MAKING WINE AND MAKING SUCCESSFUL WINERIES: RESOURCE DEVELOPMENT IN NEW VENTURES

G. Page West III  
_Wake Forest University, westgp@wfu.edu_

Ian M. Taplin  
_Wake Forest University_

Recommended Citation
Available at: http://digitalknowledge.babson.edu/fer/vol33/iss11/3

This Paper is brought to you for free and open access by the Entrepreneurship at Babson at Digital Knowledge at Babson. It has been accepted for inclusion in Frontiers of Entrepreneurship Research by an authorized administrator of Digital Knowledge at Babson. For more information, please contact digitalknowledge@babson.edu.
MAKING WINE AND MAKING SUCCESSFUL WINERIES: RESOURCE DEVELOPMENT IN NEW VENTURES

G. Page West III, Wake Forest University, USA
Ian M. Taplin, Wake Forest University, USA

Abstract

Most studies focusing on resource-based theory in new ventures examine firms at discrete stages of their development at which time a set of resources already exists. Little work has been done to date to articulate a broader, more generalized view of the resource development process over the life cycle of a new venture. This paper tackles this agenda. We propose four phases of resources development, and that each phase must focus on a priority of resource bundles. We also propose that internal strategic resource development is context-dependent on and interacts with the external stage of industry development. We draw upon extensive case studies of new ventures in the wine industry to investigate the proposed model.

Introduction

This paper investigates resource development challenges that confront all new ventures. Several important practical and theoretical questions about resources have not been adequately explored in prior research. At the instant of inception a new venture possesses no resources of the sort discussed in resource-based theory (i.e. rare, inimitable, non-substitutable, and non-tradeable Barney, 1991). How does a new venture move from a position of zero resources to possession of resources that offer the prospect of strategic sustainability (Godfrey & Gregersen, 1999)? Is there a path for new ventures to follow in resource accumulation that enables both growth and competitive advantage (Levie & Lichtenstein, 2010), or are the resource needs for these worthwhile objectives possibly in contradiction to each other (Gilbert, McDougall, & Audretsch, 2006; Newbert, Kirchhoff, & Walsh, 2007)? Given limited assets, the liability of newness (Stinchcombe, 1965), and low levels of organizational slack (Cyert & March, 1963), what is the phased priority of resources that entrepreneurs should invest in (Mishina, Pollock, & Porac, 2004)? These questions have been raised in a growing number of studies (e.g. Brush, Greene, & Hart, 2001; Godfrey & Gregersen, 1999; Sirmon, Hitt, Ireland, & Gilbert, 2011). But only a small number of empirical studies have actually examined dynamic resource development in new ventures, and even these not for very long time frames (e.g. Lichtenstein & Brush, 2001).

Drawing on a dynamic states model (Levie & Lichtenstein, 2010), this paper sets out to suggest answers to these questions by examining phases of resource development as a new venture transitions from inception to a self-sustaining level. In this paper we propose that entrepreneurs should develop their firm’s resource positions in a specific path-wise fashion (Ahuja & Katila, 2004; Makri, Lane, & Gomez-Mejia, 2006; Siggelkow, 2002) and in bundles (Penrose, 1959; Sirmon, Hitt, & Ireland, 2007) in order to be successful. But new ventures also develop from unique contexts involving their industrial, historical, and local circumstances. Changing contexts impact resource
accumulation in different ways. Thus the progress and success of any new venture involves context-based path-dependent and path-creating resource bundle development. We explore these ideas in a qualitative study of wineries in the wine region of North Carolina.

This paper makes a unique contribution to the literature on resources development in new ventures. The model developed in this paper provides a more comprehensive and dynamic view including the process and path of resource development, moving from inception to a successfully-growing venture. We also find confirming evidence that internal strategic resource development interacts with the external context in compelling ways. The model we propose may generalize to a variety of new ventures, providing insight not only on the type and level of resource investment required for a firm to progress in its development but also on the entrepreneurial behaviors that contribute to this successful path.

**MODEL OF RESOURCE DEVELOPMENT**

Resource-based theory can provide a valuable perspective to understanding the process and pace of new venture development. There are three facets of the theory that are appropriate for its application to new ventures. First, its focus on creating *ex ante* and *ex post* limits to competition (Peteraf, 1993) that generate sustainable competitive advantage are critical for new ventures that intend to survive and flourish long into the future. Second, the growing view that resource aggregations lead to competitive advantage underscores the importance of combinative capabilities (Teece, Pisano, & Shuen, 1997) facilitated by entrepreneurs. Alvarez and Busenitz (2001) argue that the process of combining resources is itself an important resource for entrepreneurial firms. Third, recent attention to how the dynamic development of resource positions over time is critical. Since new ventures confront a continuously shifting landscape of problems (Kazanjian, 1988), evolving competition and strategy concerns (Dess, Lumpkin, & Covin, 1997), and dynamically-changing tension between existing business practices and newly-emerging contexts (Levie & Lichtenstein, 2010), they must continuously adapt their resource positions to succeed (Barney, 1991).

The important dimension that drives our model is the nature of the strategic demands that are placed on a new venture at its stage of organizational development. This is fundamentally because resource-based theory is a theory about competitive advantage and superior rent generation. New ventures must invest in resources that are consistent with their intended strategic approach (Andersen, 2011; Newbert, et al., 2007; Zahra, Sapienza, & Davidsson, 2006). But in addition, new firms experience different strategy-related challenges and problems at different stages of development (Covin & Slevin, 1997; Kazanjian, 1988). The assembly of the right sets of resources to address stage-specific strategic issues is thus critically important (Levie & Lichtenstein, 2010; Mishina, et al., 2004). An under-supply of resources appropriate for a specific kind of strategic challenge can result in suboptimal performance (Garnsey, Stam, & Heffernan, 2006; Penrose, 1959). Similarly, building a portfolio of resources that are unnecessary for current or imminent strategic challenges may compromise the ability to confront existing or other unanticipated challenges (West & DeCastro, 2001) because of the liability of newness (Stinchcombe, 1965). Thus we argue that new ventures must build just the right resources at just the right phase of their development. We find a phased model useful in understanding levels and configurations of resources needed by new ventures. Figure 1 outlines the different phases of new venture development and their associated resource development focuses.
Resource Development Phases

The Founding phase is when the new venture must develop an initial resource position. Knowledge resources are seminal for new ventures (West & Noel, 2009). At the outset a new venture is only the crystallization of an idea that an opportunity to earn rents exists in the market. An entrepreneur possesses no resources that can be claimed by the new venture; the founder has only his or her ideas about opportunity that could lead to the founding of a new venture. Brush et al. (2001) argue that one of the biggest challenges facing new ventures is transforming personal knowledge of the industry, market, and product into an organizational resource. Through a variety of information processing activities the entrepreneur develops refined asymmetric knowledge about the opportunity’s real potential (West, 2003), and is then able to “broker” such knowledge in order to begin establishing legitimacy and credibility.

But new ventures cannot live on knowledge alone. They need other resources that provide some utility for the fledgling operation to be. Although it is not always the case, for the most part founding entrepreneurs seek to leverage the knowledge they possess about opportunity to raise some level of initial funding for the venture. Such funding can serve to secure tangible physical resources (e.g. space, supplies, equipment, Brush et al., 2001) for actual product or service development, and can be used to attract others to become formally involved with the venture.

**Hypothesis 1:** Successful new ventures focus efforts on developing the bundle of knowledge, informal networks, and financial resources during their founding phase.

The Leveraging phase describes new ventures that have moved beyond the legitimacy of initial founding and which have begun to address the strategic issues of research and development. Strategic issues at this stage tend to be focused on the invention and development of a product or service idea and on planning for the estimated market introduction of the new business. Here the new venture builds a team to develop appropriate understanding of the market space and to develop proprietary technology or intellectual property that will insulate the firm from competition. At the same time, formal social networks become important because they enhance internal technical knowledge, aid founders in cultivating investor, supplier and customer contacts (Dubini & Aldrich, 1991; Johannisson, 2000), and help identify prospects for a stronger management team.

**Hypothesis 2:** Successful new ventures focus efforts on developing the bundle of human, technical, and formal networking resources during their leveraging phase.

The next phase of resource development in new ventures is the Developing phase, occurring at the time the firm is ready to go to market. Kazanjian (1988) refers to this as the commercialization stage of the firm life cycle, and comments that new ventures need to deal for the first time with creating tasks and systems, marketing functions, the hiring of new sales people and managers, and managing the production of products or services on a scale appropriate to the market. Successfully commercializing also requires a much clearer understanding of how things work. The technology is no longer in “development,” it is being applied; the manufacture of products or services demands that management knows explicitly how physical assets can be deployed. So part of the resource development challenge during this phase is combining and making explicit the tacit nature of the combination of resources it has assembled.
The bundling of these resources again appears to be important in addressing the strategic demands placed on the venture at this phase. For example, the prospects of securing additional financial resources to afford a market introduction will usually depend on the presence of a management team that understands marketing and can scale production out of an R&D lab situation. Lacking any one type of resource in this bundle, the new venture may not be able to navigate the phase successfully.

**Hypothesis 3**: Successful new ventures focus efforts on developing the bundle of management and physical resources during their developing phase.

The Integration phase addresses the challenges that new ventures confront when they grow. During this phase a primary strategic challenge for the venture is to create efficiency by expanding the scope of its operations, accommodating greater volume and generating profits (Kazanjian, 1988). This is largely accomplished externally through market expansion (Lumpkin & Dess, 1996) in combination with internal improvements in organization and coordination (Miller & Friesen, 1984). Growth and volume create new strategic requirements. Now the new venture must invest in additional organizational resources in order to effect improved routines and efficiency in internal operations, and in additional physical resources (such as dedicated company-owned manufacturing facilities or raw materials suppliers) in order to exert greater control over the supply chain and costs. This is the phase during which ventures seek significant financing through initial public offerings or debt, and thus the character of financial resources developed during this period are qualitatively and quantitatively different from those developed earlier.

The nature of the resource development challenge during the Integration phase is also qualitatively different from what the new venture has previously encountered. Here the true challenge is to achieve the kind of coordination among the various resource positions such that the firm can be both efficient and effective. The challenge of managing resources during this phase is also one of making tacit what had become explicit in the earlier phase.

**Hypothesis 4**: Successful new ventures focus efforts on developing the bundle of organizational, physical and financial resources during their integration phase.

**Industry Context as Contingency**

The phased model outlined above is subject to industry context contingencies that have not previously been included in new venture research on resource development. Since the essential argument is that resources are developed in order to address the new venture’s ability to deal with strategy issues of competitiveness and rent-generation, when industry and competitive contexts change it will have some effect on the resource development process at the individual firm level (Levie & Lichtenstein, 2010).

This is especially important for the development and use of knowledge and networking resources. Audretsch and Feldman (1996), for example, find compelling evidence that tacit knowledge spillovers occur frequently and are important in the early stage of an industry’s development, but that in later stages of the industry’s life cycle there is a “congestion effect” that impedes the flow of useful knowledge about innovative behavior. In early stages of an industry’s development “component” knowledge about identifiable aspects of a business practice is more easily codifiable
and shared across networks. However as an industry matures and some firms emerge as leaders, “architectural” knowledge about an entire system of coordinating and integrating routines that confer competitive advantage is neither readily transferable nor are firms particularly keen on transferring it if they even could (Tallman, Jenkins, Henry, & Pinch, 2004).

Developed and maturing industries present extremely challenging competitive contexts for new entrants. Earlier research (e.g. Hannan & Freeman, 1988) suggests such industries present narrower strategic opportunities for new entrants. Standardization within maturing industries and more robust competitive pressure provides a thinner margin for error for any new venture, and is likely to require that any new venture somehow move rapidly through its resource development phases in order to survive.

Therefore although it is our contention that any venture must navigate the phases in our model in order to achieve sustainable advantage and rent generation, the paths followed by new ventures – as well as the time available to follow paths – will vary depending on both firm characteristics and industry context. This reflects the idea put forth by Levie and Lichtenstein (2010), that a linear stage development model of emergence is inappropriate. When industries themselves are in the formative stage, formal networks are likely to be less well-developed than later on. Informal networks will be more valuable for new firms in new industries, but informal networks may not be of great value for new firms in maturing industries.

Hypothesis 5: New venture success depends on resource bundle investments that vary in amount and timing according to the industry context confronted by the venture.

Methodology

The bulk of research on resources in new ventures has focused on specific resource positions at discrete stages of a firm’s development, with great variation across studies in just how any type of resource was operationalized. Thus while we have proposed a theoretical framework for phased development, an exploratory qualitative study is deemed more appropriate to assess how well the framework is supported. Following the recommendation of Eisenhardt and Graebner for “theory driven research…to offer insight into complex social processes that quantitative data cannot easily reveal” (2007: 26), we draw upon firms in an industry that provides a rich contrast. These differences provide the opportunity to understand how theory may be useful in making sense of different settings, and enhance the validity of the study.

We test these hypotheses by examining entrepreneurial growth in the wine industry in North Carolina. Our research was principally ethnographic with interviews conducted with owners, general managers and winemakers in 26 wineries between 2002 and 2010. The extended data collection period allowed us to meet with newly-organizing ventures as well as others at various developmental stages. Interviews involved open-ended questions concerning background, operational details, financial issues, strategy, as well as industry development. The analysis of the data followed a four step process similar to a process employed in previous qualitative studies of resource-based theory in entrepreneurial firms (Lichtenstein & Brush, 2001; West, Bamford, & Marsden, 2008), and follows recommendations made for qualitative research by Wolcott (1990).
Background on North Carolina Wine Region

We identify three distinct types of wineries, categorized by their strategic goals and their financial backing when entering the industry. First are those created by individuals with extensive financial and previous business experience who at the outset establish capital intensive operations (large winery and tasting room, extensive planting of vines, experienced professional winemaker and vineyard maintenance staff). This group of owners is more “hands off” because they simultaneously create an administrative structure responsible for daily operations and with a profitability goal that has a longer time horizon. We label these the “Cult” wineries because of their orientation toward brand and status in all they do. Second are those whose financial assets are more modest but who are still able to invest in a winemaking/tasting room facility, smaller acreage vineyards, and who employ one or two vineyard maintenance staff and utilize a consultant winemaker whilst fulfilling other administrative tasks themselves. Their aim is to remain small (2-3000 case production) and attain profitability within 5-10 years of opening. These entrepreneurs fit the category of “Boutique” wineries – those interested primarily in both high quality and a successful business. The final group is more eclectic, consisting of those who perceived an opportunity to convert inherited agricultural land into wine growing or who bought property as part of a lifestyle change; those who have been growing grapes for a number of years, selling to larger wineries and now decided to develop their own winery; and those who had developed a passion for wine after a visit to Bordeaux or Napa Valley and decided to pool their resources with some partners with shared interests and start a winery. We term these entrepreneurs the “Avocateurs” for whom the business aspects and profitability goals are secondary considerations (or at least surprising after-thoughts).

“Cult” Capital Intensive Wineries

There are a small number of wineries that have brought considerable financial assets to professionalize their operations and build impressive facilities. The key foundational resource for Cult firms was their financial endowment combined with their extensive previous business experience. Although they knew little about starting up in this industry, owners were able to use these resource positions instrumentally to hire the best people they could to develop the vineyards and the wine, leading to rapid advancements in their own technology resources. As described, their eventual success depends on the reputation of wineries in the region, so they were also quick to develop and utilize social networks with other wineries. After the initial years of developing sound practices and products, they then planted more acreage, increased bottling capacity and engaged in marketing well outside the Piedmont area. To do so they turned increasingly to developing industry-relevant managerial and organizational resources to handle growth.

They have been able to exercise leadership in informal governance and dramatically increased the stock of knowledge through developing and disseminating codified practices and new operational logics as components (Tallman, et al., 2004) of the grape-growing and wine-making process. They have stimulated collective organizational learning by providing tangible evidence of the benefits of technical innovation, but they have also sought to improve the overall legitimacy of the industry by extensive regional and national marketing of their wines. Their financial resources enabled them to invest in worker training and education, market information and establish links
with intermediaries in ways that have positive effects for all firms in the cluster. Their role is consistent with what Visser and de Langen (2006) argue in their analysis of cluster governance of the Chilean wine industry whereby leader firms combine a superior strategic insight and an ability to raise funds that permit collective investments that have a positive impact on the quality of that governance.

The winemakers/general managers of these wineries see their role as one of shaping the industry’s development and ensuring that requisite quality levels are attained by as many wineries as possible. Without a commitment to quality, their fear is that the industry will never attain the levels of legitimacy needed for sustained growth. Yet they recognize that many of the small wineries lack the resources and resolve to continue for a long time. Cult managers commented:

I’ve been fortunate in that I was given a free hand and generous resources to develop the winery. That is one of the reasons I came in the first place as I like to see something develop from the ground up. But in the early years it was difficult experimenting with what grows well here and what doesn’t and what sorts of styles are best.

I see my role as part winemaker and part champion of the local industry. But for us to succeed as individual wineries we have to all be good. It’s no good a few making good wine, some mediocre and others crap. The problem is that a lot of small wineries just don’t have the patience or the resources or even the basic know how to consistently make good wine. They have a successful crop one year but cannot replicate it the next. They don’t want to submit their wines to sensory tasting panels because they’re frightened of flaws being identified. I understand that if there’s a problem that’s one whole year down the drain and a complete harvest lost. Most cannot afford to sacrifice a harvest. But unless they learn, the industry as a whole will suffer.

Based on our analysis of interview data, we have constructed illustrations of the resources developed in different phases by each of the three types of wineries. Figure 2 displays the longitudinal process for Cult wineries (other illustrations are omitted due to space considerations).

“Boutique” Wineries

This second category applies to approximately 20–30 percent of the small wineries in the region. Their emphasis upon sustainability, quality and a commitment to winemaking (as opposed to other tourism related activities) results in their embrace of professional services for key activities such as vineyard maintenance and winemaking. Whilst learning many of the skills associated with running a winery, the owners nonetheless acknowledge the importance of long term reputation building that necessitates a professional approach to key operations.

Boutique wineries appear to be the more traditional sort of entrepreneur, because they are growth-oriented from the outset and their ability to raise financial capital to start up depends on the vision and strategy they have for a sustainable enterprise. At founding, they are able to broker their unique view of opportunity to raise capital. They also recognize at startup what they do not know about technology, and rely on informal networking to identify the best people to put in place for the R&D stage of the company. Having the right people in place for technical development gives them credibility to participate in the formal network, through which they further enhance their knowledge about best practices.
Owners of these wineries have developed more formal contractual relationships within the local winery network but they are also part of the informal social networks that have emerged. It is through this network that they have acquired tacit knowledge that complements the operational details derived from formal contracts. As winery density increases, the benefits of innovation-oriented cooperation become more apparent, especially to this group whose owners share a long term vision for the industry. In fact this group is most likely to recognize that individual success is predicated upon the growth of a collective identity; the more wineries that are established, the greater the likelihood of seeking cooperative solutions to problems and overcoming the liability of newness. But they also acknowledge that key sources of information reside in expert professionals who are winemakers at the local large wineries and these individuals have emerged as knowledge brokers. Owners commented:

I wanted to make a good quality wine on land that I’d bought with the express purpose of starting a winery. I knew that I didn’t have the skill sets to do it, except perhaps for some vineyard maintenance, you know the stuff that’s just basically hard work. So I talked to each of the big wineries’ winemakers, consulted folks outside of the state and checked reputations. I didn’t want to just start planting vines and hope for the best. I really wanted to know what was necessary to make a really good wine in this area.

I’d thought about this (winery) project for some time, had the money for it and backing from 4 investors who shared my passion for wine and a commitment to excellence. That was good since it meant we were all on the same page. When we signed contracts they were agreements that were based on a mutual understanding of shared responsibilities – our commitment to continue the pursuit of quality wines and willingness to make the necessary investments and forego immediate profits; his to deliver consistency in quality, even if in small batches for the first few years.

For boutique wineries knowledge seeking behavior becomes more purposeful and structurally embedded rather than random scanning. They recognize that what might have worked in the 1990s when the industry was taking shape regionally – informal and unstructured network relationships generating tacit knowledge – is now surpassed by the need for more structured hierarchical relationships where important operational details have become codified.

“Avocateur” Small Wineries

This is by far the largest category of wineries in the region. It is this group that is more likely to pursue ‘trial and error’ practices as well as seek formal training in enology and viticulture at the local community college, often concurrent with the development of the winery. Their enthusiasm for learning should not however, be confused with endowed skill sets since most acknowledge that they face a steep learning curve and often struggle with acquiring the routine operational details plus site-specific idiosyncrasies. The central problem is that winemaking provides a once a year opportunity to get things right; failure can be costly under such conditions.

The following comments by Avocateurs capture the difficulties they often faced:

I never realized how much hard work was entailed; farm work yes but this seems much more complicated that growing corn. It seems I’m always having to learn something else
and balance that with what I already know”. Another commented, “The learning curve has been really steep. And I never realized how much money it would cost and how long it was going to take before I could start to see decent harvests.

I massively underestimated the costs; all the little things mount up. I’ve had to go back to the bank several times and dig into savings. Also, I’m forced to do more things myself (with the help of relatives and friends who have been great) but there’s a lot of things that I’m still learning.

We were careful to make sure we purchased the right land ….and still we’ve had a really hard time selling the wine! In retrospect, instead of putting all of our money and time into the other things we should have paid more attention to marketing.

These wineries by and large approach founding without knowledge, without a strategic vision, and without financial resources. The owners simply have an idea, one that has not been “refined asymmetric knowledge” about opportunity (West, 2003), and to further their idea they participate in formal and informal networks through which they are recipients of explicit and codifiable information and knowledge that others already possess. They may learn a few tid bits about starting up a winery here, but nothing that can confer the prospects of sustainable advantage on their business. Understanding terroir and the tacit dimensions of this business is not on their radar; as the statement above suggests, it should have been “more attention to marketing” that would make a difference. Their progress in developing other resources is slow, almost linear and sequential rather than bundled.

Industry Context

In what we would describe as the industry’s early development stage at the beginning of the study period, one can identify growth trajectories as contingent upon resources that are widely different but nonetheless sufficient to sustain operations for 3-5 years without revenue streams (vine maturation period). During this period wineries are able to gain access to brokered knowledge through informal networks, information sharing, attending classes at local Community Colleges as well as through personal experimentation (learning by doing). Knowledge acquisition tends to be unsystematic, in part because knowledge is tacit and not codified, or because there is limited knowledge available in the first place given the industry’s infancy.

As the regional industry enters its next stage and begins to acquire a collective identity, interactions among companies become more dense and structured. Through access to codified information at local Community Colleges where many new entrants gain operating knowledge, a more detailed set of winemaking parameters are dispensed and ultimately dispersed. At this stage informal associations are transformed into formal industry organizations designed to disseminate best practices and provide a more systematic context for networking and knowledge sharing. At this time however, the capital rich wineries increasingly play a leadership role as well as beginning to establish benchmarks for the industry.

The Boutiques and Avocateurs face different challenges during this industry stage. The formers’ resources permit experimentation but they rely upon gaining contractual access to detailed operating information via their use of consultants. They gradually build their resource
base position by formalization rather than ‘learning by doing’. The latter continue to depend upon informal and emerging formal networks but as a consequence are more likely to be random and unsystematic in their knowledge acquisition.

As the industry cluster begins to mature, the emergent hierarchy amongst the three types of wineries becomes more pronounced, with each adopting varying degrees of professionalization and systematization of activities according to their developed internal resource positions. The large wineries continue to bring significant financial, organizational and human resource additions to bear enabling them to pursue clearly defined strategic goals. Their “architectural” knowledge is complex and systemic, not lending itself to sharing easily. And because they usually have developed their own positions of competitive superiority through their own well-developed resource positions, even though they are desirous of fostering a stronger industry reputation, they are reticent to fully share what has made them great.

But for growth to become sustainable around product quality and an expanding regional marketplace for wine, the knowledge required to successfully compete has become more complex and difficult to access either informally or formally. Whereas the early phase of the industry life cycle (industry creation) enabled those with heterogeneous but also limited bundles of resources and capabilities to acquire limited operational knowledge via informal social networks, the more complex knowledge base in the current phase necessitates more formal contractual relationships.

The Avocateurs suffer most in this respect because they have been unable to (a) acquire the upgraded operational knowledge in the first place and/or (b) they lack the resources to rectify problems that they might have encountered. Boutique wineries continue to build their resource base, focusing upon improved operational proficiency, limited but sufficient profitability and a stable growth trajectory. Their reliance upon combining contractual relationships, cementing informal and formal networks through membership of associational groups, as well as improved knowledge specificity for certain operations, continue to endow them with capabilities that permit such growth. Their aggregation of disparate resources (extraneous and internal) provide evidence of successful entrepreneurial growth for firms that can best identify and capitalize on key industry metrics for overall efficiency.

**Discussion**

At the outset of this paper we underscored the importance of the resource-based theory perspective for understanding how new ventures may bake strategic sustainability and superior rent generation into their DNA. However, we also pointed out that there has yet to be developed a systematic view of how resources develop across the life cycle of new ventures. Examining resource bundles and utilizing existing theory, we suggest that there are phases to this process that lie across two dimensions. The first dimension is the nature of the strategic challenges confronted by new ventures at various phases, while the second dimension is the industry stage context and resulting interplay among its members that impacts firm-level resource development. Our model describes configurations of resources at four phases in new venture development. These phases – while stylized and somewhat oversimplified in this paper – are nonetheless useful for analysis. For discussion purposes we labeled the four resource development phases as: 1) Founding; 2) Leveraging; 3) Developing; 4) and Integrating.
The results of our qualitative study of a variety of companies starting up and competing in the North Carolina wine industry lend support to the model and our hypotheses. We discovered that the more successful wineries developed and instrumentally drew upon knowledge and financial resources during their founding phases; the less successful Avocateur wineries by and large did not. Surprisingly, and in contrast to some previous studies, startup experience is not universally important here. But some sort of knowledge appears to be. Often entrepreneurs have not been through a startup themselves, but they understand important dimensions of what needs to be done. For both Cult and Boutique entrepreneurs, having a clear vision of what they seek to accomplish is a critical element in their ability to secure additional resources. This is not startup knowledge, nor is it managerial knowledge. This sort of clear vision seems to be a form of “opportunity knowledge,” a gestalt view of the interstices in the industry that can be occupied through entrepreneurial efforts (Penrose, 1959). Often acquired through a process of refining the opportunity idea through informal discussion with others, this knowledge lends credibility and perceived legitimacy to the new venture, can lead to more successful efforts to raise startup capital. Together, these can be instrumentally used to develop another suite of resources important in the leveraging phase when R&D occurs.

We also observe that resource bundling is apparent in those companies that are more successful. For both Cult and Boutique wineries, during the leveraging phase the bundling of and internal interactions among three resource types was pivotal (formal networks, human resources, technology resources), and during the developing stage another bundle emerged as critical (managerial knowledge, organizational systems, physical resources). In contrast, in the less successful Avocateur wineries this bundling was not apparent; the development of resources in these firms tended to be more linear with resources used or operating independent of each other.

An important new insight surfaced in this study is the effect on internal resource development of the external industry context. This manifests itself primarily through new knowledge creation that is enhanced by the use of formal and informal networks. Sometimes industry context can be helpful, but often industry context can interfere with this process—or at least differentially impact various players. Previously, resource based theory has more or less viewed strategic resource development as a firm-level construct. Yet because the bundling and rich internal interplay between resources is so important for firm development and growth, when industry context affects one resource it can affect the bundle. A better understanding of the impact which industry context can have on internal resource development potentially represents an exciting new area for entrepreneurial strategy research, and can lead to interesting prescriptions for entrepreneurs depending on the industry stage of development.

The dynamic nature of resource development parallels the dynamic nature of strategic challenges confronting firms engaged in the entrepreneurial process. New firms need to develop knowledge, physical, financial, social, human, organizational and technological resources in order to succeed in their efforts. A careful examination of the kinds of strategic challenges and the types of resources available starts a process of identifying resource gaps and investment opportunities. As firms evolve over time they confront new strategic and competitive challenges in a manner calling for additional investments in stage-appropriate resources. It is in this evolution however, that different interdependencies become prioritized and what might have been a sufficient condition in the early stage becomes a necessary one in later stages.
Finally, for dynamic capabilities to be attained by individual firms the collective organizational reputation of the local industry must grow in such a way as to legitimize incumbents and further the demand for the product (wine). It is this legitimacy building that invariably emerges when clusters of firms cooperate in a geographic location, exchanging tacit knowledge, facilitating generalize information exchange and encouraging specialist firms that service the industry to co-locate (Taplin, 2011). The phases presented in our model are indicative of such legitimacy building inasmuch as wineries that are likely to prosper are ones whose resource bundles greatly facilitate knowledge access and technique implementation.

These ideas begin to provide guidance for founders and potential investors in new ventures, inasmuch as they are indicative of key interaction issues that frame resource bundling. The integrative view outlined in this paper, despite its complexity, is consistently supported in the extant literature. A combination of resources developed simultaneously in a non-linear pattern appears to be critical to the success of new ventures. Moreover, the view that resource combinations must evolve as the strategic challenges evolve brings an important contextual view to the examination of dynamic resource development efforts. Attempts to focus in a piecemeal fashion on individual aspects of resource development, without accounting for resource interactions at a systemic level or the nature of the strategic demands, is likely to leave researchers and practitioners with few insights.

CONTACT: Page West; westgp@wfu.edu; (T): +1-336-758-4260; (F): +1-336-758-6133; School of Business, Wake Forest University, Winston Salem, North Carolina, 28109, USA.

REFERENCES


### FIGURE 1
**Proposed Model Resource Development Phases in New Ventures**

<table>
<thead>
<tr>
<th>Resource Development Phases:</th>
<th>Founding</th>
<th>Leveraging</th>
<th>Developing</th>
<th>Integrating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Strategic Challenges:</td>
<td>Startup</td>
<td>Research &amp; Development</td>
<td>Commercialization</td>
<td>Growth</td>
</tr>
<tr>
<td>Resource Development Challenges:</td>
<td>Developing initial resource</td>
<td>Leveraging into additional resources</td>
<td>Combining; Making the tacit explicit</td>
<td>Coordinating; Making the explicit tacit</td>
</tr>
<tr>
<td>Resource Types:</td>
<td>Knowledge - Startup</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge - Management</td>
<td></td>
<td>X</td>
<td></td>
<td>c</td>
</tr>
<tr>
<td>Social – Informal Networks</td>
<td>X</td>
<td>c</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>Social – Formal Networks</td>
<td>X</td>
<td>c</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>X</td>
<td>c</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>X</td>
<td>c</td>
<td>c</td>
<td>X</td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Technology</td>
<td>X</td>
<td>c</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

X = Primary resource investment priority  
c = Continuing need for resource developed at earlier phase
FIGURE 2
“Cult” Winery Resource Development Path

<table>
<thead>
<tr>
<th>Founding</th>
<th>Leveraging</th>
<th>Developing</th>
<th>Integrating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing initial resources</td>
<td>Leveraging into additional resources</td>
<td>Combining; Making the tacit explicit</td>
<td>Coordinating; Making the explicit tacit</td>
</tr>
</tbody>
</table>

- Knowledge - Startup
- Knowledge - Management
- Social – Informal Networks
- Social – Formal Networks
- Human
- Financial
- Organizational
- Technology
- Physical

R = Resource Investment Priority  → = Causal Direction  ← = Continuing Resource Development