Another year is coming to an end and like always this makes for a good opportunity to look back, note successes, acknowledge the many hard working contributors and discuss some of the things on the horizon for PMR.

In short, 2018 has been a productive year for PMR. We have published a good number of high quality papers. We have three papers that have reached more than 20,000 downloads (Angkiriwang, Pujawan, & Santosa, 2014; Mostafa, Dumrak, & Soltan, 2013; Wuest, Weimer, Irgens, & Thoben, 2016). With eight further papers having reached more than 5,000 downloads and a further 48 having passed 1,000 downloads. This year also saw the publication of the first invited paper (Wikner & Bäckstrand, 2018). I am expecting that we will expand this with invited papers on several other interesting and central topics for Production and Manufacturing in 2019 and beyond. I am also happy to see not just a broad citation of the contributions (more on this later), but some contributions which are having a significant impact in terms of citations. I find both these aspects to be impressive for such a young journal. This impact is also reflected by PMR’s strong ranking in Scopus in the area of Industrial and Manufacturing Engineering, where we are now close to breaking through to the first quartile. Of course, we would never get to this point without the strong support of a very active readership. This is clearly reflected in the number of views the average publication gets. Which, as I want to point out, is of course the strongest feature of the Open Access model used by PMR.

To get a deeper insight into the performance of PMR, I investigated the citations registered in Scopus. Below, you can see a graph showing the cumulative citations of the papers published to-date in PMR.

The brackets in Figure 1 refer to the number of citations achieved by the papers and the colors to the publication year. Some interesting facts:

- 86% of the papers published in 2013–2016 are cited at least once.
- 43% of the papers published in 2013–2016 are cited five or more times, with a median of four citations per paper.
- 38% of the papers that are not yet cited are published in 2018.
- 25% of the papers published in 2018 are already cited.

It is rather strong evidence that not only PMR reaching a broad readership, but the research has an impact in terms of academic value as well. The rapid citations are also strong signs of the immediacy of the publications. Being fully Open Access with continuous publication means that PMR’s papers are published in their final form shortly after acceptance. PMR does not have papers available in pre-print for an extended period before they are assigned to a volume and page numbers. So to see the papers cited so quickly underlines the strong relevance of the research.
I also investigated the citing sources for PMR using the citations from 2016–2018 (to-date). They naturally show that PMR papers are citing work published in PMR although not to a dominating degree (5.5% of the citations). What is perhaps more interesting is that the top five citing journals are:

- International Journal of Advanced Manufacturing Technology (3.0% of citations)
- Production Planning and Control (2.6% of citations)
- International Journal of Production Research (2.2% of citations)
- International Journal of Production Economics (1.9% of citations)
- Benchmarking (1.5% of citations)

Also very much worth noting is, that there are 172 unique publication sources citing PMR in the period 2016–2018 (to-date). Again underlining the very broad appeal and impact of the journal.

To round of the analysis, I took the number of downloads per paper, the publication year and the citations achieved by the papers and created a simple linear response model. The dependent variable was the number of citations, while the number of downloads was treated as a continuous variable and the publication year as factor. I fitted a response model and got the following significance levels:

| p-level          | Intercept  | Downloads  | Downloads:2014 | Downloads:2015 | Downloads:2016 | Downloads:2017 | Downloads:2018 |
|------------------|------------|------------|----------------|----------------|----------------|----------------|----------------|
| p-level          | 1.56e-06   | <2e-16     | 0.0004         | 0.0015         | 0.0003         | 0.0004         | 0.0045         |

Note 2013 dropped to avoid multi-collinearity.

Figure 1. Cumulative sum of citations sorted by number of citations.
The $R^2$ and adjusted $R^2$ were respectively 0.62 and 0.60, indicating a reasonable fit and limited if any overfitting.

For an overview, I have added a plot of the number of citations achieved a function of the number of downloads (for ease of view, I took the logarithmic function of the downloads as the range is large). Like in Figure 1 the observations are color coded by publication year.

While the image presented in Figure 2 is perhaps not uniformly clear, there is a strong visual indication that more downloads lead to more citations. This is both intuitively appealing and clearly supported by the findings from the response model. Without a non-Open Access hold out sample it is of course difficult to conclude anything directly about Open Access and the importance in terms of impact. However, it seems to be very clear that the more viewed the paper the more it is cited.

To reach these achievements we depend on continuously having a large base of strong reviewers and authors willing to submit their cutting-edge results. I would like to take the time to thank both the authors who submitted their contributions and the reviewers, who took time out of their calendars to support the high academic standard that we aim for in PMR.

The future is sure to hold interesting things for PMR. The topics of Production and Manufacturing are increasingly in focus and we are seeing an increasing interest in the papers published in PMR. Furthermore, a number of central funding agencies have during 2018 announced that they will in the future require full access to the results generated by funded research projects, i.e., results should be fully available for the public. A trend, I predict will continue and even gain momentum in the coming years. Strong Open Access journals, such as PMR, will for sure benefit from these requirements in the coming years.

If you are in need of further inspiration I will draw your attention to the call for papers that is ongoing. Currently, we have a group of guest editors managing a call on the topic *Intelligent Algorithms for Customized Manufacturing*. We are also launching a number of other Special issues that I hope to see published during 2019. So stay updated on the journal web page where these calls can be found.

![Citations and downloads](image.png)

*Figure 2. Citations from Scopus and downloads.*
Overall, I am confident that we are on the road to great things, and I look forward to travelling this road with you all.

Peter Nielsen,
Co-ordinating Editor PMR

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