduced the overlap between constructs and domains of the co-production of goods. In effect, it increases the relevance of applying a customer co-production concept in the context of tangible products.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(I) So What?</td>
<td>Researchers interested in the co-production of goods can use this taxonomy to guide their theory development and empirical research design. This taxonomy also facilitates the communication and collaboration of research and practice in co-production of goods by reducing ambiguity and overlaps between concepts and domains of co-production in the context of tangible goods.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONE</td>
<td>One bottom line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(J) Contribution?</td>
<td>Providing the foundation for future research on co-production of goods, by laying a formal definition and identifying the key attributes of different co-production activities in the context of manufacturing.</td>
<td></td>
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<tr>
<td>(K) Other Considerations</td>
<td>Key findings: 1. The authors identified two criteria as the key basis of classification (i.e. nature of input and customer autonomy). 2. They also identified six sub-areas of co-production of goods as the result of the classification (i.e. restricted co-manufacturing, unrestricted co-manufacturing, co-ideation, co-design, mass customization, and participation loop.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Personal reflection of using the pitch to reverse engineer a key paper

Prior to my encounter with the pitch template, I usually read key scholarly articles "the old way" using printed material and the highlighter pen. I would read one article and try to identify interesting titbits using a highlighter for future reference. Without a clear purpose or framework, this practice usually ends in large batches of the pages being highlighted. Sometimes, I wrote notations beside the highlighted part to write down why I consider that part important. This practice may be easier to do at first. However, by the time I need to write that literature review, I would've spent a lot of my time trying to figure out the pattern of those highlighted parts of the multiple papers I've read. Most of the time, I've already forgotten large parts of what have I read earlier and why I considered a particular part to be important.

The first time I applied the pitch template to reverse engineer a key paper for my thesis, it was not easy. It required multiple iteration and non-linear reading to comprehend the meanings and construct an understanding of the message. The key paper did not explicitly mention some of the key parts I'm looking for. However, after I finished the reverse engineer exercise, I felt that I have produced something tangible from my reading time. I actually have something to show after I finished the journal article. When I used the "paper and highlighter" method, this is seldom the case.

Using the template also helped to structure my comprehension of the paper and made it easier to identify important parts of the paper. Meanwhile, I can also begin paraphrasing the key insights rather than simply copy-pasting it to the reverse engineer template. After reverse engineering the first paper, I found it easier to apply the framework to the second paper. It takes practice, but the bottom line is that the reverse engineer template can really save me time spent to read the literature. Using the template as structure, I can quickly identify the core elements of the paper as shown in the Mickey Mouse novelty diagram (See Figure 1).

![Figure 1. Mickey Mouse diagram characterising novelty of the research idea](image-url)
My final key insight from my experience is to utilise the research pitch website (https://pitchmyresearch.com) when using the template. The website provides a free platform to work on and save the pitch template anytime and anywhere. Additionally, users can also make their pitches public and available to other users. In theory, this could facilitate discussion and collaboration between researchers. At least, browsing the public pitches provides various examples of research pitch applications. The reverse engineer pitch shown as an example in Table 1 is also accessible from the website.

4. Conclusion

This letter offers the application of the pitch template by Faff (2015, 2016) as a tool to aid in reviewing academic literature. In addition to a description of a step by step approach, the author also offers personal reflection in applying the template. I found that the template helps in structuring the information extraction process during the reading activity and improves the result. Based on that experience, I encourage fellow PhD students to utilise the pitch template in reading and reviewing the literature. As the final recommendation, I also found the pitchmyresearch.com website really helped the process of applying the pitch template to reverse engineer academic papers.

References