

THE IDEA OF PSEUDOINNOVATIONS

Jan Franciszek Jacko
Jagiellonian University

Abstract: This study presents the idea of pseudoinnovation concerning novelty, efficacy, and efficiency requirements that innovations meet and pseudoinnovations do not. The conceptual investigations demonstrate the essential aspects and roles of this idea in the theory and practice of innovation management. Two peculiar functions of this idea are considered: The notion of pseudoinnovation is a conceptual tool to distinguish innovations from similar artefacts and improves communication about innovative ideas. This study offers conceptual tools to identify pseudoinnovations and abuses of the term "innovation" in advertising, marketing, and manipulation. The investigations discuss novelty, efficacy, and efficiency requirements that innovations meet and pseudoinnovations do not fulfil. The aim of this paper is to identify the costs and risks of PS regarding their pseudo-newness, inefficacy and inefficiency. However, this investigation does not establish measures to assess costs and risks. The study only opens the way for their further specification.

Key words: quality management, innovation management, strategic management.

Introduction

The idea of pseudoinnovations (PS) is derivative from the concept of innovation: PS are artefacts that are similar to but not innovative (Haustein & Maier, 1979; Jacko, 2018; Mensch, 1979; Walshe, 2009). This study presents three conditions that innovations meet while PS do not encounter:

- a. Novelty: Innovations are new. They have not appeared previously (evolutionary innovations modify well-known solutions, whereas revolutionary innovations implement previously unknown solutions).
- b. Efficacy: Innovations solve a problem. Thanks to innovations, achieving an objective is possible, which was impossible before.
- c. Utility (efficiency): Innovations provide more benefits than losses, while the advantage of benefits over losses is more excellent than other available solutions.

Innovation meets all these conditions. PS meet one or two, but not all of these requirements. Consequently, PS are similar and dissimilar to innovations. These are some combinations of the above conditions in PS:

(a-b) PS can be new but ineffective (they do not solve any problem). For example, some new medications are PS when they are new but cannot heal the disease they are supposed to cure.

(ab-c) PS can be new and effective but are inefficient when they are socially damaging by resolving some issues. For example, some drugs may heal one disease (are effective) but have some side effects (cause addiction, for example).

(bc-a) PS may also be effective or efficient, yet they are not new. In this case, they duplicate known solutions.

This paper aims to specify the idea of PS and its peculiar risk. However, this investigation does not set measures to identify this risk and distinguish PS from innovation. The study only opens the perspective for their further specification, which can set up these instruments.

As the study argues, because PS resemble innovations, they attract investors, producers, and customers when they erroneously presume that PS are innovations. Their attraction produces their peculiar risk (Davila & Epstein, 2014; Mensch, 1979).



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Pseudo-novelty and the state of the research

The literature about PS focuses on pseudo-novelty (pseudo-newness), which occurs when solutions replicate known solutions without producing any new value in this way. As authors notice, their design generates unnecessary costs (Walshe, 2009) and wastes resources (Haustein & Maier, 1979; Jacko, 2018; Mensch, 1979; Tchernev, 2017; Walshe, 2009).

Some authors distinguish between subjective and objective novelty. Subjective newness is the impression that something is new. Objective novelty is that some solution has never existed and functioned before.

The authors conditionally value subjective newness (Garud et al., 2015). Subjective novelty can promote purchase when its novelty is attractive to people (Mugge & Dahl, 2013). However, pseudo-novelty generates their design costs (Walshe, 2009).

Pseudo-novelty is subjective, the false impression of objective novelty, a deception. This perception may come from the ignorance of assessors. The authors present limits of knowledge about newness, psychological sources of originality impressions, and tactics of persuasion or manipulation to create this impression (Blitz, 1992; Brigandt & Love, 2012; Garud et al., 2015; Talke et al., 2009).

Experts highly appreciate the objective novelty of innovations (newness, originality) and specify criteria to identify novelty (Blitz 1992; Brigandt and Love 2012; Hausman 2012; Mugge and Dahl 2013; Talke et al. 2009) or methods for measuring objective originality (Verhoeven, Bakker, and Veugelers, 2016; Shibayama, Yin, and Matsumoto, 2021). However, all these criteria and methods require the competence of the evaluator and do not exclude their error in stating newness.

Usually, novelty is at the centre of innovation research, and PS are identified with pseudo-newness. In the context of this identification, one can easily overlook that PS can be new. However, some authors notice that PS can be new ineffective or inefficient or less efficient solutions than the available solutions (Haustein & Maier, 1979; Jacko, 2018; Mensch, 1979; Schmaltz & Lilienfeld, 2014; Tchernev, 2017; Walshe, 2009). However, authors discuss PS only with examples of pseudo-newness and name new ineffective or inefficient solutions as “innovations.” However, these novelties get some particular names, such as the dark side of innovations. Authors point to this side when novelties have destructive effects. These consequences can be, among other things, public health risks, environmental degradation, and harm to society or the economy (Coad et al., 2021; Segnestam Larsson & Brandsen, 2016; Yotopoulos, 1974).

Pseudo-efficacy

Innovations are effective when they solve some problem. In this text, the term *problem* means that achieving some goals is impossible. The solution to the problem is the achievement or the method of achieving this objective. In this definition convention, innovations are effective (solve a problem) when they facilitate the achievement of some goal which was not achievable before (such as the first human-crewed spacecraft that made space travel possible). Innovations can also be new ways to achieve some already achievable goals in a new way (for example, aeroplanes allow humans to float differently than balloons).

a. Direct efficacy

The inefficiency of PS consists of the fact that they do not solve the problem they are supposed to solve. It is their *pseudo-efficacy*. For example, when a product is to cure diseases, it does not play this function.

Pseudoefficacy is the function of false beliefs about causality. In this case, one believes that some actions or solutions cause some consequence, which is not true. Such PS can be a product of manipulation in presenting the product or service. This manipulation may be a lie when one raises false



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information about causality to deceive people - users of the solution to motivate them to purchase decisions or investors to give money for designing the solution, producing, or implementing it.

However, pseudo-efficacy may also be the effect of false beliefs (prejudices). In this case, one can classify something as PS without the intention typical for lies or purposeful (misleading) understatements.

Evaluation of efficiency requires reliable knowledge about causality. In the cases of limited knowledge about causal links, some innovations may be wrongly accused of inefficacy. In this case, the fact that one cannot explain the causality motivates one to classify some solutions as PS. This classification may follow from the logical error *ignoratio elenchi* in reasoning when one draws statements about facts from the premise that we are ignorant about them:

We cannot explain the correlation occurring between A and B. Therefore, there is no causality between A and B.

Which reduces to:

We do not know anything about C; therefore, C does not occur.

Where C is the causality.

There is no direct inference about facts from ignorance. For example, the law logic already worked the *onus probandi* in the juridical process to protect reasoning from drawing statements about facts or evaluations from ignorance. For example, one cannot prove a person's guilt by stating that she cannot prove her innocence. This is the statement about ignorance. In this situation, the prosecutor still must prove or at least substantiate the accusation by pointing to other circumstances because ignorance cannot produce proof.

Ignorance may, of course, be the reason to specify the probability of some facts. Therefore, our ignorance about C is an excellent reason to presume a low likelihood of C. However, ignorance is an appropriate premise for any proof.

b. Indirect efficacy

Some innovations may be indirectly efficient when they solve another problem than they are supposed to solve, analogously to accidental discoveries or inventions. For instance, Wilhelm Roentgen constructed the first equipment to conduct X-rays by accident when conducting a routine experiment with cathode rays; John Pemberton did not know that he would create a beverage (Coca-Cola) when working on a prescription for a headache. Placebos are an excellent example of indirect efficacy – they cure some diseases when the patient believes they do so.

However, indirect efficacy may also occur in PS when presented as a solution to the problem they do not solve. In this case, PS solve some issues but do not solve the problem they are supposed to solve. Some examples:

- Some medical companies present a placebo as the cure for a disease to increase their income.
- According to some ideologies, some social changes are solutions to a problem. These novelties do not solve this problem. However, they provide more power for this group.
- Corporate greenwashing: Some companies engage in greenwashing, presenting themselves as environmentally friendly or sustainable without making substantive changes to their practices. This practice may be driven by a desire to enhance their brand image or gain a competitive advantage rather than genuinely addressing environmental concerns.

These examples lead to the crucial question about innovation efficacy: *Whose problem should innovations solve?*

c. Problems and groups of interests

In specifying innovation goals, one should consider the expectations of various stakeholders, including their potential users and society. The objectives of these parties can differ. By way of example, a new algorithm reduces the calculation from the harmful fumes of cars. This algorithm can meet the

goals of its producers because it benefits the sale of vehicles. However, it does not have to be so for their users and society. For them, it is a pseudo-innovation (Adams, 2015). Analogously, distorting the compatibility of new computer software with older computers increases computer sales (the objective of computer producers and sellers). However, it is ineffective (PS) for users of these computers. For example, some authors accuse Apple of deliberately slowing down iPhones to increase sales of new products and restrict repairs to products, even when repairs are relatively simple (Svensson et al. 2018). In this case, this practice solves the problem of the producer (the problem of increasing the sale) but causes problems for users.

Suppose one maintains that innovations solve the problems of innovation creators (designers, investors, sellers). In that case, some PS must be classified as innovation, for example, when they increase the profit of the creators without creating any value added for innovation users or when solutions are socially harmful. However, if innovations solve the problems of their users and, in the case of the most valuable innovations, the issue of humankind, one must investigate the moral question about the importance of problems that innovations solve. This question leads towards the requirement for the efficiency of innovations.

Therefore, in specifying the efficacy of innovations, one must decide about the group that sets the goals of innovations. When some novelties satisfy the purposes of some group at the expense of society, these novelties are PS.

One can easily fetishize the innovation efficacy by dogmatically electing some individual or group who arbitrarily sets the goals of innovations. This fetishization poses the risk of marginalizing the interests of or discriminating against some groups, such as minorities, in the practice of innovation management. To indicate one of the most shocking examples, the Nazis during the Second World War named concentration camps a 'solution to a problem' (Weindling, 2000).

Pseudo-efficiency

The efficiency of solutions consists of the proportion between the problem's value and the solution's costs. PS are inefficient when costs or risks overbalance the benefits or chances they generate.

Innovations are efficient. They provide more benefits than losses, while the advantage of benefits over losses is more excellent than other solutions available.

If concerning chances and risks, innovations generate more precious opportunities and do not produce significant risks. Consequently, innovations improve the world. They change it for the better or give this chance without causing a substantial danger of making reality worse.

PS do not fulfil this function even if it solves a problem. PS are less efficient than available solutions.

One can gradually evaluate problems according to a scale between more and less significant ones. Some issues may not be worth solving when their solution consumes more precious resources than the solution itself. For example, one can *solve* the problem of overpopulation by creating and spreading a new virus that exterminates a part of humankind. This *solution* is PS because it destroys values more precious than the solution itself. For example, a change is not efficient (PS) if it provides gain for the organization but contributes to a global economic crisis. (Adams, 2015; Alchian, 1953; Chappelow, 2019; Cowan & Rizzo, 1995; Kapteyn, 1985; Witztum & Young, 2013).

Conclusion

This study identifies the difference between innovations and PS with their novelty, efficacy, and novelty. The study shows that the discussion on PS focuses on pseudo-novelty. However, as argued, ineffectiveness and inefficiency are essential characteristics of PS.

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