



Managers' view of a new inventory paradigm

Attila Chikán*

Corvinus University of Budapest, Fővám tér 8, Budapest 1093, Hungary

ARTICLE INFO

Available online 16 September 2010

Keywords:

Inventory management paradigm
Business environment
Role of inventories
Inventory survey
Inventory performance

ABSTRACT

The significance of inventories in business operations have never been denied. The actual role of inventories, however, is changing over time, as required by the business environment. This paper provides empirical background to the thesis, which says that the role of inventories in the “Golden Era” of inventory research, which was in the 1950s, was significantly different from that of today because of fundamental changes in business. This development requires new approaches in research as well.

After a summary of the antecedents, the results of a survey are analysed, and they support the above thesis. The lack of difference between the inventory performance measured by the turnover rate of those companies, whose managers accept and those who deny the birth of the new paradigm calls attention to the need for the elaboration of a more complex inventory performance measurement.

© 2010 Elsevier B.V. All rights reserved.

1. Introduction

This paper is a step forward in a research project aiming to establish and analyse a new approach to inventory management in business. In earlier papers, I have proposed the fundamentals of a new paradigm, which according to my view has emerged as a consequence of business developments in the last three or four decades (Chikán, 2007), and I examined the managers' perception of the role of inventories in today's business (Chikán, 2009).

This paper is built on a major survey of Hungarian managers that detailed the principles and trends governing inventory management. Herein, I have analysed the results of the survey, which are very supportive of the emergence of the new paradigm and at the same time pose a number of new questions.

2. A new paradigm of inventory management

The conceptual background behind my argument is that there is a special relationship in business between research results and practical applications, which is not common with most areas of academic studies. The essence of this relationship is that new, innovative business practices mainly come from actual business life – they precede but do not follow research results. The reason for this, in my view, is that businesses are under so much pressure to innovate that practitioners are far faster at seeking and introducing new ways of doing things than any other segment of society.

Quite frequently, some management innovation, introduced by a first mover company becomes well known and widely used before research reaches any conclusion in explaining its success and generalising its real area of effective application. In areas closely related to inventory management, examples of the above sequence of events are the just-in-time concept and Materials Requirement Planning (MRP).

As knowledge has accumulated in this very important process of explanation and generalisation, it may be integrated into a new management paradigm. A new paradigm means a fundamentally new way of thinking about the given management field, which includes different principles and practices as well (The classical reference to paradigm shifts is Kuhn, 1996).

In this research, I have followed the above logic, starting out from my observations about the new role of inventories in business. In the previous papers I referred to the above I summarised

- my observations about the changing role of inventories in business (Chikán, 2007);
- results of a pilot empirical study which tested the level of acceptance of the concepts developed (Chikán, 2009).

In this paper, I go a step forward and provide the results of a major survey, which can be considered a serious test of the existence of the new paradigm.

3. Summary of the new paradigm

The essence of the new paradigm was analysed in detail in Chikán (2007) and briefly summarised in Chikán (2009). Here I only refer to the most important points of the arguments.

* Tel./fax: +36 1 267 8740.

E-mail address: chikan@uni-corvinus.hu

- a. The fundamentals of inventory research were established in the 1950s, when outstanding economists and management scientists were focused on this area. The main references are Whitin (1957), Arrow et al. (1958) and Scarf et al. (1963). (See Girlich and Chikan 2001, for an analysis of developments in this era.)

The conceptual thinking about inventories at that time was based on three pillars (Chikán, 2007):

- Inventories can be handled independently of other company functions.
- The main role of inventories is to serve as a buffer to be used to smooth business processes and maintain a flexible connection between various units of the enterprise.
- The performance measure of the operation of the inventory system is the sum of the total holding, the replenishment and the shortage cost.

These pillars were based on the thinking about the operation of business at that time, which included the assumptions that (i) the sole objective of the company is to maximise profit, (ii) managerial decisions are driven by the economies of scale principle and (iii) the internal organisation of the company is in “silos”, with separate functions like marketing, HR, etc.

This traditional paradigm has been challenged in the following decades by business development. In my earlier paper, I referred to four fundamental changes that I believe have great importance from the point of view of inventory management.

- A focus on competitiveness, instead of optimising one’s own behaviour.
- Functional integration, the close coordination of functions.
- Process orientation (complex material, information and financial flows).
- A network (chain) view of connections among the actors of the economy.

Based on these new features, companies have a new, different view of inventories. This view puts inventories in a much more active role in achieving company success. This new view is developed in detail in Chikán (2007) – the summary is quoted here from Chikán (2009):

“These new characteristics of managing the business enterprise had fundamental effects on the role of inventories, leading to a new paradigm of inventory management. According to this paradigm inventories have strategic importance for companies as

- Contributors to value creation;
- Means of flexibility and
- Means of control.”

Table 1
Comparison of the old and new paradigm.

Old	New
Inventories can be managed independently of other company functions	Inventories are an integrated part of the value chain in close relationships with other company functions
Inventories serve as buffers between functions and processes	Inventories serve as strategic tools in achieving customer satisfaction and profit simultaneously
Cost is the performance measure	Performance measures are based on the contribution of inventories to finding better “solutions” to customer needs than competitors are able to

It is very important to stress that (as explained in Chikán, 2007) the new paradigm is not contradictory to the old one. It is an organic extension, keeping the core of the inventory problem but handling it in a manner more integrative with (i) changes of the general mission of the company and (ii) the development of other company functions, like production, logistics or supply chain management. The comparison of the old and new paradigm can be followed in Table 1.

4. The survey

The survey that is the basis of this paper was conducted in November and December 2007. In the development of the questionnaire, we have used the experiences of the survey reported in Chikán (2009), as a pilot study.

The questionnaire contained 15 questions: four on the characteristics of the respondent and his or her company, three on the inventory performance of the company, six on the principles and approaches actually applied in the company and two on the trends influencing their inventory behaviour. The philosophy behind the composition of the questions was that I wanted to ask the managers about their own personal experiences and views and not about general perceptions. I believe that this is the most reliable approach available in similar empirical surveys. Generalisation is the job of the researcher and should be based on the collection and integration of individual opinions.

The actual questionnaire can be seen at http://mlbkt.hu/downloads/keszletezes_kerdoiv_angol1.doc

We had put the questionnaire on the website of the Hungarian Association of Logistics, Purchasing and Inventory Management and we received 138 responses in a roughly six-week period. The sample was random in the sense that we had not chosen any particular segment of the visitors of the website. However, because the survey was based on the membership of a professional association, it could be expected that the respondents are generally more informed and at a higher professional level than the average managers in the country.

The structure of the sample is very favourable for the purposes of our analysis. Managers in the sample almost evenly represent small, medium and large companies (Table 2): this makes it possible for us to compare the views of companies of different sizes. Majority of the respondents are in top management positions (Table 3) and have long work experience (Table 4),

Table 2
The sales revenue of the respondents’ companies.

Million euro	%
0–3	32.6
3–18	28.8
18–	38.6
Total	100.0

Table 3
The position of the respondents.

Position	%
Top manager	65.9
Middle manager	26.7
Staff	2.2
Other	5.2
Total	100.0

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات