The Paradox of Accounting Innovation
By Roya Ghafele

The double entry accounting system that is used world wide underpins the notion that all business transactions constitute a unique and identifiable exchange of assets, which results in equal credits and debits.[1] This architecture may however impede borrowers and investors to fully grasp the relevance intellectual property has to a business. [2]

Internally generated intellectual property can be of major relevance to a firm, even if it is not involved directly in a business transaction. This has led Guo and Lev argue that transaction based accounting may give a distorted picture of a creative or innovative company since their driving factors are not necessarily based on an arm's length transaction between a willing buyer and seller.[3]

Therefore, the transaction-based value reported by accounting may have little to do with the economic value of a company in cases where internally generated IP is the main driver of a business.

Take the following three examples, where immaterial assets, such as patents, trademarks or trade secrets were a main driver of business:

- Texas Instruments leverages its patents through licenses and collected some 800 million USD in royalties between 1986 and 1992.
- The Austrian SME Tinnitronics built its business around the internally developed device Ti-Ex ™ that seeks to fight tinnitus. The firm's business model is to rent and sell the IP (patents and trademark) protected device to patients. Without IP, Tinnitronics would not be in business.
- Coca Cola keeps its trade secret over its syrup since 1891. Paired with successful trademark management the company's trade secret makes up for most of its success since the 19th century.

Current accounting regulations allow only to fully understand how the IP relates to business in the context of Texas Instruments, since revenue streams can be directly related to a discernible, seperately identifiable asset (key criteria for an intangible asset under International Accounting Standards - IAS 38). The worth of the patent and trade secret in the latter two cases can/need not be made explicit, which does not allow to understand the value IP has to the company. Thus, both the earnings and the book value of equity may be distorted.

The consequences of this are far reaching:

Firstly, the cost of capital increases, meaning that IP-rich companies may find it difficult to pass the funding hurdle, confirming that little has changed since Arrow[4] published his findings some forty five years ago showing that competitive markets fail to provide socially optimal levels of technology investment. Since IP is literally absent from the accounting, reporting and managerial discourse, investors find it difficult to access information on how a firm's IP portfolio relates to its income streams. For this

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[1] With the courtesy of the Stockholm Network, which circulated an earlier version of this article in 2006.
[2] Rodov I./Leliaert P. FIMIAM: Financial method of intangible assets measurement. Journal of Intellectual Capital. 2002. 3/3: 323-336.
[3] Guo R.J/Lev B./Zhou N. The Valuation of Biotech IPOs. Journal of Accounting, Auditing & Finance. 2005. 20/4: 423-459.

[4] Arrow K.J.: Economic Welfare and the Allocation of Resources for Invention. In: Nelson R.R. (ed.) The Rate and Discretion of Innovative Activity: Economic and Social Factors. Princeton University Press. Princeton 1962

reason, risk rates associated with investments in knowledge-intensive sectors may not be adequately assessed and a higher premium may be charged when funding is provided on the basis of IP.

Secondly, the management of a company becomes a much greater challenge since adequate information on all the assets and liabilities of a company are not available.

As Dr. Harvey Bale, Director General of the International Pharmaceutical Association (IFPMA) argues: "Today, IP underpins between 50-70% of a country's private sector gross earnings, so it is often decisive for the commercial success or failure. This stands in strong contrast to IP management skills of top management. Many chairmen or CEOs do not grab the simple distinction between patentability and freedom to operate. It is like not knowing the difference between profit and cash flow."[5]

The internal management of IP is seriously hampered since its value is not made explicit on the balance sheet. Since the bulk of the space of the balance sheet is devoted to tangibles, managing intellectual property becomes a very intangible undertaking. The efforts put into this may at best be indirectly reflected, but do not directly become visible.

Thirdly, ratios, such as the market to book value are largely distorted, making it difficult for regulatory authorities and market participants alike to capture the worth of a company. Gillette, for example, which wealth mainly relies within its trademark portfolio, had a book value of 3 million USD, but was bought by Procter and Gamble for 59 million USD which makes up for a gap in the market to book value of 56 million USD that had never been reported anywhere.[6]

The information provided in financial reports frames perceptions and ultimately determines business behaviour. The current information gap, expressed in hidden information on the value of internally generated intellectual property may therefore seriously distort markets for innovation and creativity.

From multinational to micro-enterprise, no business can afford to ignore these issues forever, even though they have to learn to navigate the current business environment challenges without waiting for a quick fix or overnight reform.

Thus, the case can be made for reporting systems that lie outside traditional accounting statements so to overcome existing information gaps on intellectual property. IP can be a key driver of an innovative or creative firm, yet information necessary to understand and track what gets business going in markets for ideas is -due to current financial reporting standards- scarce and unsystematic.

An alternative reporting system may be a valuable compass helping companies to ship through troubled waters. While most influential financial standard setting institutions (such as the FASB – Financial Accounting Standards Board) continue to explore various options to better reflect the value of internally generated intangible assets, there is a clear need for further research on how to overcome the existing intangible/tangible reporting asymmetry through reporting systems that are not bound to the current logic of accounting

[5] In Ghafele, Roya, Wurzer, Alexander Reboul Yves and Hundertmark, Stephan; Rethinking IP Education; Intellectual Asset Management Magazine December/January 2007 Nr. 21, p.28-40

[6] example given by the FASB (Financial Accounting Standards Board) at the United Nations Department of Economic and Social Affairs Conference, July 12-13 2006