

Identity and Reputation in Organizational Collectives

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Doctor of Philosophy

by

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APPROVAL PAGE

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IDENTITY AND REPUTATION IN ORGANIZATIONAL COLLECTIVES

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DEDICATION

I would like to dedicate this dissertation to my wife and son, Beth and David, who have endured, supported and participated in more “adventures” than anyone should ever be asked to do in one lifetime. Without you two, I never would have finished this journey.

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Identity and Reputation in Organizational Collectives

Peter Hofherr

Chapter 1 - Introduction

A social movement based on geographic or place-based agriculture has begun. Not only are consumers more interested in understanding where their food is produced, but the United States Department of Agriculture's (USDA) "Know your farmer" programs show institutional support (Pietrykowski, 2004). Consumers increasingly consider geography or place-based characteristics an important factor in purchase decisions (Van Ittersum, 2001). This growing public policy and consumer interest in the local foods movement, demonstrated by the increase in farmer's markets (Zepeda, 2009) among other indicators, has also benefited agricultural producers who are anchored in the place, culture and heritage of the regions in which they operate.

One sector of agriculture that potentially benefits from consumers' interest in locally grown and place-based agriculture is the wine and grape industry. Because the wineries and vineyards are viewed as a combination of the tourism, agriculture and hospitality sectors and are often place-based, they represent a unique vehicle to create value in rural America and take advantage of the recent trends. Building upon this recognition, policy makers, such as United States Department of Agriculture and state governments are actively encouraging the development of public institutions and related policies to aid in the creation of economically sustainable wineries and wine trails organizations.

Recent research highlights the catalytic role that social movements play in creating new markets, initiating cultural change and institutional development by both private and public entities (Weber et al., 2008; Campbell, 2005). Weber et al., (2008) argues that these movements help bridge three roadblocks in the new market or product development process: entrepreneurial production, collective producer identity creation, and the establishment of regular exchanges between producers and consumer.

The collective organizational form has been common in American agriculture for more than a century. Originally formed to counteract market powers, these organizations consist of farm families, farm corporations or individual farmers that form an entity form many purposes that include buying farm supplies at a volume discount or jointly marketing or adding value to their farm products (Knapp 1969; Nourse 1942). As the National Council of Farmer Cooperatives notes, more than 2,500 cooperatives with more than 2 million farmer members operated in the United States alone in 2008 with a combined business volume of 191.1 billion dollars.

Generally governed by democratic processes, agricultural cooperatives are owned by the users themselves and follow a set of values and principles (Gray, 2000) that reflects the seven cooperative principals adopted by the International Co-operative Alliance in 1995.¹

These seven principals were patterned after the principals used in the founding of the

¹ The principles include: voluntary and open membership; democratic member control; member's economic participation; autonomy and independence; education, training and information; cooperation among cooperatives; concern for community. (See National Cooperative Business Association <http://usa2012.coop/about-co-ops/7-cooperative-principles>.)

Rochdale Society of Equitable Pioneers in Rochdale, England in 1844 (Knapp, 1969, p. 30).

While changes in the general economic environment and society as a whole have challenged the ability of farmer cooperatives to survive in their original form (Fulton, 1995; Chaddad & Cook, 2004), numerous examples of long-lived farmer cooperatives still exist today (Hansmann, 1996).

Beyond the study of agricultural cooperatives, collective action has been widely researched (Burrell & Cook, 2009). Mancur Olson (1971) explores the individual - group interface from the perspective of how self-interested individual behavior affects the achievement of common group goals. He indicates that there must be “a special mechanism” to effectively hold groups together. In a similar vein, Elinor Ostrom’s (1990) research provides key insights into the developmental process of effective institutional governance of common pools of resources. Olson’s research combined with Ostrom’s creates a strong theoretical foundation for the understanding of collective action by groups (Barham & Chitemi, 2009; Kaganzi et al., 2009).

This study extends Olson and Ostrom’s works and examines how a group of organizations form a separate entrepreneurial venture with distinct goals, identity and reputation. Organizations are regarded as man-made entities that often reflect the idiosyncratic entrepreneurial aspirations of their founders and are shaped by the

surrounding economic environment. Although no two organizations in these grouped ventures are completely alike, they might be similar. Some networks are loosely coupled while others are held together by an organizational structure, like an agricultural cooperative.

Ruef (2010) identified four potential mechanisms that hold the groups together: shared identity, homophily (shared characteristics), structure (roles and contracts), and strong ties (networks and trust). This research explored Ruef's (2010) shared identity mechanism and its content and importance to the success in organizing and creating sustainable collective entrepreneurial ventures.

Depending on the nature of the collective entrepreneurial action, a formal organizational structure could be necessary. The structure might take the form of a legal status, such as a corporation in the case of an agricultural cooperative, or could be absent altogether, such as a geographically delimited networked community of entrepreneurs i.e. a research park or industrial cluster (Johannisson & Dahlstrand, 2008). This type of entrepreneurial action using Ruef's (2010) mechanism of strong ties could be equally dependent on interactions with the social and the physical environments (Steyaert & Katz, 2004).

Researchers have studied individual and group entrepreneurship, as well as identity formation extensively, but less is understood about how organizational collectives and their organizations form a common identity. Starting with Albert and Whetten (1985), a

concerted effort to study and understand identity development in organizations has been undertaken. Among the areas of exploration include: the process of identity construction (Clark et al., 2010; Navis & Glynn, 2010; Foreman & Parent, 2008; Ravasi & Schultz, 2006; Corley & Gioia, 2004; Foreman & Whetten, 2002; Scott & Lane, 2000; Fox-Wolfgramm et al., 1998) and the study of hybrid identities in organizations including nonprofits (Golden-Biddle & Rao, 1997), hospitals (Pratt & Rafaeli, 1997), commercial microfinance organizations (Battilana & Dorado, 2010), agricultural cooperatives (Westgren et al., 2009), and family businesses (Sundaramurthy & Kreiner, 2008) among others. Additionally, identity conflict (Fiol et al., 2009) and cooperative member commitment (Westgren et al., 2009) have been studied using an organizational identity framework.

Recently, the identity construct has been used to understand the differences and similarities between organizational reputation, image, and legitimacy (Foreman, Whetten, & Mackey, 2012). Their proposed model uses the expectations and perceptions of identity from internal and external stakeholders as the core elements of a comparative process that informs the identity-based construct, reputation. In addition, the model provides a framework that informs the development of the attributes or content of the organization's identity and reputational elements that are the basis for stakeholder evaluation. That is, both internal stakeholders (owners, employees) and external stakeholders (customers, community) form their own perceptions of the organizations identity, and hence, reputation.

This framework is of particular interest to agricultural economists and their study of collective action in organizations in rural America because of the unique nature of agricultural collective organizations in general and the long standing interest of public policy makers in the economic development of rural area. This study uses some of the comparative process in the Foreman, Whetten, and Mackey (2012) framework to find the content of attributes of identity and reputation in organizational collectives as a mechanism for informing collective entrepreneurship.

Research Objective

This research involves the study of the eight wine trail organizations in Missouri. We chose wine trails for analysis since they are a relatively new form of collective entrepreneurship, especially in Missouri. They are composed of individual wineries, located primarily in rural areas, which join together for mutual, beneficial entrepreneurial goals including marketing and business development. The wine trail organization itself is the source of marketing and public relations programs and jointly sponsors events that are hosted at the individual wineries but conceived and executed at the wine trail organizational level.

Identity itself is a very useful construct for understanding what is important to individuals, groups, organizations, and institutions. The organization's identity is the basis for the development of a reputation that consumer and other stakeholders judge or evaluate through the organization's communications, images, promotions, and events

(Foreman et al., 2012). To judge implies an evaluation of the organization's reputation against a preexisting expectation that is held by the stakeholder (Ibid, 2012). By understanding both the specific nature of the expectations of stakeholders and their perceptions of the organization's identity, we can identify the content or attributes of the identity and reputation of the organization and deepen our understanding of the identity elements stakeholders deem important.

Foreman, Whetten, and Mackey (2012) proposed a conceptual framework that uses the identity construct to explain the process and content of stakeholders' evaluations of an organization's reputation. The framework itself is grounded in the identity attributes and characteristics that form the basis of stakeholder expectations and perceptions.

Because the wineries are normally in close proximity and thus geographically centered, the joint events lend themselves to the joint marketing of the region, the wineries and the wine trail itself. Thus, winery members and wine trail organizations are nested in the unique attributes of the agriculture sector including, but not limited to, the production of a food product from a defined geographic location that normally reflects both culture and heritage. This is particularly interesting while exploring the mechanism and content of shared identity as it relates to collective entrepreneurship.

Because wine and agriculture are place-based, we can empirically determine if geography is an important factor in the development of the identity and thus the expectations and

perception of stakeholders. According to the Foreman, Whetten, and Mackey (2012) framework, the geography factor should express itself as an attribute in the stakeholders' comparison process.

Hypothesis: Consumers' perceptions and expectations of wine trails include place-based or geographic attributes.

Hypothesis: Member winery perceptions and expectations of wine trails include place-based or geographic attributes.

Public policy makers in most states have initiated state-level institutions for the explicit purpose of the economic development of the wine and grape industry. This allows us to empirically test if institutional norms, as indicated by the Foreman, Whetten, and Mackey (2012) framework, are attributes of the organizational identity of wine trails and thus the expectations of stakeholders, both external and internal to the organization. If so, they would be expressed as an attribute in the reputation "for something" by stakeholders.

Hypothesis: Consumers' perceptions and expectations of wine trails include institutional, historical, and social role attributes.

Hypothesis: Member winery perceptions and expectations of wine trails include institutional, historical and social role attributes.

Chapter 2 - Literature Review

Identity

The history of organizational and social identity research is founded upon the original research on individual identity – the self. From its origins in social psychology, the study of individual identity has informed marketing, organizational behavior, sociology, and the study of social movements.

The individual utility function is a foundational tool in economics. It is one of the tools or concepts economists use to understand individual preferences, behavior, and underlying motivations. Traditionally, the focus of utility functions is pecuniary-based individual motivations that surround goods, services and money. Recent writing in utility functions has focused on expanding the utility function to include non-pecuniary based motivations such as individual-based motivations including norms and identity (Akerlof & Kranton, 2010). These attributes enhance the standard utility function by recognizing that human behavior is driven, in part, by influences that are not individual characteristics but are based in social context.

Akerlof and Kranton assert that norms of behavior are a result of people's positions within social context. They further argue that identity-related characteristics such as individual social category assignment, its related social norms and ideals, and the utility that is gained or lost depending on an individual's actions are important enhancements to the traditional utility function.

Individual Identity

Identity has been central to psychology, political science, history, and sociology (Stryker & Burke, 2000). The writings of James (1890) and Mead (1934) on identity are the foundation for modern social science research on the subject.

For James, the reflections on the “real me” and “I,” as well as the introduction of multiple identities, set the stage for identity work in psychology (Gioia, 1998). Mead distinguished between “I” and the “generalized other” or “me” and argued that the differences were important in the understanding of individual identity and the nature of human consciousness. Mead’s “I” was a view of self-identity from the basis of the personal knowledge of one’s actions that are grounded in who one is as a subject. His “me” constitutes a social identity borne out of the view of self-identity and one’s role in society and the learned perspectives that comes from such social interactions (Owens et al., 2010). Burke (1969) would later build on Mead’s perspective and argue for an “interactionist” view of the self. Additional contributions by Mead included arguments that one’s ability to choose different courses of actions based upon the “I” and “me” perceptions indicated agentic human actions. This ability to choose is the basis of the social actor assumption of identity (Foreman & Whetten, 2012).

Refining and building upon the work of James and Mead, Goffman (1959), Erickson (1964, 1980), and Gergen (1985) worked to build operational definitions of identity.

Most of the early definitional work was done in psychology and sociology. Erickson's (1964) writings on the division of the self into the components of "I" and "me" extended James' work and set a strong foundation for future sociological work on identity and its definitional development (Owens et al., 2010).

Emphasis on the definitional work in the social area centered on the "me" aspect is focused on the social self-concept and the self-perception of social roles and interactions that form and maintain one's identity.² This work led to the development of a broader definition of identity as a relational and comparative concept developed through the interactions with others (Tajfel & Turner, 1985).

Burke (1969) and Mead (1934) argued that the self is interactionist in nature. Building on those beliefs, sociology scholars developed both role identity theory and social identity theory, which form the basis of the conceptual foundation for much of the research on identity (Foreman & Whetten, 2012).

In role identity theory, one's identity is based on the interactions of the many social roles that one assumes (Stryker, 1980). Identity is formed through the continual negotiations of numerous situational social interactions. These interactions create a hierarchically nested configuration of identities (Gecas & Burke, 1995).

² According to Owens et al (2010), role relationships, affiliations with social groups, identification with social categories or personal narratives all can help form individual identities and ultimately are responsible for one's social action.

In social identity theory, a portion of an individual's self-concept of identity is derived from his or her membership in social groups (Turner & Oakes, 1986). These socially based interactions define one's identity as the group's individual interactions answer the question: "Who am I?" (Turner, 1982). In essence, people bring meaning to and develop the pieces of their identity through social interactions with external groups (Foreman & Whetten, 2012). The construction of the essential characteristics of one's identity is continually affirmed through the continual selection of actions in response to group-individual interactions over time (Steele, 1988).

Baumeister (1998) argues that one's identity is defined by what it does for the self. This includes providing for basic human needs such as the need for assimilation and the need for uniqueness. Tajfel and Turner (1985) argue that distinctiveness is an important aspect of identity. Thus, while social interactions drive identity development through conforming to group expectations, each person also looks for distinctiveness as part of their own identity. This need for both assimilation and differentiation and the tension it creates in the individual's social identity is expressed by Brewer's (1991, 2003) "Principle of Optimal Distinctiveness." Brewer argues that individuals express a preference for social identities that have as much distinctive elements or characteristics as possible without being exclusive to the social groups. This social position is described by Abrams and Hogg (2012) as a mixture of both aspects (similarities and differences) and is core to an individual's identity. Erickson (1964) argues that one's identity not only

distinguishes oneself from others but also is composed of elements that are similar to groups and individuals that one wants to assimilate. This unique mix of elements or characteristics makes up a unique social identity (Pratt, 1998, 2001; Hogg & Terry, 2000). Tajfel (1982) argues that group identity is maintained by intergroup comparisons. These comparisons result in the unique mix of group identity characteristics that create a positive difference between themselves and the reference groups. This suggests that the identity constructs at the individual level are robust in nature and are a sound basis for identity constructs at the organizational level.

Organizational Identity

Organization theorists make the distinction between the constructs of individual and organizational identity. The seminal work on organizational identity is Albert and Whetten (1985). They established a framework for organizational identity built around organizational characteristics, which can be classified as core, enduring and distinctive. The core characteristics answer the question “Who are we?” and are the essence of the organization. Enduring characteristics are those features that stay the same, or nearly the same, over the course of time. Distinctive features differentiate the organization from other similar or comparable entities. In addition, Albert and Whetten proposed that organizations, like individuals, can have multiple identities.

Since Albert and Whetten’s seminal article, the identity lens has been used to explain many different organization processes including organizational strategy (Fiol & Huff, 1992), change management (Reger et al., 1994), organizational competitive advantage

(Fiol, 1991; Gioia & Thomas, 1996), organizational threat identification (Elsbach & Kramer, 1996), organizational change sense (Dutton & Dukerich, 1991) and levels of member commitment in a cooperative organizations (Foreman & Whetten, 2002)

The organizational level construct of identity has been used by scholars to distill the core characteristics of the organization and bring meaning to its processes, actions or choices (Baron, 2004; Whetten & Mackey, 2002). As they are at the individual level, the organization's actions as a social actor are also assumed to be deliberate and self-directed (King et al., 2010; Whetten & Mackey, 2002). Using social identity theory as the link between individual and organizational level (Whetten, Felin, & King, 2009; Whetten, 2006; King et al., 2010), researchers began to explore the interactions of individual level actions and behaviors with those of the organization (Mael & Ashforth, 1992; Barker & Tompkins, 1994; Whetten et al., 1992).

Foreman & Whetten (2002) extended previous theory by proposing that an identity comparison process operates at the organizational level as it does at the individual level. Additionally, they proposed that this multi-level comparative process affects member behavior and involves organizational attributes such as organization form, norms, and expectations from the organization's institutional environment. Using a sample of 2,000 Midwest cooperatives, Foreman & Whetten (2002) empirically tested the identity comparison process of individual members within a member cooperative. This extended previous research on identity by testing not only the comparative process of individual's

expectations and perceptions, but also using identity as a multiple level construct. In addition, they extended Albert and Whetten's model by exploring the process of response of individual members to the multiple identities at the organizational level.

Building upon the assumption of organizations as a social actor and its agentic properties, the identity of the organization has been linked to its reputation (Dukerich & Carter, 2000; Frombrun, 1996; Martins, 2005). The reputation construct is in part an assessment by stakeholders of the effectiveness of the organization's identity attributes that distinguish it from its rivals. However, much confusion exists in the literature on the nature of the reputation construct and its relation to similar constructs (Forman, Whetten, & Mackey, 2012).

In 2012, Forman, Whetten and Mackey extended the work of Foreman and Whetten (2002). They used organizational identity as a foundational construct and linked it to similar constructs such as organizational image, legitimacy, and reputation through the assumption of organizations as social actors. Their proposed model included an identity comparative process that extends stakeholder's expectations and perceptions of identity characteristics to the development of an organization's reputation "for something" and "for someone." The identity characteristics that shape the reputation of the organization include institutional norms, social categories, and structural roles, as well as the perceived images of the organization. The institutional norms in this model are an

extension of Foreman and Whetten's (2002) work, while the social categories and structural roles are grounded in both social and role identity theory respectively.

Geography or Place-Based Identity Characteristics

In Ruef's (2010) proposed entrepreneurial firm, the team is held together by one or more of four mechanisms: structure (roles and contracts), strong ties (networks and trust), homophily (shared characteristics), and identity (shared beliefs and goals). Ruef further asserted that the team's entrepreneurial activity can occur within a firm boundary or "envelope" created by a formal legal organization (corporation or cooperative) or without one in the case of a networked firm. Geography or place has been recognized as an important factor in the building of collective inter-firm and intra-firm networks based on both social and economic interactions (Johannison et al., 2002; Johannison et al., 1994; Johannison, 1998). Examples of these types of networks include industrial clusters such as Silicon Valley or research parks. These network-based business models depend on the interaction of the entrepreneurial team with the physical and social environment (Steyaert & Katz, 2004) more than the structure of the network itself. The geographically delimited nature of agriculture lends itself to team entrepreneurship using social and physical variables in the development of a network. Geography or place-based attributes also play a role in consumer choice. Hammer (2011) and Van Ittersum (2001) argued that the relationship between terroir and cultural identity influences both the enjoyment of food and the purchase decisions of consumers.

Chapter 3 - Conceptual Framework:

Introduction

What holds groups together as they pursue goals such as entrepreneurship? The literature on collective action has been based on a rational actor assumption (Olson, 1971; Ostrom, 1990). This assumption proposes that team members involved in collective entrepreneurship will only join and work together for as long a period as they feel that the rewards from the group effort are larger than those they could earn by themselves. If additional “mechanisms” to hold groups together exist, these insights could help us understand how groups work within the collective entrepreneurial firm and affect their ultimate success. Reuf (2010), in his conceptual model, focuses on four mechanisms that affect group processes in collective entrepreneurship. These mechanisms are organizational structure (roles and contracts), strong ties among members (networks and trust), homophily (shared characteristics), and shared identity. These four mechanisms are distinct. Each could be sufficient to hold a collective entrepreneurial venture together; None of them is necessary. Two or more of these mechanisms could hold the collective together. For example, a strong local network of agricultural producers might be held together by a formal structure, such as a cooperative, or by a shared identity embodied in a brand name (e.g. California raisins, Cabot cheese).

This research focuses on a specific mechanism- the shared organizational identity that serves as the basis for a geographically delimited wine trail. We believe that the network effects are taken for granted in the localized membership. We have no evidence that any of the Missouri Wine Trails use formal roles or contracts as a structural mechanism, nor

do we find any explicit hemophilic character such as common wine blends, production methods, or size. We are interested in specifically informing aspects of the identity mechanism of Ruef (2010) and its related construct reputation in an organizational collective. The proposed research objective answers questions and provides insight into the process, content, and form of identity and reputation of an agriculture organizational collective.

Conceptual Model Build Up

Following up from the identity discussion in chapter two, we highlight some of the relevant literature that is the basis for the conceptual model.

Albert and Whetten (1985) established a conceptual framework for the investigation of organizational identity. The framework is a key foundation for the interactions of the organization with its environment (see identity discussion in chapter two). The conceptual framework, built on the work of Erickson (1980), James (1890), and Mead (1934), established the validity of the organization as a social actor. Organizational identity has the following attributes:

1. Central or core – the identity has a feature that is perceived as “the essence of the organization: the criterion of claimed central character.”
2. Distinctive – the identity of the corporation has features that are distinct from other comparable organizations; and
3. Enduring –the identity has features that are consistent over time.

Building upon Albert and Whetten's (1985) conceptual framework, **Foreman and Whetten (2002)** empirically tested a conceptual model with an identity comparison process that operates at the organizational level in a similar manner as it does at the individual level. That is, the members of the organization compared their perceptions of the content of the organization's identity with their own expectations of what it "should be." Gaps and conflicts could arise between perceived and expected identity. They also proposed that the multilevel comparative process, based on the assumption of the organization as a social actor, affected member behavior. Expectations could involve attributes such as proper organizational form, behavioral norms, and other elements deemed legitimate in the institutional environment.

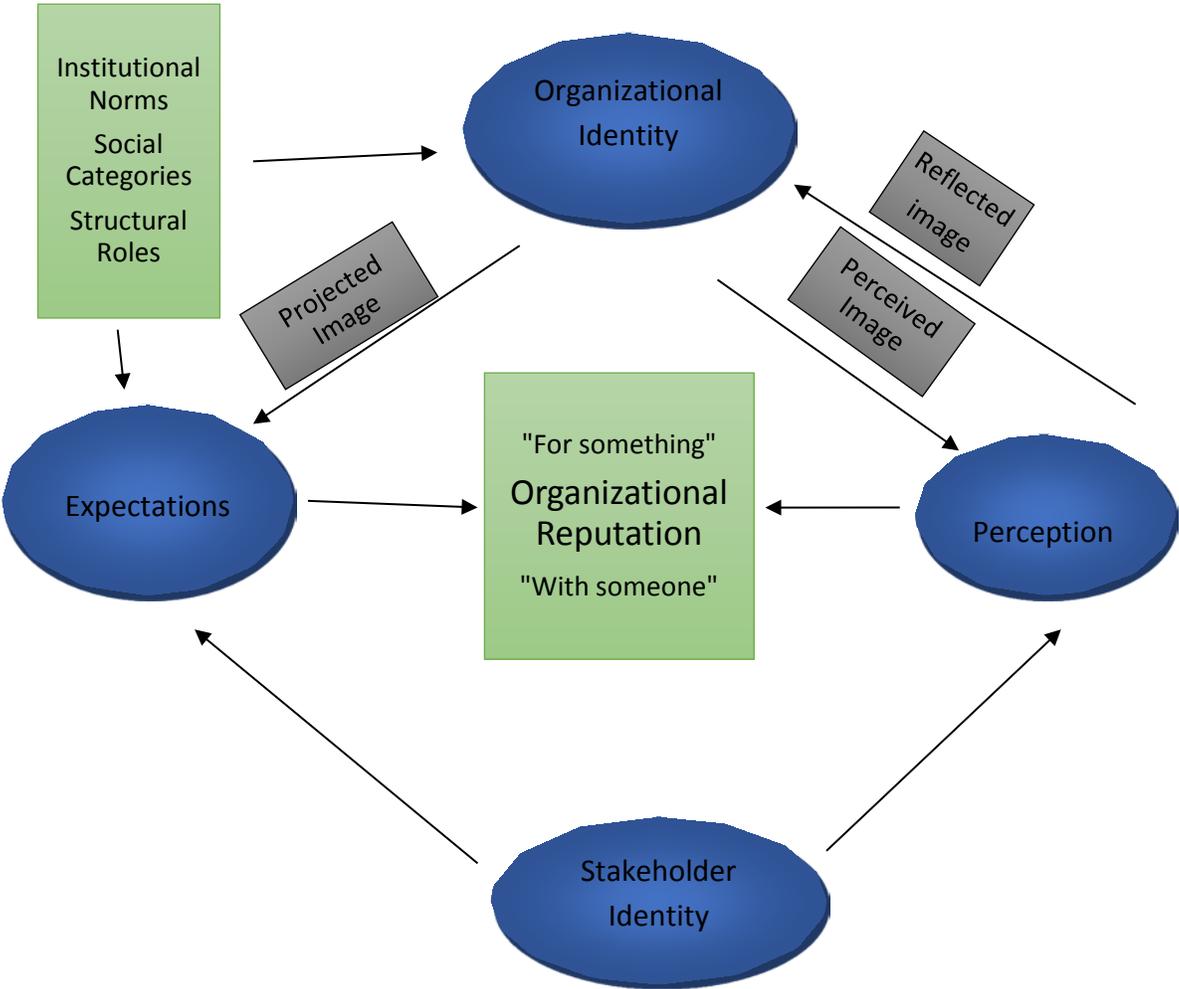
Extending Foreman and Whetten (2002)'s conceptual model, Foreman, Whetten, and Mackey (2012) proposed an organizational identity-based framework for reputation and identity comparisons by external and internal stakeholders. Their framework has as explicit outcomes, the comparison of the content of the identity-based reputation ("for something") by stakeholders in the reputation ("with someone"). They proposed a complex evaluative process that occurs around an organization's identity-based reputation. The process contains:

1. Comparisons between internal stakeholders' expectations for their organization's identity and their perceptions of its instantiation.
2. Comparisons between expectations and perceptions of the organizational identity held by external stakeholders.

- 3. Comparisons of the perceptions held by internal and external stakeholders i.e. the evolving reputation.

The diagram and relevant assumptions of the entire model are as follows. Although we will use only a few select comparative processes for our conceptual model, the assumptions behind the model are important for our base conceptual model.

Figure 1: Foreman, Whetten and Mackey Organizational Identity and Reputation Comparative Model



1. Reputation is an external manifestation of identity. It is a multi-level construct anchored in a social actor view of organizational identity. Thus, the organization's actions are fully intentional with external stakeholders holding the organization responsible for its actions.
2. Reputation serves as a means of recognition and representation of the collective knowledge that stakeholders have of the organization's character and activities. It provides external entities with an efficient mechanism for identifying and categorizing the organization.
3. The framework has as an explicit outcome - the comparison of the content of the identity-based reputation ("for something") by stakeholders in the reputation ("for someone").
4. The external and internal stakeholders' expectations are developed in part from the institutional norms, social categories, and structural roles associated with the organization.
5. "An organization's institutional form, its social groups and categorizations, and the set of functional roles it assumes, combine to determine the essence of stakeholder expectations." (Foreman, Whetten, & Mackey, 2012)
6. Individual level identities act as a "driver of salience" for organizational expectations and related attributes.

This model is unique in that it brings together reputational assessment by external stakeholders and identity development and assessment by internal stakeholders. The refinements we propose include:

- a. **Make internal and external evaluations explicit.** We are using the evaluative process for expectations and perceptions of wine trail identities (“for something”) of external and internal stakeholders as our conceptual model. We explicitly test the models of these distinct evaluations in chapter five.
- b. **Include place-based, historical, cultural, and institutional elements as content variables in identity** – Because wine trails are geographically delimited with the potential for embedded place-based, historical, and cultural elements as a result, we hypothesize that any common marketing effort will create elements of expectations of some or all of these content variables (“for something”) for stakeholders. Much in the same way that the grape varietal and wine “Norton” is expected to be at all Missouri wineries because it was designated the “state grape” by the Missouri state government and is widely publicized by media outlets, local and state wine and grape institutions, the local heritage, cultural and historical elements are also embedded in the in the area in which they occur.

While the overall model proposed by Foreman et al. (2012) is much larger and more complex than what is considered in this thesis, we use several of the evaluative processes outlined in the framework. These evaluative processes are at the core of our conceptual model and bring meaning to our research question.

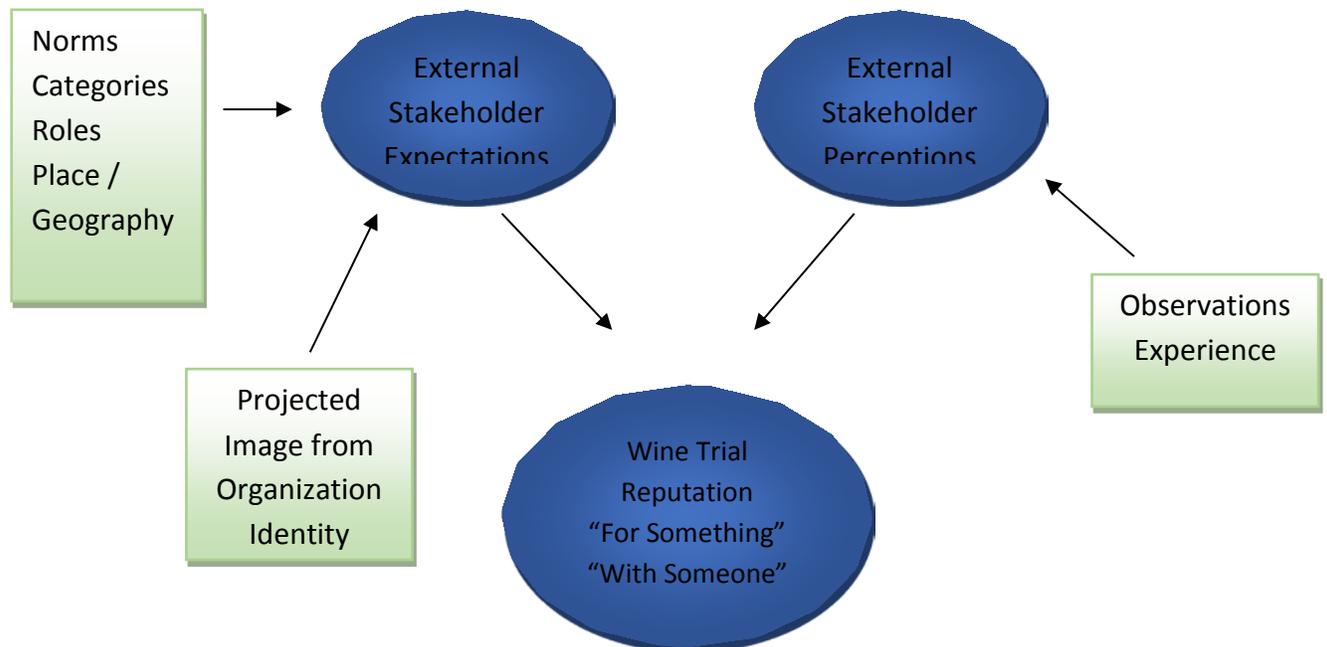
We divide the comparative process by relevant stakeholder and highlight the hypothesis pertaining to each. The division by stakeholder is important because of the different and separate role that each plays in the evaluative process and organizational identity.

According to Forman, Whetten, and Mackey (2012), the identity is created by internal

stakeholders and projected to external stakeholders through various mechanisms. The identity formation itself is influenced by internal stakeholders' own individual identities (see chapter two discussion on social identity theory) and associated social roles, categories, and forms. External stakeholders engage in a separate evaluative process from that of internal stakeholders based on identity-related expectations including similarity to other like organizations, its "effectiveness" based on past performance, and the ideal form of the organization (Foreman, Whetten, & Mackey, 2012).

External Stakeholders

**Figure 2 – External Stakeholder Evaluative Process
“For something” “With someone”**



One research goal is to test both external stakeholders' expectations and perceptions using wine trail organizations to determine if geography or place-based, institutional, social, or historical attributes are important to the identity content ("for something").

Consumer (External Stakeholder) Expectations

Given our conceptual model, we would expect the external stakeholder (consumer) to evaluate the organization based on identity-related performance, expectations, and their judgment of the organization's ability to meet those expectations in the future. These identity-based expectations are related to the ideal form of the organizational structure (expected form of wine trails), but perceptions are focused on the uniqueness that the organization uses to differentiate itself from other similar trails (i.e. the difference between the Route du Vin and the Hermann Wine Trail). The unique attributes are the basis of what and how external stakeholders desire the organization to look and behave (Foreman, Whetten and Mackey, 2012).

We would expect the content of the attributes to reflect the projected identity of the organization and be given salience by the individual self-identities of its stakeholders. Because wine trails are geographically delimited and made up of individual wineries, we would expect the content of the identity-related attributes to reflect the wine trail's region including any historical, cultural, or unique geographical features and traditions. In addition, we would anticipate that the wine products themselves would be part of the identity that is projected by that particular wine trail and expected by external stakeholders because of the wine trail member wineries' opportunities to share production techniques and because of the specific microclimates of most geographies and

regions. We expect these attributes to be the “for something” in the conceptual model as they are part of the uniqueness that is the basis of wine trail differentiation.

Consumer (External Stakeholder) Perceptions

As stated previously, external stakeholders’ judgment is an evaluation involving the perception of the organizations’ identity-related performance and expectations. Forman, Whetten, and Mackey (2012) proposed that the perceptions and their interpretations are influenced by stakeholder’s identity (see chapter two for a discussion of individual identity), and this naturally selects for the social environment attributes that are the most important to them. Given this complex evaluative process, we would expect stakeholders to develop perceptions of the wine trail organizations through their experience with the member wineries during wine trail events and also through their observations of the wine trail marketing and communications. We would presume that the individual stakeholders would give preference to and expect wine and wine-related experiences with geographically based attributes. Since wine consumers visiting wine trails are also tourists, we would expect historical and cultural attributes to be given salience, as well as tourism-related experiences.

Hypothesis 1: Consumers’ perceptions and expectations of wine trails include place-based or geographic attributes.

Hypothesis 2: Consumers’ perceptions and expectations of wine trails include institutional, historical and social norms and role attributes.

Additionally, because each external stakeholder is influenced by their own self-identity to bring salience to the attributes of the wine trail organization's attributes, we would hypothesize that there will be differences in the content of the expectations and perceptions of consumers. However, because self-identity is influenced by the groups that one associates with and the roles that one assumes, there will be similarity in some groups. For example, if a group is formed to visit wine trails to experience wine festivals or experience the tourism appeal of cultural or historical events that also involve wine trails, one would expect that the self-identity of the individual would be influenced by the group and thus affect its view of the important attributes of a wine trail.

Difference Between Internal and External Stakeholders

Both internal and external stakeholders rely upon the social actor assumption but operationalize it differently. Identity and identity-related constructs are multi-level (individual, organization, and organizational collective) and agentic in nature in that each level is purposeful in its actions and is responsible for them. This is the basis of judgment for the comparative process of Foreman, Whetten, and Mackey (2012). Self-identity also plays an important role in external and internal stakeholder expectations and perceptions of wine trail organizations. For external stakeholders, Foreman, Whetten, and Mackey (2012) proposed that expectations, perceptions and interpretations are influenced by stakeholder's self-identity, which provides salience to the attributes and content. For external stakeholders, the perception of the wine trail identity attributes are perceived from their own experiences with the wine trail, its images, and other organizational messages (brochures, media interviews, etc.). Their expectations, on the

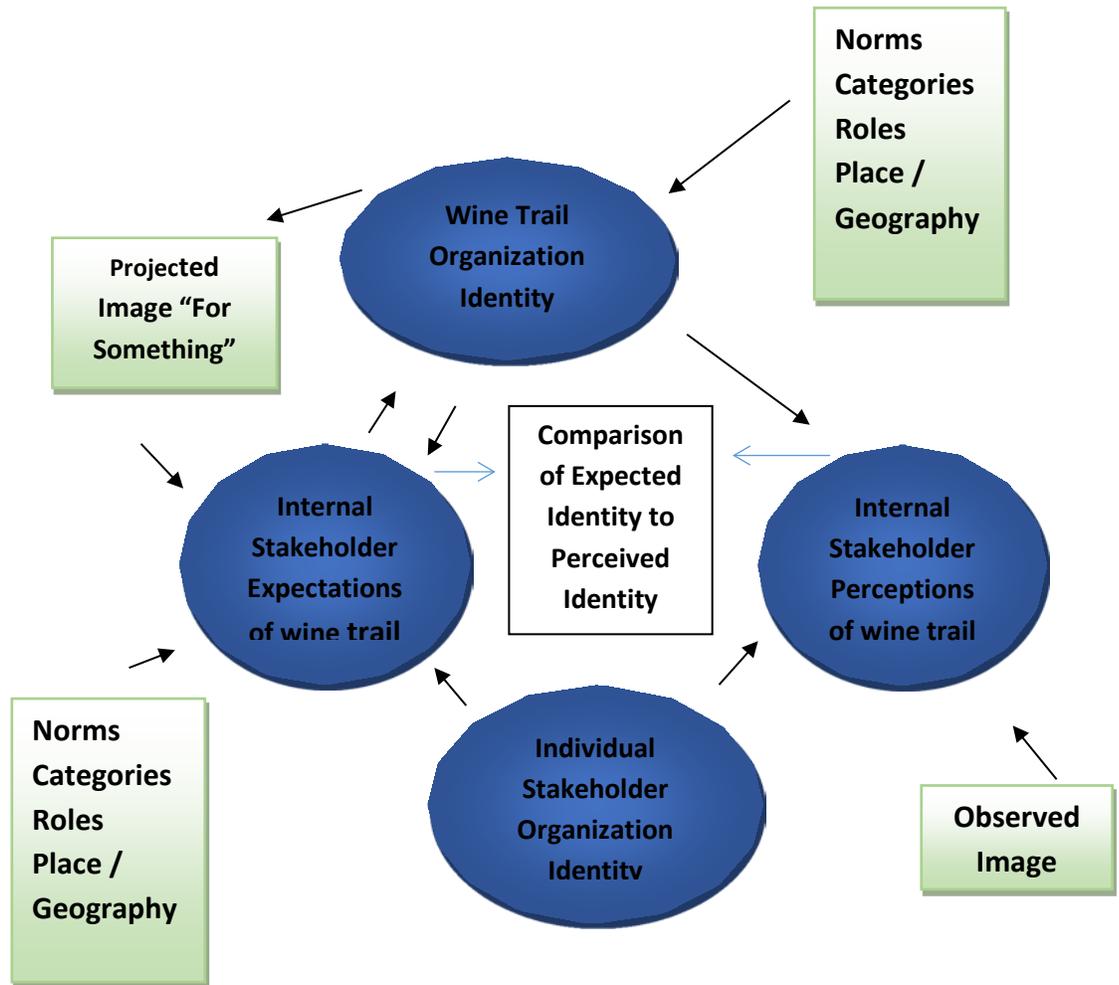
other hand, depend on the projected identity images, institutional norms, social categories, and structural roles associated with the wine trail.

For internal stakeholders, self-identity is operating behind the veil of the corporate envelope and is actively involved in not only the development of the wine trail organization's identity but is also used to bring salience to its attributes, both expected and perceived. This is critical as the internal stakeholder is continually comparing the perceived wine trail's identity attributes with their own view of the ideal form. Because they are behind the veil, we would expect that this comparative process should result in quicker congruence between internal stakeholder perceptions and expectations due to constant comparing and feedback to other member wineries than that of an external stakeholder.

The comparative process (Foreman & Whetten, 2002) is an explicit component of the conceptual model. While the "for something" and "with someone" act as qualifiers to the content of the external stakeholder's comparative process in their reputational assessment (Lang, Lee, & Dai, 2011), they also have meaning for the internal stakeholders' comparative processes.

Internal Stakeholders

Figure 3 – Internal Stakeholder Evaluative Process



Member Winery (Internal Stakeholder) Expectations

Given our conceptual model, we would expect internal stakeholders (member wineries) to evaluate the organization based on identity-related performance expectations and their judgment of the organization's ability to meet those expectations in the future. Foreman,

Whetten, and Mackey's (2012) framework proposes that the expectations of the organizational collective's attributes follow from self-identifying choices that the organizational collective makes. These choices include the form the organizational collective assumes, the groups it affiliates with and the roles that it takes. Many of these choices are influenced by stakeholder's self-identity, which has its roots in social identity theory (see chapter two for a discussion of the theory). The theory indicates that a stakeholder's identification with their organization is driven by an evaluation of the relative consistency between the individual's identity and the identity of the organization (Foreman, Whetten, & Mackey, 2012). From the standpoint of member wineries in a wine trail, we would expect to see similar comparisons made as internal stakeholders of the organizational collective. The ideal identity form of the trail would be in part determined from a winery member's own self-identity and would be expressed in the content of their expectations.

Given the difference between member wineries, it is unlikely that any two member wineries have identical self-identity views. However, because wine trails are geographically delimited, have similar climates for growing grapes, interact with similar state and local wine and grape institutions and have similar customers; we hypothesize that the member wineries within a region or wine trail would have some similar elements of their self-identities that reflect their specific place and related products. Thus, conceptually we would expect to see place-based elements, institutional norms, and similar wine varieties or styles, as well as elements of historical and cultural attributes in their expectations of their wine trail.

Member Winery (Internal Stakeholder) Perceptions

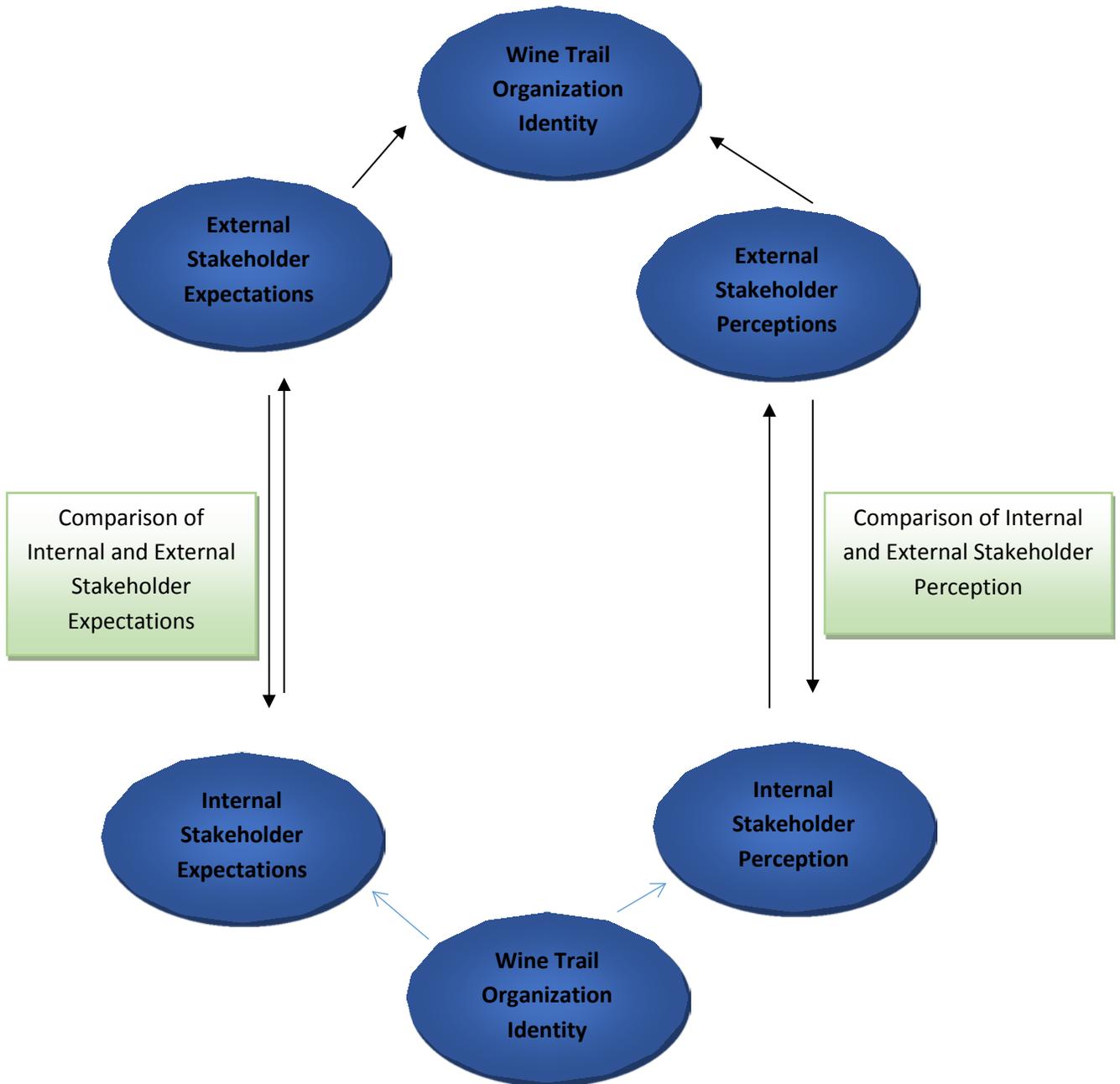
The evaluation model in Figure 3 shows that internal stakeholders form perceptions of the identity of the organization through observed images. The model further proposes that the attributes of the perceptions are given salience through a complex interaction involving the self-image of the stakeholder and the observed attributes of the organization. Through the comparative process with the attributes of the expectations of the stakeholders, judgments are made about congruence. Because internal stakeholders are wineries that are place-based and have network affiliations with other member wineries, we would expect the attributes of the perceptions of member wineries to include elements of place, geography, institutions, wine products, history, and culture.

Hypothesis 3: Member winery perceptions and expectations of wine trails include place-based or geographic attributes.

Hypothesis 4: Member winery perceptions and expectations of wine trails include institutional, historical, and social norms and role attributes.

Comparison of Internal and External Stakeholder Perceptions and Expectations

Figure 4 – Comparison of Stakeholders' Expectations and Perceptions



The uniqueness of the Foreman et al. (2012) framework is that it asserts that both internal and external stakeholders engage in a comparative process using expectations and perceptions of the organization's identity and reputation respectively. To this point, we have considered only the comparative processes of the internal and external stakeholders for our explicit conceptual model. One can also evaluate the congruence of the form of the expectations and perceptions held by both internal and external stakeholders.

Conceptually, we would expect differences between internal and external stakeholders in both expectations and perceptions because of the differences in stakeholders' self-identities and thus their views of the salient attributes of expectations and perceptions. Internal stakeholders, who are behind the corporate veil, are actively using both their network within the organizational collective and their self-identity to develop the organizational collective's identity while external stakeholders are actively evaluating the expectations and perceptions of the organizational collective's identity based on their own experiences with the wine trail, the perceived images, and other organization messages (brochures, media interviews, etc.).

To inform and validate the process in the framework, we can compare the attributes of both internal and external stakeholders' perceptions and expectations. Separately, we can also compare the projected image of the wine trail identity with the image perceived by the external stakeholders. The results should inform the process proposed in Foreman et al. (2012).

Hypothesis 5: The perceptions of internal and external stakeholders of the organizational form of wine trails are consistent.

Hypothesis 6: The expectations of internal and external stakeholders of the organizational form of wine trails are consistent.

Chapter 4 – Data Collection

We developed a plan to collect data from external stakeholders (consumers) and internal stakeholders (member wineries) of wine trail organizations to test the conceptual model.

Two related survey instruments were devised - one for the external stakeholders and one for the internal stakeholders. External stakeholders were asked to respond to a web-based survey in which they were asked to describe their expectations for a Missouri wine trail and their perceptions of one or two Missouri wine trails that they had visited in the past. In addition, we sent a web-based survey to the member wineries of the wine trails to collect data on their expectations of wine trails in general and their perceptions of their trail.

The specific steps in our plan to collect data were as follows:

1. Develop a draft survey instrument using validated scales from relevant literature, data from semi-structured interviews and industry experience.
2. From the draft survey instrument, develop the consumer survey using Survey Monkey.
3. From the draft survey instrument, develop the member winery survey
4. Pre-test the two survey instruments and associated transmittal letters with industry and winery professionals.
5. Obtain contact information for wine trail consumers from the Missouri Wine and Grape Board, using a sample drawn from their Wine Passport program.

6. Obtain contact information for wine trail member wineries from the Missouri Wine and Grape Board and survey all wine trail members.
7. Close the surveys, tabulate responses, and analyze data.

Develop a Survey Instrument

To develop the survey we used several sources of pertinent information from the wine trail members, the wine tourism literature, and industry professionals.

Wine Trail and Industry Professionals

After an initial review of the identity literature, we engaged Dr. Peter Foreman to do a series of semi-structured interviews of members of three Missouri wine trails to inform the design of the survey instrument.

Dr. Foreman was engaged for two reasons:

1. Because Peter Hofherr is an equity holder and Chief Executive Officer of the largest winery in Missouri and Chairman of the Missouri Wine and Grape Board, he was not present during the interviews so as to reduce respondent bias.
2. Dr. Foreman has considerable experience in doing identity-based research in complex organizations, including the design and execution of interview protocols.

The interviews were scheduled by Peter Hofherr and completed by Dr. Foreman after the fall 2012 grape harvest. Fourteen key subjects were identified by Peter Hofherr and the staff at the Missouri Wine and Grape Board. The subjects included four winery owners in each of three Missouri wine trails plus a senior staff member of the Missouri Wine and Grape Board and the executive director of Hermann Wine Trail. The three wine trails were purposively sampled to capture variance in range of wine trail maturity and

assumed development of their collective identity. Each trail chosen is distinctly different in age, geographic region of Missouri, and cultural and heritage associated with the region in which it operates. The three main issues of interest for the qualitative study were the content of the wine trail identity, the key factors affecting the development of a collective identity, and the rationale for engaging in collective action. The interview protocol was designed to elicit responses to open-ended questions. The transcript of the responses was then coded and analyzed using the software N*VIVO.

The trails sampled included:

The Hermann Wine Trail, which runs for 20 miles along the Missouri River between Hermann and New Haven, with six member wineries. It is the oldest established wine trail in Missouri.

Route du Vin, which was established in the old French region around Ste. Genevieve with six participating wineries.

The Northwest Missouri Wine Trail is spread out across three counties north and east of Kansas City. It was the newest wine trail at the time the research started (Kansas City Wine Trail was founded in the middle of this research project) and has seven members.

Qualitative Study Implications

The results and implications of the qualitative study were presented at an Academy of Management meeting (Foreman et al., 2013) and used to inform and develop our survey instrument. The following attributes were identified by Foreman et al. (2013) as important to the collective identity of the three wine trails.

1. Local wine production – identified as an identity requirement for wine trail members as it supported wine trail focus on the distinctiveness of their particular region.
2. Tasting room facilities – identified as critical because of the importance of having staff that can educate consumers on the non-traditional grapes and resulting wines that are grown and made in their regions.
3. Geographic proximity or wine trail boundaries – identified as important identity because of the geographically delimited area in which each of the wine trails operates.
4. Mutual trust and commitments – identified as important to the wine trails because of the critical importance of working together to be able to keep the organizational collective viable.
5. Wine produced from Missouri grapes – identified as an important identity attributes that created legitimacy for the wine trail.

Wine Tourism Literature

To develop the survey scales, we analyzed the literature that could inform the instrument design. This section describes the process and its results. In subsequent sections, we will combine the results of Dr. Foreman’s qualitative data collection, the results of the literature search, and suggestions from industry informants in scale development. In our literature search strategy we investigated relevant categories that could help us identify scales and attributes. Some of these included:

1. Identity-based research
2. Wine tourism literature
3. Wine reputation literature
4. Place-based literature

Of these, the wine tourism literature was the best source for informing survey attributes.

The following is a summary of the key journal articles that were analyzed and that contributed to the development of attributes and scales.

Table 1 - Wine Tourism Variables / Factors

Article	Design / Methodology / Approach	Factors / Variables/ Key Attributes of Wine Experience	Comments
Alant & Bruwer (2004) – Wine Tourism Behavior in the context of a Motivational Framework for Wine Regions and Cellar Doors	<p>Survey – purpose-designed, highly-structured, interactive questionnaire of 214 participants in 2 regions in South Australia</p> <p>Design is a combination of factor analytic method and qualitative research</p>	<p>Primary driver of motivation:</p> <p>Taste and to buy wine</p> <p><i>Other:</i></p> <p>Influences of geographic location</p> <p>Social context of wine tourism is relaxation and pleasure</p>	<p>Actual behavioral antecedents improve understanding of the motivational drivers</p> <p>First-time visitors and repeat visitors have different motivations</p>
Ali-Knight & Carlsen (2003) – An Exploration of the use of “Extraordinary” Experiences in Wine Tourism	A brief descriptive literature review of wine and experiential marketing	<p>Primary attributes of wine experience:</p> <p>Winery-staged experiences focused on education, engagement and entertainment</p>	

<p>Bruwer et al. (2012) – Consumption dynamics and demographics of Canadian wine consumers: Retailing insights from the tasting room channel</p>	<p>Purpose-designed highly structured questionnaire with close-ended and lasting 8 – 12 minutes. Questions are from literature review. Sampling frame – six tasting rooms within the Niagara Peninsula wine Region in Ontario, Canada. 659 respondents.</p>	<p>Primary drivers of tourism:</p> <p>Previous visits to wine region</p> <p>Winery-consumer relationship</p>	<p>Demographic (gender, age) focused research</p> <p>Preference mapping suggested</p>
<p>Bruwer (2002) – The importance and role of the winery cellar door in the Australian wine industry: Some perspectives</p>	<p>Descriptive</p>	<p>Primary attributes of wine experience:</p> <p>Sampling and buying wine are primary attributes</p> <p>Socializing, learning about wine, entertainment are secondary</p>	<p>Article for Australian & New Zealand Industry Publication</p>
<p>Bruwer (2003) – South African wine routes: some perspectives on the wine tourism industry’s structural dimensions and wine tourism product</p>	<p>Qualitative research – Interviews with 125 winery owners or representatives; Purpose was description of wine tourism product offering and the structural dimensions of the South African wine industry.</p>	<p>Primary attributes of wine experience:</p> <p>Ability to buy and taste wine</p> <p>Secondary factors:</p> <p>Difference of place</p> <p>Natural and cultural elements</p>	
<p>Brewer & Alant (2009) – The hedonic nature of wine tourism consumption: an experiential view</p>	<p>Random sample of 304 respondents from 12 wineries on the Paarl Wine Route in South Africa; self-administered, highly structured questionnaire, self-completed at each winery</p>	<p>Primary drivers of motivation:</p> <p>Region’s scenic beauty; friendly people and hospitality; overall ambience; diversity of wine estates are primary drivers of motivation</p>	<p>Uses experiential view of consumption to determine motivations of wine tourists</p>
<p>Hall & Macionis, (1998) – Wine tourism in Australia and New Zealand</p>	<p>Descriptive</p>	<p>Primary activities – wine-tasting and experiencing the attributes of a wine region</p>	

		Primary motives – vineyard, winery, wine festivals and wine show visits	
Dawson et al. (2011) – Place-based Marketing and Wine Tourism: Creating a Point of Difference and Economic Sustainability for Small Wineries	Qualitative, semi-structured, interviews with winery owners/ managers and tourism stakeholders in a case study format. South Island of New Zealand; 39 interviews in 2007 and 2010. Interviews were audio-recorded, transcribed verbatim, coded and categorized for analysis	Primary attributes: Place image used in marketing Collective reputation of region Wine quality is important Environmental asset – Physical attributes considered important in marketing Regional brand elements: Unique stories and heritage of region important Collective region reputation important	Stories highlight the human dimension of terroir Central Otago uses collective reputation to market place (region)
Zhang & Qiu (2011) – Research on the development of Wine Tourism Product based on the analysis of the wine tourist behavioral intentions	Development of a wine tourism product for Dynasty Winery based upon using wine tourism literature review of motivation factors as a framework	Primary driver of motivation: Wineries, surrounding natural environment, learning and education	
Sparks (2007) – Planning a wine tourism vacation? Factors that help to predict tourist behavioural intentions	Cross-sectional survey in Australia. Wine tourism attitudinal dimensions were identified and confirmed using exploratory and confirmatory factor analysis. Structural equation modeling was employed to predict tourism behavior. Questionnaire developed using focus groups and	Three unique dimensions of wine tourism found: Destination experience Personal development Core wine experience	Personal development: opportunity to feel enlightened, inspired <i>Destination attractiveness is similar to Getz and Brown's Cultural product</i>

	past wine tourism research.		
Charters & Ali-knight (2002) – Who is the Wine Tourist?	<p>Interviewer completed one-to-one site surveys as the data collection method.</p> <p>Interviews conducted at wineries in two different regions of Western Australia – Margaret River and the Swan Valley.</p> <p>A total of 368 consumers were surveyed. Interviews lasted between 15 and 20 minutes.</p> <p>Surveys were a mix of yes/no, open-ended and six point Likert scale</p>	<p>Primary factors of wine tourism:</p> <p>Winery tours, tasting and sales</p> <p>Winery events</p> <p>Cultural heritage</p> <p>Dining</p> <p>Hospitality</p> <p>Education</p>	Study done to determine segmentation of the wine. The factors identified are part of a proposed model of wine tourist.
Asero & Patti (2011) – Wine Tourism Experience and Consumer Behavior: The Case of Sicily	<p>Survey instrument developed from relevant literature and expanded to explore purchasing behavior. A total of 397 completed questionnaires were returned. The survey took place in Sicily during a large wine festival in May 2009. Tourist motivation portion used 5-point Likert-type scale. Survey items were from literature on wine tourism.</p>	<p>Features deemed important to wine tourists:</p> <p>Wine reputation</p> <p>Wine tasting / tasting courses</p> <p>Reputation of the wine region</p> <p>Naturalistic and cultural environment</p> <p>Relaxation</p> <p>Improve knowledge of wine</p>	Respondents were 59.7% male and 90% Sicilian.

<p>Getz & Brown (2006) – Critical success factors for wine tourism regions: a demand analysis</p>	<p>A convenience sample of 161 wine consumers in Calgary, Canada. Used factor analysis to identify underlying structure in the preferences. The questionnaire was developed in part through a focus group of wine consumers. After testing, all members of social wine club at a retail outlet were surveyed for confirmation.</p>	<p>Top features for wine tourism:</p> <ol style="list-style-type: none"> 1. Wineries are visitor-friendly 2. A lot to do and see in region 3. Attractive scenery 4. Winery staff knowledgeable about wine 5. Group tours of wineries are offered 	<p>Factor analysis results:</p> <ol style="list-style-type: none"> 1. Core wine product (4 features) 2. Core destination appeal (5 features) 3. The cultural product (3 features) 4. Variety (2 features) 5. Tourist-oriented (4 features)
<p>Williams & Kelly (2001) – Cultural Wine Tourists: Product Development Considerations for British Columbia’s Resident Wine Tourism Market</p>	<p>Secondary data from the BC Visitor Study was used to determine if resident wine tourists are distinct from other domestic visitors. BC Visitor Study data were collected via telephone interviews randomly selected from 11,000 BC households.</p> <p>Second phase of research an analysis of culture oriented wine tourists in BC was conducted.</p>	<p>Cultural tourists variables:</p> <ol style="list-style-type: none"> 1. Heritage and cultural dimensions of vineyards 2. Connections between local wines and regional cuisine 3. Boutique restaurants, gardens and vineyards; Recipes feature pairing of local food and wines 	<p>Difference between wine tourists and other tourists in British Columbia</p> <p>Travel Activity:</p> <ol style="list-style-type: none"> 1. Visit historical sites 2. Nightlife 3. Native indicant cultural sites 4. Sightseeing 5. Local festivals, concerts and fairs 6. Art galleries zoos gardens 7. Golfing 8. Shopping
<p>Thomas et al. (2010) – A Research Proposal to Explore the Factors Influencing Wine Tourist Satisfaction</p>	<p>Five focus group sessions each involving eight to 10 participants were used to select 124 items that were selected to represent constructs in the winescape scale. A review</p>	<p>Six winescape factors:</p> <ol style="list-style-type: none"> 1. Service staff 2. Layout 3. Setting 4. Food and wine 	<p>Scale development using a sample of 262 tertiary students from a university in Western Australia for perceptions of two regions in Western Australia.</p>

	<p>panel of five professionals from the wine and tourism industry helped narrow the list to 115 items - 262 tertiary students were surveyed from a university in Western Australia for their perceptions of two wine regions in Western Australia. A screening question was used to ascertain whether they had visited a wine region recently.</p>	<p>5.Non-wine related activities</p> <p>6.Cottage industries</p>	
<p>Kim et al. (2009)- Building a model of local food consumption on trips and holidays: A grounded theory approach</p>	<p>Grounded theory approach to obtain insight into the local food experiences through interviews with 20 individuals.</p>	<p>Cultural attractiveness of tourist destinations includes:</p> <p>Learning knowledge – learning about foreign cultures ,</p> <p>Local food experiences – local culture</p> <p>Escape from routine</p> <p>Health concern – local is better!</p> <p>Authentic experience</p> <p>Togetherness – family and friends</p> <p>Prestige</p> <p>Sensory appeal</p> <p>Physical environment (setting of restaurant)</p>	<p>Grounded theory approach using a qualitative study of local food experiences to build a theoretical model of local food consumption at a tourist destination.</p>
<p>Getz et al. (1999) - Critical Success Factors for Wine Tourism</p>	<p>Wine and tourism professionals at the First Australian Wine Tourism conference in Margaret River, Western Australia, and the wine tourism workshop in Washington State in the</p>	<p>Four areas of critical success factors were identified:</p> <p>1. Quality of the wine country experience including regional cuisine and of service provided to visitors. Wine country experiences include quality dining</p>	<p>Wine and tourism industry professionals were surveyed</p>

	Columbia Valley where 68 surveys from Australia and 30 from Washington State were obtained.	opportunities and other unique experiences 2. Winery Appeal – attractive, well-designed wineries, good sign posting, special events / functions, good service, friendly staff 3. Strong tourism marketing organization is essential – co-operation between tourism and wine industry bodies is needed for wine country appeal	
Quadri-Felitti & Fiore (2012) – Experience economy constructs as a framework for understanding wine tourism	Theoretical model developed from existing literature	The 4Es of the experience economy can be used to understand how to enhance the wine tourism value chain 1. Entertainment 2. Educational 3. Esthetics 4. Escapist	Extensive literature review of wine tourism
Dawson et al. (2011) Wine tourism: Winery visitation in the wine appellations of Ontario	Standard questionnaire developed from a literature review. Sample includes 583 completed surveys from visitors to seven wineries in the Niagara Peninsula during August and September 2005 and six wineries in both Price Edward County and South Western Ontario during July and August 2007 and 2008.	Reasons for visiting region: Visiting wineries – for tours; purchasing wine from a winery retail store and visiting wineries were top Potential attractions at winery that would attract more visitors: Tasting events; winery tours packaged with a fine dining restaurant; tasting events for new vintage releases; tour packages with winery tours and overnight stays in that order of rank	Survey motivation: 1. Respondent and demographic characteristics 2. Trip and winery visit characteristics 3. Attitudinal and motivational related aspects of winery visits 4. Wine consumption and consumer purchase behavior
Cohen & Ben-Nun (2009) – The important dimensions of wine tourism experience from potential	A survey was developed using semi-structured	Primary attributes: 1. The winery offers wine	

<p>visitors perception</p>	<p>interviews of 28 potential visitors. The survey was tested with a small number of interviewees. A list of 42 attributes related to wineries and wine regions were included in the questionnaire based on literature review. Participants rated each attribute's importance using a Likert-type 1-5 scale. The data was collected in Israel between December 2006 and February 2007 on trains leaving main train stations in Israel. The number of completed questionnaires was 373.</p>	<p>tasting</p> <ol style="list-style-type: none"> 2. I'll receive information about the wine-making 3. There is a special atmosphere in the winery 4. There is a cellar door tour 5. The winery staff is polite and pleasant <p>Factor analysis identified the latent variables:</p> <ol style="list-style-type: none"> 1. Winery atmosphere (12 features) 2. Cultural activities (6 features) 3. Family activities (4 features) 	
<p>Gross & Brown (2006) –Tourism experiences in a lifestyle destination setting: The roles of involvement and place attachment</p>	<p>Survey was conducted in five regions of south Australia. Exploratory factor analysis was used to investigate the dimensionality of scales designed to measure tourists' involvement in tourism experiences, place attachment, and elements of lifestyle tourism. Questionnaire was designed consisting</p>	<p>Results of place in tourism experience:</p> <p>Place attachment plays a marginal role in the tourism experience</p> <p>At 2.79, the mean level for place attachment was below the neutral level of 3 on the Likert scale.</p>	<p>Table 3 gives the mean levels of place attachment reported in leisure research studies.</p>

	<p>of CIP multi item scales using a five point Likert-type response format (1 = strongly disagree to 5=strongly agree): 196 complete survey forms were received with 189 deemed usable. Consumer involvement construct (5 items); centrality (10 items), and self-expression (5 items); Place attachment construct: place identity (4 items) and place dependence (4 items)</p>		
<p>Marzo-Navarro & Pedraja-Iglesias (2012) – Critical factors of wine tourism: incentives and barriers from the potential tourists perspective</p>	<p>Survey instrument developed from review of literature; 27 items were used in study; variables were measured using 11 point scales from 0 (totally disagree) to 10 (totally agree). 194 valid questionnaires from potential wine tourists from the Aragon (Spain) region. Exploratory factor analysis was performed; Principal Axis Factoring, Varimax rotation with Kaiser normalization was applied to obtain five factors. A first-order Confirmatory Factor Analysis Model with five</p>	<p>Primary factors of wine tourism:</p> <p>Five factors explain 74.6 percent of the variance:</p> <ol style="list-style-type: none"> 1. Winery services 2. Extra activities 3. Core destination appeal 4. Touristic development 5. cultural product 	<p>Table 1 gives summary of <i>critical factors for wine tourism</i> from Brown et al. (2006); Cohen and Ben-Nun (2009); Galloway et al. (2008); Getz and Brown (2009) and Sparks (2007)</p>

	dimensions was run with a correlation matrix obtained.		
Pikkemaat et al. (2009) The Staging of Experiences in Wine Tourism	Surveys of wine tourists vacationing in hotels in five destinations along the South Tyrolean Wine route in Italy were surveyed. The sample size is 38. The questionnaires were developed based upon a literature review.	<p>Primary dimensions in wine tourism:</p> <p>The expectations of the dimensions of experiences in products and activities on a route were identified as:</p> <ol style="list-style-type: none"> 1. Entertainment 2. Education 3. Escape 4. Aesthetics <p>The order of importance was found to be: Aesthetics; Entertainment; Education and Escape</p>	<p>Small Study</p> <p>Importance of information and signage of wine route identified as most important items; a wine dominated landscape is listed second followed by guided wine tours in vineyards with wine tasting and participation in wine production (escape)</p>

Given the results of the literature search and the semi-structured interviews of winery members, we categorized the pool of items by subscale. Emphasis in the selection process was given to the results that used exploratory factor analysis (Getz & Brown, 2006; Marzo-Navarro & Pedraja-Iglesias, 2012; and Sparks, 2007) and confirmatory factor analysis (Marzo-Navarro & Pedraja-Iglesias, 2012; and Sparks, 2007) because of the statistical significance of their results confirmed the validity of their survey and insured that the items share a common cause and thus constitute a scale (Devellis, 2012). Additional literature influenced the final selection decision as to category and item but was not relied upon. Together, the scale was considered adequate to inform the level of specificity needed to relate to the underlying latent variables (Ajzen & Fishbein, 1980).

The initial pool of items and their sources are noted below by subscale. The subscales chosen were designed to cover a range of issues relating to wine tourism including behavioral, institutional, core wine product, and geographically specific themes.

**Table 2 - Survey Subscales, Items and Sources
(Selected attributes are in bold)**

Institutional – Foreman et al. (2013)

Have common standards for its wines

Have wines that reflect its region (Getz & Brown, 2006; Dawson et al., 2011; Williams & Kelly, 2001)

Have wineries that use Missouri Grapes (Foreman et al., 2013)

Have wine styles that I expect from a Missouri winery (Foreman et al., 2013)

Provide easy access to information about Missouri Wine (Getz & Brown, 2006)

Have wine trails in the region well signposted (Getz & Brown, 2006); (Pikkemaat et al., 2009)

Have wineries that are in close proximity (Foreman et al., 2013)

Core Wine Product (Getz & Brown, 2006; Foreman et al. 2013; Sparks, 2007)

Have winery staff that is knowledgeable about wine (Getz & Brown, 2006; Getz et al. 1999; Ali-Knight & Carlsen, 2003)

Have wine festivals (Getz & Brown, 2006; Hall & Macionis, 1998)

Have a large number of wineries to visit (Getz & Brown, 2006)

Have wineries that I am familiar with (Getz & Brown, 2006; Bruwer et al. (2012)

Have opportunities to talk with winemaker and wine staff (Sparks, 2007)

Have wine-tasting opportunities (Sparks, 2007; Alant & Bruwer, 2004; Bruwer, 2002, 2003; Hall & Macionis, 1998; Hall et al., 2000)

Have excellent food-tasting opportunities (Sparks, 2007)

Have opportunities to purchase wine at a reasonable price (Sparks, 2007)

Cultural / Historical - Core Cultural Product (Getz & Brown, 2006; Foreman et al., 2013; Hall et al., 2000; Williams & Kelly, 2001)

Have unique accommodations with regional character (Getz & Brown, 2006)

Have traditional wine villages (Getz & Brown, 2006)
 Have fine dining and gourmet restaurants (Getz & Brown, 2006)
Have regional wines that are famous (Getz & Brown, 2006)
Have attractive scenery (Getz & Brown, 2006; Alant & Bruwer, 2004; Brewer & Alant, 2009)
Have distinct heritage and cultural dimensions of winescape (Williams & Kelly, 2001; Marzo-Navarro & Pedraja-Iglesias, 2012)
Reflect the ethnic culture of its region (Kim et al., 2009);
 Have regional non-wine related cottage industries (Thomas et al., 2010)
Have local art and craft for sale (Getz & Brown, 2006)

Social Norms – Tourist-Oriented (Getz & Brown, 2006; Foreman et al., 2013, Sparks, 2007)

Be popular with wine tourists like me (Getz & Brown, 2006)
Have a large number of wineries to visit (Getz & Brown, 2006)
Have regional wines that are famous (Getz & Brown, 2006)
 Have group tours of wineries (Getz & Brown, 2006)
Have recognition with friends / family that have visited the region (Getz & Brown, 2006); (Sparks, 2007)
 Be popular with my friends / family (Sparks, 2007)
 Be recommended by friends / family (Sparks, 2007)
Have food and wine activities (Sparks, 2007)
 Servicescape; (Marzo-Navarro & Pedraja-Iglesias, 2012)
Have wineries that are visitor friendly (Getz & Brown, 2006; Bruwer et al., 2012)

The selected items by subscales from the selection process are as follows:

Table 3 -Selected Scale, Subscales and Items

Institutional Sub-scale and Items:

have common standards for its wines
have wineries that use Missouri grapes
have the wine styles that I expect from a Missouri winery
provide easy access to information about Missouri grapes and wine
have wines that reflect the region
be well signposted
have wineries that are in close proximity to each other

Core Wine Product Sub-scale and Items:

have a large number of wineries to visit
have wineries that I am familiar with
have wine-tasting opportunities
have excellent food-tasting opportunities
have winery staff that is knowledgeable about wine
have wine festivals

Cultural/Historical/Place-based Sub-scale and Items:

have regional wines that are famous
have wineries and vineyards with distinct heritage and cultural dimensions
reflect the ethnic culture of its region
have local art and crafts for sale
have attractive scenery including vineyards

Social Norms Sub-scale and Items:

be popular with wine tourists like me
have recognition with friends / family that have visited the region
have food and wine activities
be visitor-friendly

External and Internal Stakeholders' Scales:

Our research objectives included the testing of the expectations and perceptions of both internal and external stakeholders. Because we are using a comparative process to test for the content of the attributes of the identity of stakeholders of the organizational collective, we chose to use the same scales for the external and internal stakeholders to establish a common foundation for comparison. In addition, our research objectives include a separate comparison process of the content/form of the expectations and perceptions for both internal and external stakeholders. For example, the content/form of the expectations of internal stakeholders will be compared with the content/form of the

expectations of external stakeholders to determine congruency of form. To make this possible, the survey scales for internal and external stakeholders as well as expectations and perceptions must be the same. Otherwise, the basis for comparison would be inconsistent, and the results would have no meaning.

To prepare the survey instruments, the selected items listed above are randomly mixed. To avoid affirmation or agreement bias, five of the items are reverse-coded (Devellis, 2012). For a measurement scale, we used a Likert scale. Likert scales are commonly used in instrument measuring beliefs, opinions, and attitudes (Devellis, 2012). To provide enough variability without overwhelming the respondent, we chose a five-response Likert scale. The five-response format also provides a format for strong (“Strongly Disagree” or “Strongly Agree”), mild (“Slightly Disagree” or “Slightly Agree”) and neutral (“neutral”) responses from the declarative statements of the items. The nature of these responses is important in order to elicit a variety of different opinions to provide the needed variability in our data.

The form of the survey was constructed as follows. Note that this particular instrument is designed to elicit expectations, not perceptions.

Table 4 - Stakeholder Expectations Scale

Question	A wine trail should....	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
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1	have recognition with friends/family that have visited the region	1	2	3	4	5
2	have wine-tasting opportunities	1	2	3	4	5
3	be well signposted	1	2	3	4	5
4	have excellent food-tasting opportunities	1	2	3	4	5
5	have attractive scenery including vineyards	1	2	3	4	5
6	be visitor-friendly	1	2	3	4	5
7	not have common standards for its wines	1	2	3	4	5
8	not have local art and crafts for sale	1	2	3	4	5
9	not have wineries that I am familiar with	1	2	3	4	5
10	have wineries that are in close proximity to each other	1	2	3	4	5
11	provide easy access to information about Missouri grapes and wines	1	2	3	4	5

12	have winery staff that is knowledgeable about wine	1	2	3	4	5
13	have wines that reflect the region	1	2	3	4	5
14	have a large number of wineries to visit	1	2	3	4	5
15	have wineries and vineyards with distinct heritage and cultural dimensions	1	2	3	4	5
16	have wineries that use Missouri grapes	1	2	3	4	5
17	not have food and wine activities	1	2	3	4	5
18	have wine festivals	1	2	3	4	5
19	be popular with the wine tourists like me	1	2	3	4	5
20	have regional wines that are famous	1	2	3	4	5

21	have the wine styles that I expect from a Missouri winery	1	2	3	4	5
22	not reflect the ethnic culture of its region	1	2	3	4	5

External Stakeholders (Consumers) Survey Form

For the external stakeholders's (consumers) survey form, the developed scale is used for both eliciting perceptions and expectations. To understand what expectations consumers have for wine trails, the scales were worded as presented in Table 4. The respondent was instructed to identify up to two familiar wine trails and rate their level of agreement or disagreement with the previously developed scale. For a review of the complete external stakeholder survey, please see Appendix 6. Respondents were asked to select and rate the trails one at a time, and the wine trail choices included:

Hermann

Missouri Weinstrasse

Missouri River

Ozark Mountain

Route Du Vin

The Aux Arcs Wine Road

The North West Missouri Wine Trail

Mississippi River Hills

Additionally, the respondents were given the opportunity to respond that they were not familiar with any of the trails.

Internal Stakeholders (Member Winery) Survey Form

To be consistent with the external stakeholders' survey, the same scale was used for both internal stakeholders' expectations and perceptions. For member winery expectations, the scale is used as presented in Table 4. See Appendix 6 for complete winery member survey. For the member wineries' perceptions portion of the survey, the winery was asked to identify which wine trail includes its location. Thus, as with the external stakeholders' perceptions, the responses are trail-specific and include the same wine trail choices:

Hermann

Missouri Weinstrasse

Missouri River

Ozark Mountain

Route Du Vin

The Aux Arcs Wine Road

The North West Missouri Wine Trail

Mississippi River Hills

Transmittal Letter:

Both external and internal stakeholders' survey instruments included a cover letter from James Anderson, the Executive Director of the Missouri Wine and Grape Program and

Dr. Randy Westgren, the holder of the Al and Mary Agnes McQuinn Chair of Entrepreneurship at the University of Missouri (attached in Appendix 8).

The letter is designed to increase consumer response rate and reduce respondent bias. Because Peter Hofherr is an equity holder and Chief Executive Officer of the largest winery in Missouri and Chairman of the Missouri Wine and Grape Board, it was felt a transmittal letter from him to stakeholders might bias respondents. Members of the Missouri Wine and Grape Board's staff and a group of industry members tested the surveys, and their feedback was incorporated into the final survey design. The survey in its entirety is available in Appendix 6.

External Stakeholders (Consumers) – Survey Population and Source

For external stakeholders, permission was granted to utilize the membership list of the Missouri Wine and Grape Board's Wine Passport Program as of January 2, 2013. This list is made up of 12,177 consumer members who have visited Missouri wineries as of January 2, 2013.

Wine Passport Program

Specific details of the Missouri Wine and Grape Board's Wine Passport Program:

- The program started in February 2011.
- As of January 1, 2013, the program included more than 12,177 consumers from 45 states.

- Consumers obtain a passport from a winery or through an online request to the Wine and Grape Board.
- Upon visiting a winery:
 - Consumers request to have their passport stamped.
 - Consumers choose a stamp shape. Each winery offers a couple of stamp shape choices. For example, a consumer might be given a choice of a stamp with a wine bottle or a grape cluster.
 - Upon choosing the shape of the stamp, consumers have their passport stamped with not only a shape but also a unique numerical code. By matching up the winery, the code and the stamp shape, the program insures that the customer actually visited the winery.
- Consumers establish an account online by accessing the program's website, which is housed on the Missouri Wine and Grape Board's server.
- To establish an account, the consumer must provide home and email address.
- Consumers enter the shape, related code and qualitative comments, if warranted, from their winery visit in their account on the Missouri Wine and Grape Board's website.
- The date of the consumers' recording of each winery visit is captured by the program.
- Consumers receive increasingly valuable rewards for reaching higher levels of activity measured by the number of visits. The levels include:
 - Level 1: 1 to 4 visits

- Level 2: 8 visits
- Level 3: 12 visits
- Level 4: 20 visits
- Level 5: 40 visits

Sample and Response

A sample of 2,764 was drawn from the population of 12,177 Winery Passport Holders by the staff of the Missouri Wine and Grape Board. Of the 2,764 email invitations to participate sent out via Survey Monkey, 694 responded for a response rate of 25.1%. Additionally, seven opted out, and 106 email invitations to participate bounced. A review of the responses indicated no apparent biases with respect to their location. Of the 694 responses received from consumers, the breakdown of the perceptions by trail is as follows:

Table 5 - Consumer Perception Responses by Trail			
Trail	First Trail	Second Trail	Total Perceptions
Hermann	305	103	408
Missouri Weinstrasse	118	95	213
Missouri River	38	32	70
Ozark Mountain	22	18	40
Route Du Vin	81	54	135
The Aux Arcs Wine Road	9	3	12
The NWMO	53	25	78
Mississippi River Hills	26	10	36
Not familiar with any of the wine trails	21	265	N/M
Skipped Question	21	89	N/M
Total	694	694	992

Perceptions of Wine Trails

Of the 694 responses received, there are 652 valid responses to the first wine trail perception section with 21 skipping the section and 21 answering that they not familiar with any of the wine trails. Additionally, 340 respondents identified and answered questions regarding the second wine trail. Thus, in total, there were 992 total responses on the perceptions of wine trails.

Expectations of Wine Trails

Although 694 responses were received from consumers regarding their wine trail expectations, no one question received 694 responses. The question with the most answers received 690, and the one with the least received 672. After analyzing the data and eliminating responses that were missing a majority of the answers, a total of 676 cases were determined viable for analysis. Then, the responses with missing values were reviewed to determine if the missing values were random. After determining they were random, the missing values were replaced by using the average for all consumer respondents for that particular variable (see Byrne, 2010 for a discussion on missing data).

Internal Stakeholders (Member Wineries) – Survey Population and Source

For internal stakeholder testing, we utilized a list of Missouri wineries provided by the Missouri Wine and Grape Board as of January 1, 2013. For wine trail member wineries, we utilized contact information from a list of wine trails and their Missouri winery membership provided by the Missouri Wine and Grape Board for our internet based survey instrument.

Wine Trail Members' Responses

According to the Missouri Wine and Grape Board, Missouri has nine wine trails with 55 member wineries. Of the 55 member wineries, two wineries on the Missouri Weinstrasse and two wineries on the Missouri River Wine Trail are owned by the same owners, so the total member count is 53 for research purposes. The member wineries were sent the same expectations and perceptions survey as consumers, except they were asked about their perceptions with respect to the wine trail in which their winery participates. The surveys were sent via email through Survey Monkey, an online survey company, with an invitation to participate letter from James Anderson, the Executive Director of the Wine and Grape Board and Dr. Randy Westgren. Of the 53 surveys sent, 31 responses were received for a total response rate of 58.49%.

Table 6 - Member Responses by Trail

Trail	Trail	Total Members	Trail Coverage
Hermann	5	6	83.3%
Missouri Weinstrasse	3	3	100%
Missouri River	4	5	80%
Ozark Mountain	2	8	25%
Route du Vin	5	6	83.3%
The Aux Arcs Wine Road	2	3	66.7%
The NWMO	5	8	62.5%
Mississippi River Hills	2	6	33.3%
Kansas City	3	8	37.5%
Skipped Question	0	0	0%
Total	31	53	58.49%

By the time the survey was emailed to member wineries in late summer, a ninth wine trail, Kansas City, had been formed and was functioning. So it was included in the member surveys but not in the consumers because of timing.

Institutional Review Board Approval – please refer to the letter of approval for information on data and respondent confidentiality and terms of the research in Appendix 7.

Data Preparation

The survey results from Survey Monkey were downloaded into an Excel Spreadsheet and visually inspected for gaps and omissions in survey responses. The data was then loaded into SPSS software where gaps and skips were replaced with the means. Then the negative questions were reverse coded so that all responses were positive.

Chapter 5 – Model Testing

In this chapter, we empirically test the data of external and internal stakeholders' perceptions and expectations to determine the content of the identity and identity-based constructs. In addition, we compare the content and form of the expectations and perceptions of both internal and external stakeholders to determine if both stakeholders have the same expectations and perceptions of content of wine trail organization attributes. We will first discuss the external and internal stakeholder expectations and perceptions as well as the comparison of stakeholder expectations and perceptions before reporting on our empirical analysis.

External Stakeholders' (Consumers) Expectations

One of our research objectives is to empirically estimate the identity content of external stakeholders' expectations of wine trails. This will determine which, if any, attributes – including geography or place-based, institutional, social and historical – are important to the organization's identity. To do this, we measured external stakeholders' opinions with a survey instrument that was developed, in part, from validated subscales with items from the literature, member wineries and industry interviews (see chapter four for a detailed explanation of the scale development). The items in the subscales contained declarative statements such as “have wineries and vineyards with distinct heritage and cultural dimensions” and “have wineries that use Missouri grapes” (see chapter four for a complete list of scales and items).

Because wine trails are geographically delimited, we expected the embedded attributes (historical, cultural or unique geographical features and traditions) of the region to be

included in the identity content of the wine trail organization (see chapter three for a full explanation of the conceptual model of stakeholder expectations). We anticipated that the identity content of the attributes would be determined by external stakeholders' perception of the wine trail organization and given salience by their own individual self-identity.

External Stakeholders' (Consumers) Perceptions

For external stakeholders, one of our research objectives is to empirically estimate if their perceptions of a wine trail organization's identity contain place-based, geographic, institutional, and historical and role content attributes. As indicated in chapter three's conceptual model, these content attributes are expected to be a part of the identity-based evaluation process (see chapter three for a more detailed explanation of the evaluation process). This process involves the comparison of the perception of the organization's identity-related performance as projected through images, organizational messages and consumer experiences to the ideal attributes of the organization as given salience by the individual self-identity of the consumer.

Internal Stakeholders' (Member Wineries) Expectations

We estimated the content of the attributes of the member wineries' expectations of a Missouri wine trail. This is the expected ideal content of the attributes of what a wine trail organization's identity should be in the opinion of the internal stakeholder.

Conceptually, we expected that the member wineries would evaluate the wine trail based partly on the ideal identity and its attributes and compare it to their perception of its

current form (see chapter three for a full explanation of the comparative process of internal stakeholders).

Organizational identity is built upon such choices as the form of the organization, the groups with which it affiliates and the roles it takes. Each individual member winery's self-identity gives salience to their individual expectations of the content of attributes of the wine trail organization's identity (see chapter two for a full discussion of individual and organizational identity development). We expect the identity attributes to contain place-based, geographic, institutional, historical and role-based attributes given the geographically delimited nature of wine trails.

While it is unlikely that any two winery members have the same self-identity, we would expect member wineries within a region or wine trail to have some similar content of attributes in their own self-identity because the wine trails are geographically delimited, have similar climates for growing grapes, interact with similar state and local wine and grape institutions and have similar customers. For these reasons, they should expect some similar content of the organizational collective.

To test for the expected identity attributes of the organizational collective of each winery member, we developed a self-administered survey instrument using validated scales, semi-structured interviews with wine trail members and industry experts (see chapter four for a more detailed explanation of scales, subscales and item development).

Internal Stakeholders' (Member Wineries) Perceptions

For our research objective, we estimated the identity content of attributes in the perceptions of internal stakeholders (member wineries) for the Missouri wine trail organization to which they belong. As discussed in chapter three, the comparative process used by internal stakeholders involves a complex interaction of the observed identity of the organizational collective and the internal stakeholder's expectations of its identity. The content of the organizational collective's identity is determined by the stakeholders from observed images, messages, and other actions of the wine trail. The self-identity of each wine trail member gives salience to the attributes of the perceptions. We would expect the self-identities of the wine trail members to be different and thus, the perceptions to differ as well. At the same time, the content of the perceptions should have some similar content given the geographically delimited nature of the wine trail.

To test for the identity attributes in the perception of the organizational collective by each member winery, we developed a self-administered survey instrument using validated scales, semi-structured interviews with wine trail members and industry experts (see chapter four for a more detailed explanation of scales, subscales and item development).

Comparison of Expectations of External and Internal Stakeholders

Given the empirical estimations of the identity content attributes of both external and internal stakeholder expectations, we can draw indications of the congruency of the expected identity form and content of the wine trail organization by stakeholders. The conceptual foundation for this comparison is contained in the uniqueness of the Foreman et al. (2012) framework, which proposes that both internal and external stakeholders engage in a comparative process using, in part, the expectations of the organizational

collective's identity (see chapter three for a more detailed explanation of the 2012 Foreman et al. framework).

In our scale development (see chapter four), we explicitly developed the same scales for both internal and external stakeholders so as to form a common comparative basis for content/form estimation. Respondents were asked to express opinions on the identity content of the ideal organizational attributes of a wine trail.

Conceptually, we would expect the stakeholders' forms to be different given the differences in stakeholders' self-identities and thus their views of the salient content of organizational form expectations. In addition, the foci of the stakeholders are not the same and contribute to expected differences in form/content. Internal stakeholders, who are behind the corporate veil, are actively using both their network within the organizational collective and their own self-identity to shape the organization's identity. External stakeholders, on the other hand, are actively evaluating the expectations and perceptions of the organizational collective's identity based on their experiences with the wine trail and organizational messages (brochures, media interview etc.).

Comparison of the Stakeholders Expectations and Perceptions

Finally, we use the empirical estimations of the identity content of external and internal stakeholders to give indications of congruency of stakeholders' expectations and perceptions -- overall and at the individual wine trail level. We build upon the comparative processes outlined in Foreman et al. (2012). Conceptually, we would expect the attributes of the perceptions and expectations for the stakeholders to be different

given their differences in self-identities. At the individual wine trail level, we would expect to see some differences because no two wine trails are located in the same geographic area and most likely do not have the same historical, cultural, or institutional influences. However, at the same time, we do expect to see parallels given the similarity in climate for grape growing, institutional engagement with the Missouri Wine and Grape program, Missouri Vintners Association, Missouri Grape Growers Association and other similar institutions, and the interactions of individual wineries and organizational collectives at both the regional and state level.

Empirical Analyses

To do these analyses, it is necessary to reduce the dimensionality of the identity content attributes in the data. In chapter four, the list of manifest variables is presented, based upon validated scales and qualitative interviews. These are categorized a priori in the following groups.

Table 7 - Scales, Subscales and Items

Institutional Sub-scale and Items:

have common standards for its wines
have wineries that use Missouri grapes
have the wine styles that I expect from a Missouri winery
provide easy access to information about Missouri grapes and wine
have wines that reflect its region
be well signposted
have wineries that are in close proximity to each other

Core Wine Product Sub-scale and Items:

have a large number of wineries to visit

have wineries that I am familiar with
have wine-tasting opportunities
have excellent food-tasting opportunities
have winery staff that is knowledgeable about wine
have wine festivals

Cultural / Historical/Place-based Sub-scale and Items:

have regional wines that are famous
have wineries and vineyards with distinct heritage and cultural dimensions
reflect the ethnic culture of its region
have local art and crafts for sale
have attractive scenery including vineyards

Social Norms Sub-scale and Items:

be popular with wine tourists like me
have recognition with friends/family that have visited the region
have food and wine activities
be visitor-friendly

The following data analysis steps establish the cognitive maps held by internal and external stakeholders of their expectations of the identity of a Missouri wine trail, and of their perceptions of a particular Missouri wine trail.

1. Consumer data on agreement with statements about the importance of 22 proposed variables to expectations are reduced through exploratory factor analysis (EFA). Exploratory factor analysis seeks to reduce the variance-covariance matrix of the 22 manifest variables to a small number of meaningful factors.
2. The models of consumer expectations estimated using EFA are tested using confirmatory factor analysis so as to establish the best-fitting model of external

stakeholder expectations. In effect, we allow the data to reveal the cognitive structure of consumers' mental maps, regardless of the a priori categorizations we used in designing the survey instruments.

3. Consumer data on their perceptions of wine trails they have visited are analyzed using EFA to construct factor structures that represent mental maps of how consumers or visitors (external stakeholders) perceive the eight Missouri wine trails.
4. The EFA models of consumers' perceptions are tested using CFA to seek the best-fitting models of the external stakeholder's perceptions of the eight Missouri Wine trails.

Steps 1 – 4 are repeated for the internal stakeholders' data, so as to obtain models of their expectations for what a Missouri wine trail should be and their perceptions of the wine trails in which they hold memberships. The analyses that follow from the estimation of internal and external stakeholders' perceptions and expectations are the evaluative comparisons we outlined in chapter three. The first evaluative comparison is that of the stakeholders' cognitive maps of the expected organizational form of a wine trail organization. Is the content of the identity of a Missouri wine trail the same for internal and external stakeholders? Is there organizational form congruency between stakeholders? To compare the mental maps of external and internal stakeholders' expectations, we took the following steps.

1. The best-fitting models of consumers' (external stakeholders) expectations were organized by factor and related manifest variables. The underlying common

theme of the factors was determined based on the common nature of the manifest variables' declarative statements. For example, if the declarative statements associated with the manifest variables pertaining to place-based attributes loaded on factor 1, the theme of the factor would be recognized as "Place-Based." This is an attempt to identify the mental maps of stakeholders expectation.

2. Step 1 was repeated for members' (internal stakeholders) expectations.
3. The factor models of consumer and winery member expectations were compared on a qualitative basis to derive indications of model congruency between stakeholders. The themed factors and associated manifest variables of the mental map of the stakeholders were used as the comparative basis to ascertain similarities/differences in content/form.

The best-fitting model for the external stakeholders' (consumer) perception data was determined using the above steps. However, the internal stakeholders' perception model could not be because the CFA analysis failed to show a statistically valid model fit. To be able to derive indications of the congruency of the two stakeholders' perceptions models, we used the factor scores that were derived from the CFA of the internal stakeholders' expectations model and then applied them to the measured results of member winery survey results to derive indications of the congruency of the two perceptions models. The analysis steps are detailed in the individual wine trail analysis later in this chapter.

Individual Wine Trail Comparisons:

Because each wine trail is located in a different geographic area, it is assumed that the attributes of the organizational collectives' identity will be different because each location has distinct embedded social, cultural, and place-based elements.

To be able to compare expectations and perceptions of wine trails by stakeholders, a common comparative framework is needed for both form and basis. For form, the point of comparison for both internal and external stakeholders is their expectations of the organizational collective's ideal identity attribute content. A CFA provides factor scores by manifest variable and by factor that can then be used as a common basis to derive insights from the variability of the perceptions and expectations data at the wine trail level.

To compare external and internal stakeholders' expectations and perceptions of individual wine trails, the following steps were taken.

1. Using the external stakeholders' expectations factor model as a basis for comparison, factor scores were derived from a CFA using the perceptions data.
2. The factor scores for the CFA data was applied to the measured survey results for perceptions by variable, by factor, and by wine trail, resulting in a composite factor score for each respondent's case by factor for external stakeholder perceptions of each wine trail.
3. Using the external stakeholders' expectations factor model as a basis for comparison, factor scores were derived from a CFA using the expectations data.

4. The factor scores for the CFA data was applied to the measured survey results by wine trail for expectations by individual respondent, by variable, by factor, and by wine trail, resulting in a composite factor score by factor for external stakeholder perceptions of each wine trail.
5. Steps 1 – 4 were performed for the internal stakeholders' analysis of wine trails.
6. The composite scores by factor and by wine trail for internal and external stakeholders' expectations and perceptions were compared in order to derive overall and trail-by-trail differences by factor.

Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) is a descriptive technique used to determine the covariance among measured variables in a data set and group them in the most sparing manner that accounts for the most variability. It is often used when developing a scale that uncovers underlying correlations among identified variables and their associated latent constructs. Often the researcher will not have specific expectations of the number of variables associated with a latent one. Through EFA, the extent of the underlying relationship between manifest variables and the underlying number of constructs are discovered and analyzed in a statistically valid manner.

Bryant & Yarnold (1995) indicate that a fundamental assumption underlying EFA is that three different types of variances make up the total variance of a variable. These include common variance, which is the portion shared with other variables in the analysis; specific variance, the portion of variance that is not shared with any other variables; and error variance, which is random variance. EFA is used to find the factors that explain the most common variance through a repetitive process in which a correlation matrix is decomposed into its dimensions or factors. The resulting factor loading(s) are standardized estimates of the regression slopes for predicting the variables from the latent factor(s) (Cohen et al., 2003). Covariances between variables originate from common influences between the variables associated with the factors that are unobservable. The common influences are the core of the latent variables, or factors, that are extracted in EFA.

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is used to test a hypothesis based on measurement models such as those found through the inductive process of EFA. Because confirmatory factor analysis is a form of structural equation modeling, we can statistically test the relationships between factors derived from our EFA and the underlying variables. In our case, CFA is used to validate the factors and their manifest variables from the EFA analysis that is based on our survey measurements. By examining the makeup of the factors, we are able to draw conclusions about the content of the organizational collective's identity and identity-related construct -- reputation.

While EFA is more inductive in nature and is used to determine the number and composition of factors, CFA starts with a specified number of factors and their manifest variable loadings a priori along with any associated parameters of the factors and variables. Thus, CFA requires a conceptual foundation for the statistical analysis of the underlying factor model for goodness of fit to the data and interrelationships of model factors. These assumptions allow the researcher to understand the relationships between variables independent of both unique and correlated measurement error.

We can also use CFA to produce factor scores using the factor loadings and factor correlations. Conceptually, factor scores are the measurements that would have been observed if the researcher could measure the latent construct directly. Therefore, factor scores can be used as proxies for the latent variables. We use these in our analysis to be

able to create a common basis for generating insights into individual wine tail differences as well as informing the congruence of overall perceptions of stakeholders.

In summary, we have used EFA to develop the factor insights needed to build our model and have used CFA for testing the fit of the model against the original variance-covariance matrix, which carries all the information on the relationships among the observable variables. Because we seek to build a tight model in which the number of variables has been reduced by constructing latent variables (factors), we measure the cost of parsimony with the goodness of fit statistics that we present below.

Exploratory Factor Analysis Process for Both Member and Consumer Data:

1. The first step in our EFA was choosing a factor extraction method to help estimate factor pattern coefficients. We used two factor extraction methods to examine the robustness of the subsequent factors: principal component and maximum likelihood. Principal component extraction is the most frequently used by social scientists (Thompson, 2004; Brown, 2006). It assumes that the scores on the measured variables have perfect reliability and also attempts to reproduce the variance present in the sample data rather than the population (Thompson, 2004). It does not differentiate between common and unique variance and tries to minimize the variance in as few variables as possible. Maximum likelihood extraction analysis focuses on creating factors that reproduce the correlation or covariance matrix in the population, versus in the sample (Thompson, 2004). It has the advantage of allowing for a statistical evaluation of fit between the

solution for the manifest variables and the input data (Brown, 2006). We carefully checked each iteration to insure it had converged on a final set of parameter estimates. We used principal component extraction for all EFAs reported herein, as there was no qualitative difference between the factors extracted using both methods.

2. The next step in EFA was the choice of the number of factors. We used the scree plot to initially determine the number of factors that explain a majority of variance. Our focus was on the factors with eigenvalues of one or more and also represented a natural break or “shoulder” of the steep decline of the scree plot as it levels off to a slower, steady decline. The number of factors was then adjusted depending on the factor loads (number of variables on each factor), the statistical strength of manifest variables, the number of factors that each variable loaded onto, and finally, the common sense meaning/theme of the variables that loaded together. We considered factor loadings greater than or equal to 0.3 to be salient (Brown, 2006).
3. It is common to rotate the extracted in variable space to obtain orthogonal, or nearly orthogonal factors, to reduce the descriptive overlap among factors. For rotation selection, we used varimax with Kaiser Normalization and quartimax rotations. Brown (2006) indicates that varimax and quatermax rotations are both orthogonal rotations, which are most often used in social science research because of the ease of interpretation.

4. In each round of analysis, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), Bartlett's Test of sphericity and the communalities of the extractions were analyzed along with the percentage of variance explained by the number of factors chosen. Each factor and manifest variable was analyzed to determine if variables loaded on one or more factors and if a variable had a very low correlation. In each round of analysis, variables with low correlations were eliminated; the overall model fit and correlation statistics and variance were examined; and the rotated component matrix was analyzed to make sure the model results were improved. At the end of the analysis, each model was forced to have manifest variables that loaded on only one factor.

Exploratory Factor Analysis (EFA) – Consumer Expectations of Wine Trails

The consumer surveys yielded 676 observations of consumers' expectations of the organizational form of wine trails. The EFA resulted in a model with 16 manifest variables loading on four factors. Bartlett's test of sphericity indicates if the correlation matrix is significantly different from the identity matrix. If significant, the test indicates that the sum of the variables is significantly different from zero and therefore has meaning. The Kaiser-Meyer-Olkin measure of sampling adequacy represents the ratio of the squared correlation between variables to the squared partial correlation between variables. The closer the measure is to 0, the larger the diffusion in the pattern of correlations and the more inappropriate the factor analysis. Anything above .5 is deemed acceptable (Kaiser, 1970). The results of the tests are as follows:

**Table 8 -KMO and Bartlett's Test for Consumer Expectations
Sample Model - EFA**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.791
Bartlett's Test of Sphericity	Approx. Chi-Square	2598.035
	Df	120
	Sig.	.000

The Kaiser-Meyer-Olkin measure of sampling adequacy is .791 which indicates adequacy and therefore the sample is deemed appropriate for factor analysis. Bartlett's test of sphericity is significant, which implies that the probability that the variables are different than zero is $p < .01$, given the chi-square of 2598.035 and the degrees of freedom of 120.

The four factor model explains 54.3% of the total variance of the model. The breakdown of the variance explained by factor is presented in Table 9.

**Table 9 -Total Variance Explained by Factor
Consumer Expectations – EFA Analysis**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.049	25.306	25.306	4.049	25.306	25.306	2.756	17.222	17.222
2	1.788	11.175	36.482	1.788	11.175	36.482	2.219	13.870	31.092
3	1.478	9.239	45.721	1.478	9.239	45.721	2.159	13.497	44.589
4	1.374	8.585	54.306	1.374	8.585	54.306	1.555	9.717	54.306
5	1.018	6.360	60.666						

6	.856	5.348	66.014					
7	.793	4.959	70.973					
8	.714	4.460	75.433					
9	.708	4.425	79.859					
10	.633	3.957	83.815					
11	.548	3.427	87.243					
12	.512	3.199	90.441					
13	.479	2.994	93.435					
14	.421	2.633	96.068					
15	.378	2.364	98.432					
16	.251	1.568	100.000					

Extraction Method: Principal Component Analysis.

In calculating the linear components (eigenvectors), we recognize that there will be as many eigenvalues as component in the R-matrix. However, the importance of the top four accounts for 54.306% of the total variance of the model, which is significant.

After the rotation, the magnitude of factor one decreased in its variance explanatory power (25.306% to 17.222%). while the magnitude of factors two and three increased slightly with factor three benefiting the most from the varimax rotation (9.239% to 13.497%). This means that while the four factors explain a majority of the variance, factor four explains less variance than the first three factors.

The principal component analysis extraction and varimax rotation resulted in reported factor loadings as presented in Table 10.

Table 10 - Consumer Expectations Loadings – EFA Analysis

	Component			
	1	2	3	4
QE2 - have wine-tasting opportunities	.858	.000	.185	.006
QE6 – be visitor-friendly	.802	.015	.163	.077
QE3 – be well signposted	.787	-.003	.092	.097
QE5 – have attractive scenery including vineyards	.602	.312	.209	.017
QE4 – have excellent food-tasting opportunities	.445	.353	.046	.029
QE19 – be popular with the wine tourist like me	.087	.784	.124	.108
QE20 – have regional wines that are famous	.004	.729	.131	-.073
QE18 – have wine festivals	.040	.650	.008	.274
QE14 – have a large number of wineries to visit	.160	.538	.168	-.193
QE13 – have wines that reflect its region	.147	.146	.769	.021
QE16 – have wineries that use Missouri grapes	.054	.019	.724	.026
QE11 – provides easy access to information about Missouri grapes and wines	.130	.147	.671	.165
QE12 – have winery staff that is knowledgeable about wine	.312	.142	.629	-.019
QE8R – have local art and crafts for sale	.119	-.010	-.028	.736
QE9R – have wineries that I am familiar with	-.038	-.115	.135	.676
QE17R – have food and wine activities	.087	.248	.057	.618

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

The variables loaded independently on four factors, and each factor was above .3. With three factors having four or more variables loading and three factors having at least four variables loading above .6, the results are acceptable. Guadagnoli and Velicer (1988) suggest that four or more variables loading on any factor generate reliable results no matter the size of the sample. We know from the KMO test that the sample is adequate, and the loadings confirm the findings. These factors and manifest variables will be loaded into AMOS for a CFA later in this chapter.

Exploratory Factor Analysis (EFA) – Consumer Perceptions of Wine Trails

The consumer surveys yielded 992 cases of consumers' perceptions of specific wine trails. The EFA resulted in a model with 12 manifest variables loading on four factors. The Kaiser-Meyer-Olkin measure of sampling adequacy and Barlett's test of sphericity results are reported in the Table 11.

Table 11- KMO and Bartlett's Test for Consumer Perceptions Model - EFA Analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.839
Approx. Chi-Square		2818.392
Bartlett's Test of Sphericity	Df	66
	Sig.	.000

The Kaiser-Meyer-Olkin measure of sampling adequacy is .839, which indicates the sample is deemed appropriate for factor analysis. Hutcheson and Sofroniou (1999) indicated that a KMO measure greater than .8 indicates that the sample is very good. Bartlett's test of sphericity is significant, which implies that the probability that the variables are different than zero is $p < .01$ given the Chi-square of 2818.392 and the degrees of freedom of 66. The Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity both indicate adequate samples because the result of .839 is over the minimum acceptable level of .5.

The breakdown of the variance by factor in addition to the cumulative total for all four factors for the consumer perceptions' EFA is reported in Table 12.

**Table 12 - Consumer Perceptions EFA Analysis
Total Variance Explained by Factor**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.934	32.782	32.782	3.934	32.782	32.782	2.005	16.706	16.706
2	1.511	12.588	45.370	1.511	12.588	45.370	1.897	15.811	32.517
3	1.084	9.034	54.404	1.084	9.034	54.404	1.824	15.199	47.715
4	.990	8.246	62.650	.990	8.246	62.650	1.792	14.935	62.650
5	.739	6.158	68.809						
6	.710	5.917	74.725						
7	.586	4.882	79.608						
8	.558	4.650	84.257						
9	.528	4.399	88.656						
10	.484	4.036	92.692						
11	.461	3.840	96.533						
12	.416	3.467	100.000						

Extraction Method: Principal Component Analysis.

The top four factors account for 62.65% of the total variance of the model. After the rotation, the magnitude of factor one decreased in its variance explanatory power (32.782% to 16.706%) while the magnitude of factors two, three, and four increased from 12.588%, 9.034% and 8.246%, respectively to 15.811%, 15.199% and 14.935%. Varimax rotation equalized the importance of the factors in explaining total variance. This is an important recognition of the overall strength of the factors as the model is not dominated by one factor, but contains distinct, equally strong factors. The principal component analysis extraction and varimax rotation resulted in reported variable loadings as displayed in Table 13.

Table 13 - Consumer Perceptions Component Loadings – EFA Analysis

	Component			
	1	2	3	4
SMEAN(QT1P2) – is visitor-friendly	.820	.082	.171	.080
SMEAN(QT1P1) – has wine tasting opportunities	.809	.070	.071	.049
SMEAN(QT1P3) – has the wine styles that I expect from a Missouri winery	.718	.252	.206	.074
SMEAN(QT1P20) – has recognition with friends/family that have visited the region	.091	.764	.178	.098
SMEAN(QT1P19) – has regional wines that are famous	.072	.756	.228	.144
SMEAN(QT1P18) – has wines that reflect its region	.221	.683	.057	.163
SMEAN(QT1P7) – has wineries that are in close proximity to each other	.138	.185	.795	.115
SMEAN(QT1P4) – has a large number of wineries to visit	.250	.116	.795	.057
SMEAN(QT1P6) – has wine festivals	.075	.218	.598	.363
QT1P9_1R – does have local art and crafts for sale	.040	-.042	.093	.814
QT1P10_1R – reflect the ethnic culture of its region	.056	.251	.110	.722
QT1P12_1R – does have food and wine activities	.091	.200	.137	.623

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The variables loaded independently on four factors with each factor loading being above .3. Since three factors having three or more variables loaded, and most loaded at greater or close to .6, the results are acceptable. We know from the KMO test that the sample is adequate and the loadings confirm the findings. These factors and manifest variables will be loaded into AMOS for a CFA later in this chapter.

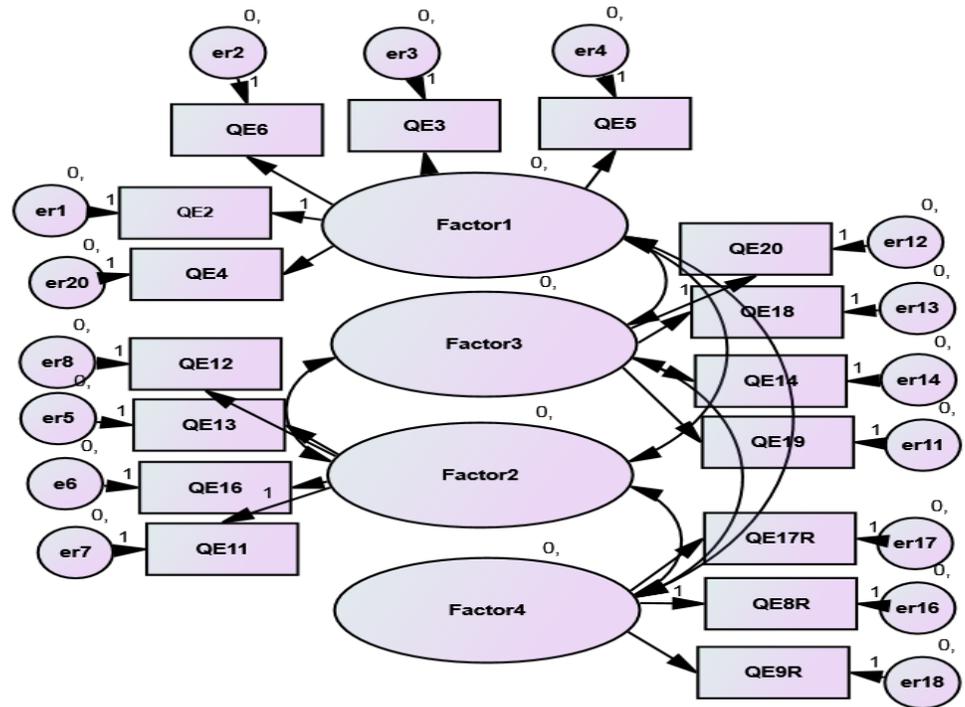
Confirmatory Factor Analysis – Consumer Expectations

As stated in this chapter’s introduction, we used Confirmatory Factor Analysis (CFA) to test our hypotheses, which are centered on the underlying sources of the variability in the

factors that were determined through the EFA analysis. To perform the analysis, we used AMOS, one of the commercially available software packages for CFA and part of the SPSS suite. Set-up allows the modeler to visually represent the relationships between the factors, their manifest variables, and measurement errors through a diagram. The software permits the researcher to specify the solution algorithm and to choose from a number of goodness of fit statistics. For the analyses reported below, the solution algorithm is maximum likelihood.

The four factors and manifest variables were loaded in AMOS to perform a Confirmatory Factor Analysis (CFA). A key to the descriptions of the path diagram's variables by factor is presented in Table 15 on page 87. The path diagram for the CFA analysis is depicted in Figure 5.

Figure 5 – Path Diagram – Consumer Expectations Model



The CFA analysis of the model indicates a chi-square of 434.789 with degrees of freedom of 98 and strong statistical significance at $p < .01$. Thus, there is a significant relationship between model variables and factors.

The analysis of the factor loadings informs us as to the statistical significance of the estimates by manifest variable. The results of the regressions weights for the consumer expectations model are reported in Table 14.

**Table 14 - Consumer Expectations Regression Weights
CFA Analysis**

	Estimate	S.E.	C.R.	P	Label
QE2 <--- Factor1	1.000				
QE6 <--- Factor1	1.124	.053	21.224	***	
QE3 <--- Factor1	1.129	.060	18.932	***	
QE5 <--- Factor1	1.045	.075	13.910	***	
QE16 <--- Factor2	.935	.092	10.121	***	
QE13 <--- Factor2	1.066	.089	12.038	***	
QE12 <--- Factor2	.684	.058	11.802	***	
QE11 <--- Factor2	1.000				
QE19 <--- Factor3	1.115	.094	11.914	***	
QE18 <--- Factor3	.812	.079	10.337	***	
QE14 <--- Factor3	.569	.065	8.790	***	
QE20 <--- Factor3	1.000				
QE8 <--- Factor4	1.000				
QE17 <--- Factor4	.758	.140	5.408	***	
QE9 <--- Factor4	.755	.139	5.432	***	
QE4 <--- Factor1	.752	.090	8.316	***	

All variable estimates appear to be reasonable and statistically significant. The critical ratio (C.R.) is the parameter estimate (Estimate) divided by its standard error (S.E.). This test statistic functions as a z-statistic in determining if the estimate is statistically different from zero. If we consider a probability level of .05% to be appropriate, then the test statistic should be within 1.96 of zero. Given that the smallest critical ratio is 5.48 for the variable QE17 (has food and wine activity), all of the estimates are found to be statistically significant. In addition, the standard errors (S.E.) are deemed reasonable given that no one standard error is close to zero or disproportionally large, which could indicate a poor fit by the model.

Table 15 - Consumer Expectations Factor Variables and Descriptions

Factor	Variable	Variable Description
Factor 1	QE2 QE6 QE3 QE5 QE4	has wine-tasting opportunities is visitor-friendly is well signposted has attractive scenery including vineyards have excellent food-tasting opportunities
Factor 2	QE16 QE13 QE12 QE11	has wineries that use Missouri grapes has wines that reflect its region has winery staff that is knowledgeable about wine provides easy access to information about Missouri grapes and wine
Factor 3	QE19 QE18 QE14 QE20	is popular with the wine tourist like me has wine festivals has a large number of wineries to visit has regional wines that are famous
Factor 4	QE8 QE17 QE9	have local arts and crafts for sale has food and wine activities has wineries that I am familiar with

Given that each estimate is statistically significant, we can now look at model fit. That is, how closely does the model, as presented in the path diagram, fit the underlying data?

The model fit statistics are presented in Table 16.

Table 16 - Consumer Expectations Model Fit Statistics - CFA Analysis					
Fit Statistic	NPAR	CMIN	DF	P	DMIN/DF
CMIN - Default Model	54	434.789	98	0.000	4.437
Fit Statistic	RMSEA	LO 90	HI 90	Pclose	
RMSEA - Default Model	0.071	0.065	0.078	0.000	

For indications of model fit, we chose to focus on minimum discrepancy (CMIN) and the root mean square error of approximation (RMSEA). We will now address each separately:

Model Fit – CMIN

The minimum discrepancy statistic tests the degree to which the factor loadings, factor variances, covariance and error variances are valid. It is most commonly expressed as the X^2 (chi-square) statistic, so the higher the chi-square statistic, the closer is the fit between the hypothesized model and the perfect model (the original variance-covariance matrix). Relative chi-square (CMIN / DF) was chosen to avoid the sample size issues associated with chi-square (Wheaton et al., 1977). Ratios less than five are considered an appropriate indication of a reasonable model fit (Marsh & Hocevar, 1985). Because the CMIN/DF ratio for the consumer expectations model is 4.437, the model fit is deemed acceptable.

Model Fit – RMSEA

The root mean square error of approximation (RMSEA) indicates how well the model would fit the population covariance matrix if it were available. Values of less than .10 indicate acceptable fit, with those below .05 to be considered to be indicative of a good fit between the model and the data (MacCallum et al., 1996). For the consumer expectations model, a RMSEA value of .071 is indicative of an acceptable fit.

Confirmatory Factor Analysis – Consumer Perceptions

As stated in this chapter's introduction, we used Confirmatory Factor Analysis (CFA) to test the relationship between the factors we determined in the EFA of the consumer perceptions data and their manifest variables. To perform the CFA analysis, we used AMOS, one of the commercially available software packages for CFA, to visually represent the relationships between the factors, their manifest variables, and measurement errors through a diagram. The resulting analysis informs statistical significance of the variables and the overall goodness of fit of the SEM, which indicates how well the model adequately describes the data. The four factors and manifest variables were loaded in AMOS to perform a Confirmatory Factor Analysis (CFA). A key to the description of the variables by factor is presented in Table 15 on page 87. The path diagram for the CFA analysis is depicted in Figure 7.

Our EFA of the consumer perceptions data indicated a model with four factors and twelve manifest variables (see Table 18 on next page for detailed descriptions of the factor, the variables that loaded on the factors, and their descriptions). The resulting model was loaded in AMOS to perform a Confirmatory Factor Analysis (CFA). The path diagram for the CFA of the four factor consumer perceptions model is presented in Figure 7 with a description of the variables listed in the path diagram directly following it.

Figure 7 – Path Diagram Consumer Perceptions – CFA Analysis

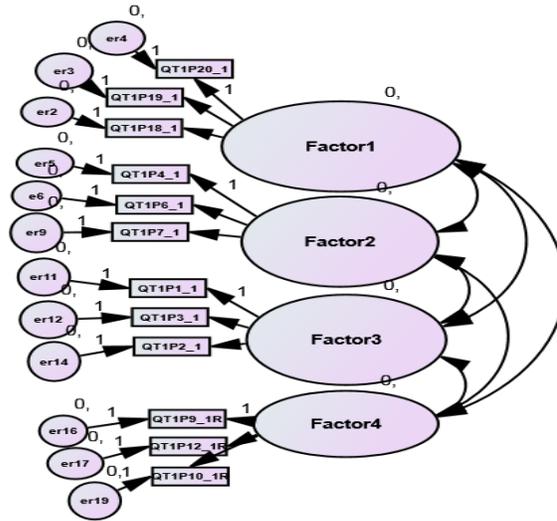


Table 18 – Consumer Perceptions - Factor Description by Variable

Factor	Variable	Variable Description
Factor 1	QT1P1 QT1P2 QT1P3	has wine tasting opportunities is visitor-friendly have the wine styles that I expect from a Missouri winery
Factor 2	QT1P19 QT1P18 QT1P20	have regional wines that are famous has wines that reflect its region have recognition with friends/family that have visited the region
Factor 3	QT1P7 QT1P6 QT1P4	have wineries that are in close proximity to each other has wine festivals has a large number of wineries to visit

Factor 4	QT1P9 QT1P12 QT1P10	have local arts and crafts for sale has food and wine activities reflect the ethnic culture of its region
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The CFA of the model indicates a chi-square of 178.204 with degrees of freedom of 48 and strong statistical significance at $p < .01$. Thus, a significant relationship exists between model variables and factors. The analysis of the factor loadings informs us as to the statistical significance of the estimates by manifest variable. The results of the regressions weights for the consumer expectations model are reported in Table 19.

Table 19 – Consumer Perceptions – Regression Weights

		Estimate	S.E.	C.R.	P	Label
QT1P18_1	<--- Factor1	.739	.055	13.465	***	
QT1P19_1	<--- Factor1	1.165	.076	15.266	***	
QT1P20_1	<--- Factor1	1.000				
QT1P6_1	<--- Factor2	1.102	.074	14.918	***	
QT1P4_1	<--- Factor2	1.000				
QT1P1_1	<--- Factor3	1.000				
QT1P2_1	<--- Factor3	1.570	.097	16.140	***	
QT1P9_1R	<--- Factor4	1.000				
QT1P12_1R	<--- Factor4	.978	.090	10.872	***	
QT1P7_1	<--- Factor2	1.104	.068	16.311	***	
QT1P10_1R	<--- Factor4	1.175	.101	11.662	***	
QT1P3_1	<--- Factor3	1.580	.099	15.948	***	

All variable estimates are statistically significant. The critical ratio (C.R.) is the parameter estimate divided by its standard error. This test statistic functions as a z-statistic in testing if the estimate is statistically different from zero. If we consider a probability level of .05 to be appropriate, then the test statistic should be within 1.96 of zero. Given that the smallest critical ratio is 10.872 for the variable QT1P12_1R (has

food and wine activities), all of the estimates are found to be statistically significant. In addition, the standard errors (S.E.) are reasonable given that no one standard error is close to zero or is disproportionately large, which could indicate a poor fit by the model.

Given that each estimate is statistically significant, we can now look at model fit. The model fit statistics are presented in Table 20.

Table 20 – Consumer Perceptions Model Fit Statistics					
Fit Statistic	NPAR	CMIN	DF	P	DMIN/DF
CMIN - Default Model	42	178.204	48	0.000	3.713
Fit Statistic	RMSEA	LO 90	HI 90	Pclose	
RMSEA - Default Model	0.053	0.045	0.061	0.268	

CMIN

Relative chi-square (CMIN/DF) was chosen to avoid the sample size issues associated with chi-square (Wheaton et al., 1977). Ratios less than five are considered appropriate and indicative of a reasonable model fit (Marsh & Hocevar, 1985). Because the CMIN/DF ratio for the consumer perceptions model is 3.713, the model fit is deemed acceptable.

RMSEA

The root mean square error of approximation (RMSEA) indicates how well the model would fit the population covariance matrix if it were available. Values of less than .10 indicate acceptable fit, with those that are below .06 to be considered indicative of a good

fit between the model and the data. For the consumer perceptions model, a RMSEA value of .053 is indicative of a good fit.

Discussion of Four Factor Models from Consumer Expectations and Perceptions

As indicated at the beginning of this chapter, we plan to use the empirical estimations of external and internal stakeholders to give indications of the congruency of stakeholders' expectations and perceptions, overall and at the individual wine trail level. Building upon the comparative processes outlined in Foreman et al. (2012), we would expect the perceptions and expectations for the stakeholders to be different, given their differences in self-identities and foci. At the individual wine trail level, we would anticipate differences because no two wine trails are located in the same geographic area and most likely do not have the same historical, cultural, or institutional influences. However, we do expect to see some commonalities given the similarity in climate for grape growing; institutional engagement with the Missouri Wine and Grape program, Missouri Vintners Association, Missouri Grape Growers Association and other similar institutions; and the interactions of individual wineries and organizational collectives at both the regional and state level.

Given that both consumer (external stakeholder) expectations and perceptions model have now been empirically estimated and tested, we can compare the expectations and perceptions of consumers (external stakeholders) models. A comparison of the model fit statistics of both consumer expectations and perceptions model is presented in Table 21.

Table 21 - Comparison of Consumer Expectations and Perceptions Model

Model	CMIN	CMIN/DF	RMSEA
Consumer Expectations	434.789	4.437	.071
Consumer Perceptions	178.204	3.713	.053

Statistically, the model fit for both consumer expectations and perceptions are acceptable with the four factor consumer perceptions model being superior for both CMIN/DF and RMSEA fit statistics. This is not unexpected given the number of consumer perceptions responses from Hermann (408) and Missouri Weinstrasse (213) compared to the total number of consumer responses (992). In addition, Herman and Missouri Weinstrasse, along with Route du Vin, are the oldest and most established wine trails in Missouri. Given that both are considered adequate models, a qualitative comparison of the expected ideal identity content attributes (consumers' expectations) of a wine trail organization with the perceptions of the content attributes (consumers' perceptions) will be informative as we identify common themes of factors and look to analyze differences between wine trails. The factors and their descriptions of the consumers' expectations four factor model are shown in Table 22.

**Table 22 - Consumer Expectations Factor Model
Factor and Variable Descriptions**

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QE2 QE6 QE3 QE5 QE4	has wine-tasting opportunities is visitor-friendly is well signposted has attractive scenery including vineyards have excellent food-tasting opportunities
Factor 2	Place-Based Experience	QE16 QE13 QE12 QE11	has wineries that use Missouri grapes has wines that reflect its region has winery staff that is knowledgeable about wine provides easy access to information about Missouri grapes and wine
Factor 3	Group Belongingness	QE19 QE18 QE14 QE20	is popular with the wine tourist like me has wine festivals has a large number of wineries to visit has regional wines that are famous
Factor 4	Individual- Based Tourism	QE8 QE17 QE9	have local arts and crafts for sale has food and wine activities has wineries that I am familiar with

The factors and their descriptions of the consumers' expectations four factor model are shown in Table 23.

**Table 23 - Consumer Perceptions Model
Factor and Variable Descriptions**

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QT1P1 QT1P2 QT1P3	has wine tasting opportunities is visitor-friendly have the wine styles that I expect from a Missouri winery
Factor 2	Place-Based Experience	QT1P19 QT1P18 QT1P20	have regional wines that are famous has wines that reflect its region have recognition with friends/family that have visited the

			region
Factor 3	Group Belongingness	QT1P7 QT1P6 QT1P4	is have wineries that are in close proximity to each other has wine festivals has a large number of wineries to visit
Factor 4	Individual-Based Tourism	QT1P9 QT1P12 QT1P10	have local arts and crafts for sale has food and wine activities reflect the ethnic culture of its region

While some of the attributes of the two four-factor models differ, basic similarities in the themes of each of the four factors for both models exist. For any organization to be perceived by consumers as a legitimate wine trail, it would have to meet the basic consumer expectations of the form of the organization. In much the same way that consumers have form expectations of the factors or functions of banks or gas stations (i.e. banks lend money, and gas stations have gas), the wine trail organizational form is composed of identity content expectations as expressed by the manifest variables.

A more detailed description of the manifest variables of the four factor expectations model of consumers is as follows:

Factor 1 is named “Sensory Experience – Tourism.” It is composed of variables that facilitate or enhance the tasting of wine and food. This is the only factor that involves the physical process of wine and food consumption. In addition, the attributes of visitor friendliness, great signage, and an attractive winescape including vineyards are deemed to be critical elements of the sensory experience.

Factor 2 is named “Place-Based Experience.” It is composed of variables that highlight the regional-based wine experience in Missouri. The place-based experience in Missouri includes the use of Missouri grapes that reflect the region in which they are grown as well as the explanation of the region-based wines through information about the grapes that are used in the wines as well as information obtained through an interactive experience with the trained winery staff.

Factor 3 is named “Group Belongingness.” It is composed of variables that highlight aspects of group-based wine tourism. These include popularity of the wine trail with other tourists who have similar interests in wine-based tourism, the presence of both numerous wineries to visit and wine festivals in addition to wines that are famous. Each of these variables combines to create a group-based experience.

Factor 4 is a named “Individual-based tourism.” It is composed of variables that highlight wine tourism based on options for individual enjoyment of the local wine culture through wine and food activities and familiar wineries, as well as enjoyment of non-wine tourism amenities such as local arts and crafts. Now that we have our proposed factor models for both consumer expectations and perceptions, we turn our attentions to the internal stakeholders’ (member winery) analysis.

Winery Wine Trail Member Data Analysis

Member Winery Expectations Exploratory Factor Analysis (EFA)

The surveys yielded 31 observations of members’ expectations of the organizational form of wine trails (see chapter four for response rates). The EFA resulted in a model with 11

manifest variables loading on two factors. The results of the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity are detailed in Table 24.

Table 24 - KMO and Bartlett's Test for Member Expectations Model

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.566
Bartlett's Test of Sphericity	Approx. Chi-Square	130.459
	Df	55
	Sig.	.000

The Kaiser-Meyer-Olkin measure of sampling adequacy at .566 indicates that the model is above the minimum level of acceptability of .5 and is therefore deemed appropriate for factor analysis. Bartlett's test of sphericity is significant, which implies that the probability that the variables are different than zero is less than $p < .01$ given the model Chi-square of 130.459 and the degrees of freedom of 55. The total variance explained by the two-factor model was 52.633% as detailed in Table 25.

Table 25 - Winery Member Expectations – Total Variance of EFA Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.660	33.274	33.274	3.660	33.274	33.274	3.625	32.952	32.952
2	2.129	19.359	52.633	2.129	19.359	52.633	2.165	19.681	52.633
3	1.428	12.981	65.614						
4	.841	7.646	73.260						

5	.743	6.754	80.013					
6	.698	6.343	86.356					
7	.502	4.564	90.921					
8	.424	3.851	94.772					
9	.290	2.635	97.407					
10	.160	1.450	98.857					
11	.126	1.143	100.000					

Extraction Method: Principal Component Analysis.
 After the rotation, the magnitude of both factors stayed nearly the same (33.274% and 19.359% vs. 32.952% and 19.681% for factor one and two, respectively. This indicates the extracted factors are robust. The principal component analysis extraction and varimax rotation resulted in the reported factor in Table 26.

Table 26 - Winery Member Expectations Component Loading – EFA Analysis

	Component	
	1	2
SMEAN(QE21) – Have the wine styles that I expect from a Missouri winery	.851	.140
SMEAN(QE20) - Have regional wines that are famous	.829	-.057
SMEAN(QE19) - Be popular with wine tourist like me	.803	.000
SMEAN(QE18) - Have wine festivals	.712	-.104
SMEAN(QE15) - Have wineries and vineyards with distinct heritage and cultural dimensions	.633	-.030
SMEAN(QE5) - Have attractive scenery including vineyards	.598	.097
SMEAN(QE3) - Be well signposted	.492	.296
SMEAN(QE13) - Has wines that reflect its region	-.089	.774
SMEAN(QE16) - Has wineries that use Missouri grapes	.144	.741
SMEAN(QE2) - Have wine-tasting opportunities	-.110	.701
SMEAN(QE1) - Have recognition with friends/family that have visited the region	.139	.627

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 3 iterations.

The variables loaded independently on two factors, and each factor that loaded was above .3. Since both factors have four or more variables and each factor loaded at least four greater than .6, the results are acceptable. We know from the KMO test that the sample is adequate and the loadings confirm the findings. An explanation of the manifest variables and their factor themes from the EFA is presented in Table 27.

**Table 27- Winery Member Expectations
Factor Name and Description – EFA Analysis**

Factor	Factor Name	Variable	Variable Description
Factor 1	Group Wine Tourism	QE3 QE5 QE15 QE18 QE19 QE21 QE20	be well signposted have attractive scenery including vineyards have wineries and vineyards with distinct heritage and cultural dimensions have wine festivals be popular with wine tourist like me have the wine styles that I expect from a Missouri winery have regional wines that are famous
Factor 2	Place Based Wine Experience	QE16 QE13 QE1 QE2	has wineries that use Missouri grapes has wines that reflect its region have recognition with friends/family that have visited the region have wine-tasting opportunities

Factor 1 – This factor highlights variables that affect the tourist demand of a Missouri winery. The setting (scenery, signs, distinct heritage, cultural attributes of the winery), combined with activities (wine festivals) and familiarity (wine tourist like me and wine styles) creates a strong tourism experience.

Factor 2 – This factor focuses on the regional wine experience. The expectations are that the wines are available for tastings and reflect the region (Missouri) in which the winery

is located. In addition, third party confirmation of friends and family are important in confirming the consumer's choice of the regional wine experience.

In summary, it appears that the member wineries expect their wine trail organization to have identity attributes that emphasizes group-based tourism and the wine experience, both based on place. These factors and associated manifest variables will be tested in confirmatory factor analysis later in this chapter.

Winery Wine Trail Member Perceptions Exploratory Factor Analysis (EFA)

The member surveys yielded 31 observations of members' perceptions of their wine trails. The EFA resulted in a model with 14 manifest variables loading on four factors. The results of Kaiser-Meyer-Olkin measure of sampling adequacy and Barlett's test of sphericity are both presented in Table 28.

Table 28 - Winery Member Perceptions KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.512
Approx. Chi-Square	174.449
Bartlett's Test of Sphericity Df	91
Sig.	.000

The Kaiser-Meyer-Olkin measure of sampling adequacy at .512 indicates that the model is just above the minimum level of acceptability of .5 and is therefore deemed marginally appropriate for factor analysis. Barlett's test of sphericity is significant, which implies that the probability that the variables are different than zero is $p < .01$, given the chi-square of 174.449 and the degrees of freedom of 91. The total variance explained by member wineries' perceptions four-factor model was 67.229% as detailed in Table 29.

Table – 29 Winery Member Perceptions – Total Variances

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.946	28.183	28.183	3.946	28.183	28.183	3.768	26.912	26.912
2	2.352	16.803	44.985	2.352	16.803	44.985	2.426	17.330	44.242
3	1.912	13.656	58.641	1.912	13.656	58.641	1.944	13.884	58.126
4	1.202	8.588	67.229	1.202	8.588	67.229	1.274	9.103	67.229
5	1.155	8.250	75.479						
6	.828	5.911	81.390						
7	.680	4.854	86.244						
8	.548	3.911	90.155						
9	.407	2.910	93.066						
10	.351	2.509	95.575						
11	.241	1.719	97.293						
12	.187	1.337	98.631						
13	.116	.830	99.460						
14	.076	.540	100.000						

Extraction Method: Principal Component Analysis.

The top four account for 67.229% of the total variance of the model. After the rotation, the magnitude of all the factors stayed nearly the same. Factor one explains 26.912% of the total variance, which dominates over factor two with 17.330% of the total variance explained. The principal component analysis extraction and varimax rotation resulted in reported factor loadings as presented in Table 30.

Table 30 - Member Winery Perceptions Factor Loadings – EFA Analysis

	Component			
	1	2	3	4
QT1P18- has wines that reflect its region	.872	-.011	-.129	.031
QT1P3 – has the wine styles that I expect from a Missouri winery	.859	.127	.043	-
				.077
QT1P7 – has wineries that are in close proximity to each other	.830	.138	.084	-
				.030
QT1P14 – is popular with wine tourists like me	.822	.110	-.115	.227
QT1P20 – has recognition with friends/family that have visited the region	.813	.040	.156	.012
QT1P6 – has wine festivals	.166	.772	.024	.037
QT1P11 – has excellent food-tasting opportunities	.258	.757	.034	.015
QT1P4 – has a large number of wineries to visit	-.008	.748	.006	-
				.211
QT1P12R – has food and wine activities	-.066	.739	-.164	.249
QT1P2 – is visitor-friendly	.233	-.084	.879	-
				.081
QT1P1 – has wine tasting opportunities	.030	-.164	.849	-
				.133
QT1P16R – has common standards for its wines	.280	-.253	-.566	-
				.107
QT1P9R – has local art and crafts for sale	-.038	.062	.102	.877
QT1P10R – reflects the ethnic culture of it region	.093	-.025	-.166	.550

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 5 iterations.

The variables loaded independently on four factors, and each factor that loaded was above .3. The loadings on factor one and two had four or more variables loading greater than .6. Factor three loaded three, all of which were greater than .5, which is adequate. However, the two variables loading on factor two is not adequate as most researchers look for at least three to four variables to load on each factor to have meaningful results. In addition, when the factors were reduced to three or two, the variables cross loaded to such a degree that the analysis had no meaning. The four-factor model presented was the most stable. Possible explanations include the sample adequacy or the number of cases. A description of the four factor model for the EFA is presented in Table 31.

Table 31 - Member Winery Perceptions – Factor Name and Variable Description

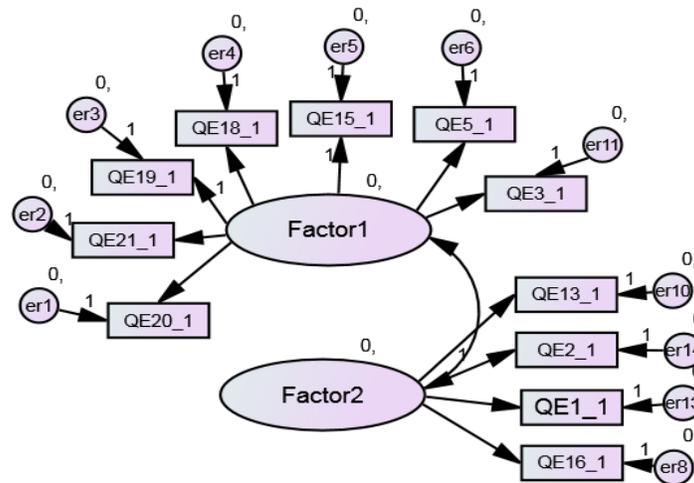
Factor	Factor Name	Variable	Variable Description
Factor 1	Wine Experience Tourism	QT1P1 QT1P2 QT1P16	has wine tasting opportunities is visitor-friendly does not have common standards for its wine
Factor 2	Place-Based Wine Experience	QT1P3 QT1P18 QT1P7 QT1P14 QT1P20	has the wine styles that I expect from a Missouri winery has wines that reflect its region has wineries that are in close proximity to each other is popular with wine tourists like me has recognition with friends/family that have visited the region
Factor 3	Group Tourism	QT1P11 QT1P6 QT1P4 QT1P12R	has excellent food-tasting opportunities has wine festivals has a large number of wineries to visit has food and wine activities

Factor 4	Individual-Based Tourism	QT1P9R QT1P10R	have local arts and crafts for sale reflects the ethnic culture of it region

Member Expectations Confirmatory Factor Analysis (CFA)

The member expectations' two factors and manifest variables were then loaded in AMOS to perform a Confirmatory Factor Analysis (CFA). The path diagram for the CFA analysis is presented in Figure 7. The variables and their description by factor are found in Table 32 immediately after the path diagram.

Figure 7 - Path Diagram Winery Member Expectations



**Table 32 - Winery Member Expectations
Factor Name and Description**

Factor	Factor Name	Variable	Variable Description
Factor 1	Group Wine Tourism	QE3 QE5 QE15	be well signposted have attractive scenery including vineyards have wineries and vineyards with distinct heritage and

		QE18 QE19 QE21 QE20	cultural dimensions have wine festivals be popular with wine tourists like me have the wine styles that I expect from a Missouri winery have regional wines that are famous
Factor 2	Place-Based Wine Experience	QE16 QE13 QE1 QE2	has wineries that use Missouri grapes has wines that reflect its region have recognition with friends/family that have visited the region have wine-tasting opportunities

The analysis of the factor loadings informs us as to the statistical significance of the estimates by manifest variable. The results of the regressions weights for the consumer expectations model are reported in Table 33.

Table 33 -Winery Member Expectations Regression Weights

	Estimate	S.E.	C.R.	P	Label
QE20_1 <--- Factor1	1.294	.279	4.642	***	
QE21_1 <--- Factor1	1.436	.257	5.583	***	
QE19_1 <--- Factor1	1.000				
QE18_1 <--- Factor1	.982	.281	3.491	***	
QE15_1 <--- Factor1	1.000				
QE16_1 <--- Factor2	4.872	2.293	2.125	.034	
QE5_1 <--- Factor1	.422	.175	2.419	.016	
QE3_1 <--- Factor1	.510	.216	2.364	.018	
QE2_1 <--- Factor2	1.000				
QE1_1 <--- Factor2	1.424	1.035	1.377	.169	
QE13_1 <--- Factor2	2.006	.891	2.252	.024	

All variable estimates except QE1 (have recognition with friends/family that have visited the region) appear to be statistically significant at the $p < .05$ level.

The critical ratio (C.R.) is the parameter estimate divided by its standard error. This test statistic functions as a z-statistic in testing if the estimate is statistically different from zero. If we consider a probability level of $p = .05$ to be appropriate, then the test statistic should be within 1.96 of zero. With its large standard error (2.293), QE16 (has wineries that use Missouri grapes) has a critical ratio of 2.2125 but still is statistically significant at the $p = .034$. QE1 (have recognition with friends/family that have visited the region) is found to be statistically significant at $p = .169$ level.

We can now look at model fit. The model fit statistics are presented in Table 34.

Table 34 - Member Expectations Model Fit Statistics					
Fit Statistic	NPAR	CMIN	DF	P	CMIN/DF
CMIN - Default Model	33	57.503	44	0.083	1.307
Fit Statistic	RMSEA	LO 90	HI 90	Pclose	
RMSEA - Default Model	0.101	0	0.168	0.154	

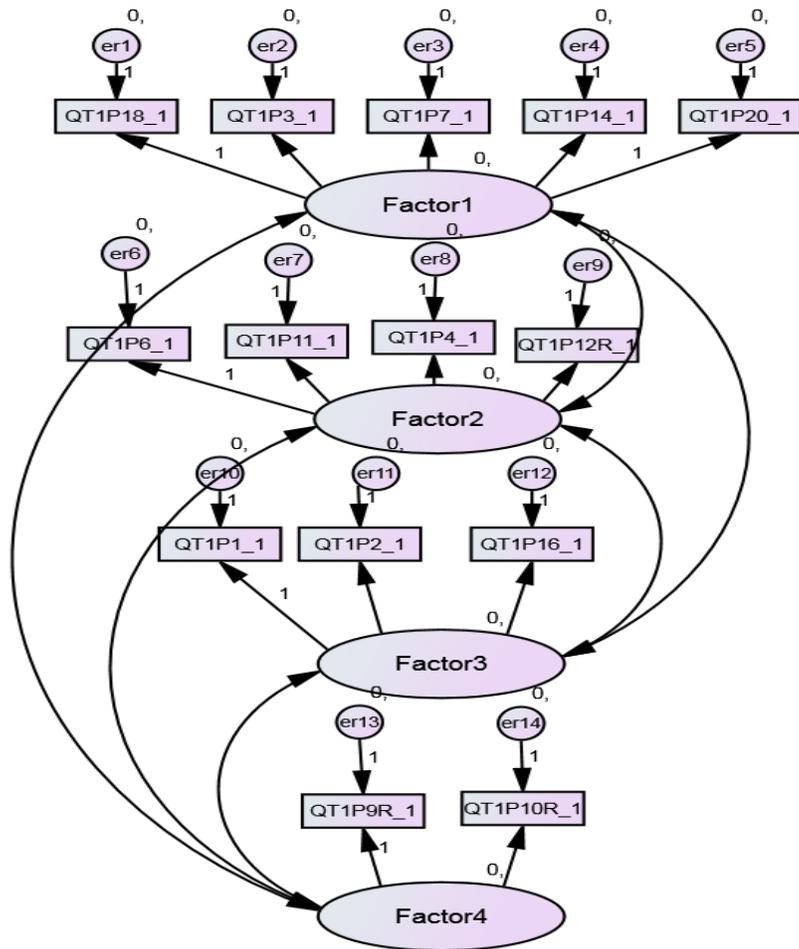
CMIN

Relative chi-square (CMIN / DF) was chosen to avoid the sample size issues associated with chi-square (Wheaton et al., 1977). Ratios less than 5 are considered appropriate and indicative of a reasonable model fit (Marsh & Hocevar, 1985). Because the CMIN/DF ratio for the member expectations model is 1.307, the model fit is deemed acceptable.

RMSEA

The root mean square error of approximation (RMSEA) indicates how well the model would fit the population covariance matrix if it were available. Values of less than .10 indicate acceptable fit, with those being below .06 to be considered indicative of a good fit between the model and the data. For the member expectations model, a RMSEA value of 1.01 is indicative of a poor fit. Therefore, the model fit statistics give us a mixed view of the model fit. The member perceptions four-factor model from the EFA analysis was loaded in AMOS to perform a CFA. The path diagram is presented in Figure 8.

Figure 8 - Winery Member Perceptions – Path Diagram



We did not obtain a solution to the CFA analysis because some of the calculations would have resulted in negative variances. We speculate that the reasons for the negative variances could include misspecification of the model, too few observations, and data inadequacy. The low KMO (see Table 28) indicates that the sample is marginally adequate for the factor analysis. This is an indication of high partial correlations, which can cause the manifest variables to load on more than one factor. In addition, the replacement of the skips with the means lowers the KMO and exacerbates the high partial

correlations problem. Given the sensitivity of our EFA to this issue, we believe this is the problem, which can be overcome with an increased sample size. The CFA analysis of winery members' perception was rejected.

Comparison of Member and Consumer Expectations Models

While the expectations model as determined through our analysis is structurally different for external stakeholders (consumers) and internal stakeholders (member wineries), a direct comparison of the themes of the factors and their manifest variables could inform us as to the comparability of the two expectations models. A summary of the factors and manifest variables of consumer expectations is summarized in Table 36, and the two factor model for winery members is summarized in Table 37. A discussion of the common themes and variables follows the summary tables.

Table 36 - Consumer Factor Expectations Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QE2 QE6 QE3 QE5 QE4	has wine tasting opportunities is visitor-friendly is well sign posted has attractive scenery including vineyards have excellent food-tasting opportunities
Factor 2	Place-Based Experience	QE16 QE13 QE12 QE11	has wineries that use Missouri grapes has wines that reflect its region has winery staff that is knowledgeable about wine provides easy access to information about Missouri grapes and wine
Factor 3	Group Belongingness	QE19 QE18 QE14 QE11	is popular with the wine tourist like me has wine festivals has a large number of wineries to visit has regional wines that are famous
Factor 4	Individual-	QE8	has local arts and crafts for sale

	Based Tourism	QE17 QT1P17	has food and wine activities has wineries that I am familiar with
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Table 37 - Winery Member Factor Expectations Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Group Wine Tourism	QE3 QE5 QE15 QE18 QE19 QE21 QE20	be well signposted have attractive scenery including vineyards have wineries and vineyards with distinct heritage and cultural dimensions have wine festivals be popular with wine tourist like me have the wine styles that I expect from a Missouri winery has regional wines that are famous
Factor 2	Place-Based Wine Experience	QE16 QE13 QE1 QE2	has wineries that use Missouri grapes has wines that reflect its region have recognition with friends/family that have visited the region have wine-tasting opportunities

Similarities in expected stakeholder organizational form

Both consumers and members have expectations that the organizational form of a wine trail will consist of a group-based tourism factor.

**Table 38 - Consumer Expectations Model – Factor 3
Group Belongingness**

Factor 3	Group Belongingness	QE19 QE18 QE14 QE20	is popular with the wine tourist like me has wine festivals has a large number of wineries to visit has regional wines that are famous
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**Table 39 - Wine Trail Member Expectations – Factor 1
Group Wine Tourism**

Factor 1	Group Wine	QE3	be well signposted
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	Tourism	QE5 QE15 QE18 QE19 QE21 QE20	have attractive scenery including vineyards have wineries and vineyards with distinct heritage and cultural dimensions have wine festivals be popular with wine tourist like me have the wine styles that I expect from a Missouri winery has regional wines that are famous
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Both groups have expectations of attributes of tourism and reputational elements through third party confirmation of other tourists (popular with wine tourist like me).

**Table 40 - Comparison of Tourism Element Expectations
Consumer and Winery Members**

Attribute	Consumer Expectations	Wine Trail Member Expectation
Tourism Elements	<ul style="list-style-type: none"> • Wine Festivals • Large number of wineries to visit 	<ul style="list-style-type: none"> • Wine Festivals • Be well signposted • Have attractive scenery including vineyards • Have wineries and vineyards with distinct heritage and cultural dimensions • Have the wine styles I expect from a Missouri winery
Third party confirmation	<ul style="list-style-type: none"> • Popular with the wine tourists like me • Has regional wines that are famous 	<ul style="list-style-type: none"> • Popular with wine tourists like me • Has regional wines that are famous

In comparing the two expectations, the wine trail members have a more expansive focus on the tourism attributes of a wine trail, while consumers are not as focused on third party

confirmations. In addition to the expectations of group tourism, consumers and wine trail members also have expectations of a place-based experience.

**Table 41 - Consumer Expectations Factor 2
Place-Based Experience**

Factor 2	Place-Based Experience	QE16 QE13 QE12 QE11	has wineries that use Missouri grapes has wines that reflect its region has winery staff that is knowledgeable about wine provides easy access to information about Missouri grapes and wine
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**Table 42 -Wine Trail Member Expectations Factor 2
Place-Based Wine Experience**

Factor 2	Place-Based Wine Experience	QE16 QE13 QE1 QE2	has wineries that use Missouri grapes has wines that reflect its region have recognition with friends/family that have visited the region have wine-tasting opportunities
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Both groups have expectations of a wine experience based on local terroir and service variables.

Table 43 - Comparison of Wine Experience Expectations of Stakeholders by Attribute

Attribute	Consumer Expectations	Wine Trail Member Expectation
Wine experience based on local terroir	<ul style="list-style-type: none"> • Has wineries that use Missouri grapes • Has wines that reflect its region 	<ul style="list-style-type: none"> • Has wineries that use Missouri grapes • Has wines that reflect its region • Has regional wines that are famous
Service	<ul style="list-style-type: none"> • Has winery staff that is knowledge about wine • Provides easy access 	<ul style="list-style-type: none"> • Has wine tasting opportunities

	to information about Missouri grapes and wine	
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In addition, to the place-based attributes like terroir reflection in the wines, the wine trail members also included a third party confirmation or reputational attributes of the place (have recognition with friends/family that have visited the region) as an important element of the wine trail form.

Differences in Expectations of Form

Consumer (external stakeholders) expectations are more numerous than those of the member wineries (internal stakeholders) and add attributes of individual-based tourism structured around sensory experience and a broad-based tourism element that includes non-wine activities.

**Table 44 - Consumer Expectations Factor 1
Sensory Experience Tourism**

Factor 1	Sensory Experience Tourism	QE2 QE6 QE3 QE5 QE4	has wine tasting opportunities is visitor-friendly is well signposted has attractive scenery including vineyards have excellent food-tasting opportunities
Factor 4	Individual-Based Tourism	QE8 QE17 QE9	has local arts and crafts for sale has food and wine activities has wineries that I am familiar with

In summary

While both consumer and member wineries have expectations of a wine experience based on place and a tourism experience in common, consumers have an expanded view of tourism that includes group and individual attributes that have both sensory and non-wine tourism elements. In the comparative process, both stakeholders compare the ideal or expected attributes against the perceived attributes. Our findings indicate a gap has formed between the expectations of member wineries and consumers as to the expected attributes of a wine trail as it pertains to tourism.

Individual Wine Trail Expectations and Perception Analysis

We assume that the expectations of attributes for individual wine trails will be different than that of the overall expectation of a wine trail organization in general. We believe this is attributed to the differences of the geographic region in which the trails reside, as well as their embedded social, cultural, historical, and place-based differences. In addition, the difference in the age of trails and composition of the collective entrepreneurial member wineries and associated self-identities are assumed to play a role in the differences. The ability to parse out the differences by factor and by wine trail would help inform these assumptions of wine trail characteristic differences. To be able to compare expectations and perceptions of wine trails by stakeholders, a common comparative framework is needed for both form and basis. For form, the expectation of the ideal attributes of the identity of the organizational collective is used as the point of comparison for both internal and external stakeholders. To be able to quantify estimated differences by factor, we generate trail-specific composite factor scores based on an expectations model CFA using underlying stakeholder expectations data.

Factor Scores

Once a factor solution is determined from the confirmatory factor analysis, we can calculate composite factor scores. Factor scores serve as a proxy for the measurement of an unobserved factor and are composed of the unweighted composites of the scores of the manifest variables that loaded on the factor (Brown, 2006). Using the “weighted sum scores” method (DiStefano et al., 2009), comparisons between wine trails can be made by creating a sum or composite score for each factor of each case. This is accomplished by multiplying the scaled score for each manifest variable by the factor score for the same variable. The resulting values are summed to create a composite factor score. By averaging all composite factor scores by individual wine trails, we have a basis for comparison of wine trails by factor for both the consumers’ and member wineries’ expectations and perceptions data. This allows us to compare the expectations and perceptions of individual trails based on factors.

Comparison Steps

To compare external and internal stakeholders’ expectations and perceptions of individual wine trails, the following steps were taken.

1. Using the external stakeholders’ expectations factor model as a basis for comparison, factor scores were derived from a CFA using the consumers’ perceptions data from Missouri Weinstrasse, Hermann, and Route du Vin (older trails with the most number of consumer perceptions). In addition, a CFA was

run on the combined perception data of the remaining newer trails (see appendices 1 – 5 for CFA run statistics).

2. The resulting factor scores were applied to the measured survey results for each case of consumer perceptions by variable, by factor, and by trail. The sum of the resulting values gave a composite factor score for the individual case. All cases pertaining to each individual wine trail were then averaged by factor resulting in an average composite factor score by factor and by wine trail for external stakeholders' perceptions.
3. Steps 1 – 2 were performed for external stakeholders' expectations data using the same external stakeholder's expectations factor model as a basis for comparison.
4. Steps 1 – 4 were performed for the internal stakeholders' expectations data using the internal stakeholders' expectations model as the basis for comparison of the wine trails.
5. We were not able to perform a CFA on the member wineries' perceptions data, so we used the factor scores from step four (internal stakeholders' expectations data) to derive indications of individual trail perception differences. This was considered appropriate because the winery members' expectations of the attributes of an ideal organizational identity are the basis for a reputational comparative process. Using these attributes and their form as a framework would give us indications of differences in wine trails. These factors were applied to the measured survey perceptions results by trail and summed up to derive an average composite score by factor by trail.

6. The composite scores by factor and by wine trail for internal and external stakeholders' expectations and perceptions were compared to derive overall and trail-by-trail differences by factor.

Member - Individual Wine Trail Analysis

The factor scores resulting from the CFA of the members' expectations two-factor model are presented in Table 45.

Table 45 - Member Winery Expectations Factor Scores

	QE1_1	QE2_1	QE3_1	QE5_1	QE13_1	QE16_1	QE15_1	QE18_1	QE19_1	QE21_1	QE20_1
Factor1	0.002	0.006	0.051	0.065	0.009	0.011	0.064	0.066	0.215	0.238	0.113
Factor2	0.015	0.057	0	0	0.092	0.111	0	0	0.001	0.001	0.001

Winery Member Perceptions

Using the wine trail members' two-factor model of expectations as a guide, we can determine if their current perceptions of their wine trails match their expectations of a wine trail. In particular we can determine if the two factors (group-based wine tourism and place-based wine experience) are in line with their perceptions.

Using the factor scores derived from the CFA of the two-factor model of member expectations, we computed the average and variance of members' perceptions by factor by applying the factor weights to the measurement data of member perceptions by trail. The results are presented in Table 46.

Wine Trail	Factor 1 Average	Factor 2 Average	Factor 1 Variance	Factor 2 Variance
Overall Perceptions	3.5602	1.2858	0.2873	0.0133
Hermann	3.9188	1.2304	0.1065	0.0097
Kansas City	3.7853	1.3060	0.0713	0.0207
Mississippi River Hills	3.7020	1.3810	0.0551	0.0001
Missouri River	3.1078	1.1470	0.4368	0.0001
Missouri Weinstrasse	3.9777	1.3587	0.0014	0.0029
Ozark Mountain	2.7100	1.2305	0.6498	0.0047
Route du Vin	3.7596	1.3854	0.0914	0.0000
The Aux Arcs Wine Road	3.0770	1.2775	0.3461	0.0244
NWMO	3.4550	1.2840	0.2439	0.0158

Wine Trail	Factor 1 Average	Factor 2 Average	Factor 1 Variance	Factor 2 Variance
Overall Expectations	3.3813	1.3137	0.3828	0.2678
Hermann	3.4214	1.3040	0.1512	0.0287
Kansas City	3.7007	1.3270	0.2089	0.0113
Mississippi River Hills	3.4220	1.3865	0.5767	0.0000
Missouri River	2.6933	1.1865	0.8674	0.0094
Missouri Weinstrasse	3.7693	1.3880	0.0050	0.0000
Ozark Mountain	2.9110	1.2760	0.1682	0.0181
Route du Vin	3.8306	1.3632	0.2696	0.0023
The Aux Arcs Wine Road	2.9460	1.2760	0.3890	0.0229
NWMO	3.3640	1.3244	0.2857	0.0029

Comparison of Member Expectations and Perceptions

Factor 1 (Group Wine Tourism) comparison between member expectations and perceptions (3.3813 vs. 3.56032) indicates that the members perceive that their wine trail organizations' attributes for group wine tourism exceed expectations overall.

However, at the individual wine trail organization level, two wine trails’ perceptions (Ozark Mountain and Route du Vin) are lower than their expectations for the group wine tourism attribute.

Factor 2 (Place–Based Wine Experience) comparison between member expectations and perceptions (1.3137 vs. 1.2858) indicates that members perceive their wine trail organizations’ attributes for group wine tourism are less than their expectations overall. At the individual wine trail organization level, The Aux Arcs Wine Road and Route du Vin’s perceptions exceed expectations. This shows that there is a “gap” in the expectations of place-based experience with a majority of the winery trail winery members.

Differences in Wine Trail Stakeholders’ Perceptions

To compare the perceptions of stakeholders, the expected organizational form of a wine trail was used as a comparative framework. By applying the expectations factor scores of both consumers and members to their respective perceptions survey data, we were able to derive some insight into stakeholders’ views and thus compare external to internal stakeholder perceptions. The composite scores for consumers’ and members’ perceptions by factor are presented in Table 48.

Table 48 – Wine Trail Comparison of Consumer Perceptions				
Data Set	Factor 1 Average	Factor 2 Average	Factor 3 Average	Factor 4 Average
Overall Expectations	4.1698	4.3402	3.8714	3.3553
Overall Perceptions	3.0657	3.9094	1.0562	3.6026
Consumer Perceptions of Herman	3.4895	4.6584	4.5356	3.1652

Consumer Perceptions of Missouri Weinstrasse	3.4625	5.1544	3.8106	1.8387
Consumer Perceptions of Route du Vin	1.8552	4.5832	3.5148	2.3209
Consumer Perception of Other Trails	1.4682	4.4234	4.4054	1.4975

Table 49 - Wine Trail Comparison of Member Perceptions		
Data Set	Factor 1 Average	Factor 2 Average
Overall Expectations	3.3813	1.3137
Overall Perceptions	3.5602	1.2858
Member Perceptions of Hermann	3.9188	1.2304
Member Perceptions of Missouri Weinstrasse	3.9777	1.3587
Member Perceptions of Route du Vin	3.7596	1.3854
Member Perceptions of All Other Trails	3.0428	1.1741

While the cognitive structures of the models are different, we can draw some inferences from the analysis.

Factor 2 – Place-Based Factors for Both Consumers and Members

The comparison of consumer and member perceptions of the place-based factor two for both consumer and member winery models indicates that overall perceptions are below expectations. At the individual wine trail level of comparison, consumers’ perceptions exceed expectations for every trail while only Missouri Weinstrasse and Route du Vin’s members’ perceptions of the place-based factor exceeds expectations.

Group Belongingness and Group Tourism

The comparison of consumer and member perceptions of the group belongingness and tourism factor (factor three for the consumer factor model and factor one for the member factor model) indicate that consumers’ perceptions exceed expectations at both the

overall and trail level. For members, overall perceptions exceeded expectations while just the newer trails (all but Missouri Weinstrasse, Route du Vin and Hermann) are below expectations.

Summary

In this chapter we have developed and tested models from the external and internal stakeholders' perceptions and expectations survey data. The summary of our analysis is as follows:

External Stakeholders' Expectations

The EFA of the stakeholder data indicated a four-factor mode with 16 total manifest variables. The sample for the analysis was determined adequate, and the loadings, which were all above .6, were considered acceptable. The CFA of the model determined in the EFA was run with a chi-square indicating strong statistical significance between the model and its variables. Additionally, all variables were found to be statistically significant, and the model fit statistics were found to be acceptable.

The resulting four-factor model for consumer expectations included factor themes of "Sensory Experience Tourism," "Place-Based Experience," "Group Belongingness," and "Individual-Based Tourism." The following subscale and items were determined to be the content of the four factors:

Institutional Sub-scale and Items:

have wineries that use Missouri grapes

provide easy access to information about Missouri grapes and wine
have wines that reflect its region
be well signposted

Core Wine Product Sub-scale and items:

have a large number of wineries to visit
have wineries that I am familiar with
have wine-tasting opportunities
have excellent food-tasting opportunities
have winery staff that is knowledgeable about wine
have wine festivals

Cultural/Historical/Place-based Sub-scale and Items:

have regional wines that are famous
have local art and crafts for sale
have attractive scenery including vineyards

Social Norms Sub-scale and Items:

be popular with wine tourists like me
have food and wine activities
be visitor-friendly

External Stakeholders' Perceptions

The EFA of the stakeholder data indicated a four-factor model with 12 total manifest variables. The sample for the analysis was determined to be adequate, and the loadings were considered acceptable. The CFA of the resulting four-factor model showed a statistically significant relationship of the model and its manifest variables. Additionally, all variables were found to be statistically significant. The model fit statistics indicated

an acceptable fit. The resulting four-factor model for consumer expectations included the factor themes of “Sensory Experience Tourism,” “Place-Based Experience,” “Group Belongingness,” and “Individual-Based Tourism.” The following subscale and items were determined to be the content of the four factors:

Institutional Sub-scale and Items:

have the wine styles that I expect from a Missouri winery
have wines that reflect its region
have wineries that are in close proximity to each other

Core Wine Product Sub-scale and Items:

have a large number of wineries to visit
have wine-tasting opportunities
have wine festivals

Cultural/Historical/Place-based Sub-scale and items:

have regional wines that are famous
reflect the ethnic culture of its region
have local art and crafts for sale

Social Norms Sub-scale and Items:

have recognition with friends/family that have visited the region
have food and wine activities
be visitor-friendly

Internal Stakeholders’ Expectations

The EFA of the internal stakeholders’ expectations data indicated a two-factor model with 11 total manifest variables. The sample for the analysis was determined to be adequate, and the loadings were considered acceptable. The CFA of the resulting four-factor model showed a statistically significant relationship between the model and its manifest variables. Additionally, all variables were found to be statistically significant

with the exception of variable QE2 (have recognition with friends/family that have visited the region). This variable was found to be statistically significant at $p = .169$. The model fit statistics indicated an acceptable fit. The resulting two-factor model for consumer expectations included the factor themes of “Group Wine Tourism” and “Place-Based Wine Experience.” The following subscale and items were determined to be the content of the two factors:

Institutional Sub-scale and Items:

have wineries that use Missouri grapes
have the wine styles that I expect from a Missouri winery
have wines that reflect its region
be well signposted

Core Wine Product Sub-scale and Items:

have wine-tasting opportunities
have wine festivals

Cultural/Historical/Place-based Sub-scale and Items:

have regional wines that are famous
have wineries and vineyards with distinct heritage and cultural dimensions
have attractive scenery including vineyards

Social Norms Sub-scale and Items:

be popular with wine tourists like me
have recognition with friends/family that have visited the region

Internal Stakeholders' Perceptions

The EFA of the internal stakeholders' expectations data indicated a four-factor model with 16 total manifest variables. The sample for the analysis was determined to be

marginal for factor analysis, and the loadings were considered acceptable. No solution was obtained for the CFA from the resulting EFA four-factor model as some of the calculations would have resulted in negative variances. An indication of the factor themes was obtained from the four-factor EFA model and included “Wine Experience Tourism,” “Place-Based Wine Experience,” “Group Tourism,” and “Individual-Based Tourism.”

Comparison of Expectations Models of External and Internal Stakeholders

In comparing the factor models that make up the expectations of the ideal wine trail organization's attributes of both external and internal stakeholders, a difference in structure was found. The external stakeholders' analysis indicated a four-factor model while the internal stakeholders' analysis found a two-factor model. However, the results of the analysis indicated some similarities in factor themes and manifest variables between the two models. In particular, both stakeholders had expectations of both a group-based tourism and a place-based factor. The common content or attributes by sub-scale included:

Institutional Sub-scale and Items:

have wineries that use Missouri grapes
have wines that reflect its region
be well signposted

Core Wine Product Sub-scale and Items:

have wine-tasting opportunities
have wine festivals

Cultural/Historical/Place-based Sub-scale and Items:

have regional wines that are famous
have attractive scenery including vineyards

Social Norms Sub-scale and Items:

be popular with wine tourists like me

Comparison of Perceptions Model of External and Internal Stakeholders

The analysis of the perceptions data from the external and internal stakeholders' yielded indications of differences in content. The analysis of the external stakeholder data yielded a four-factor model. However, because the CFA of the internal stakeholders' four-factor model was inconclusive, we were unable to make a direct comparison and draw a conclusion about the perceived form of the model. The EFA of the internal stakeholder data did result in a four-factor model, which would indicate a similar form between the stakeholders. An analysis of the stakeholder perceptions at the individual wine trail level indicated a difference in perceptions of stakeholders. Thus, indications are that the perceptions of stakeholders are different.

Comparison of the Content of External and Internal Stakeholders

For our analysis, the summary of the content of the expectations and perceptions' models of the internal and external stakeholders is summarized below. Even though the CFA for member wineries was inconclusive, the results of the EFA analysis were included in the comparison to give indications of content of the winery members' perceptions model.

Table 50 – Comparison of the Content of External and Internal Stakeholders’ Models

Sub- Scale and Item	Consumer Expectations	Consumer Perceptions	Winery Member Expectations	Winery Member Perceptions (EFA)
Institutional				
have common standards for its wines				X
have wineries that use Missouri grapes	X		X	
have the wine styles that I expect from a Missouri winery		X	X	X
provide easy access to information about Missouri grapes and wine	X			
have wines that reflect the region	X	X	X	X
be well signposted	X		X	
have wineries that are in close proximity to each other		X		X
Core Wine Product				
have a large number of wineries to visit	X	X		X
have wineries that I am familiar with	X			
have wine-tasting opportunities	X	X	X	X
have excellent food-tasting opportunities	X			X
have winery staff that is knowledgeable about wine	X			
have wine festivals	X	X	X	X
Cultural / Historical/Place-based				
have regional wines that are famous	X	X	X	
have wineries and vineyards with distinct heritage and cultural dimensions			X	
reflect the ethnic culture of its region		X		X
have local art and crafts for sale	X	X		X
have attractive scenery including vineyards	X		X	
Social Norms				
be popular with wine tourists like me	X		X	X
have recognition with friends / family that have visited the region		X	X	X
have food and wine activities	X	X		X
be visitor friendly	X	X		X

Chapter 6 - Conclusions

Our research explores the attributes of the identity-based mechanisms of group collective action. Ruef (2010) asserts that identity is one of the four key mechanisms that holds collective enterprises together. To inform the identity-based mechanism in a group collection action (wine trails), we used some of the comparative processes of Foreman, Whetten, and Mackey (2012). Recognizing that wine trails are organizational collectives that market themselves and the region in which they reside, we tested for the presence of an identity-based reputation attribute that reflects the social and physical aspects of the region. Survey instruments were developed and used to determine external stakeholder (consumers) and internal stakeholder (member wineries) perceptions and expectations of wine trails. Using exploratory and confirmatory factor analysis, the survey results were analyzed to determine if the following hypotheses were accepted or rejected:

External Stakeholders (Consumers)

Hypothesis 1 – Consumers perceptions and expectations of wine trails include place-based or geographic attributes

Hypothesis 2 – Consumers’ perceptions and expectations of wine trails include institutional, historical, social norms, and role attributes

The consumer confirmatory factor analysis of consumers’ expectations data yielded a four-factor model. The themes of the factors reflect the consumer expectations of the attributes of the identity of the ideal wine trail organization. As presented in Table 51 (consumer expectations model) and 52 (consumer perceptions model), the factor themes

are composed of manifest variables that are a mix of institutional, historical, social, institutional, and place-based attributes. **Therefore, both hypothesis 1 and 2 are accepted.**

Table 51 - Consumer Expectations Four-Factor Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QE2 QE6 QE3 QE5 QE4	has wine tasting opportunities is visitor-friendly is well signposted has attractive scenery including vineyards have excellent food-tasting opportunities
Factor 2	Place-Based Experience	QE16 QE13 QE12 QE11	has wineries that use Missouri grapes has wines that reflect its region has winery staff that is knowledgeable about wine provides easy access to information about Missouri grapes and wine
Factor 3	Group Belongingness	QE19 QE18 QE14 QE11	is popular with the wine tourist like me has wine festivals has a large number of wineries to visit has regional wines that are famous
Factor 4	Individual- Based Tourism	QE8 QE17 QT1P17	has local arts and crafts for sale has food and wine activities has wineries that I am familiar with

Table 52- Consumer Perceptions Four-Factor Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QT1P1 QT1P2 QT1P3	has wine tasting opportunities is visitor-friendly have the wine styles that I expect from a Missouri winery
Factor 2	Place-Based Experience	QT1P19 QT1P18	have regional wines that are famous has wines that reflect its region

		QT1P20	have recognition with friends/family that have visited the region
Factor 3	Group Belongingness	QT1P7 QT1P6 QT1P4	have wineries that are in close proximity to each other has wine festivals has a large number of wineries to visit
Factor 4	Individual-Based Tourism	QT1P9 QT1P12 QT1P10	have local arts and crafts for sale has food and wine activities reflect the ethnic culture of its region

Internal Stakeholders (Member Wineries)

Hypothesis 3 – Member winery perceptions and expectations of wine trails include place-based or geographic attributes

Hypothesis 4 – Member winery perceptions and expectations of wine trails include institutional, historical, and social norms and role attributes

Expectations

The member winery confirmatory factor of the expectations data yielded a two-factor model. The themes of the factors reflect internal stakeholders’ (winery members) expectations of the attributes of a wine trail. The factor themes are made up of manifest variables that are a mix of institutional, historical, social, institutional, and place-based attributes as presented in Table 53.

Perceptions

The exploratory factor analysis of the winery member perceptions data confirmed the existence of manifest variables that contained institutional, historical, social, institutional,

and place-based attributes (see Table 50). The confirmatory factor analysis failed to validate the EFA.

We were able to derive some additional indications of the content of the perceptions of internal stakeholders from an analysis of individual wine trails. Using factor scores from the winery member expectations CFA, we developed composite scores by factor and by wine trail from the winery members' perceptions data. The result indicated that the perceptions of the wine trails to which the winery members belong have similar factors and attributes as their expectations of the wine trail organization.

Therefore, both hypothesis 3 and 4 are accepted.

Table 53 - Winery Member Expectations Two -Factor Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Group Wine Tourism	QE3 QE5 QE15 QE18 QE19 QE20 QE21	be well signposted have attractive scenery including vineyards have wineries and vineyards with distinct heritage and cultural dimensions have wine festivals be popular with the wine tourist like me have regional wines that are famous have the wine styles that I expect from a Missouri winery
Factor 2	Place-Based Wine Experience	QE16 QE13 QE1 QE2	has wineries that use Missouri grapes has wines that reflect its region have recognition with friends/family that have visited the region have wine-tasting opportunities

Comparison of the perceptions and expectations of Stakeholders

Hypothesis 5 – The perceptions of internal and external stakeholders of the organizational form of wine trails are consistent.

Hypothesis 6 - The expectations of internal and external stakeholders of the organizational form of wine trails are consistent.

The content of the attributes and the overall structure of the consumer expectation of the wine trail organization were found to be different than that of the winery members. For form, the analysis of consumer expectations data indicated a four-factor model while the winery members' analysis yielded a two-factor model.

However, the results indicate that both consumers and winery members expect place-based and tourism factors and related content from a wine trail organization. While the winery members' mental map of tourism was an all-encompassing single factor, consumer expectations were more nuanced as they divided the tourism element into three distinct factors including group, sensory, and individual-based tourism. Therefore, external stakeholders (consumers) and internal stakeholders (member wineries) have different expectations of the structure and content of attributes of a wine trail organization.

In addition, the research indicates that the attributes of consumers' and winery members' wine trail perceptions might differ, but the form of the perceptions models for them is inconclusive. For form, the EFA and CFA of the consumer perceptions data yielded a statistically valid four-factor model (see Table 55), while the EFA of the winery members' perceptions data also yielded a four-factor model (see Table 54). The CFA of

the winery members' perceptions model failed and thus, did not validate the form.

However, the form of the validated consumer perceptions model and the model from the EFA of the winery member were similar (see Tables 53 and 54). In addition, because we analyzed the expectations and perceptions of consumers and producers at the individual wine trails, we were able to draw inferences that the overall perceptions and expectations of winery members were not consistent.

Thus, **hypothesis 5 and 6 are rejected** as the overall expectations of stakeholders are different, and the perceived and projected images are inconsistent.

The differences are as follows:

Form of Expectations model: The external stakeholders form was a four-factor model (see Table 51) while the internal stakeholders form was a two-factor model (see Table 53).

Content of Expectations model: While both had place-based factors (factor two in both models), the tourism-themed factor contained seven manifest variables for internal stakeholders but only three different factors (sensory experience tourism, group belongingness, and individual-based tourism) that were made of a total of 12 manifest variables for external stakeholders. Thus the expectation models of stakeholders are different in both content and form.

Form of Perceptions model: The external stakeholders form was a four-factor model (see Table 51), and the internal stakeholders form was also a four-factor model (see Table

53). However, the only indication of the internal stakeholders' mental map or form was the one resulting from the EFA because the CFA failed to validate the relationship between the proposed model and its manifest variables. Therefore, the structure comparison is inconclusive.

Content of the Perceptions model: Because we do not have a direct comparison of the form of the perceptions models of external and internal stakeholders due to the failure of the internal stakeholders' CFA, the analysis of the factors and their manifest variables cannot be done. We were, however, able to compare the attributes of consumer and member winery's perceptions using the results from the CFA of consumers and the EFA from member wineries for indications of congruency (See table 50 for attribute comparisons). The results show indications that the two stakeholders' view of the ideal attributes are different. Additionally, indications derived from the factor analysis of the stakeholder's perception data indicate that perceptions of the place-based and group-based factors are different (see Table 48 and 49). Thus, the perception models of both types of stakeholders are not found to be the same.

Table 54- Member Winery Perceptions – Factor Name and Variable Descriptions - EFA

Factor	Factor Name	Variable	Variable Description
Factor 1	Wine Experience Tourism	QT1P1 QT1P2 QT1P16	has wine tasting opportunities is visitor-friendly does not have common standards for its wine
Factor 2	Place-Based	QT1P3	has the wine styles that I expect from a Missouri winery

	Wine Experience	QT1P18 QT1P7 QT1P14 QT1P20	Has wines that reflect its region has wineries that are in close proximity to each other is popular with the wine tourist like me has recognition with friends/family that have visited the region
Factor 3	Group Tourism	QT1P11 QT1P6 QT1P4 QT1P12R	has excellent food-tasting opportunities has wine festivals has a large number of wineries to visit has food and wine activities
Factor 4	Individual-Based Tourism	QT1P9R QT1P10R	have local arts and crafts for sale reflects the ethnic culture of it region

Table 55 - Consumer Perceptions Four-Factor Model

Factor	Factor Name	Variable	Variable Description
Factor 1	Sensory Experience Tourism	QT1P1 QT1P2 QT1P3	has wine tasting opportunities is visitor-friendly Have the wine styles that I expect from a Missouri winery
Factor 2	Place-Based Wine Experience	QT1P19 QT1P18 QT1P20	have regional wines that are famous has wines that reflect its region have recognition with friends/family that have visited the region
Factor 3	Group Tourism	QT1P7 QT1P6 QT1P4	have wineries that are in close proximity to each other has wine festivals has a large number of wineries to visit
Factor 4	Individual-Based Tourism	QT1P9 QT1P12 QT1P10	have local arts and crafts for sale has food and wine activities Reflect the ethnic culture of its region

Implications of Research

This research finds that certain attributes are important in the development of the identities and reputations of agricultural organizational collectives. While we did not test

the entire conceptual model of Foreman et al. (2012), this research validates, extends, and challenges certain aspects of the evaluative processes of their conceptual framework.

In particular these aspects are:

1. The content of both external and internal stakeholders' expectations used in the evaluative process contains attributes of institutional, place-based, cultural, and social norms. This is represented in the Foreman et al. model as "for something." This research confirms that the specific content of stakeholders' expectations is developed in part from the institutional norms, social categories, and structural roles associated with the wine trail organization and adds the place-based attributes to their model.
2. Both external and internal stakeholders' perceptions contain attributes and associated content of institutional, place-based, cultural, and social norms. This is represented in the Foreman, Whetten, and Mackey (2012) model as an explicit outcome of the identity based reputation "for something" by stakeholders in the reputation "with someone." This research confirms and extends the content of the attributes with stakeholders.
3. The internal and external stakeholders' expectations of the content of the identity-based reputation are not congruent as they differ in both form and content. This confirms Foreman, Whetten, and Mackey (2012) as it indicates an explicit separation of the internal and external reputational comparative process based on salient stakeholder expectations.

Discussion of implications of Research

Finding: Both external and internal stakeholders indicate that place-based attributes such as cultural, historical, social, and institutional attributes are important to the identity and reputation of Missouri Wine trails.

Discussion: This research has implications for both the tourism and agriculture sectors based on the continuing social trends involving place-based agriculture and tourism.

These trends indicate that consumers of food and tourism recognize that place matters.

1. Understanding the premiums associated with the place-based attributes is important to being able to define the value of the opportunity space that place-based tourism and agriculture provides to the entrepreneur.
2. Can regionally branded food and tourism products receive premiums from consumers over those that are not?
3. What is the consumer mechanism for the development of the premiums? Is it an identity-based construct based on quality alone to which place based elements of the identity contribute? Is it important that the projected identity from an internal stakeholder match the external stakeholders' perception to receive increased value from the consumer?

Finding: We have confirmed aspects of the identity-based reputation comparative process in Foreman, Whetten, & Mackey (2012) and extended it to place-based organizational collectives.

Implications: The ability to successfully develop and increase the number of collective entrepreneurial efforts will increase the economic impact of these value-added and agri-tourism efforts. To do so, the mechanisms that hold these organizations together must be understood. While we have explored specific aspects of the identity-based mechanism within the organizational collective, additional understanding of its process of development is needed.

1. How do the organizations and individuals develop a joint identity for the organizational collective that is successful without conflicting with or diminishing the prospects of their own, individual organization?
2. What are the dynamics of the ability of the member organization to cooperate in an organizational cooperative such as a wine trail while competing against each other as individual wineries? How does an organizational collective's identity affect its members' individual identities? Is the organizational identity of the organizational cooperative additive to the individual winery's organizational identity? Does membership in the organizational collective improve the competitiveness of the member wineries?
3. How does the identity-based construct change as the organizational collective ages and enters different stages of its life cycle? Do other "mechanisms" from Reuf (2012) become more salient as the collective organization changes? Foreman et al. (2013) found indications that trust is an important ingredient in the organizational collective. What role does it play in the success of the organizational collective?

Finding: We have confirmed that content containing institutional attributes is part of the expectations and perceptions of external and internal stakeholders. In addition, we have found that a gap exists in stakeholders' expectations of the content of the ideal wine trail organization.

Implications: The role of institutions in the development and success of agricultural organizational collectives could be important in their economic sustainability.

1. Understanding the process that resulted in the institutional attributes' presence in the expectations and perceptions of external and internal stakeholders could be important for rural policy development in agriculture. Can institutions help narrow the identified gap in external and internal stakeholders' expectations?
2. Because the attributes showed up in both internal and external expectations of wine trails, institutions could play an important role in the creation of external stakeholders' demand for their products and thus could potentially affect the premiums associated with place-based agriculture and tourism. Do institutions play a critical role in creating and maintaining place-based "product quality" attributes in agricultural organizations such as wine trails?

Limitations of Research

Because the research is on Missouri Wine Trails, the results might not be generalizable beyond Missouri and its wine industry. The research will need to be repeated and

expanded with wine trails in other states and also with other agricultural place-based commodities to confirm the findings and increase its robustness. While the number of internal stakeholders' survey responses included a majority of total eligible winery members, the total number was still only 31. The small sample size could have affected the robustness of the research results.

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Appendix 1 - Consumer Expectation Model Imposed on Perception Data

Regression Weights: (Group Number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
QT1P2_1	<---	Factor1	1.000				
QT1P13_1	<---	Factor1	1.602	.268	5.975	***	
QT1P11_1	<---	Factor1	1.353	.249	5.443	***	
QT1P5_1	<---	Factor1	1.249	.183	6.808	***	
QT1P6_1	<---	Factor3	.765	.143	5.364	***	
QT1P14_1	<---	Factor3	.994	.143	6.954	***	
QT1P19_1	<---	Factor3	.698	.135	5.167	***	
QT1P4_1	<---	Factor3	1.000				
QT1P22_1	<---	Factor2	1.001	.140	7.168	***	
QT1P21_1	<---	Factor2	1.125	.145	7.731	***	
QT1P8_1	<---	Factor2	1.169	.172	6.806	***	
QT1P18_1	<---	Factor2	1.000				
QT1P17_1R	<---	Factor4	1.000				
QT1P12_1R	<---	Factor4	.966	.275	3.511	***	
QT1P9_1R	<---	Factor4	.441	.166	2.664	.008	
QT1P1_1	<---	Factor1	.509	.092	5.545	***	

Covariances: (Group Number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Factor2	<-->	Factor1	.132	.024	5.553	***	
Factor3	<-->	Factor4	.177	.057	3.107	.002	
Factor2	<-->	Factor4	.099	.036	2.722	.006	
Factor3	<-->	Factor1	.193	.033	5.822	***	
Factor1	<-->	Factor4	.112	.032	3.447	***	
Factor3	<-->	Factor2	.209	.041	5.105	***	

The following covariance matrix is not positive definite.

	Factor4	Factor1	Factor2	Factor3
Factor4	.408			
Factor1	.112	.108		

	Factor4	Factor1	Factor2	Factor3
Factor2	.099	.132	.200	
Factor3	.177	.193	.209	.362

Model Fit

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	54	249.657	98	.000	2.548
Saturated model	152	.000	0		
Independence model	32	940.321	120	.000	7.836

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.082	.070	.095	.000
Independence model	.173	.163	.183	.000

Appendix 2 - Consumer Expectation Model Imposed on Hermann Wine Trail Perception Data

Regression Weights: (Group Number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
QT1P1_1 <--- Factor1	1.000				
QT1P2_1 <--- Factor1	1.198	.095	12.652	***	
QT1P13_1 <--- Factor1	1.204	.169	7.112	***	
QT1P5_1 <--- Factor1	1.235	.087	14.139	***	
QT1P22_1 <--- Factor2	.919	.079	11.655	***	
QT1P18_1 <--- Factor2	.918	.092	9.938	***	
QT1P8_1 <--- Factor2	1.000				
QT1P14_1 <--- Factor3	1.000				
QT1P6_1 <--- Factor3	1.000				
QT1P4_1 <--- Factor3	.962	.081	11.926	***	
QT1P19_1 <--- Factor3	1.031	.106	9.700	***	
QT1P9_1R <--- Factor4	1.000				
QT1P12_1R <--- Factor4	1.323	.264	5.019	***	
QT1P17_1R <--- Factor4	.692	.170	4.078	***	
QT1P21_1 <--- Factor2	.978	.086	11.415	***	
QT1P11_1 <--- Factor1	1.023	.191	5.355	***	

Covariances: (Group Number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Factor4 <--> Factor3	.098	.021	4.762	***	
Factor2 <--> Factor3	.155	.017	8.953	***	
Factor2 <--> Factor1	.108	.013	8.536	***	
Factor2 <--> Factor4	.105	.023	4.621	***	
Factor3 <--> Factor1	.111	.011	9.905	***	
Factor4 <--> Factor1	.065	.014	4.470	***	

Model Fit

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	354.663	99	.000	3.582
Saturated model	152	.000	0		
Independence model	32	2042.103	120	.000	17.018

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.080	.071	.089	.000
Independence model	.198	.191	.206	.000

Appendix 3 - Consumer Expectation Model Imposed on Missouri Weinstrasse Wine Trail Perception Data

Regression Weights: (Group Number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
QT1P1_1	<---	Factor1	1.000				
QT1P2_1	<---	Factor1	1.304	.126	10.340	***	
QT1P13_1	<---	Factor1	.756	.188	4.026	***	
QT1P5_1	<---	Factor1	1.285	.120	10.684	***	
QT1P22_1	<---	Factor2	.623	.087	7.154	***	
QT1P18_1	<---	Factor2	.651	.100	6.510	***	
QT1P8_1	<---	Factor2	1.000				
QT1P14_1	<---	Factor3	1.000				
QT1P6_1	<---	Factor3	1.000				
QT1P4_1	<---	Factor3	1.033	.132	7.815	***	
QT1P19_1	<---	Factor3	.973	.156	6.248	***	
QT1P9_1R	<---	Factor4	1.000				
QT1P12_1R	<---	Factor4	1.897	.688	2.758	.006	
QT1P117_1R	<---	Factor4	.466	.235	1.985	.047	
QT1P21_1	<---	Factor2	.856	.104	8.271	***	
QT1P11_1	<---	Factor1	.995	.226	4.398	***	

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Factor4 <-->	Factor3		.074	.030	2.450	.014	
Factor2 <-->	Factor3		.226	.034	6.659	***	
Factor2 <-->	Factor1		.154	.025	6.159	***	
Factor2 <-->	Factor4		.101	.041	2.481	.013	
Factor3 <-->	Factor1		.116	.019	6.213	***	
Factor4 <-->	Factor1		.025	.016	1.587	.112	

Model Fit

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	366.177	99	.000	3.699
Saturated model	152	.000	0		
Independence model	32	1139.296	120	.000	9.494

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.113	.101	.125	.000
Independence model	.200	.190	.211	.000

Appendix 4 - Consumer Expectation Model Imposed on Route du Vin Wine Trail Perception Data

Regression Weights: (Group Number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
QT1P1_1	<---	Factor1	1.000				
QT1P2_1	<---	Factor1	1.637	.500	3.275	.001	
QT1P13_1	<---	Factor1	2.842	.812	3.500	***	
QT1P5_1	<---	Factor1	1.528	.443	3.450	***	
QT1P22_1	<---	Factor2	.732	.138	5.324	***	
QT1P18_1	<---	Factor2	.710	.166	4.279	***	
QT1P8_1	<---	Factor2	1.000				
QT1P14_1	<---	Factor3	1.000				
QT1P6_1	<---	Factor3	1.000				
QT1P4_1	<---	Factor3	.936	.225	4.162	***	
QT1P19_1	<---	Factor3	1.187	.297	3.994	***	
QT1P9_1R	<---	Factor4	1.000				
QT1P12_1R	<---	Factor4	.992	.389	2.554	.011	
QT1P17_1R	<---	Factor4	2.059	.729	2.826	.005	
QT1P21_1	<---	Factor2	.923	.166	5.574	***	
QT1P11_1	<---	Factor1	2.177	.705	3.087	.002	

Covariances: (Group Number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Factor4 <-->	Factor3		.075	.031	2.429	.015	
Factor2 <-->	Factor3		.133	.031	4.230	***	
Factor2 <-->	Factor1		.073	.022	3.272	.001	
Factor2 <-->	Factor4		.106	.042	2.551	.011	
Factor3 <-->	Factor1		.064	.019	3.344	***	
Factor4 <-->	Factor1		.034	.016	2.110	.035	

The following covariance matrix is not positive definite (Group Number 1 - Default model).

	Factor1	Factor3	Factor4	Factor2
Factor1	.031			
Factor3	.064	.095		
Factor4	.034	.075	.131	
Factor2	.073	.133	.106	.225

Model Fit

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	175.885	99	.000	1.777
Saturated model	152	.000	0		
Independence model	32	477.484	120	.000	3.979

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.076	.057	.094	.013
Independence model	.149	.135	.163	.000

Appendix 5 - Consumer Expectation Model Imposed on the All but Hermann, Missouri Weinstrasse and Route du Vin Wine Trail Perception Data

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
QT1P1_1 <--- Factor1	1.000				
QT1P2_1 <--- Factor1	1.927	.350	5.508	***	
QT1P13_1 <--- Factor1	3.152	.650	4.852	***	
QT1P5_1 <--- Factor1	2.458	.468	5.256	***	
QT1P22_1 <--- Factor2	.857	.107	8.049	***	
QT1P18_1 <--- Factor2	.846	.124	6.797	***	
xQT1P8_1 <--- Factor2	1.000				
QT1P14_1 <--- Factor3	1.000				
QT1P6_1 <--- Factor3	1.000				
QT1P4_1 <--- Factor3	1.137	.149	7.623	***	
QT1P19_1 <--- Factor3	.769	.138	5.557	***	
QT1P9_1R <--- Factor4	1.000				
QT1P12_1R <--- Factor4	2.169	.798	2.718	.007	
QT1P17_1R <--- Factor4	2.174	.797	2.730	.006	
QT1P21_1 <--- Factor2	.963	.109	8.831	***	
QT1P11_1 <--- Factor1	2.694	.586	4.600	***	

Covariances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Factor4 <--> Factor3	.070	.029	2.419	.016	
Factor2 <--> Factor3	.213	.037	5.774	***	
Factor2 <--> Factor1	.077	.016	4.802	***	
Factor2 <--> Factor4	.050	.023	2.212	.027	
Factor3 <--> Factor1	.087	.017	5.012	***	
Factor4 <--> Factor1	.025	.010	2.428	.015	

The following covariance matrix is not positive definite.

	Factor1	Factor3	Factor4	Factor2
Factor1	.027			
Factor3	.087	.293		
Factor4	.025	.070	.081	
Factor2	.077	.213	.050	.268

Model Fit

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	53	248.219	99	.000	2.507
Saturated model	152	.000	0		
Independence model	32	946.938	120	.000	7.891

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.080	.068	.093	.000
Independence model	.172	.162	.182	.000

Appendix 6 - Consumer and Winery Member Surveys

Missouri Wine Trail Research					
By filling out the survey, you are consenting to being involved in the research project. Your participation in the survey is voluntary. You may decline to answer any question or discontinue participation at any point.					
Wine Trail Research - Expectations					
The purpose of this section of the survey is to understand your expectations of wine trails. Please tell us your feelings about the following statements concerning wine trails.					
1. A Wine Trail should.....					
	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
have recognition with friends / family that have visited the region	<input type="radio"/>				
have wine-tasting opportunities	<input type="radio"/>				
be well signposted	<input type="radio"/>				
have excellent food-tasting opportunities	<input type="radio"/>				
have attractive scenery including vineyards	<input type="radio"/>				
be visitor friendly	<input type="radio"/>				
not have common standards for its wines	<input type="radio"/>				
not have local art and crafts for sale	<input type="radio"/>				

2. A Wine Trail should.....

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
not have wineries that customers are familiar with	<input type="radio"/>				
have wineries that are in close proximity to each other	<input type="radio"/>				
provide easy access to information about Missouri grapes and wines	<input type="radio"/>				
have winery staff that is knowledgeable about wine	<input type="radio"/>				
have wines that reflect the region	<input type="radio"/>				
have a large number of wineries to visit	<input type="radio"/>				
have wineries and vineyards with distinct heritage and cultural dimensions	<input type="radio"/>				
have wineries that use Missouri grapes	<input type="radio"/>				

3. A Wine Trail should.....

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
not have food and wine activities	<input type="radio"/>				
have wine festivals	<input type="radio"/>				
be popular with wine tourists like me	<input type="radio"/>				
have regional wines that are famous	<input type="radio"/>				
have the wine styles that I expect from a Missouri winery	<input type="radio"/>				
not reflect the ethnic culture of its region	<input type="radio"/>				

Wine Trail Research - Perceptions

The purpose of this section of the survey is to understand your perceptions of a wine trail that you have visited in Missouri. Please choose a wine trail that you are familiar with and rate your level of agreement or disagreement with the following statements.

4. Please identify only one wine trail that you have visited and can give us your perceptions

- Hermann
- Missouri Weinstrasse (Augusta Region)
- Missouri River (Central Missouri)
- Ozark Mountain (Springfield Area)
- Route Du Vin (Sainte Genevieve)
- The Aux Arcs Wine Road (Mountain View Area)
- The NWMO (North West Missouri Wine Trail)
- Mississippi River Hills (Southeast Missouri)
- Not familiar with any of the wine trails

5. The [Q4] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
has wine tasting opportunities	<input type="radio"/>				
is visitor friendly	<input type="radio"/>				
has the wine styles that I expect from a Missouri winery	<input type="radio"/>				
has a large number of wineries to visit	<input type="radio"/>				
has attractive scenery including vineyards	<input type="radio"/>				
has wine festivals	<input type="radio"/>				
has wineries that are in close proximity to each other	<input type="radio"/>				
provides easy access to information about Missouri grapes and wine	<input type="radio"/>				

6. The [Q4] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
does not have local art and crafts for sale	<input type="radio"/>				
not reflect the ethnic culture of its region	<input type="radio"/>				
has excellent food-tasting opportunities	<input type="radio"/>				
does not have food and wine activities	<input type="radio"/>				
is well signposted	<input type="radio"/>				
is popular with the wine tourist like me	<input type="radio"/>				
has wineries and vineyards with distinct heritage and cultural dimensions	<input type="radio"/>				
does not have common standards for its wines	<input type="radio"/>				

7. The [Q4] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
does not have wineries that I am familiar with	<input type="radio"/>				
has wines that reflect its region	<input type="radio"/>				
has regional wines that are famous	<input type="radio"/>				
has recognition with friends / family that have visited the region	<input type="radio"/>				
has winery staff that is knowledgeable about wine	<input type="radio"/>				
has wineries that use Missouri grapes	<input type="radio"/>				

8. If you are familiar with another wine trail in addition to the one chosen above, please identify it and give us your perceptions; otherwise, please choose "not familiar with any of the wine trail" option.

- Hermann
- Missouri Weinstrasse (Augusta Region)
- Missouri River (Central Missouri)
- Ozark Mountain (Springfield Area)
- Route Du Vin (Sainte Genevieve)
- The Aux Arcs Wine Road (Mountain View Area)
- The NWMO (Northwest Missouri Wine Trail)
- Mississippi River Hills (Southeast Missouri)
- Not familiar with any of the wine trails

9. The [Q8] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
has wine tasting opportunities	<input type="radio"/>				
is visitor friendly	<input type="radio"/>				
has the wine styles that I expect from a Missouri winery	<input type="radio"/>				
has a large number of wineries to visit	<input type="radio"/>				
has attractive scenery including vineyards	<input type="radio"/>				
has wine festivals	<input type="radio"/>				
has wineries that are in close proximity to each other	<input type="radio"/>				
provides easy access to information about Missouri grapes and wine	<input type="radio"/>				

10. The [Q8] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
does not have local art and crafts for sale	<input type="radio"/>				
not reflect the ethnic culture of its region	<input type="radio"/>				
has excellent food-tasting opportunities	<input type="radio"/>				
does not have food and wine activities	<input type="radio"/>				
is well signposted	<input type="radio"/>				
is popular with the wine tourist like me	<input type="radio"/>				
has wineries and vineyards with distinct heritage and cultural dimensions	<input type="radio"/>				
does not have common standards for its wines	<input type="radio"/>				

11. The [Q8] wine trail

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
does not have wineries that I am familiar with	<input type="radio"/>				
has wines that reflect its region	<input type="radio"/>				
has regional wines that are famous	<input type="radio"/>				
has recognition with friends / family that have visited the region	<input type="radio"/>				
has winery staff that is knowledgeable about wine	<input type="radio"/>				
has wineries that use Missouri grapes	<input type="radio"/>				

Survey Finish

Thank you for agreeing to share your time and opinions of Missouri's wine trails. If you have any questions or concerns, please contact us. We are most easily reached by email at this time of year.

Dr. Randall Westgren
Division of Applied Social Sciences
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westgrenr@missouri.edu

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Missouri Wine and Grape Board
PO Box 630
Jefferson City, Mo 65102
(573)751-6807
missouri.wine@mda.mo.gov

Wine Trail Research

By filling out the survey, you are consenting to being involved in the research project. Your participation in the survey is voluntary. You may decline to answer any question or discontinue participation at any point.

Wine Trail Research - Expectations

The purpose of this section of the survey is to understand your expectations of wine trails in general. Please tell us your feelings about the following statements concerning wine trails.

1. A Wine Trail should.....

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
have recognition with friends / family that have visited the region	<input type="radio"/>				
have wine-tasting opportunities	<input type="radio"/>				
be well signposted	<input type="radio"/>				
have excellent food-tasting opportunities	<input type="radio"/>				
have attractive scenery including vineyards	<input type="radio"/>				
be visitor friendly	<input type="radio"/>				
not have common standards for its wines	<input type="radio"/>				
not have local art and crafts for sale	<input type="radio"/>				
not have wineries that customers are familiar with	<input type="radio"/>				
have wineries that are in close proximity to each other	<input type="radio"/>				
provide easy access to information about Missouri grapes and wines	<input type="radio"/>				
have winery staff that is knowledgeable about wine	<input type="radio"/>				
have wines that reflect the region	<input type="radio"/>				
have a large number of wineries to visit	<input type="radio"/>				
have wineries and vineyards with distinct heritage and cultural dimensions	<input type="radio"/>				
have wineries that use Missouri grapes	<input type="radio"/>				
not have food and wine activities	<input type="radio"/>				

have wine festivals	<input type="radio"/>				
be popular with wine tourists	<input type="radio"/>				
have regional wines that are famous	<input type="radio"/>				
have the wine styles that I expect from a Missouri winery	<input type="radio"/>				
not reflect the ethnic culture of its region	<input type="radio"/>				

Wine Trail Research - Perceptions

The purpose of this section of the survey is to understand your perceptions of that wine trail to which you belong. Please choose your wine trail and rate your level of agreement or disagreement with the follow statements.

2. Please identify the wine trail that to which your winery belongs and can give us your perceptions

- Kansas City
- Hermann
- Missouri Weinstrasse
- Missouri River
- Ozark Mountain
- Route Du Vin (Sainte Genevieve)
- The Aux Arcs Wine Road
- The NWMO
- Mississippi River Hills

The purpose of this section of the survey is to understand your perceptions of that wine trail to which you belong. Please rate your level of agreement or disagreement with the follow statements.

3. The [Q2] wine trail

	Strongly disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
has wine tasting opportunities	<input type="radio"/>				
is visitor friendly	<input type="radio"/>				
has the wine styles that I expect from a Missouri winery	<input type="radio"/>				
has a large number of wineries to visit	<input type="radio"/>				
has attractive scenery including vineyards	<input type="radio"/>				
has wine festivals	<input type="radio"/>				
has wineries that are in close proximity to each other	<input type="radio"/>				
provides easy access to information about Missouri grapes and wine	<input type="radio"/>				
does not have local art and crafts for sale	<input type="radio"/>				
not reflect the ethnic culture of its region	<input type="radio"/>				
has excellent food-tasting opportunities	<input type="radio"/>				
does not have food and wine activities	<input type="radio"/>				
is well signposted	<input type="radio"/>				
be popular with the wine tourist	<input type="radio"/>				
has wineries and vineyards with distinct heritage and cultural dimensions	<input type="radio"/>				
does not have common standards for its wine	<input type="radio"/>				
does not have wineries that I am familiar with	<input type="radio"/>				
has wines that reflect its region	<input type="radio"/>				
has regional wines that are famous	<input type="radio"/>				
has recognition with friends / family that have visited the region	<input type="radio"/>				
has winery staff that is knowledgeable about wine	<input type="radio"/>				
has wineries that use Missouri grapes	<input type="radio"/>				

4. Please choose the response that best reflects how much you agree with each of the following specific statements about the relationship between your winery and the wine trail.

	Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
My winery feels a sense of belonging to this wine trail	<input type="radio"/>				
My winery feels like a part of the family at this wine trail	<input type="radio"/>				
My winery feels emotionally attached to this wine trail	<input type="radio"/>				
This wine trail has a great deal of professional meaning for my winery	<input type="radio"/>				
I feel I have too few options to consider leaving this wine trail	<input type="radio"/>				
Leaving this wine trail is not an option for our winery	<input type="radio"/>				
We get more out of this wine trail than it costs us in time and expense	<input type="radio"/>				
Leaving the wine trail now would disrupt our winery's business	<input type="radio"/>				
Our winery is better run because we are a member of the wine trail	<input type="radio"/>				
We would lose an important identity dimension to our winery if we left the wine trail	<input type="radio"/>				
It would cost us too much to leave the wine trail	<input type="radio"/>				

Several characteristics of wine trails have been suggested as being important to the success of wine trails. Please state the degree to which you agree with the following statements about the importance of the specific characteristics.

5. This following is important to the success of the wine trail.

	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
Number of different wines available for sale	<input type="radio"/>				
Ability to stage major events	<input type="radio"/>				
Geographic proximity to other wine trail members	<input type="radio"/>				
Fermentation and bottling on premise	<input type="radio"/>				
Wine quality	<input type="radio"/>				
Quality of customer service	<input type="radio"/>				
Quality of the wine and food experience	<input type="radio"/>				
Production tours	<input type="radio"/>				
Tasting room capacity	<input type="radio"/>				
Tasting room capacity	<input type="radio"/>				

The purpose of this section of the survey is to understand how you feel about your winery's capabilities. Please rate your winery on the following characteristics.

6. On a scale from poor to great, our winery's characteristics rate as follows:

	1 - Poor	2	3	4	5	6	7	8	9	10 - Great
Number of different wines available for sale	<input type="radio"/>									
Ability to stage major events	<input type="radio"/>									
Geographic proximity to other wine trail members	<input type="radio"/>									
Fermentation and bottling on premise	<input type="radio"/>									
Wine quality	<input type="radio"/>									
Quality of customer service	<input type="radio"/>									
Quality of wine and food experience	<input type="radio"/>									
Production tours	<input type="radio"/>									
Tasting room capacity	<input type="radio"/>									

Survey Finish

Thank you for agreeing to share your time and opinions of Missouri's wine trails. If you have any questions or concerns, please contact us. We are most easily reached by email at this time of year.

Dr. Randall Westgren

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westgrenr@missouri.edu

James Anderson
Executive Director
Missouri Wine and Grape Board
PO Box 630
Jefferson City, Mo 65102
(573)751-6807
missouri.wine@mda.mo.gov

Appendix 7 – Institutional Review Board Approval and Extension Letter



Campus Institutional Review Board
University of Missouri-Columbia

485 McReynolds Hall
Columbia, MO 65211-1150
PHONE: (573) 882-9585
FAX: (573) 884-0663

March 12, 2013

Principal Investigator: Hofherr, Peter William
Department: Agricultural/Applied Economics

Your Application to project entitled *Consumer Affiliation to Missouri Wine Trails and Associations* was reviewed and approved by the MU Campus Institutional Review Board according to terms and conditions described below:

IRB Project Number	1206821
Funding Source	R.Westgren
Initial Application Approval Date	March 12, 2013
IRB Expiration Date	March 12, 2014
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Risk Level	Minimal Risk

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems, serious adverse events, and deviations must be reported to the IRB within 5 days.
3. All modifications must be IRB approved by submitting the Exempt Amendment prior to implementation unless they are intended to reduce risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date.
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize the IRB stamped document informing subjects of the research and other approved research documents located within the document storage section of eIRB.

If you have any questions, please contact the Campus IRB at 573-882-9585 or umcresearchcirb@missouri.edu.

Thank you,

Charles Borduin, PhD
Campus IRB Chair



Campus Institutional Review Board
University of Missouri-Columbia

485 McReynolds Hall
Columbia, MO 65211-1150
PHONE: (573) 882-9585
FAX: (573) 884-0663

February 10, 2014

Principal Investigator: Hofherr, Peter William
Department: Agricultural/Applied Economics

Your Annual Exempt Form to project entitled *Consumer Affiliation to Missouri Wine Trails and Associations* was reviewed and approved by the MU Campus Institutional Review Board according to terms and conditions described below:

IRB Project Number	1206821
Funding Source	R.Westgren
Initial Application Approval Date	March 12, 2013
Approval Date of this Review	February 10, 2014
IRB Expiration Date	March 12, 2015
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Regulation	45 CFR 46.101b(2)
Risk Level	Minimal Risk

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems, serious adverse events, and deviations must be reported to the IRB within 5 days.
3. All modifications must be IRB approved by submitting the Exempt Amendment prior to implementation unless they are intended to reduce risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date.
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize the IRB stamped document informing subjects of the research and other approved research documents located within the document storage section of eIRB.

If you have any questions, please contact the Campus IRB at 573-882-9585 or umcresearchcirb@missouri.edu.

Thank you,

Charles Borduin, PhD
Campus IRB Chair

Appendix 8 – Transmittal Letter to External Stakeholders

UNIVERSITY *of* MISSOURI

MCQUINN CENTER OF ENTREPRENEURIAL LEADERSHIP

Division of Applied Social Sciences

Dear _____,

The Missouri Wine and Grape Board and the McQuinn Center for Entrepreneurial Leadership of the University of Missouri are beginning a new research project in support of the Missouri Wine industry. We are seeking your opinion about Missouri's wine trails in an attempt to better understand their development and consumer impact. You were selected because you currently or have recently used a Missouri Winery Passport.

Purpose

The purpose of this research project is to examine group entrepreneurship in the wine industry, notably the development of wine trails, state organizations, regional labels, and appellations. We wish to examine how these activities lead to higher levels of consumer acceptance, market share, and similar measure of success in the industry.

Project Personnel

The research project is co-directed by Dr. Randall Westgren, the holder of the Mary Agnes McQuinn Chair of Entrepreneurship at the University of Missouri and Jim Anderson, the Executive Director of the Missouri Wine and Grape Board. Dr. Westgren is responsible for maintaining the confidentiality of all information gathered in the research project.

Confidentiality and Your Rights

Your participation in answering questions on the survey is voluntary. All information obtained in the survey process will be kept confidential and will not be released in any individually

identifiable form without your prior consent. You may decline to answer any question or discontinue participation at any point in the survey.

We believe that this research will feed back into the future success of the Missouri wine industry. We will share any insights we get from analyzing the confidential data we gather from the surveys. We will seek federal and state funding for continued research into group entrepreneurship to enhance industry outcomes, and for projects to support the further development of group entrepreneurship in marketing, promotion, and brand-building.

Thank you in advance for agreeing to share your time and opinions of Missouri's wine trails. If you have any questions or concerns, please contact us. We are most easily reached by email at this time of year.

Dr. Randall Westgren
Division of Applied Social Sciences
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University of Missouri
141 Mumford Hall
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westgrenr@missouri.edu

James Anderson
Executive Director
Missouri Wine and Grape Board
PO Box 630
Jefferson City, Mo 65102
(573)751-6807
missouri.wine@mda.mo.gov

Note: If you any concerns or complaints please contact the investigators listed above. If you have questions regarding human subject's rights as a research participant, please contact the Campus Institutional Review Board at the University of Missouri using the following contact information:

Campus Institutional Review Board
University of Missouri-Columbia
483 McReynolds Hall
Columbia, Mo 65211-1150
Phone: (573)882-9585

VITA

PETER HOFHERR, CFA

PROFESSIONAL EXPERIENCE

St. James Winery, Inc., St. James, Missouri – Chief Executive Officer (2008 – Present)

University of Missouri., Columbia, Missouri – Assistant Director of the McQuinn Center for Entrepreneurial Leadership (July 2005 – Present).

State of Missouri – Chief of Staff to the Governor (November 2004 – January 2005), Director of the Department of Agriculture (2003 – 2005); Deputy Director of the Department of Agriculture (2001 – 2003)

St. James Winery, Inc., St. James, Missouri – General Manager (1995 – 2001)

Coopers and Lybrand, LLP., Atlanta, Georgia – Manager - Financial Advisory Services (1992 – 1995)

BDO Seidman, Atlanta, Georgia - Financial Services Unit (1989 – 1992)

EDUCATION

PhD – Agricultural and Applied Economics – University of Missouri - 2014

Master of Business Administration – Georgia State University – 1989

Bachelor of Science – Microbiology – Auburn University – 1986

Charter Financial Analyst – 1993