

# Influencing pedagogical development with ScienceDirect's pre-1995 backfiles



# About Dr. Nyoman Pujawan

**Dr. Nyoman Pujawan is a Professor of Supply Chain Engineering and Head of Graduate Programme at the Department of Industrial Engineering, Sepuluh Nopember Institute of Technology (ITS), Surabaya, Indonesia.**

As Head of Graduate Programme for the Sepuluh Nopember Institute of Technology (ITS), Dr. Pujawan plays a key role in steering the institution's pedagogical development. He is responsible for ensuring that their graduate students are prepared not only for the rapidly changing landscape of the industries, but that they are also engaged in the intellectual discourses of the academic world. In order to do so, they need to embrace recent developments and, at the same time, be acquainted with earlier and more fundamental research works that are of ground-breaking value.

## Reading pre-1995 research journals: an educational perspective

With the availability and accessibility of Pre-1995 Backfiles online, introducing classic research work to graduate students has now been made easier. According to Dr. Pujawan, ITS' doctoral students are encouraged to read more than 100 journal articles when conducting their research work, particularly from quality journals. A list of his recommended journals is made available to them as a reference, including those that could be considered for publishing their research.

"Although we often require students to read the latest publications, I always remind them not to neglect earlier publications so they know the developments from time-to-time," emphasized Dr. Pujawan.

As an author who publishes in top international journals such as Elsevier's *European Journal of Operational Research* and *International Journal of Production Economics*, Dr. Pujawan often cites work from earlier journals. In his publications, 14% of his citations are to Pre-1995 content of which 13% are to Pre-1995 content from Elsevier. Notably, a similar pattern is observed in his institution, where 12% of ITS' citations are to Pre-1995 content, of which 13% are to Elsevier's Pre-1995 Backfiles.

In fact, this is in line with Google's observation on the growing impact of earlier articles. "In 2013... 13% of citations were to articles more than 20 years old... an increase of 36%... Now that finding and reading relevant older articles is about as easy as finding and reading recently published articles, significant advances aren't getting lost on the shelves and are influencing work worldwide for years after," Google Inc., November 2014.

Over the years, his work has been published in international journals in his field, including the *European Journal of Operational Research*, *International Journal of Production Research*, *International Journal of Production Economics*, *Production Planning and Control*, and *Business Process Management Journal*. He is the Editor-in-Chief of *Operations and Supply Chain Management: An International Journal* and he is an Editorial Board member for several other international journals. He is also a Board Member of the Asia Pacific Industrial Engineering and Management Systems Society (APIEMS).

Having worked in industry prior to his academic career, Dr. Pujawan has been actively delivering professional courses and consultancy services to Indonesian companies in the area of operations and supply chain management. He is now a Member of the Committee responsible for designing national logistics systems for the Coordinating Minister for the Economy, Republic of Indonesia.



“I have been using ScienceDirect much more extensively than other electronic databases as it is more complete, and now many of its journals in my field are of excellent quality.”

—Dr. Nyoman Pujawan, Professor of Supply Chain Engineering and Head of Graduate Programme at the Department of Industrial Engineering, Sepuluh Nopember Institute of Technology (ITS), Surabaya, Indonesia

## Catalysing new areas of research

Dr. Pujawan also shared how Pre-1995 articles have catalysed new areas of research. “The research that I have been doing is rooted in knowledge development that took place as early as the 1950s. By having a good track on the development from its early stage, a researcher like me would know more accurately the evolution of a particular issue, focus, approach/ methodology, and the findings of what other (and earlier) researchers have done. Research is about contributing to the knowledge gap. If we only look at literature from the past five years, it is possible that we may repeat something that other people have done ten years before.”

A fine example of how earlier research has helped recent works is the journal articles authored by Professor Suresh Goyal of Concordia University, Montreal, Canada. His work in the area of inventory modelling is held in high esteem by his peers, and his many articles written in 1995 and before have garnered very high citations, generally in the range of 200 to 300. They have gained popularity because the topic is relevant to this day, they are published in the best publication outlets, and they are written by a scholar who has made significant contributions to his field.

Pre-1995 content, now available in online databases such as ScienceDirect, is a valuable source for researchers. To Dr. Pujawan, such databases make a huge difference to the research process. “I have been using ScienceDirect much more extensively than other electronic databases as it is more complete, and now many of its journals in my field are of excellent quality,” he said.

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