

Measuring intangible assets – the state of the art

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Abstract In this introductory editorial to the special issue "Measuring intangible assets – state of the art" I outline the background and rationale of this special issue and introduce the various contributions. All contributors are members of the PMA Intellectual Capital Group which was formed to address the issue of measuring intellectual capital. The articles in this special issue outline implications of the knowledge economy for measuring, reporting, and valuing performance of both, private enterprises as well as public organizations.

Keywords Intangible assets, Intellectual capital, Measurement, Financial reporting

Background

Corporate performance measurement and management has been transformed over the past decade. Many private enterprises as well as public organizations have shifted their focus away from the financially biased measurement systems primarily based on accounting information. This shift was provoked by the changing nature of global markets and a new business environment. In this new business environment, power has shifted from the sellers to the buyers, knowledge has become a fundamental factor of production, and the right relationships with customers, suppliers, and stakeholders are crucial. Many of these assets are intangibles that lay the foundation for differentiation and innovation, which are vital drivers of sustainable business performance. In consequence, any corporate performance measurement and management systems needs to reflect this change in order to provide managers or analysts with the relevant information on their intangible value drivers.

To address this important issue the PMA Intellectual Capital Group was founded as a special interest group of the Performance Measurement Association (PMA). The PMA is a global network for those interested in the theory and practice of performance measurement and management (see www.performanceportal.org). The Intellectual Capital Group of the PMA was established in recognition of the growing interest and importance of measuring and managing intellectual capital (IC). The PMA IC Group is a global and multidisciplinary network of thought-leading academics and practitioners who jointly facilitate and participate in cross-disciplinary knowledge transfer in the area of measuring and managing intellectual capital and intangible assets. Its aim is to raise the awareness of intangibles and knowledge-based assets as critical value drivers in today's economy and actively engage in global knowledge transfer. Participants in this group come from a wide spectrum of disciplines including strategy, finance, accounting, economics, HR, IT, operations, etc. and engage in a broad range of research projects.

With the start of my new role as Intangible Assets Editor of *Measuring Business Excellence* and as chairman of the PMA Intellectual Capital Group, I assembled this special issue to report on the state of the art in measuring intangibles. The intention is to raise some important issues and hopefully fuel a wider discussion and further research in this vital field of study. All contributors to this special issue are members of the PMA Intellectual Capital Group and were deliberately selected to provide a multi-disciplinary view of the field.

Contributions to this special issue

The first article is by Baruch Lev and Juergen Daum, who outline why intangible assets have become important factors of value creation in today's knowledge economy. The authors highlight that individually these assets are often commodities and only create value in combination with other factors of production. In their article, Lev and Daum outline the implication for corporate performance measurement and management systems. The article outlines how total factor productivity can be assessed in organizations as a means to better understand organizational performance in order to objectively measure the productivity and efficiency of the entire enterprise.

The second article by Bernard Marr and J.-C. Spender addresses the importance of measuring knowledge-based assets in today's business environment. The article reviews the evolution and the increasing importance of knowledge as an asset – from data, over information, to knowledge as proficient practice. Based on the dissimilar views of knowledge assets Marr and Spender identify existing approaches proposed in the management literature and practice, and match them with the different view of knowledge. This analysis raises some issues of how to measure knowledge assets and their value creation in today's complex business reality.

In the third paper Göran Roos, Lisa Fernström, and Stephen Pike discuss intellectual capital from a human resource perspective. The authors review the research into the relationship between human resource management (HRM) and business performance and highlight the change of the HR function into the more strategic HRM role. Roos *et al.* show that the resource-based approach of intellectual capital may provide the key to quantifying the links but emphasize that work to date has shown that it may not be possible to clearly separate HRM from other management actions to quantify the effects of HRM. To overcome this the authors suggest the holistic value approach which is based on rigorous measurement.

In the fourth article Robin Roslender discusses intangibles through the accounting lens. The accountancy profession is closely associated with the measurement and reporting of performance. Many initiatives are currently underway to address the accounting for intangibles and intellectual capital. Roslender outlines that as long as the accountancy profession seeks to progress accounting for intellectual capital within the confines of prevailing accounting theory, the prospects for a successful outcome appear remote. The author suggests that alternative theoretical precepts need to be explored, an exercise that also has implications for the future development of financial reporting.

The fifth article in this special issue is by Jan Mouritsen, Per Nikolaj Bukh and Bernard Marr who address the issue of how to report on intellectual capital. Linking into Roslender's paper, the authors emphasize the shortcomings of traditional financial reporting and suggest intellectual capital statements as a tool to overcome the existing information gap. This new way of reporting on how intellectual capital drives value creation is based on narratives and measures. The application of such an approach is exemplified using a case study from a Danish firm.

The penultimate article is a closing commentary by Leif Edvinsson and Ahmed Bounfour who pick up the point made by Pulic and re-emphasize the importance of measuring intellectual capital on a regional and national level. This article highlights the importance of understanding how value is created on a national level in order to enable governments and organizations to better navigate through the knowledge economy.

In the final paper of this issue Ante Pulic emphasizes the importance of viewing any expenses made to build or enhance intellectual capital as an investment, instead of a cost. Pulic introduces a methodology to calculate added value with the difference that intellectual capital is seen as a resource that has to be managed in the most efficient way. Pulic defines a new index that measures the value creation efficiency of intellectual capital and suggests using this as an improved methodology to understand value creation, not only on a business level but also on a regional and national level. Empirical applications of the index show that while revenue, profit and GDP may indicate successful performance, IC efficiency may indicate the opposite, that value is being destroyed and not created.

The aim of this special issue is to lay the foundation for a wider discussion on how to measure, report, and value intellectual capital and intangible assets. I herewith invite more papers that may support, discard, or test theories and ideas put forward to date. The need for improved measurement, reporting, and valuation of intangibles is critical and it is down to scholars and practicing managers to discuss, apply, and test new approaches in order to forward our understanding in this vital field.