The World's Most Innovative Companies in the Period 2015-2016

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Abstract

Since the beginning of the twenty-first century innovation has represented a major challenge for companies around the world. Innovation is both a powerful driver for rapid and profitable corporate growth, and an important determinant of competitive advantage. The aim of the paper is to present the evolution of the world's ten most innovative companies in the period 2015-2016. In this view, the methodology is based on the research of various secondary sources such as books, articles and reports. The paper shows that the vast majority of the world's ten most innovative companies remained the same in the period 2015-2016 and that the research and development activity constitutes an important source of innovation within business organizations.

Key words: innovation, company, research and development

J.E.L. Classification: O3

1. Introduction

Since the beginning of the twenty-first century innovation has remained a major concern for companies around the world. On the one hand, innovation is a powerful driver for rapid and profitable corporate growth (Gerybadze et al, 2010; Almquist et al, 2013; PricewaterhouseCoopers, 2013). On the other hand, innovation represents an important determinant of competitive advantage (Lengnick-Hall, 1992; Nonaka et al, 1995; Brem et al, 2016).

The issue of innovation has gained prominent significance both as a vital business imperative and a means for achieving growth and obtaining competitive advantage. Therefore, innovation is driven by a plethora of organizations, such as multinational and transnational corporations, small and medium enterprises or academic institutions (World Economic Forum, 2014).

The aim of the paper is to present the evolution of the world's ten most innovative companies in the period 2015-2016. In this respect, the methodology is based on the research of various secondary sources (e.g., books, articles, reports). The next part of the paper displays the literature review. Then, it briefly analyses the evolution of the ten most innovative companies worldwide. The paper ends with conclusions.

2. Literature review

The understanding of the role played by innovation in the business world has become a key subject in the literature in the last decades. The ability of a company to innovate constitutes a precondition of its competitiveness and business success. This is why most of today's business organizations are innovation-driven companies.

Innovation refers to "a company's efforts in instituting new methods of production and/or bringing new products or services to market" (Burgelman et al, 1986, p. 10). At the corporate level, innovation requires the involvement of different stakeholders (e.g., management, employees) and the integration of different activities (e.g., research and development- R&D) across the business organization. Innovation is driven within companies by "encouraging inter and intra department communication, distribution of responsibility and accountability for innovation, attracting smart

talent and retaining them as creative teams, consistently leveraging ability to innovate as a competitive advantage, increased focus on innovation in core products and services" (KPMG, 2017, p. 10).

Corporate innovation implies product and/or service, process and organizational innovation. Product and/or service innovation represents the company's capability to successfully launch a new or improved product and/or service on the market, process innovation refers to the adoption of a new or improved production/distribution process, and organizational innovation relates to the company's efforts directed towards encouraging innovation through its different systems (Neely et al, 1998; Huse et al, 2005).

Therefore, innovative companies are business organizations that foster a culture for innovation. They are organic, open, dynamic, enthusiastic, anticipative, creative and knowledge organizations that are eager for putting innovation into practice (Burns et al, 1961; Nonaka et al, 1995; Katsaros et al, 2005; Lewrick et al, 2012; Kahan, 2013).

3. The evolution of the world's most innovative companies in the period 2015-2016

There are numerous innovation rankings in the business literature. In this regard, the paper is focusing on the evolution of the best ten companies of the Global Innovation 1000 Study published yearly by PricewaterhouseCoopers (PwC).

According to PwC's ranking Apple was the world's most innovative company in the period 2015-2016 (PricewaterhouseCoopers, 2017). In 2015, the world's ten most innovative companies belonged to various industries as follows (Table no. 1):

- Three companies were from computing and electronics (Apple, Samsung, IBM).
- Three companies were from software and internet (Google, Amazon, Microsoft).
- Two companies were from automotive (Tesla Motors, Toyota).
- Two companies were from industrials (3M, General Electric).

Taking into account their headquarters, these companies were located in the following three countries:

- the United States of America (Apple, Google, Tesla Motors, Amazon, 3M, General Electric, Microsoft, IBM);
- Japan (Toyota);
- South Korea (Samsung).

Table no. 1. The ten most innovative companies in 2015

2015 Rank	Company	Industry
1	Apple	Computing and electronics
2	Google	Software and internet
3	Tesla Motors	Automotive
4	Samsung	Computing and electronics
5	Amazon	Software and internet
6	3M	Industrials
7	General Electric	Industrials
8	Microsoft	Software and internet
9	IBM	Computing and electronics
10	Toyota	Automotive

Source: (PricewaterhouseCoopers, 2017)

In 2016, the ten most innovative companies belonged to the same industries as follows (Table no. 2):

- Four companies were from software and internet (Alphabet, Amazon, Facebook, Microsoft).
- Three companies were from computing and electronics (Apple, Samsung, IBM).
- Two companies were from industrials (3M, General Electric).
- One company was from automotive (Tesla Motors).

Taking into account their headquarters, these companies were located in:

- the United States of America (Apple, Alphabet, 3M, Tesla Motors, Amazon, Facebook, Microsoft, General Electric, IBM);
- South Korea (Samsung).

Table no. 2. The ten most innovative companies in 2016

2016 Rank	Company	Industry
1	Apple	Computing and electronics
2	Alphabet	Software and internet
3	3M	Industrials
4	Tesla Motors	Automotive
5	Amazon	Software and internet
6	Samsung	Computing and electronics
7	Facebook	Software and internet
8	Microsoft	Software and internet
9	General Electric	Industrials
10	IBM	Computing and electronics

Source: (PricewaterhouseCoopers, 2017)

One of the main sources of corporate innovation is the R&D activity. From this point of view, Volkswagen was the world's biggest R&D spender in the period 2015-2016 (PricewaterhouseCoopers, 2017). In 2015, the world's ten biggest spenders belonged to different industries as follows (Table no. 3):

- Three companies were from software and internet (Microsoft, Google, Amazon).
- Three companies were from healthcare (Roche, Novartis, Johnson & Johnson).
- Two companies were from computing and electronics (Samsung, Intel).
- Two companies were from automotive (Volkswagen, Toyota).

Taking into account their headquarters, these companies were located in:

- the United States of America (Intel, Microsoft, Google, Amazon, Johnson & Johnson);
- Switzerland (Roche, Novartis);
- Germany (Volkswagen);
- South Korea (Samsung);
- Japan (Toyota).

Table no. 3. The ten biggest R&D spenders in 2015

2015 Rank	Company	Industry
1	Volkswagen	Automotive
2	Samsung	Computing and electronics
3	Intel	Computing and electronics
4	Microsoft	Software and internet
5	Roche	Healthcare
6	Google	Software and internet
7	Amazon	Software and internet
8	Toyota	Automotive
9	Novartis	Healthcare
10	Johnson & Johnson	Healthcare

Source: (PricewaterhouseCoopers, 2017)

In 2016, the world's ten biggest spenders belonged to different industries as follows (Table no. 4):

- Three companies were from software and internet (Amazon, Alphabet, Microsoft).
- Three companies were from healthcare (Roche, Novartis, Johnson & Johnson).
- Two companies were from computing and electronics (Samsung, Intel).
- Two companies were from automotive (Volkswagen, Toyota).

Taking into account their headquarters, these companies were located in:

- the United States of America (Amazon, Alphabet, Intel, Microsoft, Johnson & Johnson);
- Switzerland (Roche, Novartis);
- Germany (Volkswagen);
- South Korea (Samsung);
- Japan (Toyota).

Table no. 4. The ten biggest R&D spenders in 2016

2016 Rank	Company	Industry
1	Volkswagen	Automotive
2	Samsung	Computing and electronics
3	Amazon	Software and internet
4	Alphabet	Software and internet
5	Intel	Computing and electronics
6	Microsoft	Software and internet
7	Roche	Healthcare
8	Novartis	Healthcare
9	Johnson & Johnson	Healthcare
10	Toyota	Automotive

Source: (PricewaterhouseCoopers, 2017)

The period 2015-2016 witnessed the supremacy of Apple as the most innovative company around the world. The ranking of the ten most innovative companies was dominated by companies from two industries: computing and electronics, and software and internet. Also, the ranking emphasizes the significant innovation gap between the American companies and the other companies.

Interesting enough is the fact that Apple held only the eighteenth place in 2015 and the eleventh place in 2016 regarding the R&D spending (PricewaterhouseCoopers, 2017). In spite of the fact that Volkswagen was the world's leading R&D spender in the period 2015-2016, it did not succeed in becoming one of the most innovative companies worldwide. However, five out of the ten most innovative companies were among the biggest R&D spenders in 2015 (Google, Samsung, Amazon, Microsoft, Toyota) whereas the number decreased to four companies in 2016 (Samsung, Amazon, Alphabet, Microsoft).

4. Conclusions

Numerous researches have been carried on about the importance of innovation in the business world in the past decades. Without any doubt innovation constitutes one of the key prerequisites for achieving business success and, therefore, a crucial challenge for today's companies.

The paper has shown that 90% of the world's ten most innovative companies remained the same in the period 2015-2016. Also, it has confirmed the fact that the R&D activity represents an important source of innovation within business organizations. This is why great efforts should be made by any company around the world to undertake and develop R&D activities and, therefore, to improve its innovative capacity.

5. References

- Almquist, E., Leiman, M., Rigby, D. and Roth, A., 2013. *Taking the measure of your innovation performance*. Bain & Company, [online]. Available at: http://www.bain.com/Images/BAIN_BRIEF_Taking_the_measure_of_your_innovation_performance.pdf> [Accessed 22 April 2017].
- Brem, A., Maier, M. and Wimschneider, C., 2016. Competitive advantage through innovation: The case of Nespresso. *European Journal of Innovation Management*, 19(1), pp. 133 148.
- Burgelman, R. A. and Sayles, R. L., 1986. Inside Corporate Innovation: Strategy, Structure, and Managerial Skills. New York: The Free Press.
- Burns, T. and Stalker, G., 1961. *The Management of Innovation*. London: Tavistock.

- Gerybadze, A., Hommel, U., Reiners, H. W. and Thomaschewski, D. (eds.), 2010. Innovation and International Corporate Growth. Berlin & Heidelberg: Springer-Verlag.
- Huse, M., Neubaum, D. O. and Gabrielsson, J., 2005. Corporate innovation and competitive environment. *International Entrepreneurship and Management Journal*, 1, pp. 313-333.
- Kahan, S., 2013. Getting Innovation Right: How Leaders Leverage Inflection Points to Drive Success. San Francisco: Jossey Bass.
- Katsaros, J. and Christy, P., 2005. *Getting it Right the First Time: How Innovative Companies Anticipate Demand*. Westport&London: Praeger.
- KPMG, 2017. Entrepreneurship, growth and opportunities, KPMG India and Confederation of Indian Industry, [online]. Available at: https://assets.kpmg.com/content/dam/kpmg/in/pdf/2017/02/entrepreneurship-growth-and-opportunities.pdf> [Accessed 22 April 2017].
- Lengnick-Hall, C. A., 1992. Innovation and competitive advantage: What we know and what we need to learn. *Journal of Management*, 18(2), pp. 399-429.
- Lewrick, M. and Raeside, R., 2012. Attributes of innovative companies in diverse innovation typologies. *International Journal of Entrepreneurship and Innovation Management*, 15(3), pp. 159-176.
- Neely, A. and Hii, J., 1998. *Innovation and business performance: A literature review*, The Judge Institute of Management Studies, [online]. Available at: http://ecsocman.hse.ru/data/696/521/1221/litreview_innov1.pdf [Accessed 18 April 2017].
- Nonaka, I. and Takeuchi, H., 1995. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
- PricewaterhouseCoopers (PwC), 2013. *Breakthrough innovation and growth*, [online]. Available at: https://www.pwcaccelerator.com/pwcsaccelerator/docs/pwc-breakthrough-innovation-and-growth.pdf> [Accessed 25 April 2017].
- PricewaterhouseCoopers, 2017. 2016 Global Innovation 1000 Study, [online]. Available at: https://www.strategyand.pwc.com/innovation1000#/tab-2016 [Accessed 25 April 2017].
- World Economic Forum (WEF), 2014. Enhancing Europe's Competitiveness Fostering Innovation-driven Entrepreneurship in Europe, [online]. Available at: http://www3.weforum.org/docs/WEF_EuropeCompetitiveness_FosteringInnovationDrivenEntrepreneurship_Report_2014.pdf [Accessed 3 May 2016].