

**The Role of Systemic Adaptability in  
Subsistence Consumer-Merchant Management of Business and Family**

Madhu Viswanathan\*  
Department of Business Administration  
University of Illinois at Urbana-Champaign

José Antonio Rosa  
Department of Management and Marketing  
University of Wyoming

Julie A. Ruth  
School of Business  
Rutgers University

**WORKING PAPER. PLEASE DO NOT CITE WITHOUT THE DIRECT APPROVAL  
OF THE AUTHORS.**

\*Author acknowledgements: The authors would like to thank Barbara Bickart, Maureen Morrin, and Cele Otnes for helpful comments on an earlier draft of the manuscript. All authors contributed equally to this research.

## **The Role of Systemic Adaptability in Subsistence Consumer-Merchant Management of Business and Family**

Our research focuses on subsistence consumer-merchants (SCMs), or people living in substandard conditions, with little or no education, and earning minimal incomes from self-managed businesses such as selling flowers or prepared food items from a kiosk. Our research objectives are to achieve a more profound and nuanced understanding of why subsistence consumers, who lack formal education and business training, engage in running their own micro-businesses, and how SCMs manage in that context. Adopting a grounded-theory approach and working from interview data, we find that SCMs' families are both the primary reason for running their own small business, and a key resource in managing the enterprise. We find that SCMs manage through *systemic adaptability*, which we identify and define as a responsive and principle-informed approach to emergent life and business demands where business-to-family (B2F), business-to-consumer (B2C), and business-to-business (B2B) relationships are treated as an integrated and fluid whole and are adjusted continually, with time horizons almost always being not longer than one day. Our analysis reveals four underlying business principles shape systemic adaptability exhibited by SCMs: (1) all finished inventory must produce value; (2) good customer relations must be assured by every transaction; (3) adequate quality and quantity of supplies must be negotiated daily; and (4) the business must prove profitable at the end of each business day. Our results provide a more profound theoretical understanding of the individual- and collective-level forces that shape SCM behavior, and nuanced insights that can help commercial and nonprofit organizations assist SCMs and the markets they serve.

The field of marketing has seen a quantum leap in research activity on subsistence consumers – people living in substandard housing, with minimal education, having inadequate access to sanitation, potable water, or health care, and earning minimal incomes. It is estimated, for example, that two and one half billion consumers survive on incomes of less than \$2 per day (United Nations Human Development Report 2005), on the edge of extreme poverty. Scholarly and practitioner interest in subsistence consumers is exemplified by the increasingly frequent appearance of terms such as “poorest of the poor” and “bottom of the pyramid” in the popular press, the awarding of the 2006 Nobel Peace Prize to Yunus Muhammad and the Grameen Bank for their empowerment of these populations, a growing number of conferences and special sessions on the topic in scholarly venues, and a rising number of academic articles and books on the subject (e.g., Prahalad and Hammond 2002; Hart 2005; Prahalad 2005; Rosa and Viswanathan 2007). Subsistence consumers are located throughout the developing world from Africa to Asia to Latin America, and they account for 40%-60% of the world’s population (United Nations Human Development Report 2005). Given their numbers and trillions of dollars in purchasing power, subsistence consumers have become a front-and-center topic for research and discussion, and have given rise to multiple initiatives among market-focused companies, ranging in size from regional firms such as Casas Bahia and Jaipur Foot (Prahalad 2005) to multinationals such as Procter & Gamble and Unilever (e.g., Xavier, Raja, and Nandhini 2007).

Such interest and activity notwithstanding, knowledge of subsistence consumers is relatively shallow, and much remains to be learned in order to understand how they manage in that context and how businesses should operate to serve them effectively, responsibly, and profitably (Hart 2005; Prahalad 2005), with a primary reason being that contemporary consumer and marketing theories are based on assumptions about literacy, modes of thinking, interpersonal

relationships, and fundamental values that may not hold in subsistence marketplaces (Viswanathan and Rosa 2007). Our research seeks to help address this knowledge gap by highlighting one of its common phenomena – the subsistence consumer-merchant.

We define subsistence consumer-merchants as people living in substandard conditions, with little or no education, and earning minimal incomes from a self-managed business. Lacking education and business training, these individuals enter into and manage micro-businesses such as selling flowers at the temple square, household or packaged goods door-to-door, or prepared food items from curbside kiosks. Our investigation of subsistence consumer-merchants seeks to provide insights into “what puts the poor on paths to...self-efficacy and entrepreneurial achievement” (Chakravarti 2006, p. 366). Moreover, subsistence consumer-merchants by definition hold few economic and educational resources, giving rise to questions of why they start self-run businesses and what processes are used to manage these businesses in conditions that differ from those we typically study in developed North American or European markets. Investigating subsistence consumer-merchants also responds to Steenkamp’s (2005, pp. 6-7) call for marketing research to “move out of the U.S. silo and...recognize that 80% of the world’s consumers live in emerging consumer markets” such as India, China, and other countries with sizable subsistence consumer populations.

Our research objectives are to discern and articulate the reasons behind subsistence consumer-merchants (SCMs) starting their own businesses, and to achieve a deeper and more detailed understanding of how they manage marketing processes of creating and exchanging products and services of value. We first present extant research on subsistence consumers and consumer merchants. Next, we introduce the grounded theory method and depth interview data collection technique used in this investigation. We then present the framework that reflects our

interpretation of how SCMs manage their business activities. This framework centers on *systemic adaptability*, which we conceptualize as a responsive and principle-informed approach to emergent life and business demands where family, customer, and supplier relationships are treated as an integrated and fluid whole. Based on our analysis, we find that SCMs' families are both the reason for engaging in the business enterprise and a key resource used in managing it daily, and that systemic adaptability is the underlying mechanism that enables SCMs to balance both business and family needs under conditions of few economic and educational resources and the uncertainties associated with subsistence living. Our contributions center on offering a more profound theoretical understanding of the individual- and collective-level forces that shape SCM behavior, and nuanced insights that will help commercial and nonprofit organizations serve SCMs and their markets more effectively.

### **Subsistence Consumers and Subsistence Consumer-Merchants**

Subsistence consumers typically lack access to basics such as adequate food, shelter, education, health care, and sanitation (Viswanathan 2007). For example, among India's 1.1 billion people, 44% have incomes below \$1 per day and 80% earn less than \$2 per day, 70% live in rural areas with scant infrastructure (e.g., electricity, phone, paved roads), and 40% of urban dwellers and 80% of rural dwellers do not have access to hygienic sanitation such as public sewers, controlled septic systems, or properly maintained and controlled pit latrines (Population Reference Bureau 2006). Similar conditions exist throughout many Asian, African, and Latin American countries. Moreover, because they struggle to secure survival basics on a daily basis, subsistence consumers typically do not have monetary or fungible resources to tap when emergency and unexpected needs arise.

It has been estimated that as many as half of all subsistence consumers around the world are SCMs.<sup>1</sup> Moreover, the majority of SCMs are women, as reflected in the lending strategies of microfinance organizations that target women for their services (e.g., Freeman and Higginson 2007). The over-representation of women is in part caused by customs and mores that give preference to men for day-jobs in factories and other employment venues (Gender Equality 2006; Ardrey, Pecotich, and Shultz 2006). In addition, self-managed businesses provide women the flexibility needed to handle family responsibilities (e.g., children, aged relatives).

Without adequate access to education, individuals in subsistence markets often lack fundamental literacy and numeracy skills. Women represent a disproportionate number of those with low literacy and numeracy skills, in part because many countries with limited resources sacrifice education for females in favor of males. As late as 1999 in India, for example, only 10% of women among the country's poorest 20% of the population had completed fifth grade (Population Reference Bureau 2004), and today only 65% of females between the ages of 15 and 24 have adequate literacy skills, in contrast to 80% of men in the same age bracket (Population Reference Bureau 2005). Also contributing to low functional literacy and numeracy among SCMs are growing marketplace demands, such as product packaging labels and store self-service signage, which are not unique to subsistence markets but are possibly made more challenging for those with low levels of education. In the United States, 14% of the consumer population is not capable of accomplishing simple literacy tasks such as brand/product recognition and reading traffic signs (National Assessment of Adult Literacy 2003). Similar results from the International Adult Literacy Survey (1995) include countries such as Poland (47%), Ireland

---

<sup>1</sup> The description of SCM gender, education, and behavior characteristics that follow are primarily drawn from "Unleashing Entrepreneurship: Making Business Work for the Poor," a report to the Secretary-General of the United Nations prepared by the UN Commission on the Private Sector and Development, and published by the United Nations Development Program on March 1, 2004.

(22%), United Kingdom (21%), and New Zealand (18%). Comparable data for emerging economies and subsistence consumer populations is scarce, but there is reason to believe their functional literacy and numeracy deficiencies would be greater than those of industrialized economies, and recent accounts of subsistence consumers and how they navigate the marketplace suggest that low literacy and numeracy skills are the norm (Prahalad 2005; Viswanathan 2007).

The cognitive implications of low literacy and numeracy skills among consumers have been discussed in the marketing literature (e.g., Viswanathan, Rosa, and Harris 2005; Wallendorf 2001; Adkins and Ozanne 2005) and include concrete thinking (i.e., relying primarily on sensory information versus abstractions in mental representations) and a preference for pictographic information over word descriptions in decision making. Concrete thinking has been linked to short-term planning and imagining (Luria 1976) and reliance on pictographic thinking to errors when purchasing packaged goods (Viswanathan et al. 2005). Low literacy, therefore, is most likely linked to concrete and short-term thinking that may be exhibited by SCMs.

Short-term planning horizons also characterize consumers in resource-poor contexts (e.g., scarce basic goods and services, unpredictable availability) where the imperative is to survive or subsist by obtaining essentials in the immediate and near term. Short-term planning among SCMs may be exacerbated by uncertainty in their living environments. Subsistence consumers typically dwell in homes they do not own, and often as squatters in urban slums, leaving them susceptible to expropriation at any time. Even when having legitimate homes, they may be subject to capricious changes in rent or even eviction in favor of a more lucrative or higher social status tenant. Moreover, law enforcement cannot be relied upon to provide protection from such actions by landlords and other parties, for reasons as wide ranging as corruption, unequal

administration of legal standards based on religion, social class, and ethnicity, and judiciary systems incapable of the timely handling of cases they must administer.

In sum, low literacy skills, concrete and short-term thinking, and high levels of uncertainty and inadequate access to basics such as food and shelter characterize the environment in which SCMs operate. Against this, however, they are members of families and communities where resource and capability scarcity is at least partially offset by intricate and multi-level webs of relationships. Members of families and neighborhood communities get to know each other, admonish and encourage those in need, and reach out quickly to either ask for help or extend it (Sridharan and Ritchie 2007). For example, Ruth and Hsiung (2007) find that among South African subsistence households that lose a primary or sole wage earner, more distant family members often begin contributing to the resource-depleted household, reflecting a reallocation of financial resources across an extended family network. Our research draws on these insights into subsistence markets to ask why and how SCMs pursue independent businesses within such contexts.

## **Method**

In light of the scant academic research on SCMs, we adopted a grounded theory approach that was geared toward identifying and understanding the processes through which SCMs manage their businesses (Glaser and Strauss 1967; Strauss and Corbin 1994, 1998). A growing body of marketing research applies the grounded theory approach, including studies of market orientation (Gebhardt, Carpenter, and Sherry 2006) and business-customer relationships (Flint, Woodruff, and Gardial 2002; Ulaga and Eggert 2006). We also sought a data collection technique well suited to the resources and skills of SCMs. To these ends, depth interviews were used because they provide an opportunity to gain insight into marketing management processes



and practices associated with the informants' merchant activity. The conversational format of interviews allows informants to elaborate on business activities in their own words in light of unique life circumstances. Interviews also allowed for probing to understand more fully each informant's current and past life situation and business experiences.

### ***Interviews***

This study is part of a research program involving low-income, low-literacy buyers and sellers in Chennai (formerly Madras), the fourth largest city in India, located in the Tamil Nadu state of India. Following a set of initial interviews that served to orient the researchers on substantive and methodological issues, interviews were conducted in 2004 with 18 subsistence consumers in this region. Informants were recruited through a non-profit organization that provides a variety of services to people in low-income communities characterized by subsistence living conditions. The organization provides financial assistance, tuition and nutrition for children, vocational training for adults, and training and grants for starting businesses. Interviews were conducted in Tamil, the local language and native language of the first author. Interviews were conducted by the first author and assisted by one of two Tamil-speaking assistants trained in interview techniques. The interview format was largely unstructured, allowing individuals to elaborate on their family and business experiences. Interviews were conducted at the local community center.

Thirteen of the 18 informants manage a self-run business and engage in activities such as raw material sourcing, obtaining goods for resale, performing value-added tasks (e.g., preparation, assembly, and delivery), merchandising, and selling. These 13 interviews form the corpus of the data. Interviews began with conversation to elicit background information about the informant's life context such as place of birth, marital and family status, and education level.

The interview then proceeded to an open-ended discussion of the informant's current life situation and concerns including work and family. Probes were used to elicit a deeper understanding of how SCMs obtain supplies, interact with customers, and manage resources, suppliers, and business tasks. Interviews typically lasted one hour or more. Informants were provided with a small gift for participating.

Interviews were audio recorded and later transcribed. Once transcribed, interviews were translated from Tamil into English, resulting in 425 pages of single-spaced data for analysis. The Appendix provides a summary of the informants, identified by pseudonyms. All are living in subsistence conditions involving inadequate housing, sanitation, nutrition, health care, and/or education. The informants are in their thirties and forties, and education levels range from no formal education to completing tenth grade. Business enterprises range from door-to-door sales of perfumes or household goods, preparation and sale of food at kiosks, milk delivery, and managing an arts and crafts enterprise. Each SCM has been engaged in the business for more than one year, and most more than five years.

### *Analysis*

The analysis is interpretive and involved reading and rereading the text to gain insight into how SCMs manage their businesses. Reliability of findings was assessed in several ways. Two authors analyzed the data and proposed frameworks and findings to each other and another author. Agreement was sought on the most parsimonious framework capturing the phenomena revealed. Having arrived at a mutually agreeable framework, and following minor revisions, research findings were summarized and shared with interview assistants who were not involved in conceptual development. A verbal summary was also shared with two informants. Through these processes, theoretical concepts were discussed, challenged, agreed upon, and clarified.

As we began to understand informants' lives, it became clear that family issues affect, and are affected by, customer and supplier affairs in intricate and systemic ways. As a result of the holistic and intertwined phenomenon we uncovered, we focused our interpretation on the relationship between how the SCM manages the business and family, which we conceptualize as the business-to-family (B2F) aspect of SCMs' lives.

### **Findings**

Our interpretation reveals that SCMs manage through what we identify as *systemic adaptability*, which we define as a responsive and principle-informed approach to emergent life and business demands where family, customer, and supplier relationships are treated as an integrated and fluid whole. We deliberately choose the term systemic, firmly grounded in the biological sciences, as a metaphor for the holistic perspective we found. In ways similar to how the circulatory system reallocates oxygenated blood between organs in real time in response to bodily needs, SCMs continually recalibrate short-term priorities in pursuit of business successes that help preserve family welfare. SCMs are ultimately trying to ensure family survival and prosperity, but they continually shift resources of money, effort and time between family, customers, and suppliers, and enact business strategies to cope with and adapt to unpredictable environments. These continual shifts typically occur within daily time horizons.

The Figure illustrates the manner in which SCMs apply systemic adaptability to maintain balance between the three key life domains: business-to-family (B2F) processes whereby the merchant manages the overarching relationship between the business and family concerns; business-to-customer (B2C) processes of bringing the product assortment to market; and business-to-business (B2B) processes of obtaining materials or finished inventory for sale. Whereas B2C and B2B issues have been acknowledged in the marketing literature, our

interpretation reveals B2F processes as paramount in systemic adaptability of SCMs. That is, SCMs hold values – overarching and enduring beliefs about desired states – that are hierarchically prioritized and in turn shape goals and behaviors (Rokeach 1976). For SCMs, the overarching value is family well-being. Goals stemming from this value include ensuring family survival, providing for family member needs such as obtaining adequate food and shelter, and the pursuit of a better future and life opportunities for children. While pursuing such goals, SCMs enter into self-managed businesses, for which on a daily basis they must engage in relationships with customers and suppliers, knowing well that some of these relationships are likely to demand sacrifices from family members and the giving up of short-term benefits and opportunities for them. Nevertheless, family is in general prioritized over business, and managing a successful business is an instrumental means of achieving higher-order goals (Bagozzi and Dholakia 1999) such as family survival and a better future. Differences in the directionality of purposeful decisions in the Figure illustrate the underlying priority scheme.

---

Insert Figure here

---

We first elaborate on the value SCMs place on family and the role that entering into business plays in satisfying family goals. We then discuss four business principles through which SCMs exhibit systemic adaptability in their B2C and B2B activities. Italicized portions of verbatim quotes point to values, goals, and behaviors that are reflected in systemic adaptability exhibited by SCMs.

### ***Prioritized Values and Goals***

Of paramount importance is the family. The daily quest for family survival prompts SCMs to seek opportunities whereby they can adapt to the environment and strive toward gaining a measure of control over factors affecting the family, including income generation. Without such income, the family is in danger of going hungry or not having shelter, for example. Some SCMs follow the example of family and friends engaged in a particular business; others are encouraged to enter a business by a third party such as local distributors or producers.

I studied up to fifth standard [fifth grade].... An officer was here at that time, he asked us how could we manage our family within the income from [her husband's job] and advised us to start any business to have an additional income. He cautioned that it would be difficult for us to manage the family and our children within the salary of my husband. While we were in [this] distressed condition, he gave us one hundred rupees to start a business.... *We started the tea shop, worked sincerely and added the selling items one by one.... [Back then] my husband had six sisters and the family expenses were high. Since the income was not sufficient, we worked hard in the shop.* [Sita]

Regardless of the route associated with entering into a self-run business, a common prioritized goal is family survival, and SCMs perceive that business is instrumental to achieving the higher-level goal of family survival (Bagozzi and Dholakia 1999).

Many SCMs also seek to satisfy their children's educational needs and possibly advance them beyond the parents' educational achievements. In the cases we investigated, pursuit of basic education requires payment because of the absence of public education. Thus, SCMs act upon the recognition that income must be generated to strive toward improved life chances for children.

My husband is an auto driver but he is not a good person. I have three children.... I attended the housemaid job in three houses. I didn't get sufficient income from that job. My husband...didn't attend his job regularly. He would go to his job one day, another day he would drink and leave the job. It was continuing for some time. When my life was going like this, a lady suggested to me that I could join in the sales job, as I was getting insufficient income from the housemaid job and my children were struggling with hunger.... *I asked myself how could I manage the*

*family...how long could I leave my children hungry? ...I decided that I should not be idle at home.... [The business] is helpful to meet my family expenses. My three children are attending high school.... Because as we didn't study, at least they should. Whatever the struggling and problems we face in our life, I decided that we should provide them with good education. [Charu]*

Having to pay annual school fees does not deter SCMs, and the strong emphasis on education among the informants is consistent with intergenerational mobility motivations observed by Ruth and Hsiung (2007) among subsistence consumers in South Africa.

Our analysis further reveals a strong belief among SCMs that being self-employed is preferable to working for others, because of the potential for greater control through obtaining higher income; the prospect of non-paying customers and uncooperative suppliers is better than employers withholding wages capriciously or due to uncontrollable outcomes.

*I didn't study.... So I wish to make my children study well.... As I was illiterate I could not do any job at companies.... We could not manage the family from the single earning we had through my husband. He suggested me to do something, and then I [decided to] make vadai, bajji like that.... Suppose we go for a housemaid job. There, we have to wash their clothes and do other errands. They would find fault on our job and say this is not fine and that is not good.... If we do business on our own, money would come to our hands. We could manage the business as well as spend for family expenses.... I didn't like to be a slave [working for someone else]. We have been earning from our own business and we have provided education to all our three children.... We push life like that. [Anita]*

Implicit in employers' claims of work being "not fine" and "not good" are oft-occurring unilateral changes to the agreed-upon wages and performance standards after the work is done. The end results are often lower take-home wages after a long day of work, accompanied by the nagging thought that the reduction was unjustified and out of the laborer's control. When managing their own business, good days and bad days are more closely linked to the SCM's personal effort and work ethic, and we find that SCMs enter into self-employment as a means to more consistently control family welfare. Consistent with goal setting and striving as discussed

by Bagozzi and Dholakia (1999), working hard to manage the business is emblematic of action initiation and an attempt to exert control over the situation.

### ***Managing through Systemic Adaptability***

Consistent with Anita, who states, “*We should adapt the required [business] method depending on the situation,*” we find that SCMs shift their priorities and associated strategies through an adaptable approach that responds to changing conditions in the business and family environment. Table 1 summarizes four salient business principles and strategies through which SCMs enact systemic adaptability, as well as the business conditions affecting them. The four business principles are: (1) all finished inventory must produce value; (2) good customer relations must be assured by every transaction; (3) adequate quality and quantity of supplies must be negotiated daily; and (4) the business must prove profitable at the end of each business day. Ever-changing business conditions, however, affect how these principles are enacted including variability in unit sales per day, customers’ behaviors, supplier pricing and product availability, and revenue and profit per day.

---

Insert Table 1 here

---

*All finished inventory must produce value.* SCMs recognize and act on the business principle that inventory must be used to produce revenue and should not be disposed at a loss. Yet, SCMs face variable unit sales in any given selling period, typically daily, and recognize that this variability brings about two possible adverse outcomes: (1) supply may exceed demand, which risks ending the selling period with excess and often perishable inventory; or (2) demand may exceed supply, which risks foregone sales revenue and lost customers. Both of these outcomes can be devastating to a family that may have no more than the equivalent of \$1-2 as a

buffer against losses. To deal with unit sales variability, SCMs develop and enact business strategies that allow for systemic adaptability to the daily sales environment.

Operating under the principle that all finished inventory must produce value and acting in concert with the conviction that surplus end-of-day inventory is lost, SCMs first estimate likely sales and then acquire or prepare inventory in that quantity. Subsequently, SCMs involved in the marketing of perishable products develop strategies for the fruitful disposal of inventory that cannot be sold through regular channels if sales are weaker than expected.

*We would prepare the items with the anticipation that people would come and we would get sales. Sometimes, we wouldn't get the expected sales. So we couldn't expect high sales always. We would estimate and prepare the average quantity. We would observe the business over time and keep the item ready.... We would see whether we get customers and have business. If we don't have sales and have unsold [items], we would eat [these items]. We don't cook food separately for our family members. We eat the same food we cook for sales. [Prema]*

*If [all the items prepared for the day are] not sold here, he [her husband] would take [the excess] to his shop. He too does the same business [at a different location] at the wine shop.... Suppose he takes [the excess items] and the business was dull there [at his shop] too, sometimes we have a balance of unsold [items]. In this case I would distribute to the neighbors.... We could notice from the speed of business [that] there would be loss in a day when there is lack of people movement passing on the street near the shop. We would start to think what to do [with] the prepared materials? [Anita]*

In addition to being the primary reason for entering the business, family acts as a resource for value-generating inventory management and represents a B2F aspect of systemic adaptability. If the family cannot absorb excess perishable inventory through consumption or alternative selling venues, the products are then used to enhance relationships within the SCMs' social network.

SCMs who sell non-perishable products may hold excess inventory for tomorrow's sales, as does Charu who sells cleaning supplies and perfume door-to-door. This practice can be risky, however, because of the all-too-common losses (e.g., theft, adverse weather, corruption) that



each day can bring. Moreover, high transportation costs can eat into profits when unsold inventory must be double-handled. Even for non-perishable products, therefore, selling out of inventory by the end of the business period is the preferred strategy.

My husband [achieved only] a very minimum amount [of sales] in the beginning days of the [arts and crafts] exhibition. *He would be very casual in the exhibition shop and never bother about the sales. His approach would be that those who are interested to buy could approach him. Otherwise they can go. If there was no sales [he thought that was] no problem as our product is not perishable. [But] we sent product [worth] seventy thousand rupees but he did sales for only forty thousand rupees. I went for two days to provide his lunch...and noticed that the amount of sales was not satisfactory....* The exhibition would be continued...only for two more days.... *I suggested to him that I would look after the sales along with him. I did business for thirty-five thousand rupees within that last two days. I targeted the female members who visited the exhibition and canvassed for sales. I explained to them that keeping particular handicraft pieces in the showcase at their house would be nice or it could be presented as a gift to anyone they wish.... I used to do this [style of selling] at the places nearby our house during the Tamil month of Puratasi and have experiences. [Selvi]*

Further reflecting the interdependence of family and the business, in the process of preparing and delivering lunch to her husband, Selvi deftly manages their interpersonal relationship by “suggesting” that she also participate in selling. She is careful to preserve her husband’s dignity and social status while concurrently pursuing the goal of avoiding the double-handling and transportation costs of unsold inventory. Family relations are maintained while enhancing family income, reflecting the interdependence of family and business concerns and outcomes.

Likewise, demand exceeding supply is also detrimental because SCMs are faced with the prospect of foregone sales and dissatisfied customers. SCMs develop and enact backup strategies that can be adapted in real-time and at the point of sale to address higher than expected sales opportunities. Customary business processes are modified to satisfy emergent opportunities for more business.

*I wouldn't return home just because I sold out the stock earlier. I decide that we should do something and supply the need. What are we going to do in the house? ...We can earn something and use it for our expenses.... If the prepared items [from] wet flour were insufficient, we have stock of grinded, dry powder flour. We...buy five kilograms of dhall [dried beans] and make it as powder and keep it as stock for ready or urgent use. Whenever the wet flour is insufficient for the day, we use the dry power for instant preparation of bajjis and manage the business. [Anita]*

It should be noted that SCMs even develop systemic adaptability strategies for both excess demand and excess supply situations.

*My job is to deliver milk packets door by door.... I do this business like this and manage my family.... I get fifteen rupees salary per month [per family] to deliver...milk packet[s].... If I buy...cards separately and sell the packets, I could get two or three rupees additional income. Hence, I [also] invest and buy...cards separately.... Suppose you have booked or purchased a card for supplying four packets daily, you may ask me whether I have a packet extra.... [From the extra card I] would give you an extra packet.... If all were not sold [from the extra card] I would take [it] to the place where I work [as a housemaid. Later] I would sell it in the local shops. I would supply it if the tea shopkeepers ask me.... The problem is one day we could get sales, and another day we may not get it. That is why I don't buy more number of cards.... I have been surviving because of this business. [Janaki]*

By purchasing extra cards, Janaki transforms a consumer good (i.e., milk cards) into a shortage buffer, while use of a refrigerator enables storage of excess inventory for later sale. In tandem, card and refrigerator use enable the SCM to adapt to the daily prospect of excess demand and excess supply endemic to her line of business.

In sum, ensuing that all finished goods produce value requires adaptations in business practices that may involve a shift in processes or resources to the family from the business, as in the case of unsold perishable food, or from the family to the business, as in taking dry flour from the family stock and allocating it to satisfying unexpected demand in the business. In the latter case, a family shortfall may ensue, but customer demand must be met for the sake of current revenue and the possibility of future business, both of which ultimately benefit the family.

*Good customer relations must be assured by every transaction.* Systemic adaptability is also evident in how SCMs manage B2C relations. SCMs embrace the business principle that satisfied customers are essential to the ongoing success of the business enterprise and its ultimate contribution to family survival. SCMs act on the belief that customer loyalty must be earned at every consumer encounter because of high levels of competition and the short-term horizons of customers, many of whom are also subsistence consumers. In subsistence marketplaces, with low literacy and numeracy skills as the norm, buyers and sellers must rely on their shared B2C relationship histories as confirmed by other community members to keep track of their exchange relationships. Consumer merchants and their customers have nothing other than their memories and those of their neighbors to keep track of how well a merchant has fulfilled a customer's needs, or how good of a customer a particular community member has been. Relationships between buyers and sellers, therefore, have a short half-life, at least in the fast turnover businesses that comprise most SCM enterprises, and those relationships must be reaffirmed daily (Viswanathan 2007). Consistent with this principle, SCMs continually adapt their business practices to meet the daily wants and needs of particular customers.

[Some customers] would mention that the fish gravy served in a particular shop on a previous occasion was not good but they like my preparation and ask me to serve them the fish gravy today.... [Some] customers wouldn't like to talk while eating but few would like to talk and chat while they eat. *We should manage both types of customers. We should join in the conversation if they wish to talk while they eat tiffin or lunch. They would share the facts that they visited a particular shop yesterday but they couldn't take much food due to lack of taste. They would appreciate that I prepare the items tasty.... I have changed the taste [sometimes in response to a customer request]. They would tell me that I am the only one who cooks tasty items in this area. They would appreciate me like that.* [Prema]

Of course, most customers would be satisfied with paying lower prices for a given level of quality, or receiving greater benefits for a given price, as reflected by Jayashree, who states: "It is the situation – one side [is] the cost of materials. The other side customers expect more."

As a result, SCMs are faced with on-going tension between creating customer satisfaction versus generating enough revenue to cover expenses and make a profit in every transaction. This tension is evident in SCM pricing strategy and practices. Specifically, SCMs typically set and maintain prices for products based on the behaviors of competitors, the prices they and others pay for similar products, and their knowledge and intuition about price sensitivities in their market area. Their preferred strategy is to maintain price continuity over extended periods of time and without discounts:

*[I] won't give [a price reduction]. Never. I won't give. If someone like the regular customer would ask me one extra, I would agree and give. Suppose they buy [ten items] for ten rupees, I would give one extra. [But] I won't give for 75 paise [which is one rupee less 25 paise]. If we give to someone at the rate of 75 paise, then everyone would ask for the same price.... Everyone in this area would start to ask for 75 paise if I give it once. Could we afford it? We would incur loss.... They would share that here it is sold for 75 paise, and then people who were told so would come here to buy.... It would be known to everyone.... I never gave [at 75 paise]. We can't afford it.... I look after the business sincerely, then I have to cook and wash the clothes for my family. I spend my time like this. [Anita]*

Reduction in prices is explicitly linked to daily profit/loss, which directly affects SCM family welfare. It is interesting that SCMs do not see the giving of bonus items as a discount, even though in effect it lowers the price per unit for that transaction. SCMs focus on defending the reference price held by regular customers and transmitted through word-of-mouth to others in the community. The reference to “everyone in this area” points to the intricate and multi-level web of social relationships (Wathne, Biong, and Heide 2001) that characterize marketplaces in which SCMs are embedded. As a result, SCMs believe that news of a price reduction would be dispersed throughout the consumer community virtually overnight.

Still, the preferred strategy of price continuity over time must sometimes be violated, if there is a risk of losing an existing customer. Making such exceptions reflects systemic adaptability, as SCMs cope with the variability in pressure that particular customers exert:

[Among milk delivery merchants] we discuss in advance at the milk distribution depot that we are going to raise the delivery charge to 15 rupees since there is a price hike in the market as we could not manage our families within the 10 rupees rates. Accordingly, I would tell my customers that I raise the delivery charge to 15 rupees from next month. Few customers would accept it and few wouldn't agree.... *What I would do is I would try to retain as much customers as possible and tell few customers who don't agree [to] the price hike to continue to pay me at the old rate of ten rupees.... I receive [the 10 rupee payment] confidentially.... If other [merchants] know this difference, they would definitely fight with me. [I] inform the customers that they shouldn't reveal the rate what I am collecting from them.... I would caution them that they would come for fight with me if they reveal my rate to others.... If I demand normal rate, they might give the card for order delivery to someone else and I might lose a customer.* [Janaki]

When making an exception to her preferred strategy, Janaki uses her B2C relationship as a resource to minimize risks associated with adapting the price: she invokes a code of silence between this customer and others, and threatens a relationship confrontation with the customer if the price reduction becomes public knowledge. Janaki does this to preserve two key relationship resources: those with customers who pay full price, and those with competitors who collectively work toward maintaining a high and advantageous price for all merchants in this market.

However, priorities sometimes shift away from maintaining customer loyalty to preserving family relationships and carrying out family responsibilities. Reflecting such a shift, SCMs occasionally travel to native villages to attend family events such as marriages and funerals. During those times, for example, the *tiffin* items Sita prepares are not available to be sold at her husband's tea shop; because a shift in priority toward family responsibilities, customer satisfaction and loyalty are threatened:

*[The customers] knew it. They buy somewhere else [during that time]. When we start the business again, we would prepare little in quantity...and increase the quantity gradually.... My husband would be here [to run the tea shop]. I would go alone [to the native village]. My husband would be here and take care of the tea and coffee business. When I am not here, he couldn't prepare and supply tiffin items. Even when I am here, we both would take care of the business in shift hours. When he is in the shop, I would go home to take care of the jobs at home.*

He would come to home when I return to shop. We both should not go [to the native village] and close the shop. [Sita]

Sita and her husband coordinate visits to family events to minimize negative effects on customers: Sita attends family events while her husband maintains scaled-down business operations, reflecting a tight B2F coordination.

Family relationships also act as resources SCMs deploy to maintain customer satisfaction on a daily basis and in times of emergency. Family resources may also be tapped when members are tasked to obtain additional supplies or staff the sales site in circumstances where customer satisfaction is at risk, further reflecting the interdependence of the business and family.

*Though I am not feeling well or with serious illness, I should have to attend [to milk delivery]. My children would take the packets to the upstairs and deliver at the houses on the different floors in the housing quarters. I would wait at the ground floor and guide them to deliver at which houses. They would deliver accordingly. [Janaki]*

Family blends seamlessly into managing customer exchanges and satisfaction on an on-going basis. As SCMs reprioritize highly valued business and family goals, family relationships are resources that can be deployed to respond to the emergent business situations.

*Adequate quality and quantity of supplies must be negotiated daily.* In order for businesses to operate, the merchant must acquire goods for resale or raw materials that can be transformed into finished goods. Given their negligible financial resources and the need to deliver customer loyalty-building value with every transaction, these items must be sourced daily at quality and quantity levels that are compatible with the day's business objectives. To do so SCMs must transact with suppliers who often share some of their same concerns. Through experience, SCMs develop strategies on where and how to obtain inventory. Most SCMs develop and act on a strategy to buy regularly from one or two suppliers, largely for two reasons:

concerns over variability in the quality of supplies they might otherwise get from unknown vendors, and the need to obtain short-term credit from time to time.

Regarding the first concern, SCMs recognize that repeat purchases from a limited number of non-overlapping suppliers are important to securing consistent and fair-price access to the quantity and quality of goods and services needed to run the business. Thus, SCMs develop and maintain B2B relationships as an important resource in managing the business.

*I...buy all provision items from the same shop and I visit the market to buy [fresh] vegetable items.... I...buy there [from that same provision shop]. My husband too buys from there.... I won't buy anywhere else. I would buy from the adjacent shop if there were not stock of oil or other necessary item in the particular shop. [Anita]*

Even when suppliers' prices rise, SCMs continue to purchase from the same vendor, but amend their business practices – here in product manufacture and in B2C relationships – in order to absorb higher costs.

*Once you enter the business, you may have to face many problems. We should manage it.... I would assemble the flowers with [a bigger] gap [between them] when the price is high in the market. I would assemble closely when the price is coming down. I would knit it closely. I would inform the customers that I have tied the flowers with a little gap because the price is high in the market. [Malathi]*

The alternative to such loyalty is to have access to supplies in unpredictable quantities and only after the supplier's preferred customers have been served, and to be sold lower quality goods and/or charged higher prices, all of which are detrimental to the business.

Thus, systemic adaptability is evidenced through the strategy of buying from one supplier, and shifting purchases only when the original and preferred supplier is out of stock and s/he grants permission. In such cases, systemic adaptability is also being practiced by the supplier, who will forgive customers who visit a competitor when his/her stocks are low. It must be noted that although none of our informants are mid-level distributors, some of those suppliers

are also SCMs, possibly better off than our informants but far from financial affluence and economic security. Suppliers to SCMs also struggle with uneven quality and quantities from their sources, and discriminate between their customers along these dimensions.

Regarding the second concern, one of the benefits of a well-developed B2B relationship is the ability to obtain short-term, immediate credit if needed. Although none of the SCMs wish to use credit, they may seek it when life circumstances generate daily business losses or otherwise compromise their ability to secure supplies for the next business period. Suppliers are a ready source of credit for SCMs, but only if the SCM is known and trusted by the supplier, as reflected by Narayan who states: “Suppose the bill exceeds 200 rupees. I would tell him [the supplier] that I would give the balance amount of 50 tomorrow. *He would say OK and accept it...since we buy regularly. He gives us [credit] based on the trust. That’s all.*” Thus, long-term B2B relationships substitute for assets such as savings, a formal credit history, or property that non-SCMs might rely on to obtain formal third-party loans.

Not only do SCMs use this B2B relational resource to manage uncertainty in their business environment, they also recognize and act on the interdependence and mutuality of B2B relationships (Kumar, Scheer, and Steenkamp 1995), whereby both parties give and take, and benefit from their history of interaction.

*I wouldn’t go to other shops. I would buy [supplies] from that particular shop.... I visited that shop for the past eight years. Occasionally, I visited Parrys [another shop] to buy vathal and appalam if [the first shop is out of stock].... [The regular store] would give [credit] very occasionally if we don’t have sufficient cash. We would sell those items and pay them promptly.... I would say, “Shopkeeper, today I have no sufficient amount. I am with problems. You give the items on credit. I would settle it immediately after the sales.” The shopkeeper would accept it and give us.... They know the people who repay it promptly. They would consider our request very sympathetically, as we are poor and struggle for life, and give credit to us. We would pay them back immediately after sales.... As he [the shopkeeper] is an acquainted person, we should think before changing the shop just because of*



*lower rates. Because he is an acquainted person, we couldn't just ignore him easily.... We too should do something to help him. [Vasantha]*

This recognition of the mutuality of B2B relationships is consistent with the notion that “social capital [accrues] in the form of relationship-specific obligations and reciprocity expectations” (Wathne et al., p. 55). We hasten to reiterate that the half-life of this history of interaction is short. Our informants believe that two to three days of shortfalls or not being able to settle a debt may be enough for them to lose preferred customer status. Hence, SCMs recognize the need to reaffirm the relationship through daily transactions.

*The business must prove profitable at the end of each business day.* Underlying the three business principles discussed so far is the belief that exchange activities must produce a daily profit. That SCMs who sell perishable goods focus on daily revenues is not necessarily surprising, but even SCMs working with non-perishable goods have a daily revenue orientation.

*[Customers] pay 10 rupees in advance and [then] pay 5 rupees daily [until the item is paid off]. I visit their house with this card...and they pay daily. I deliver the items first and then collect...the amount daily. I have to visit every day for [revenue] collection. [Vidya]*

This orientation to daily revenues (and profits) reflects the environmental uncertainties of both buyers and sellers, and their lack of resources such as savings to buffer against daily losses.

Even so, daily revenue must be allocated, sometimes sacrificially, between family needs and the demands of the next business day, reflecting systemic adaptability in balancing B2C (revenues) and B2B (expenses of obtaining inventory) activities with family needs that are funded through the profit of the business. While family is the highest priority at one level, maintaining the business as a profitable ongoing concern can compete with immediate family demands. As a result, SCMs develop strategies regarding revenue allocation. Typically, daily

revenue is first allocated to the next day's business expenses such as obtaining inventory for the next day's sales and second to longer term expenses such as rent. Only the remaining surplus is allocated to family needs such as food, savings, and education. On a day-to-day basis when managing her perfume and cleaning supply business, for example, Charu says "We reserve the amount that should be settled to the [supplier] shops. *We reserve the capital first and we should use the profit amount [excess] to meet the family expenses.*" Similarly, Sita indicates:

*We have to meet the family expenses from the business profit. We should pay the rent and electricity bill. We have to bear all [family] expenses from this income [including] my daughter's annual school fee.... My husband would buy all the items [for tomorrow's business] when he is returning home after closing the shop.... [After purchasing supplies for tomorrow's business] we would buy [family items] depending on the money he brings to home.*

The working principle is preserving business continuity, which often demands sacrifices from the family. In some ways, this is similar to the Protestant ethic value of delayed gratification, but among SCMs it is practiced with a short time horizon (1-2 days) in unpredictable environments, and with few moral overtones. Such shifting of goal priorities and strategies is consistent with Bagozzi and Dholakia's (1999) framework of consumer goal setting and striving, in which they acknowledge that "a goal associated with many desirable and feasible consequences may...appear less attractive when scrutinized in the context of a competing goal" (p. 31).

The principle that daily profit must be obtained also has implications for strategies related to whether and how credit is extended. SCMs routinely grant credit only to established customers from whom ready payment can be expected. Anita indicates: "*I won't trust those [unknown] people and give [credit to them].... I would give [credit to] those who are living in this area...who are known to me.*" The strategy of not granting credit except to well-known customers involves a relationship resource that SCMs develop and tap into for effectively

managing their businesses. B2C transaction episodes are preserved in memory, and with the human disposition towards reciprocity (Bowles and Gintis 2002) in even the most adverse of circumstances, credit is granted to well-known customers, provided that a sense of equity is maintained. Otherwise, the business principle of obtaining a daily profit may be violated.

### **Discussion**

The main contribution of this research lies in identifying and documenting the disciplined application of systemic adaptability by subsistence consumer merchants to the management of their own businesses in highly unstable, unpredictable environments and where access to basics such as food and shelter is inadequate. We find that SCMs operate at two levels of values and priorities. Although the highest and most enduring value is placed on family, and family needs are a constant undercurrent to business decisions, SCMs often sacrifice short-term family interests to sustain the business. Certain business conditions – such as unpredictable daily sales levels along with variability in customer behavior, supplier pricing and product availability – ultimately affect revenue and profit per day.

Because family welfare is so tightly tied to business outcomes, SCMs must make real-time adaptations in managing the business. In a context of high environmental uncertainty and the short-term horizons with which plans are made and enacted, SCMs reallocate time, energy, and financial resources between their families, consumers, and suppliers on a continual basis, in much the same way as blood flow must be redirected between organs in response to physiological externalities. In the short term, resources normally allocated to the family or business may be shifted. When a given day's sales are poor, SCMs exhibit systematic adaptability when they (re)allocate resources from the family's evening meal to purchase supplies for the next day's business operations; as a result, family members sometimes go

hungry. Likewise, SCMs aim to satisfy customers at each transaction as the primary means of securing repeat business but sometimes inconvenience customers by temporarily closing their kiosks or halting deliveries for a few days for the sake of visiting family and honoring ancestors at festivals in their native villages. Similarly, SCMs place high value on reaffirming daily their loyal relationships to suppliers as a way of securing inventory and credit in times of need. But if a family member or customer were to ask SCMs to do business with a different supplier, SCMs would try to preserve relationships with existing suppliers by explaining the situation, while inexorably shifting part of their business to the supplier suggested by valued others.

Thus, our data reveal a dynamic and evolving set of priorities associated with family, customer, and supplier demands, each of which is concurrently expected to understand that other constituents exist and must be satisfied daily whenever possible, and responded to with great deference and respect when their needs rise to the surface. We observe that SCMs exercise little advance planning in their business, partly because of working and living in highly uncertain environments, and partly because the absence of plans, and the investments toward their achievement, allows for flexibility in responding to unexpected, emergent demands. In contrast to a business mindset where planning is seen as a necessity and its absence is bemoaned, SCMs see the lack of planning as an integral part of systemic adaptability, and as necessary to their overarching strategy for survival.

This last point has special value to researchers and practitioners who are interested in a better understanding of subsistence consumer-merchants. Limited control over the environment and high levels of ambiguity in business priorities are anathema to small business operators in industrialized economies. Among SCMs, however, limited control and ambiguity are the only available reality, and hence not dwelt upon or resented as factors to be avoided. Subsistence

consumer-merchants accept limited control and ambiguity as given, and adjust their beliefs and behaviors accordingly while maintaining hope and enjoyment in their work. The SCM informants in our study were happy people who did not see their circumstances as hopeless. They did note when circumstances worked against them, or when injustice was perpetrated on them and their loved ones, and they made note of how much more others seem to have than them, but they were not hindered or defeated by these facts. Possibly because of their short-term horizons and consistent application of systemic adaptability, they seem to have little room for long-term resentments and frustrations. They accept what comes each day, recalibrate priorities and reallocate resources as needed, and set the next day's goals, driven by an overarching desire to have their families thrive.

### **The Importance of Relationships in How SCMs Manage**

One particularly striking aspect of our findings is the use of relationships in managing business and family concerns. Similar to exchanges studied in industrialized countries (e.g., Wathne et al. 2001), exchanges between SCMs and their suppliers and customers are embedded in a network of social relationships. Relying on a history of transactions between SCMs and customers, or SCMs and suppliers, and a mutually agreed-upon and evolving balance of exchange between the parties, these relationships represent one of the resources that SCMs develop and redeploy through systemic adaptability.

This form of social capital may perhaps be more important to SCMs than to businesses operating in industrialized settings because, in theory, knowledge of and long-standing relationships with customers and suppliers are resources unconstrained by low literacy and numeracy skills or lack of savings and other assets. That is, SCMs do not need education or material possessions to employ business practices that are based on knowing their customers and

suppliers, and hence it is not surprising that we find them in widespread use. These relationships represent an important avenue for the SCM to obtain valued supplies, credit when needed, and revenue from daily sales, which in turn affect not only the merchant but also family and community networks. These relationships also function as resources to be deployed (e.g., children enlisted as needed to help with the business,) as well as beneficiaries when business is good (e.g., achievement of family goals through profits) and even when business is bad (e.g., neighbors receive perishable food products when business is weak).

### **Implications for the Consumer Aspect of SCMs**

Systemic adaptability has implications for models of consumer decision making and behavior that seek to integrate beliefs, emotions, and actions into coherent wholes. Given their tendency toward short-term thinking, SCMs may not respond in the same way as other consumers to risk-reward trade-offs when choosing products if the time horizons for some desired or dreaded outcomes are long. In terms of hyperbolic discounting of future outcomes, SCMs seem to discount future outcomes to zero very quickly, and hence not allow them to influence their decisions even if the emotional overtones (i.e., hopes) associated with such outcomes remain. Moreover, they are likely to respond differently to price discounts among competing brands or sellers when relationships already exist with one brand and/or vendor. As small business owners, they are also likely to behave differently when it comes to the purchase of key raw materials and services, to say nothing of securing financial services. As seen in our data, loyalty to suppliers is virtuous among SCMs, and they are not likely to switch suppliers for better prices or better support unless a long-term relationship can be established.

### **Implications for the Relationship of Work and Family**

SCMs display exceptions to the work-family “conflicts” that characterize many

industrialized economies (e.g., Netemeyer, Maxham, and Pullig 2005). Even when they find themselves going hungry for the sake of protecting tomorrow's business, family members take as given that their welfare is the SCM's primary motivator, and they do not see it as threatening when short-term family interests are sacrificed for the sake of servicing customers or dealing with important suppliers on a timely basis. This finding is consistent with Ruth and Hsiung (2007) who found that, even if no material resources were actually obtained for the family, parents' striving and trying were important symbols of caring within families living in subsistence conditions in South Africa. Work-family issues are absorbed into the widespread acceptance and practice of systemic adaptability, and the end result may well be healthier family relationships among SCMs than in other contexts because their loyalties and emotional bonds are not tied to possessions and/or the attainment of material gains. Perhaps a renewed and refreshed conceptualization of work-family issues, and how marketing can play a role in their successful interface (Netemeyer et al. 2005), can offer even further insights into subsistence consumer markets and merchants, and may also be extended to other marketing settings where work, family, and consumption decisions and practices are tightly coupled (e.g., telecommuting; voluntary simplicity). Indeed, marketing may wish to adopt the business-to-family (B2F) terminology and conceptualization to spark research in a variety of work-family interface domains including family decision making, marketing communications directed toward families rather than individuals, and family-based entrepreneurship in industrialized markets.

### **Fostering SCM Success**

With formal employment opportunities limited by a host of conditions such as low levels of education, poor infrastructure such as roads, or discrimination due to social status, starting and running a small business provides subsistence consumers an opportunity to provide for

themselves and their family. As such, there are many moral, economic, and social reasons to assist SCMs, and our research provides the foundation for offering numerous suggestions for how commercial and non-profit organizations can support SCMs and the markets they serve. First, business practices and products that allow SCMs to manage inventory more efficiently and effectively would be welcome including, for example, small and inexpensive, secure storage lockers for door-to-door sales merchants or refrigerated ones for those selling perishable items like milk packets. Inventory products that enable the SCM to maintain greater control and reliability of storage would not only enhance business operations, they may also boost profitability through less spoilage or pilferage and greater opportunity to capitalize on emergent and unexpected sales opportunities.

Second, the profound and multi-faceted relationship between business and family can be examined for areas where nonprofit and commercial organizations might enhance SCMs and their businesses. For example, business training that provides guidance on how the SCM can manage the business more successfully – even if greater use of family members is required to achieve smoother operations – could ultimately have a positive spillover onto the family. On the other hand, perhaps one area where these organizations might offer training development and assistance is in examining whether and how SCMs might actually disentangle business and family in ways that offer benefit to both. For example, when children are required to shoulder operational responsibilities of the business, their formal educational opportunities may be diminished. If no longer required as a resource in SCMs' systemic adaptability, perhaps family members would be able to pursue other activities that would enhance achievement of life goals and family welfare.

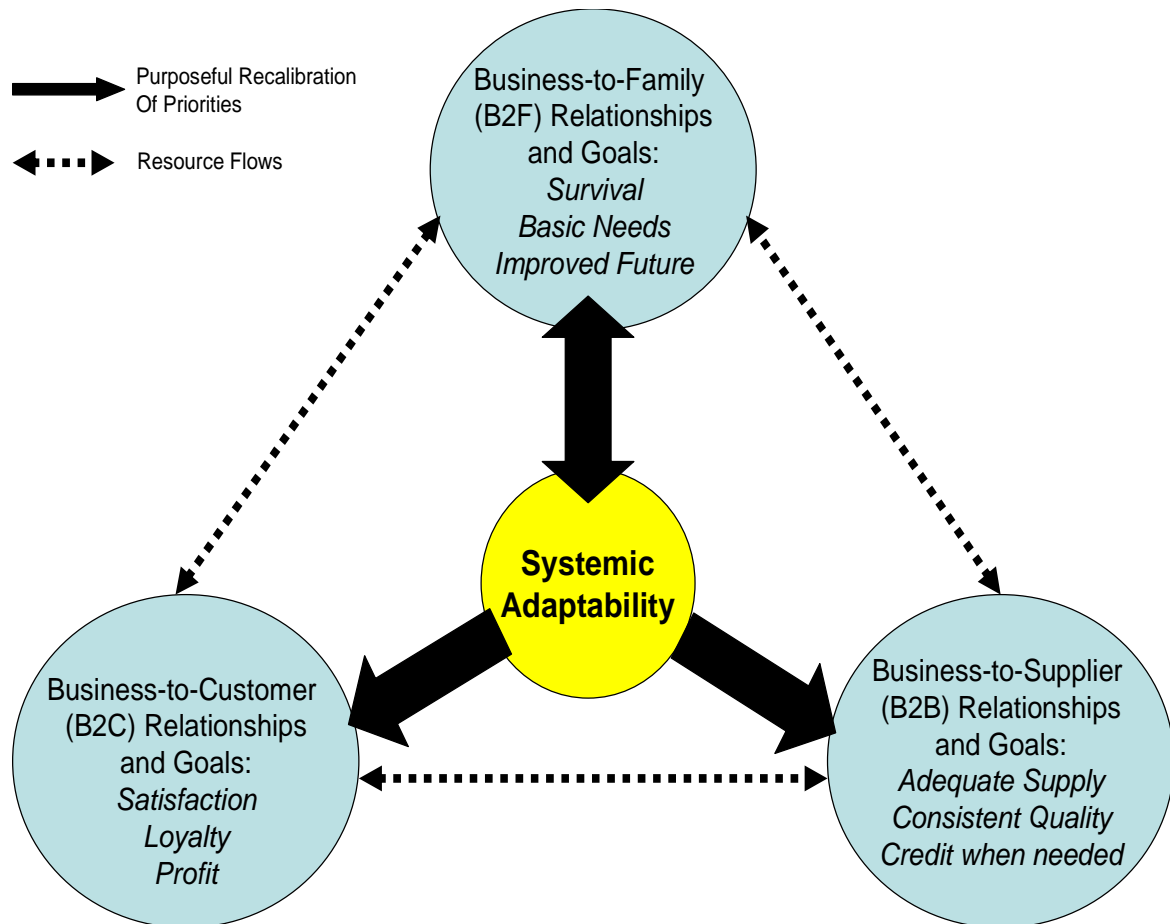


Third, although SCMs were assisted by the ready credit offered by suppliers who knew them well and trusted their ability to repay, perhaps SCMs would be better off by being able to obtain credit in other ways. For example, SCMs indicated that typically they buy from their regular supplier, even if other vendors might offer lower prices, because of the possibility the SCM may need credit. If less expensive or more accessible credit were offered in other ways, perhaps SCMs' overall costs of doing business might be lowered by paying for short-term loans which are offset by lower per-unit inventory acquisition costs. Still, this type of shift in accessing credit would be accompanied by changes in the relational fabric of SCMs, and so a purely financial view of cost-of-credit and inventory management might be short-sighted.

### **Limitations and Conclusion**

This research was conducted among SCMs in India, and it is possible that culture and societal factors influence the adoption and application of systemic adaptability in other contexts. Moreover, our insights are drawn from SCMs who are currently operating businesses, and we cannot confirm if the absence of systemic adaptability would cause business failure. Case study methods could be used to track multiple SCMs and ascertain if varying levels of systemic adaptability influence business success and the achievement of SCM objectives. In that sense our research is a first step toward developing an understanding of systemic adaptability among SCMs, but the absence of SCMs who failed does not negate the insights gained from studying those who succeeded. We find that systemic adaptability is useful in articulating and explaining notable differences in the basic beliefs and behaviors of SCMs in managing B2F, B2B, and B2C concerns, and that it promises valuable insights as future research and the commercial pursuit of the subsistence marketplace unfolds.

**FIGURE**  
A Framework for Systemic Adaptability Among Subsistence Consumer-Merchants



**TABLE 1**  
**Business Principles and Strategies Underlying the Systematic Adaptability Employed by**  
**Subsistence Consumer-Merchants (SCMs) in Managing Business and Family**

<b>SCM Business Principle</b>	<b>Relevant Business Conditions</b>	<b>Possible Adverse Business Outcomes</b>	<b>SCM Business Strategies</b>	<b>Example Strategies from Data</b>	<b>Implications for Business-to-Family Relations</b>
All finished inventory must produce value.	Daily unit sales are variable; demand and supply are not perfectly matched.	If supply exceeds demand, unsold inventory will represent a loss; if demand exceeds supply, SCM may lose sales and put customer satisfaction at risk.	Acquire inventory and prepare finished goods in amount SCM believes likely to be sold; develop and enact back-up plan(s) for dealing with excess demand or supply.	Observe demand during selling period and adjust inventory in real time. If demand is weak, dispose of inventory in most advantageous manner (e.g., serve perishable inventory to family or neighbors; sell items in alternative channels). If demand is strong, obtain additional inventory (e.g., add dry flour to food production).	Family is a resource buffer against excess demand or excess supply. Family members may be called upon to participate in and contribute to the SCM business through performing business functions.
Good customer relations must be assured by every transaction.	Customers, and their wants and needs, vary; there is an intricate web of social relationships among customers, where word-of-mouth communication is	If customers are not satisfied with transaction(s), they may not return; word-of-mouth communication about bad transactions or other business aspects (e.g., isolated	Treat customers the same and strive to satisfy them. If facing loss of a customer, weigh deviating to satisfy the customer (e.g., making a price cut) with possible	Maintain regular hours and days of selling so that customers are satisfied (e.g., enlist children to assist so that deliveries will never be missed due to SCM illness; strive to maintain business	Family needs may be sacrificed in the short term to meet customer requirements. Family needs may be prioritized over business (e.g., closing business during return to native village).

	spread easily.	price cuts) may hurt the business.	negatives in other business aspects (e.g., other customers demanding the price cut; competitor retaliation).	continuity when visiting native village).	Family members may be called upon to participate in and contribute to the SCM business through performing business functions.
Adequate quality and quantity of supplies must be negotiated daily.	Quality and quantity of supplies can be variable.	SCMs' ability to obtain adequate supply may be compromised by various business conditions (e.g., weak sales in previous period may mean there is little funding to obtain supplies in the current period).	Buy from one supplier to ensure quality and quantity of inventory at a fair price and via credit, if needed.	Purchase from the regular vendor because, as a known customer, the SCM is more likely to be granted credit when funds are insufficient for inventory purchase, and because quantity and quality are more reliable.	If credit is not available via vendor, SCM may withhold or withdraw family funds to purchase inventory for the business.
The business must prove profitable at the end of each business day.	Revenues and profits vary from selling period to selling period (e.g., daily).	Business may operate at a loss some days.	Ensure costs are matched or exceeded by revenues in given selling period, typically daily.	Allocate daily revenues according to rule-of-thumb, typically first to business needs for the next selling period, followed by short-term and long-term business and family needs (e.g., rent, food, school fees for children).	If business is not profitable, funds may not be available for family needs. Funds earmarked for the family are sometimes redirected to business needs. If family survival is threatened, business resources are redirected to meet pressing needs.

## REFERENCES

- Adkins, Natalie R. and Julie L. Ozanne (2005), "The Low Literate Consumer," Journal of Consumer Research, 32 (1), 93-105.
- Ardrey, William J., IV, Anthony Pecotich, and Clifford J. Shultz II (2006), "Entrepreneurial Women as Catalysts for Socioeconomic Development in Transitioning Cambodia, Laos, and Vietnam," Consumption, Markets and Culture, 9(4), 277-300.
- Bagozzi, Richard P. and Utpal Dholakia (1999), "Goal Setting and Goal Striving in Consumer Behavior," Journal of Marketing, 63 (special issue), 19-32.
- Bowles, Samuel and Herbert Gintis (2002), "Homo Reciprocans," Nature, 415, 125-136.
- Chakravarti, Dipankar (2006), "Voices Unheard: The Psychology of Consumption in Poverty and Development," Journal of Consumer Psychology, 16(4), 363-376.
- Flint, Daniel J., Robert B. Woodruff, and Sarah Fisher Gardial (2002), "Exploring the Phenomenon of Customers' Desired Value Change in a Business-to-Business Context," Journal of Marketing, 66 (October), 102-117.
- Freeman, Ina and Nancy Higginson (2007 forthcoming), "Micro-credit through the Feminist Lens: Towards a More Equitable Approach to Social Entrepreneurship," in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.
- Gebhardt, Gary F., Gregory S. Carpenter, and John F. Sherry Jr. (2006), "Creating a Marketing Orientation: A Longitudinal, Multifirm, Grounded Analysis of Cultural Transformation," Journal of Marketing, 70 (4), 37-55.
- Gender Equality: The Forgotten Millennium Development Goal (2006), Washington, DC: World Bank. Accessed February 2006. URL: <http://web.worldbank.org>.

Glaser, Barney and Anselm Strauss (1967), The Discovery of Grounded Theory. Chicago: Aldine.

Hart, Stuart (2005), Capitalism at the Crossroads: The Unlimited Business Opportunities in Solving the World's Most Difficult Problems. Upper Saddle River, N.J.: Wharton School Publishing.

International Adult Literacy Survey (1995), <http://www.nifl.gov/nifl/facts/IALS.html>.

Kumar, Nirmalya, Lisa K. Scheer, and Jan-Benedict E. M. Steenkamp (1995), "The Effects of Perceived Interdependence on Dealer Attitudes," Journal of Marketing Research, 32 (2), 348-356.

Luria, Aleksandr R. (1976), Cognitive Development: Its Cultural and Social Foundations. Cambridge, MA: Harvard University Press.

National Assessment of Adult Literacy (2003), <http://nces.ed.gov/naal/>.

Netemeyer, Richard G., James G. Maxham III, and Chris Pullig (2005), "Conflicts in the Work-Family Interface: Links to Job Stress, Customer Service Employee Performance, and Customer Purchase Intent," Journal of Marketing, 69 (October), 130-143.

Population Reference Bureau (2004), The Wealth Gap in Health, Washington DC.

Population Reference Bureau (2005), Women of Our World, Washington DC.

Population Reference Bureau (2006), World Population Data Sheet, Washington DC.

Prahalad, C. K. (2005), The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits. Upper Saddle River, NJ: Wharton School Publishing.

Prahalad, C. K. and Allen Hammond (2002) "Serving the World's Poor, Profitably," Harvard Business Review, September, 48-57.

Rokeach, Milton (1976), Beliefs, Attitudes, and Values. San Francisco: Jossey-Bass.

- Rosa, José Antonio and Madhu Viswanathan, Volume Editors (2007 forthcoming), Product and Market Development for Subsistence Marketplaces. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.
- Ruth, Julie A. and Rachel Oakley Hsiung (2007 forthcoming), “A Family Systems Interpretation of How Subsistence Consumers Manage: The Case of South Africa,” in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.
- Sridharan, Srinivas and Robin Ritchie (2007 forthcoming), “Marketing in Subsistence Markets: Innovation through Decentralization and Externalization,” in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.
- Steenkamp, Jan-Benedict E. M. (2005), “Moving Out of the U.S. Silo: A Call to Arms for Conducting International Marketing Research,” Journal of Marketing, 69 (October), 6-8.
- Strauss, Anselm and Juliet Corbin (1994), “Grounded Theory Methodology: An Overview,” in Handbook of Qualitative Research, Norman K. Denzin and Yvonna S. Lincoln, Eds. Newbury Park, CA: Sage, 273-285.
- Strauss, Anselm and Juliet Corbin (1998), Basics of Qualitative Research: Grounded Theory Procedures and Techniques, 2nd ed., London: Sage.
- Ulaga, Wolfgang and Andreas Eggert (2006), “Value-Based Differentiation in Business Relationships: Gaining and Sustaining Key Supplier Status,” Journal of Marketing, 70 (January), 119-136.

United Nations Human Development Report (2005). New York: United Nations Development Programme.

Viswanathan, Madhubalan (2007 forthcoming), “Understanding Product and Market Interactions in Subsistence Marketplaces: A Study in South India,” in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.

Viswanathan, Madhubalan and José Antonio Rosa (2007 forthcoming), “Product and Market Development for Subsistence Marketplaces: Consumption and Entrepreneurship Beyond Literacy and Resource Barriers,” in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.

Viswanathan, Madhubalan, José Antonio Rosa, and James Edwin Harris (2005), “Decision-Making and Coping by Functionally Illiterate Consumers and Some Implications for Marketing Management,” Journal of Marketing, 69(1), 15-31

Xavier, M. J., J. Raja, and Usha Nandhini (2007 forthcoming), “Entrepreneurship Development through Corporate Intervention among Self Help Groups in India: The Case of Hindustan Lever Limited’s Shakti Project,” in Product and Market Development for Subsistence Marketplaces, José Antonio Rosa and Madhu Viswanathan, Volume Editors. In the Advances in International Management Series, Joseph Cheng and Michael Hitt, Series Editors, Oxford: Elsevier.



Wallendorf, Melanie (2001), "Literally Literacy," Journal of Consumer Research, 27 (4), March, 505-12.

Wathne, Kenneth, Harald Biong, and Jan B. Heide (2001), "Choice of Supplier in Embedded Markets: Relationship and Marketing Program Effects," Journal of Marketing, 65 (April), 54-66.

## APPENDIX

### SUMMARY OF SUBSISTENCE CONSUMER-MERCHANT INFORMANTS

Anita is a 46 year old married woman with three children. Although her husband sells *vadai* and *bajji* (batter-fried bean and vegetable snacks) in a wine shop, Anita decided to make and sell *vadai* and *bajji* because the family could not manage on his earnings alone. She expresses a strong desire to work for herself and not for someone else. Anita hopes that her children will “study well,” in part, because she did not have an opportunity to do so.

Babu is a 32 year old married man with two children. He is a goldsmith who solicits orders from shopkeepers for gold jewelry including chains and rings. He also has been running a retail shop for six years, where he sells these products to consumers. He completed ninth grade and learned the goldsmith trade from his father.

Charu is a 34 year old married woman with three daughters. She volunteers that her husband does not contribute much to the family. When she found her children “were struggling with hunger,” Charu left a housemaid job and shifted to sales. She now sells floor cleaning powder and perfume door-to-door. She studied up to fifth grade.

Janaki is a 34 year old married woman with three children. She volunteers her husband is “not useful” to the family. For 10 years she has managed twice-daily milk delivery to approximately 100 households. Her children assist in milk deliveries. Janaki also provides maid services to three households. She studied up to sixth grade.

Jayashree is a 34 year old mother of two children. Her husband used to sell pickles and, later, groundnut sweetcakes to shops on commission. Faced with insufficient income for family needs, Jayashree and her husband started a pickle-making business. In addition to making the product, Jayashree sells pickles to neighbors, while her husband sells to distant shops and her son

sells to local shops. They emphasize quality pickle production in this year-old business.

Malathi is a 40 year old mother of four sons. She completed fourth grade. After her husband left the family 16 years ago, she started a daily flower delivery service to families \_\_\_\_\_. At one time, Malathi had 40 regular customers; now physical demands of the work make it difficult to complete so many deliveries each day. Malathi's sons help, but she now has only 10 regular customers and is finding it hard to make ends meet.

Narayanan is a 32 year old married man with two children. After a disagreement with management at the government provision store where he worked as a clerk, Narayanan started a milk delivery service and more recently a small provision shop. He completed tenth grade.

Prema is a 36 year old married woman who studied up to third grade. She has two school-age children. She sells morning and afternoon tea and *tiffin* (light meals) at a small hotel. She became acquainted with this business by observing and participating in her mother's *tiffin* shop. Prema expresses a strong desire to work for herself rather than someone else.

Rani is a 30 year old woman with two children. Her husband recently died of AIDS, and tests show Rani has the disease but her children do not. With some help from her mother, she runs a *tiffin* stall, where she sells *iddlies* (steamed lentil snacks) and lunch items. She states that her "world" is focused on the business and her children. She completed second grade.

Selvi is a 45 year old woman with two children. She is married to a man who makes wood handicrafts. While her husband is the artist and craftsman, Selvi manages employees, obtains supplies at negotiated and advantageous prices, and sometimes performs the selling function. She studied up to fifth grade and is confident and assertive.

Sita is a 45 year old married woman with three children. She studied up to fifth grade. When first married, her husband sold cigarettes and soft drinks. Upon recognizing his income

was not sufficient for managing expenses of the family including her husband's sisters, they started a small tea shop. Sita prepares and sells breakfast and lunch *tiffin* items such as *iddlies*, *vadai* and *dosai* (lentil crepes). Sita and her husband coordinate time at the shop and home to carry out responsibilities for the business and family.

Vanita is a 35 year old married woman with two children. She studied up to eighth grade. Vanita's husband has not had steady employment. Because their family was "struggling for survival," Vanita took up the suggestion of an acquaintance and began door-to-door sales for a company. After gaining experience, Vanita decided to buy and sell items on her own including biscuits, *papadam* (lentil flatbread), and other snack products.

Vidya is married woman in her forties who completed fifth grade. She has three children and also cares for her sister's child. Her husband is "idle at home" and does not contribute to household income. In the past, she has sold cotton candy and homemade sweets, and now she sells household goods door-to-door including pots and pans, rice cookers, and furniture.