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Role of Intangible Assets in Firm Level Competitiveness: A Case Study of the Indian Economy

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The term intangible assets denote goods which cannot be seen or touched. In other words, they are unseen and extremely valuable in the day to day business activity of a firm. According to Albert Einstein as he says, "Everything that can be counted does not necessarily count and everything that counts cannot necessarily be counted". Intangibles had been present since the dawn of evolution. The initial ancient cave resident who was capable to begin the fire on objective had some exceptionally useful expertise and information. His knowledge was an example of intangible asset. Other notable examples such as people who invented numbers, structure of letters were initial creators of exceptionally valuable "intangible assets".

With the onset of globalization and opening of the economy to the outside world, numerous firms whether domestic or foreign, large, or small have established their presence in the Indian Economy. With their increasing operations, firms no matter whether they are of larger size or smaller size have both tangible and intangible assets present within their enterprise. Among the Indian firms, some have readily acquired some well-known intangible assets in the forms of copyrights and patents, contractual commitments, and intellectual property rights. These intangible assets are there in the firm's financial statements (annual statements).

With progress in technology and further with time, the domain of the intangible assets has increased. Newer types of intangible assets have come into the forefront in several forms which is harder to classify and find an appropriate value in the annual statements of the company. They are namely human resources and person with superior organization skills, an exclusive agreement and loyal work force, respectively. These assets are untouched and do not appear in a firm's financial statement. Unlike physical assets like land, building, furniture and equipment's, the difference with an intangible asset are they are characterised as knowledge assets and are hard to classify. Hence, unlike the tangible assets they cannot be purchased in an open market.

With increase in trade via exports and imports, exporting firms are making themselves more competitive through a factor such as use of advanced technology, number of services embodied in the goods, raw materials. In addition to this, there are continuous upgradation of skills and human resources. From time and again, the Indian Pharmaceutical Firms have been continuously investing a large amount of economic resources for the usage of intangible assets such as Research and Development (R&D), selling, advertising, distribution and marketing expenses, investing in training human training and skills programme to improve the productivity and competitiveness of the firm. However, a major challenge which comes in the process is to estimate the productivity effect of the intangible assets on the competitiveness of the Indian Firms.

With the increase in usage of intangible assets in the Indian companies, the present study tries to examine the role of intangible assets in matters of competitiveness at the firm-level study. There are more than 1000 pharmaceutical companies operating in India. The study will mainly focus on such firms such as automobile firms, pharmaceutical firms etc. using a high amount of intangible assets to improve the competitiveness in the globalization era.

Looking at the literature, there have been a few studies who have tried to investigate the impact of intangible assets on the firm's productivity.

Marrocu et al. (2012) examined the impact of intangible capital on firm's productivity level for the 6 European countries such as France, Italy, Netherlands, Spain, Sweden, and the United Kingdom. Their study relied on balance sheet information which was available for the period 2002-2006. Using a Cobb-Douglas Production function, they found a highly significant effect of intangible capital on the productivity of the firm. Bontempi and Mairesse (2014) went beyond the impact of purely capitalised intangible assets. They compared the productivity effects of intangible relative to tangible capital. Their study mainly differentiated between capitalized and expensed intangible capital on the one hand and intellectual in terms of research and development, copy right versus patents versus mainly advertising and, trademarks on the other hand. Using data for Italian firms, their estimates provided evidence that intangible capital has a stimulating effect on the firm's productivity. Greenhalgh and Longland (2005) measured the productivity effects of inventive capital through different gauges. In addition, to using the R&D expenditures the study also used patents and trademark registrations. The study found that for a sample of manufacturing firms, trademark activity was associated with perpetual productivity gains. Further, again in 2012, Greenhalgh and Rogers (2012) study confirmed the productivity-enhancing role of trademark activity. The study concluded that the trademarking firms between 10% and 30% significantly had higher future value added than the others. Other notable studies such as Bloom, Sadun and Van Reenen (2007, 2010, 2012) examined the impact of numerous managerial and administration practises on productivity The results concluded that improved organizational practice remained deeply associated with greater firm-level productivity.

Keeping this background in mind, the present study intends to examine the role of the intangible assets on the productivity competitiveness of the Indian Firms. For this purpose, firm-level data "annual financial statement" will be obtained from the prowess database managed by Centre for Monitoring of the Indian Economy (CMIE). Data such as R&D, Patents, Copyrights, and data on Information Technology enabled services, selling, advertising, marketing, and other values of services can be collected. The period of the study chosen starts from 2010-2018. The methodology chosen for this purpose is a simple econometric analysis (Logit-Tobit Model) based on theoretical insights. Among the other factors affecting competitiveness such as age of the firms, size of the firm, import intensity, use of the intangible assets will be one of such factors explaining the competitiveness. The competitiveness will be defined as exports divided by sales.