The Value Of Intangibles In Privately Held Firms

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Abstract

This paper seeks to encourage consideration of intangible resources from the perspective of small privately held firms. Using extant literature that deals primarily with issues from a large firm perspective, the paper identifies a range of potentially important issues associated with the determination and measurement of intangibles such as intellectual capital or knowledge generation, and considers the importance of such issues in dealing with small firms.

Key Words: resource-based theory; intangible resources; value; small firms

Introduction

It is regularly argued that firms in today's more competitive global environment have had to focus more on intangible resources such as intellectual capital or knowledge generation in order to survive (Rastogi 2003, p.247). Most of these arguments have been focused on large public firms. However, as is the case for many business activities, it is possibly small privately held firms that have a greater reliance on such intangibles. This paper seeks to encourage consideration of these important dimensions in the broader business environment. It identifies a range of issues associated with the determination and measurement of intangibles, and considers the importance of such issues in dealing with small firms.

While there are many ways to describe the functioning of firms, a central focus has been the management of resources to achieve desired outcomes for stakeholders. Desired outcomes are often expressed in terms of value. In such a framework, importance has been attached in recent decades to the influence of intangible resources or "weightless wealth" (Andriessen 2001, p.204) on the success (and value) of business organizations.

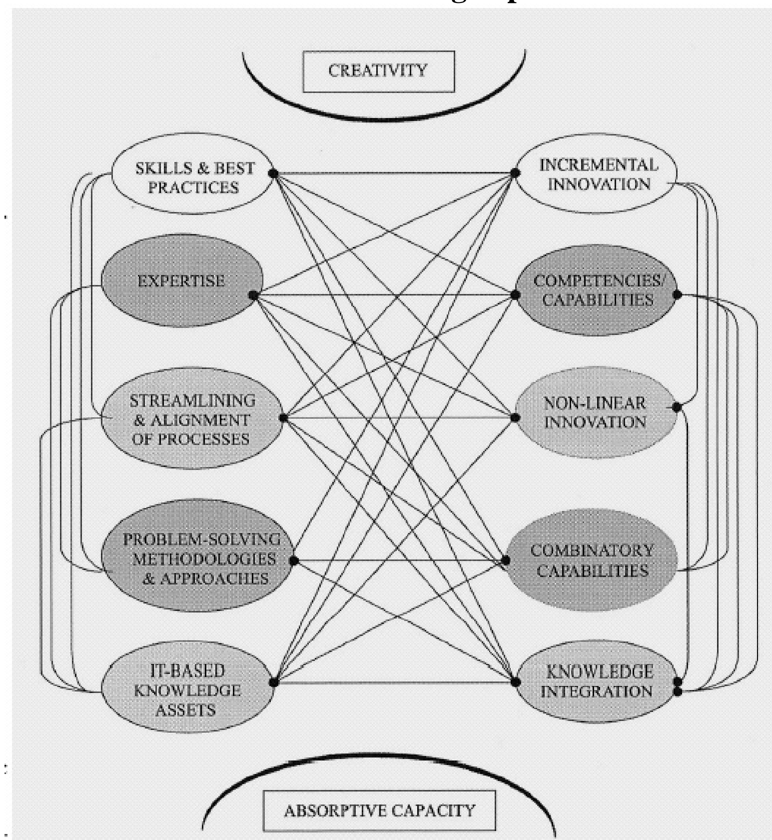
Indeed there is evidence of the "existence of significant positive relationship of intellectual capital with business performance" (Rena 2002, p.181). Such emphasis has also been present in earlier attempts to understand business. As suggested by Marr *et al*. (2004 p.313), Marshall (1890) identified knowledge as an important resource and a powerful engine of production, Drucker (1959) also emphasized the importance of knowledge in organizations, and Penrose (1959) identified the importance of both physical and human resources. Recent discussion might therefore be more appropriately described as an extension of earlier arguments, although the recent emphasis appears to be driven by changes in a more competitive global business environment. Following these precedents, the paper considers initially the nature of resources available to the firm, and then how the value generated by such resources can be determined. Departures from the focus on large firms that are necessary to accommodate small firm issues are also identified. The final section builds on problems identified with attempts to integrate the resource focus and valuation processes.

Resources

The relationship between resources and performance provides the critical elements of the resource-based theory of the firm (Barney 1991) and its focus on the use of unique (or strategic) resources (Rangone 1999, p.234) to optimize performance. These relationships have been explored at the small firm level. Rangone (1999), for example, identifies innovation, production and market management capabilities as critical resources to gain a competitive advantage in small firms. Confirming the influence on performance, Wiklund and Shepherd (2003) suggest "resource based theories … argue firms with valuable, rare and immutable resources (including non substitutability) have the potential of achieving superior performance" (p.1307). O'Regan and Ghobadian (2004) show generic capabilities are also important alongside the unique capabilities.

Identifying resources and their relationships is a complex process. For example, Figure 1 identifies a number of important resources (including knowledge assets, expertise, and both competence and combinatory capabilities) in one area of performance (optimizing the benefits of interactive knowledge). Even in such a narrow area of performance there are 35 simple relationships identified. While understanding the nature of these complex relationships is important, the purpose of this paper is to focus mainly on the

Figure 1
Interactive Knowledge Spectrum



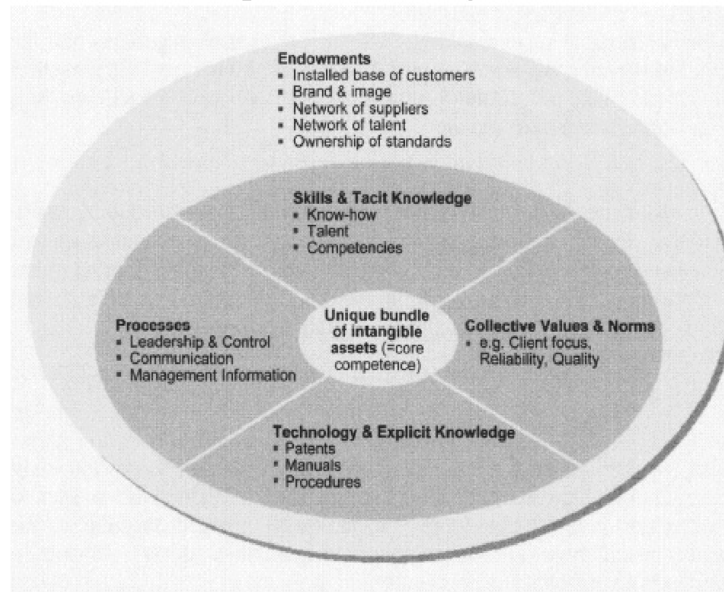
Source: Rastogi, 2003, Figure 3, p.240.

identification and measurement of available resources. Considerations affecting the management of the resources are not developed.

The identification of the unique resources that facilitate the core competences of the firm is an important aspect of the resource-based theory of the firm. Such resources are often expressed in terms of intangibles. Figure 2 provides an example of the nature of such intangibles (identifying skills and tacit knowledge, collective values and norms, technology and explicit knowledge, processes, and endowments as the sources of unique resources).

While intangibles represent important resources, there is still a need for tangible resources (such as the underlying physical assets of the firm). Accordingly a more complete range of resources required to achieve success in business are identified in the following taxonomy of resource categories adapted from Andriessen (2001), Marr *et al.* (2004), and Shaikh (2004):

Figure 2
A Core Competence of Intangible Resources



Source: Andriessen, 2001, Figure 1, p.210.

Financial resources – cash and cash equivalents;

Physical resources – tangible plant, equipment, land and natural resources;

Human resources (skills and tacit knowledge) – the talent embedded in people including their know-how, skills, competencies, commitment, motivation and loyalty;

Information (practice and routine) resources (primary and management processes) – embedded formal and informal rules and procedures, including processes and workflows;

Intellectual property resources (technology and explicit knowledge) – patents, copyrights, trademarks, brand, registered design, trade processes (all where ownership is granted by law);

Relationship resources (endowments) – inherited intangibles generated from external relationships such as corporate reputation and image, brand image, and supply chain influences (such as customer bases and networks of suppliers); and,

Culture resources (collective values and norms) – also inherited but focused on internally generated intangibles such as corporate culture, organizational values and management philosophies.

The preceding list identifies, as important resources for firms, more than the physical resources implied by the capital and labour focus of earlier concerns with business

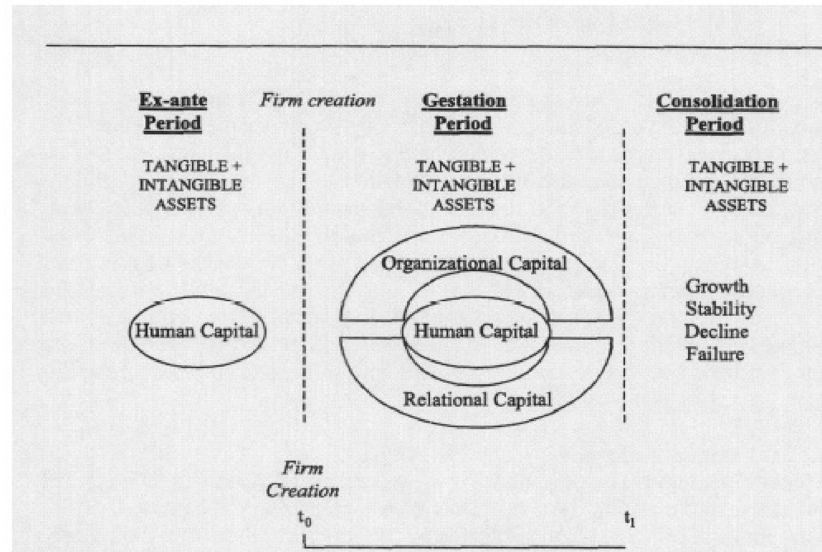
management and economics. Arguably "economists now look beyond traditional factors of production – labour, capital and land – as drivers of growth, development and productivity. Knowledge is now explicitly recognized as a key factor of economic production" (Shaikh 2004, p.440). Also, as well as identifying resources beyond the physical and human skills levels, there is implicit acknowledgement of the information resources that capture the processes by which resources are managed.

The resources listed above are often described as assets. That is a terminology that is strongly linked to the accounting function, a linkage that is sometimes argued to be an inhibitor to good management (Andriessen 2001, p.207). In deed much of the impetus for new approaches to measurement and a focus on intangibles has stemmed from dissatisfaction with traditional accounting practices (Martin 2004, p.78). This is because conventional accounting performs poorly when trying to identify and measure intangibles even though such intangibles are considered the engine of modern economic growth. To avoid this undesirable linkage, the paper maintains an emphasis on resources rather than assets.

From the perspective of small privately held firms, the resource categories listed above are also the basis for firm performance and success. However, just as many large firms do not access all of these resources, there are some resources that may not be as important in some small firms. For example many small firms are service oriented and as such place greater reliance on intangibles such as human resources, information and relationships. Helfat and Peteraf (2003, p.998) highlight this different resource focus using the notion of the capability life cycle to make the resource-based view dynamic. They suggest that all firms will go through an initial phase during which capabilities rise with activity. At a certain point (that varies across firms), capabilities will be assessed and choices made that result in retirement (business discontinuance), retrenchment (winding down because of inability to optimize capability), replication, recombination, redeployment, or renewal.

A similar approach is suggested by Peña (2002) who indicates a relationship for emerging firms as depicted in Figure 3 and concludes "although entrepreneurs usually show special concern about the availability of tangible assets at the moment of starting up a new firm (i.e. space, financial resources etc.), they should not undervalue the

Figure 3
Intellectual Capital Framework for Business Start-up



Source: Peña, 2002, Figure 1, p.187.

significant and positive contribution of intangible assets (i.e. in the form of human, organizational and relational capital) to their companies" (p.195).

The complexity of identifying appropriate resources and when a focus is more or less important seems to be exacerbated in small firms. Arguments exist, for example, to suggest financial resources are more critical in small firms because of their constrained access to finance and the importance of liquidity (Cosh and Hughes, 1994). There is also an extensive literature that focuses on the importance for small firms of relationship resources through strategic alliances (Dickson and Weaver 1997). Other intangibles seem to also be critical for small firms. "Most often less endowed in human, financial, and technological resources than large enterprises, SMEs nonetheless have advantages in terms of flexibility, reaction time, and innovation capacity that make them central actors in the new economy" (Raymond, 2003, p.260). Also Wiklund and Shepherd (2003) find "EO [entrepreneurial orientation] moderates the relationship between a bundle of knowledge-based resources (applicable to opportunity discovery and exploitation) and firm performance" (p.1312). This shows the importance of information resources and how managers manage resources. Also, Erikson (2002) ties the concept of entrepreneurial capital to small firm performance.

The above arguments suggest there is a wide array of resources that are likely to influence the performance (and ultimate value) of a firm. Acknowledging the existence

of all of these resources (both tangible and intangible) should enable small firms to more clearly identify their unique combinations that are able to facilitate their development. It also provides a better basis for research focused attempts to understand small firm performance. However, identification is not enough. If the previously identified resources are creating value then it is important to be able to determine that value. As Martin (2004, p.87) suggests "if intangibles represent the clearest and most potent source of value for organisations then management must at least be able to identify and scope the nature of the challenges this poses", an argument supported by Shaikh (2004, p.440).

Values and Valuation

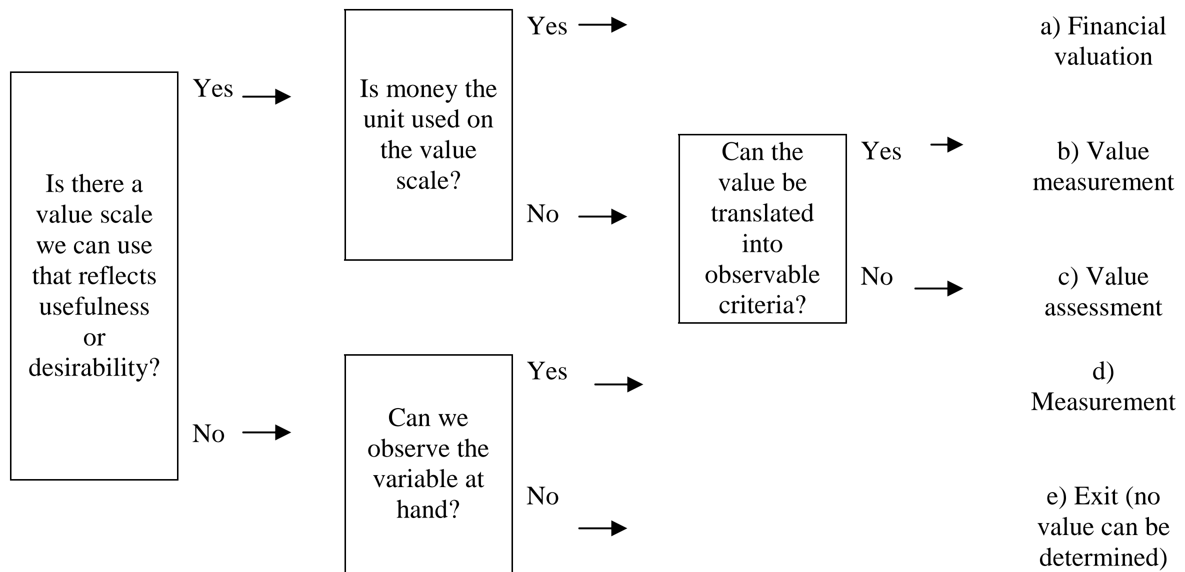
Determining the value that resources provide to a firm is not without significant difficulties. In a broad sense, values determine the definition of good and bad (Trompenaars and Hamden-Turner 1977) and reflect the concept an individual or group has about what is desired. Value, then, expresses the degree of usefulness or desirability of something, especially in comparison with other things. The emphasis is on utility and desirability and not just money. Value in a financial sense is just one of many ways of expressing value.

Valuation is the process by which an individual or group determines the value of an object of interest. While it reflects the values of the valuer, it usually requires "implicit or explicit criteria, or yardsticks for usefulness or desirability" (Andriessen 2004, p.237). Further, "valuation requires an object to be valued, a framework for the valuation, and a criterion that reflects the usefulness or desirability of the object" (Andriessen 2004, p.238).

Figure 4 indicates how the combinations of criterion and frameworks for valuation identified by Andriessen (2004 p.238) result in a number of different values outcomes:

(a) If a monetary value scale is available and desirable it is possible to utilize a financial valuation framework;
(b) Where a non-monetary value scale is to be used, and the scale is able to be translated into observable criteria, a value measurement method is required;

Figure 4
Determination Of Value



Source: Andriessen, 2004, Figure 1, p.238

(c) The existence of a subjective value scale where there is no monetary measure and the absence of observable criteria, requires the use of a value assessment method;

(d) If there is no value scale but an observable phenomenon scale exists then a measurement method can be used, or,

(e) If there is no value scale and no observable phenomenon exists then no value can be determined.

An important note on small firms is relevant here. For many small firms, monetary valuation is not critical. Small firms often bring owners value through life style and other non-monetary benefits. This means value measurement or assessment using other measurement units is often more appropriate than a financial valuation. In deed, because of the difficulty in identifying observable measures of the value scales used by small firm owners, it is often impossible to determine an objective specification of the value of the firm. While there may be circumstances such as in exits or ownership restructures where a financial valuation is necessary, non-financial expressions of value are more likely to be relied on in most stages of a small firms lifecycle.

Financial valuation for the purpose of ownership transfers are not the only benefit to flow from attempts to capture a measure of value. Andriessen (2004, p.232) identifies a

number of problems that valuation or measurement methods are intended to solve. These include:

1. *Improving internal management*, including consideration of issues associated with: the argument that what gets measured gets managed; improving the management of intangible resources; creating resource based strategies; monitoring effects from actions; translating business strategy into action; weighing possible courses of action; and, enhancing the management of the business as a whole. According to Shaikh (2004, p.441) the four most popular internal measures of intellectual capital are HRA (Human Resource Accounting), an Intangible Assets Monitor, the Skandia Navigator and the Balanced Scorecard. However, the first two focus on external reporting issues and the latter are more techniques for describing strategy rather than standard measuring systems (Pulic 2004, p.63).

2. *Improving external reporting*, that seeks to focus on: closing the value gap between book and market value; improving information to stakeholders about the real value and future performance of the enterprise; reducing information asymmetry; increasing the ability to raise capital; and, enhancing corporate reputation and affecting stock price. Shaikh (2004, p.442) identifies common external measures as Market to Book Value approaches, Tobin's Q, proprietary Calculated Intangible Value, and a Real Options Approach. These also have some advocates in the small firm area. Erikson (2002, pp.277-278), for example, examines the relationship between entrepreneurial capital defined as the present value of an infinite series of shadow options and a conceptualization based on a multiplicative function of entrepreneurial competence and entrepreneurial commitment. A problem with these measures is that most continue to treat employee costs (human capital) as expenditure and not as an investment (Pulic 2004).

3. *Statutory and transactional issues*, that focus on: transaction motives incorporating the trade of resources giving rise to value (including the sale merger or acquisition of a business); financing securitisation; taxation issues;

bankruptcy and reorganization; litigation support and dispute resolution; and, accounting standards (regular assessment of fair value).

These approaches are neither exhaustive nor easy to apply and at best "represent tentative attempts to capture the substance of an extraordinarily rich, powerful, inclusive and elusive concept" (Rastogi, 2003, p.236).

Again these issues identified as important aspects of intangible resource valuation are likely to be different across firm size and structure dimensions. Many of the statutory and transactional issues are unlikely to be of interest to the vast majority of small firms but may become of keen interest as the firm moves to an exit strategy. There is also little argument to support the suggestion that for most small firms the improvement of external reporting is critical. This changes, however, if a growth strategy requiring significant capital injection is being pursued. The internal management improvements are likely to flow to most small firms, but these are often achieved through less formal management processes and, as noted earlier, are often driven by different objectives.

However, while it may be that for a very large proportion of small firms factors such as lifestyle objectives or constrained growth choices will make concern with such issues of little importance, there is likely to be a minority of privately held firms (which may still constitute a large absolute number of firms) that will benefit from identifying and seeking to solve problems that focus on the valuation and measurement methods as described above. It is important therefore not to allow problems of poor specification and definition to hinder attempts to understand these issues.

Problems

Unfortunately, while it has importantly identified the critical link between resources and value, the recent debate has generated some questionable tendencies that have possibly created an inappropriate focus in some areas of identifying and measuring intangibles. These are identified, following Andriessen (2001), as:

1. A tendency to limit discussion to intellectual capital incorporating intellectual skills and explicit knowledge. However there are many other intangible resources that are not "intellectual" when that word is interpreted, as it often is,

as a surrogate for "rationality", "intelligence" and "reason" (Andriessen 2001, p.206). These include corporate cultures and management styles, and that aspect of human activity that cannot be structured and made explicit. It is this aspect that is often better able to add value with regard to future success (Tissen *et al*. 2000). There needs, therefore, to be a broader identification and interpretation of the nature and benefits of intangible resources.

2. The use of classification schema that breaks resources into contributing parts and sees them studied without appropriate recognition of independencies. Such separation may result in a failure to see synergies and correlations that reflects the combination that makes a company unique and successful (Andriessen 2001, p.207; Rastogi 2003, p.229). It also focuses on all business having the same resources and all attempts to understand value become blurred because all businesses start to look similar. The alternative identified by Andriessen (2001, p.209) is to focus on the core competencies of a firm and develop a unique inventory of important intangibles (using, for example, the value creation map approach of Marr *et al*. (2004)). Rastogi (2003) emphasizes this importance of process: "without an overarching enterprise capability to create, enhance, co-ordinate, and leverage its knowledge resources collaboratively; the intangible, as well as, financial assets of the firm would not exist or matter" (p.230). This is a warning not to become too focused on the identification of resources (as argued above) because it is ultimately the relationships that are important. The conflict between these first two identified problems highlights the difficulty of developing a framework that captures both the right resources and the appropriate relationships. It is likely to be more significant for small firms where the diversity and complexity is greater.

3. Apparent desires to treat intangible resources in the same way tangible resources are treated from a measurement perspective (especially accounting). However the unique characteristics of intangibles do not fit a transaction-based system (Webber 2000). They are not the consequence of measurable transactions of the firm, lack measurable benefits, and are difficult to add. These aspects have to be accepted and measurement has to be less focused on objective criteria and managers and stakeholders encouraged to use the results to supplement the

output of traditional bookkeeping measurement systems. Given that many small firms don't make use of traditional bookkeeping measurement outcomes, special attention has to be focused on the identification of appropriate benchmarks and comparisons that have meaning outside of a financial valuation.

4. A focus on measurement indicators that lack a comparison or yardstick that facilitates managerial use. Even subjective measures need a benchmark to facilitate comparisons across businesses or within business and across time. The identification of core competencies proposed by Andriessen (2001 p.212) focuses on their unique criteria that include, (a) a need to add value for customers, (b) provision of a competitive edge, (c) an offer of potential for the future, (d) sustainable for several years, and (e) be firmly anchored in the organisation. Here again, given the differing objectives and desired outcomes of many small firm owners, special attention is needed on the identification of appropriate benchmarks and comparisons in small firms.

These problems are important in any attempt to bring an understanding of these issues to the small firm domain. The association between intellectual and rational is one area of concern. Small firms often develop with human, intellectual, relationship and cultural resources that do not follow the big firm norm. It is this different focus that allows them to be flexible and innovative and take advantage of opportunities. We have already identified that many aspects of the resources identified for large firms are often not applicable for small firms (for example intellectual property resources or image endowments from a relationship resource perspective). Encouraging small firms to focus on other than core competencies may well be counter productive. Fortunately many small firms are able to avoid the pressure to measure such resources in a formal ongoing manner. But even when the need arises it is important to recognize the uniqueness of small firms when it comes to missions and strategies and to not attempt to force them into large firm measurement processes. For these reasons measurement yardsticks are always going to be more difficult to determine for privately held firms.

This is not to say that these issues are not important. It is that the measurement or valuation issue only takes on importance at particular points in the evolution of the firm. Small firm owners and those that advise them need to be aware that these measurement

methods exist but that they need to be adapted to suit the diverse needs of the small firm.

Conclusion

This paper has sought to raise awareness of issues surrounding the nature of resources used be firms and their valuation. There are no suggested models and many questions are left unanswered. The premise in the paper is that the value of small firms to their owners, like large firms, is dependent on the resources they use. However small firm owners are driven by different objectives and accordingly there has to be a significant adaptation of the various approaches to resource-based valuation in applying them to small firms. It is important in developing an understanding of value creation in small firms to recognize the diversity and complexity of the task. It is also important to avoid some of the errors that are evident in attempts to deal with these issues in large firms. This is an emerging area of understanding in the small firm sector that needs to be developed from a unique framework applicable to small firms and not just by extending arguments applicable to large firms.

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