

Intangible Assets

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Classification: intellectual capital/property issues; key concepts/overview; resources, competencies and capabilities

Definition

Intangible assets are identifiable, non-financial elements of an enterprise's productive resources that lack the material substance of physical assets.

Abstract

Intangible assets are a very economically significant asset class yet are largely excluded by accounting conventions from corporate balance sheets. Ownership (or control) of intangible assets can allow firms to differentiate their offerings to customers and establish some degree of competitive advantage. However, intangibles do not, apart from a few cases of licensing, generate value on their own. To do so, they must be combined with complements and astutely managed.

Keywords: accounting, business model, complements, differentiation, intellectual property, patent, software, trade secret

Intangible assets are identifiable, non-financial elements of an enterprise's productive resources that lack the materiality of physical assets. They can sometimes be acquired, but are more often generated internally.

Under international accounting standards (IFRS, 2012), non-physical, non-financial assets that are potentially separable from the physical and human resources of the firm

can be considered assets. Examples include patents, copyrights, trademarks, customer lists, franchises, marketing rights, software and digital content.

However the international accounting rules exclude investments for internal use, i.e., not intended for sale. Such investments include software programming for internal use, improvements in business processes, training, and advertising. Thus, accounting, with its emphasis on what can be accurately priced, makes the potentially more serious error of leaving a great deal of value off corporate balance sheets. In fact, the level of under-representation has probably been increasing. By some measures, investment in intangibles in the United States has grown considerably since 1980 (Nakamura, 2010). By 2000, U.S. investment in intangibles had reached the same order of magnitude as investment by U.S. firms in physical plant and equipment—more than a trillion dollars (Nakamura, 2001).

For the purposes of this article, intangible assets are defined to include the results of investments for internal, as well as external, use. Even so defined, the category excludes many important elements that make up the broader category of intangible resources, such as organizational capabilities.

growing economic importance

Intangible assets have grown in economic prominence during recent decades. In the nineteenth and twentieth centuries, the assets that economists saw as sources of value

were the traditional factors of production: land, labor, and capital. While these factors remain important, their ownership by firms does not guarantee financial success.

Today's global economy offers ready access to intermediate goods, investment capital, and many types of information. Because these factors are in many cases competitively supplied to all firms that seek them, it is hard for a firm relying primarily on them to earn better than a competitive return (Barney, 1986).

While barriers to global trade and investment have fallen, the transfer of intangible assets, such as manufacturing processes and service formulas, remains difficult. The resource cost of technology transfer depends in large part on the nature of the intangible; the cost is higher, for example, when the intangibles are less codified or have not previously been transferred (Teece, 2005). The general complexity of trading intangibles limits arbitrage opportunities in comparison with most physical goods. As a result, the development and astute management of intangible assets is now central to creating a competitive advantage based on differentiation.

characteristics

Intangible and physical assets differ along a number of significant dimensions. A comparison puts the salient features of intangible assets in sharp relief.

First, intangibles are not what economists call "rival in use;" consumption by one entity does not reduce the amount left for another, as would be the case for physical goods. One

person's use of Microsoft's Windows operating system does not affect the ability of other people to use it. In fact, operating systems and many other intangibles (e.g., a social networking web site) benefit from network effects, so that the more users who adopt the technology, the more valuable the technology becomes. In other cases, multiple use of a technology may cause it to decline in value to the owner, especially if some users are direct competitors.

Whereas physical assets lend themselves to an inventory, intangible assets are less readily counted and, as noted above, are virtually absent from corporate financial statements. The chief exception is the purchase premium (over book value) left over from mergers and acquisitions, which accounting rules allow to be recognized as "goodwill."

Another important difference between intangible and physical assets is the availability and enforceability of property rights. The property rights to physical assets such as land or machinery are generally clear and well protected by law in most developed economies. Whether theft has occurred is relatively easy to ascertain. Property rights to intangibles can be "fuzzy," and theft (e.g., patent infringement) costly and complicated to prove.

Most physical assets can be bought and sold with relative ease, although prices for certain highly specialized items may be difficult to negotiate. The difficulty arises from the small numbers of buyers and sellers. "Thin" (i.e., not liquid) markets of this type are the rule rather than the exception for intangible assets. This limited tradability is part of what

makes them hard for rivals to access and therefore a potential source of competitive advantage.

Other characteristics of intangibles also make them hard to trade in organized market transactions. The value of an intangible asset often cannot be ascertained until its details have been revealed, which, apart from legally protected intellectual property, will provide the potential buyer sufficient knowledge to have the benefits of the asset without paying for it. Arrow (1962) first brought this disclosure problem to light.

Physical and intangible assets have in common some form of depreciation, but intangibles can generally lose their value much more quickly. While knowledge does not wear out as most physical assets do, it is frequently subject to rapid loss of value because the creation of new knowledge will render it obsolete. In fact, if a firm's own renewal process does not make its existing knowledge obsolete, then a competitor's knowledge activities will. And brand value, which is expensive to create and maintain, can vanish almost overnight following a corporate misstep, or even just bad luck.

types

There are many types of intangible assets. The patent, a form of intellectual property, is perhaps the best known. A valid patent provides rights for exclusive use by the owner, but patents have weaknesses despite their legal support. Depending on the scope of the patent, it may be possible to invent around it at some cost. There can be 'holes' and

'gaps' in intellectual property coverage. Ascertaining whether trespass or theft has occurred can prove difficult. And patents (and copyrights) eventually expire.

Trade secrets, another class of intangible, can augment the value of a patent position. They do not provide rights of exclusion over a knowledge domain, but they protect covered secrets in perpetuity. Trade secret protection is possible, however, only if a firm can put its product before the public and still keep the underlying technology secret. This is most likely to be true of industrial processes.

Another intangible asset of central importance is the firm's business model, i.e., the logic of a how a business creates and delivers value to customers while earning a profit for itself (Chesbrough and Rosenbloom 2002; Teece 2010). A business model in its entirety is generally not protectable by intellectual property rights. At most, certain elements of a model might qualify for patent or copyright protection. Business model innovations are critical to success in unsettled markets. The growth of the Internet is both allowing and requiring business model innovation in many industries ranging from music to insurance. In particular, the Internet requires new pricing structures for many products because users are accustomed to getting information for free. In other industries, middlemen serving as information brokers are being disintermediated.

Other interesting classes of intangible assets include brand image, customer and business relationships, and organizational culture.

profiting from intangibles

Markets are a great leveler. If an asset or its services are traded in a market, it can be accessed by all who can pay. It therefore cannot provide any competitive differentiation.

The range of domains in which competitive advantage can be built narrows as more and more activities become outsourceable. The Internet and other recent innovations have vastly expanded the number and type of goods and services that can be readily accessed externally. Non-tradable assets, of which intangible assets are the most important group, have the potential to form a basis for competitive advantage.

Intangible assets by themselves, however, will not generally yield value; they must almost always be combined with other intangible and physical complements in a way that yields value for customers. The best “governance” mode for managing the complements of a firm’s intangibles depends on the characteristics of the intangible, the relevant appropriability regime, and the structure of the markets for the necessary complements (Teece, 1986, 2006). Generally, the successful leveraging of a potentially valuable intangible asset requires that the firm own any key complements that are not competitively supplied.

See also: brand; business model; competitive advantages; differentiation; imitability; information and knowledge; intangible resources; intellectual assets; knowledge as strategic asset; network effects; profiting from innovation; R&D investment; technology transfer

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