GLOBAL VIRTUAL SALES TEAMS (GVSTs):
A CONCEPTUAL FRAMEWORK OF THE INFLUENCE OF INTELLECTUAL AND SOCIAL CAPITAL ON EFFECTIVENESS

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International sales opportunities, consolidation of global accounts, and advancements in communication technologies have led to the prevalence of global virtual sales teams (GVSTs). GVSTs enable salespeople from different geographical areas, time zones, and cultural backgrounds to use virtual interfaces and work closely together on interdependent global sales objectives. However, as technology-enabled, culturally diverse, and globally separated teams have not lived up to their potential, researchers have called for furthering our understanding of such teams. Therefore, drawing from literature streams on traditional sales teams, global sales teams, virtual teams, teamwork in organizations, intellectual capital, and social capital, we offer a framework for enhancing the effectiveness of GVSTs. Specifically, we define GVST effectiveness, identify effectiveness enhancing components of the GVST environment, and examine unique dimensions of GVST intellectual and social capital that influence the GVST environment. We conclude with several directions for future research in this promising, yet underresearched, area and implications for practice.

A global powerhouse, Microsoft maintains global sales teams consisting of members drawn from its 8000 geographically dispersed sales representatives, 1000 call center employees, and 1000 sales partners. Microsoft’s global sales teams share and access customer data, record sales opportunities and transactions, and manage and respond to global accounts to improve sales effectiveness, customer support, and partner interaction. The integrated sales force utilizes sophisticated technological solutions and communicates both internally and externally using virtual interfaces supported by the Internet, integrated communication technologies, and other electronic media. Operational efficiencies and access to global resources facilitate better sales force collaboration and fulfillment of global sales activities. (Accenture 2009)

Unprecedented changes in technology, product and service innovations, global customer dispersion, and competition have necessitated continuous organizational learning, operational flexibility, rapid response to market fluctuations, and adaptive product and process innovations (Harrison et al. 2000). To compete better in today’s hypercompetitive global environ-

ment, firms need to develop flexible organizational structures and interaction networks, such as dynamic global teams that have customer-focused membership and leadership (Harrison et al. 2000; Levinthal and March 1993). These developments and challenges have resulted in two major changes to the sales organization: virtualization of work and globalization of the sales force (Mulki et al. 2008; Sheth and Sharma 2008).

First, as Mulki et al. (2008) note, sales organizations are increasingly adopting virtual sales teams to perform distributed work, meet customer needs, and achieve sales objectives. Decentralization of work processes, adaptive organizational structures, flexible job designs, and global resource access and sharing have supported the creation of highly dynamic virtual work environments where salespeople no longer need to be collocated to fulfill their designated roles (Aubert and Kelsey 2003; Hertel, Geister, and Konradt 2005). Importantly, advancements in real-time telecommunication networks and Internet-enabled technology have provided the means for dispersed (carried out in different places) and asynchronous (carried out at different times) task accomplishment (Montoya-Weiss, Massey, and Song 2001).

Second, in addition to virtualization, the dissolution of geographic boundaries, emergence of international sales opportunities, and consolidation of global accounts have necessitated the development of global sales teams (Hickins 1998; Money and Graham 1999). As Sheth and Sharma (2008) note, contemporary sales teams need to be globally organized

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in alignment with key customers, marshal firm resources, establish key contact managers and personnel, bridge internal and external cultural differences, establish new boundary-spanning processes, and become more service oriented. Such teams play a vital role in global account management programs, “which treat a customer’s operations worldwide, as one integrated account” (Yip and Bink 2007, p. 103) and involve the deployment of dedicated sales personnel to manage interactions with global customers (Homburg, Workman, and Jensen 2002; Montgomery, Yip, and Villalonga 1999). Several multinational corporations, such as Cisco Systems, IBM, Intel, Toshiba, and Siemens, utilize integrated global sales teams that interact through virtual interfaces to service globally dispersed customers and pursue international business opportunities.

Formally, based on the definition of virtual teams provided by Martins, Gilson, and Maynard, global virtual sales teams (henceforth, GVSTs) are defined as sales teams “whose members use technology to varying degrees in working across locational, temporal, and relational boundaries to accomplish an interdependent task” (2004, p. 808). That is, GVSTs consist of geographically dispersed personnel who combine their functional and domain expertise, interact primarily over technology-enabled interfaces, and fulfill sales objectives directed at global clients. Across industries, GVSTs enable firms to adopt a service-centered approach toward customizing offerings to customers’ needs and utilize globally distributed firm resources to better satisfy customers’ needs (Vargo and Lusch 2004). Unfortunately, although sales researchers have recently begun to focus some attention on topics relevant to GVSTs (Mulki et al. 2008; Sheth and Sharma 2008), research regarding such teams remains scarce.

Past researchers have identified operational and functional problems associated with traditional selling teams (e.g., Arnett and Badrinarayanan 2005; Dixon, Gassenheimer, and Barr 2003; Moon and Armstrong 1994), global sales teams (Attia, Honeycutt, and Jantan 2008), and virtual teams (e.g., Martins, Gilson, and Maynard 2004). As GVSTs share characteristics with each of these team formats, they could inherit some complexities as well. For instance, to meet performance expectations, GVST members must possess the teamwork and taskwork-related knowledge, skills, and abilities that influence sales success and successfully transfer them to the challenging global, virtual environment. In general, research on global virtual teams has produced mixed results on their effectiveness. While some researchers have found that colocated teams outperform or match virtual teams in performance, others have found that virtual teams produce better work, more creative/original ideas, and more effective decisions (Martins, Gilson, and Maynard 2004). Given these issues, more research is warranted to understand the functioning of global virtual teams, in general, and GVSTs, in particular.

As a starting point, this paper integrates prior research on traditional sales teams, global teams, and virtual teams to develop a theoretically grounded framework that captures a parsimonious set of relationships between internal (i.e., intrateam) factors that affect GVST effectiveness outcomes. Past research suggests that collective intellectual capital and social capital are imperative for collaboration and social integration in dispersed teams (Nahapiet and Ghoshal 1998). Collective intellectual capital reflects the accumulation and utilization of dispersed knowledge resources (Hoefling 2008), while collective social capital serves as a prerequisite for effective virtual team collaboration (Riemer and Klein 2008). Extending these viewpoints, the framework proposes that collective intellectual and social capital in GVSTs influence team environment and, ultimately, team effectiveness. We contribute to the sales literature by (1) introducing a new framework for GVSTs; (2) focusing on intellectual capital and social capital, which have been scarcely discussed in the sales literature; (3) expanding on the components of intellectual capital and social capital in the context of GVSTs; (4) focusing on hitherto underexplored dimensions of virtual sales team environment; and (5) providing a discussion on how academicians and practitioners can better understand complex GVSTs and enhance their effectiveness.

Next, we provide a brief discussion on GVST effectiveness and focus on the relationships between GVST environment dimensions and GVST effectiveness. Next, we introduce a set of variables representing GVST intellectual capital and social capital that influence GVST environment. Finally, we conclude with a discussion of directions for future research in this promising, yet underresearched, area and offer implications for practice.

GVST EFFECTIVENESS

GVSTs bring together salespeople from different geographic areas, time zones, and cultural backgrounds to work closely together on interdependent global sales objectives. They serve as a technology-enabled platform for geographically dispersed employees to collaborate and compete in a global marketplace (Bell and Kozlowski 2002; Lipnack and Stamps 1999). Due to their flexible structure, they could enhance an organization’s productivity, flexibility, dynamism, and adaptability to global opportunities (Townsend, DeMarie, and Hendrickson 1998). Indeed, an important advantage of a GVST is its ability to achieve synergies by bringing together appropriate sales talent, regardless of their location (Hardin, Fuller, and Davison 2007). As the best talent is recruited for specific tasks, many virtual teams are typically transitory in nature, that is, team membership is often temporary and members may be part of multiple teams simultaneously to execute assigned tasks (Harvey, Novicevic, and Garrison 2005).
However, despite their many benefits, GVSTs face unique challenges as well. In contrast to traditional, collocated teams, distal and temporal separations among GVST members require substantial accommodations by team members, and often prove detrimental to team outcomes such as coordination, communication, cohesiveness, and project control in virtual interfaces (Carmel 1998; Jacobs et al. 2005). As Hertel, Konradt, and Orlikowski state, “it is often more difficult to implement and maintain common goals when persons are spatially and temporally distributed” (2004, p. 3). In addition, if GVST members are from different countries and value systems, cultural differences may affect trust, communication, and cohesiveness among team members (Carmel 1998; Kayworth and Leidner 2001–2; Maznevski and Chudoba 2000). Research on out-group or atypical salespeople has found that culture-based stereotypes and devaluation of abilities have hindered socialization among salespeople and perceptions of sales performance (Comer, Nicholls, and Vermillion 1998). To be more effective in international markets, selling organizations often hire salespeople who speak local languages and dialects (Tsalkis, DeShields, and LaTour 1991). For instance, to serve growing markets in Latin America, major American corporations recruit educated Hispanic Americans who are multilingual, relationship focused, and allocentric (Comer, Nicholls, and Vermillion 1998). Likewise, to respond to the burgeoning Asian markets, American companies recruit Asian Americans who are sensitive to cultural idiosyncrasies, interact better with Asian customers, and provide valuable customer feedback (Comer, Nicholls, and Vermillion 1998). In such instances, team members must be cognizant of and sensitive to behavioral and attitudinal differences. Finally, as GVSTs rely heavily on synchronized information technology—enabled interfaces to communicate and collaborate, and given the inherent rapid changes and potential incompatibilities, technology is an additional challenge that must be overcome. In other words, GVST members must gain proficiency in a wide range of technologies and must constantly keep up with changes in technology to function effectively. Further, to manage, synchronize, and coordinate customer data and information, dispersed team members need to be adept in utilizing appropriate customer and partner relationship management software platforms.

Extant research on distributed, global teams indicates that when these four contextual challenges are overcome, virtual teams can surpass traditional, collocated teams in effectiveness (Hertel, Geister, and Konradt 2005; Martins, Gilson, and Maynard 2004). But, what is GVST effectiveness? In the broader work groups literature, team effectiveness is defined as “an evaluation of the outcomes of team performance processes relative to some set of criteria” (Salas et al. 2009, p. 41). As the sales teams literature has focused especially on functional and psychological team outcomes (Dixon, Gassenheimer, and Barr 2003; Moon and Gupta 1997; Ruekert and Walker 1987), GVST effectiveness is conceptualized in terms of market and team effectiveness. Moon and Gupta (1997) propose that functional team outcomes include sales goal achievement and customer responsiveness. As GVSTs are deployed for obtaining, initiating, and maintaining global customer relationships, both dimensions must be afforded due consideration. Specifically, in the global account management literature, a variety of market-centric measures, including customer satisfaction, sales volume, customer value, market share, and customer retention, among others, have been proposed as appropriate market outcomes for selling teams (Homburg, Workman, and Jensen 2002; Jones et al. 2005). Therefore, given the variety of tasks that GVSTs are utilized for, the above-mentioned market outcomes are consolidated under the construct of market effectiveness. Further, as interpreted by Dixon, Gassenheimer, and Barr (2003), psychosocial outcomes can be captured through assessments of perceived team effectiveness. Adapting from Ruekert and Walker (1987), team effectiveness in the context of GVSTs is the team members’ perception that the intrateam relationships are worthwhile, equitable, productive, and satisfying. As Dixon, Gassenheimer, and Barr (2003) state, this variable captures the psychological and sociological outcomes of team affiliation.

In the following sections, we present a conceptual framework (see Figure 1) and research propositions on GVST effectiveness. In their life cycle model of virtual team management, Hertel, Geister, and Konradt (2005) stress that an important antecedent of virtual team outcomes is the development of a constructive team environment. Therefore, first, we introduce the factors characterizing the GVST environment and discuss their impact on GVST effectiveness. Then, we discuss the dimensions of social capital and intellectual capital as antecedents of the GVST environment.

A CONCEPTUAL FRAMEWORK

GVST Environment

In their recent work, Evans et al. (2007) state that any study on the environment of an organizational subsystem (e.g., GVST) must include dimensions relevant to that work unit. Therefore, in the following subsections, we examine affective GVST climate, GVST efficacy, and GVST potency as critical determinants of team effectiveness (Ashkanasy, Wilderom, and Peterson 2000; Gully et al. 2002).

Affective GVST Climate

To Jones and James (1979), team climate captures organizational members’ shared perceptions and interpretations of their work environment. A rich body of research on team
climate in organizational settings supports that climate is a collective property of groups and that perceptions regarding the climate of work environments influence how individuals behave collectively (Ashkanasy, Wilderon, and Peterson 2000; Tse, Dasborough, and Ashkanasy 2008). GVSTs satisfy the three necessary conditions stipulated in team climate theory for allowing the formation of team climate perceptions: frequent interaction, common goals that require collective effort, and task interdependence (Anderson and West 1998). First, GVST members interact extensively, albeit over electronic media. Second, salespeople in GVSTs have one or more shared goals and outcomes that necessitate collective action. Third, GVST members experience adequate shared interdependence that facilitates the development of shared insights and patterns of behavior.

A positive team climate supports motivational processes and performance in virtual as well as collocated teams (Ashkanasy, Wilderon, and Peterson 2000; Hertel, Geister, and Konradt 2005). Past studies have considered combinations of climate-related dimensions based on job characteristics, role characteristics, leadership characteristics, work group and social attributes, and organizational subsystem characteristics (Parker et al. 2003). Martin and Bush (2005) viewed climate as including subdimensions of support, recognition, fairness, innovation, autonomy, trust, cohesiveness, and pressure. Evans et al. (2007) focused on customer orientation, sales supportiveness, and sales innovativeness. As most of the dimensions listed above emanate within individuals (i.e., not a result of shared experiences), we focus on affective team climate, that is, a shared positive perception among members regarding the general atmosphere characterizing interactions among GVST members (Choi, Price, and Vinokur 2003; Tse, Dasborough, and Ashkanasy 2008). Affective team climate refers to “ambient group stimuli” (Choi, Price, and Vinokur 2003, p. 357) that can be “palpably sensed” (De Rivera 1992, p. 197).

Compared to collocated work teams, GVST members face additional challenges in establishing a positive shared climate. Anderson and West (1998) noted that shared perceptions will evolve in proximal work groups when employees have the opportunity to interact with one another and coconstruct perceptions. In addition, Ashkanasy, Wilderon, and Peterson (2000) note that increased social interactions lead to stronger team climate perceptions. But the temporary and transitory nature of GVSTs could allow a sense of remoteness to linger and inhibit shared perceptions. Therefore, GVSTs must develop operating procedures that overcome structural challenges and foster a productive team climate. As two executives from Intel recently surmised, (1) team charter, mission, and member roles must be clearly defined ahead of team launch and ensure member agreement with team objectives; (2) favorable and blackout meeting schedules must be established to respect national holidays and time zone challenges; (3) communication etiquette regarding audio, video, e-mail, and technology usage must be established so that members participate in an active, efficient, and disciplined manner; (4) team member input must be solicited in an inclusive manner with due consideration to team member diversity; (5) team member profiles, including photos, personal interests, and areas of

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**Figure 1**

A Framework for Enhancing GVST Effectiveness

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Note: Although extant research suggests relationships (1) between the environment components and (2) between social and intellectual capital, discussions on such relationships have been omitted due to space constraints. KSA = knowledge, skills, and abilities.
expertise, must be shared to break the ice, identify connecting points, increase familiarity, and build camaraderie; (6) cultural diversity must be embraced without negative behaviors such as stereotyping and ethnocentrism; (7) team member actions that support positive, collaborative, and problem-solving behaviors must be rewarded and reinforced; (8) team member perceptions about team performance must be solicited for continuous improvement; and (9) issues that hinder team efforts or damage individual relationships must be identified and resolved before they escalate (Combs and Peacocke 2007). These recommendations could serve as the foundation for the development and communication of a positive team climate within GVSTs.

An affective team climate serves as a social control mechanism that influences and shapes GVST member behavior (Tse, Dasborough, and Ashkanasy 2008). Importantly, an affective team climate reduces relational distance, engenders information sharing, and facilitates understanding of expectations regarding sales objectives (Dixon, Gassenheimer, and Barr 2003; Tse, Dasborough, and Ashkanasy 2008). Therefore, it becomes vital for GVSTs to achieve both market- and team-related outcomes. Following past sales researchers, who conclude that a positive team climate is a critical predictor of the successful functioning of sales teams (Evans et al. 2007; Martin and Bush 2005), we offer the following proposition:

Proposition 1: Affective GVST climate is positively related to (a) market effectiveness and (b) team effectiveness.

GVST Potency

GVST potency refers to the members’ belief in the team’s abilities to attain its goals and objectives. Guzzo et al. define group potency as “a group’s collective belief that it can be effective” (1993, p. 87). As Gully et al. elaborate, “Potency refers to generalized beliefs about the capabilities of the team across tasks and contexts (i.e., our team will be successful no matter what the task)” (2002, p. 820). In highly turbulent global sales environments, GVSTs that are confident about their abilities are likely to accept challenges accompanied by uncertainty and risk (Gil et al. 2005). Further, as Gully et al. (2002) state, group potency enables teams to persevere in adverse conditions. Interestingly, Campion, Medsker, and Higgs (1993) and Campion, Papper, and Medsker (1996) find that group potency exerted a significant influence on team productivity as well as satisfaction of team members.

As with team climate, it is relatively more difficult for team potency to develop in GVSTs than in collocated teams. Therefore, before the launch of GVSTs, selling organizations must ensure that they assemble team members who bring a defined array of complementary resources. Further, the captive performance capabilities residing in the assembled GVST must be clearly communicated to the team members. Member knowledge, skills, and abilities could also be uploaded on team member profiles for later reference. Also, team leaders must continuously monitor team member performance and reinforce positive behavior. Overall team accomplishments must be reviewed and circulated to provide indications of team performance and needs for improvement. These measures could enhance GVST members’ perceptions of team potency. Further, adapting Kirkman et al.’s (2004) recommendations, GVST members can be brought together for occasional face-to-face meetings to enhance process improvements. If the scheduling of such meetings is not feasible, then team managers and leaders must strive to communicate directly with individual team members. Although various complementary resources are invested to achieve GVST potency, ultimately group potency is an idiosyncratic team resource that resides within a team. In other words, group potency will vary from team to team even if certain team members are shared. Therefore, GVST potency is likely to highlight the importance of team affiliation, membership benefits, and intrateam relationships (or team effectiveness, as defined earlier).

Several researchers have identified and empirically verified group potency as a significant cognitive influence on performance (Gil et al. 2005; Guzzo et al. 1993). Collective outcomes have been reported to be higher for high-potency teams rather than low-potency teams (Guzzo et al. 1993). In a meta-analysis, Gully et al. (2002) provide support for a positive relationship between group potency and the overall performance of teams. Interestingly, as Kirkman et al. (2004) find, potency empowers teams and leads to greater process improvements for virtual teams than for teams that have a high number of face-to-face meetings. As they further add, team potency will influence virtual team members to behave proactively, seek continuous process and work improvements, and develop innovative solutions. Therefore, we offer the following proposition:

Proposition 2: GVST potency is positively related to (a) market effectiveness and (b) team effectiveness.

GVST Efficacy

While potency refers to beliefs regarding specific teamwork and taskwork abilities, GVST efficacy refers to the collective or team members’ beliefs that their team can function effectively in a virtual environment (i.e., our team will be able to communicate and collaborate using virtual interfaces). Based on Bandura (1997), GVST efficacy is defined as the team members’ collective belief in the interactive and coordinative abilities of the members in a global and virtual sales network. Although both potency and efficacy involve beliefs in team capabilities, they are conceptually different in terms of sharedness.
and task specificity (Gully et al. 2002). Compared to other
types of efficacy beliefs, GVST efficacy refers specifically to
the members’ belief in the team’s ability to use communica-
tion technology to coordinate its sales activities across time
and space (Bandura 1997; Hardin, Fuller, and Davison 2007). The
task specificity in this definition concerns the GVST’s
ability to overcome the challenges of the virtual environment
and perform their assigned sales tasks.

Past research has demonstrated that collective efficacy with
respect to virtual communication, interaction, and computer
usage affects the performance of virtual teams (Hardin, Fuller,
and Davison 2007). Indeed, the belief in their team’s efficacy
influences members’ collective action and effort expended
(Bandura 1997). As with group potency, in their meta-analysis,
Gully et al. (2002) find a positive relationship between team
efficacy and team performance outcomes; that is, according to
efficacy theory, when team members believe that the GVST
has the ability to function virtually, they are likely to be more
effective in meeting team outcomes. Hence, the following
proposition is offered:

Proposition 3: GVST efficacy is positively related to (a) mar-
ket effectiveness and (b) team effectiveness.

Antecedents of GVST Environment

Next, we turn our attention to factors that can influence GVST
environment. As the three variables we include in GVST en-
vironment concern climate, potency, and efficacy, we examine
pecific variables that influence these perceptions and beliefs.
Our review of the literature revealed concepts that have a very
strong presence in the management strategy literature but are
seldom included in sales management research: intellectual
capital and social capital.

GVST Intellectual Capital

Nahapiet and Ghoshal refer to intellectual capital as “the
knowledge and knowing capability of a social collectivity,
such as an organization, intellectual community, or profes-
sional practice” (1998, p. 245). Therefore, following Zack
(1999), GVST intellectual capital consists of knowledge held
by team members that can be applied in GVST procedures
and processes and utilized in achieving strategic objectives.
Qureshi, Briggs, and Hlupic note that “electronic collabora-
tion has become a powerful means of capturing, exchang-
ing, exploiting, and managing knowledge” (2006, p. 199).
Knowledge, skills, and abilities (KSAs) accumulated by the
GVST become valuable intellectual capital that could posi-
tively influencing team competences and performance (e.g.,
Nahapiet and Ghoshal 1998). There is general consensus
that intellectual capital is a multidimensional concept and
that it originates from organizational employees’ education,
experience, talents, competences, and attitudes (Hudson
1993). However, as there is no established work on the di-
mensions of intellectual capital in the context of GVSTs, we
draw from relevant research on intellectual capital, sales, and
global virtual teams (Cron et al. 2005; Harvey et al. 2004,
2005) to propose four unique team-level subdimensions: sales
task–related KSAs, team-related KSAs, technology KSAs, and
cross-cultural KSAs.

As Cron et al. define, sales task–related KSAs “are knowledge,
skills, and abilities that are directly and proximally related to
the sales function within an organization” (2005, p. 125). These
KSAs represent the intangible human capital that is
available collectively for GVSTs to achieve their sales tasks
(Bontis 1998). That is, the GVST must have members that
possess (1) knowledge (regarding products/services, custom-
ers, market, industry, etc.) that can support sales productivity,
(2) skills (selling, closing, territory management, people, rela-
tion building, etc.) that are essential for salespeople, and
(3) abilities (analytical, cognitive, emotive, etc.) that enhance
selling exchanges (Cron et al. 2005). Although individual
members may vary in the levels of sales task–related KSAs,
the team as a whole must possess the requisite intellectual
resources. Possession and demonstration of task-appropriate
levels of KSAs are critical for empowering member percep-
tions of the team’s ability to perform global sales tasks and
function as a collective unit (Bandura 1997).

Team-related KSAs include expertise in individual partici-
pation in a team and social dynamics of teamwork that are
necessary for functioning in an interdependent team (Salas
et al. 2009). Team-related KSAs enable GVSTs to translate,
magnify, and synergistically combine task-related KSAs (Salas
et al. 2009). Specifically, in virtual teams, team members must
possess effective cooperation and communication skills as the
reduced personal interactions may lead to misunderstandings
and perceived isolation (Hertel, Konradt, and Voss 2006).
Further, to collaborate effectively over virtual interfaces, Orvis
and Zaccaro (2008) recommend that teams must possess
teamwork KSAs that are both generic (e.g., communication,
collaboration, coordination, preference for teamwork, bound-
ary spanning) and specific (e.g., team-building skill, conflict
management skill, collective information sharing). The five
core components of teamwork as proposed by Salas et al.
(2009) are especially useful for building highly intertwined
GVSTs: (1) shared leadership to leverage heterogeneous in-
dividual KSAs, (2) adaptability of the team to environmental
changes and self-management of team processes, (3) mutual
performance monitoring to maintain and elevate levels of
performance, (4) requesting for and providing supporting
behavior when assistance is needed, and (5) team orientation
in that members are predisposed to request, provide, and
evaluate input from one another.
Technology KSAs refer to the team’s ability to utilize available and emerging technology for fulfilling sales task work and virtual teamwork. The dispersed and asynchronous nature of GVSTs necessitates that team members are proficient in a variety of technological tools to communicate effectively within the team and with external sources. For collaboration, GVSTs employ both real-time, synchronous technology (audio, video, videoconferencing, Internet interfaces, etc.) and delayed, asynchronous technology (e-mail, online bulletin boards, blogs, vlogs, etc.) (Bradley 2008). The type of technology chosen for collaboration depends on the level of interaction (or social presence) and the level of media richness required for information exchange (Bradley 2008). In addition, for fulfilling sales responsibilities, GVSTs utilize CRM (customer relationship management) technology that provides vital information about current and prospective customers. As Boujena, Johnston, and Merunka (2009) note, automated sales force systems can influence the sales function by contributing to productivity, information processing, communication effectiveness, perceived competence, and customer relationship quality. However, as the relationship between sales task performance and CRM technology usage has been shown to be curvilinear (Ahearne, Srinivasan, and Weinberg 2004), GVSTs should determine optimum solutions for technology use.

Cross-cultural KSAs refers to the GVST’s collective ability to adapt to new cultural contexts or effectively bridge issues between diverse cultures. In GVSTs, teamwork and task work need to be conducted with acute attention to cross-cultural differences. As Hertel, Konradt, and Voss note, “KSAs related to sensitivity and handling of such heterogeneity and cultural differences might thus also be an important competency for working in a virtual team” (2006, p. 482). For successful cross-cultural interactions in sales settings, researchers have advocated that cultural awareness, sensitivity, and adroitness are necessary (Chaisrakeo and Speece 2004; Chen and Starosta 1996; Zakaria 2000). Cultural awareness prompts a greater awareness of the consequences of one’s actions on others and the willingness to modify one’s behavior. Cultural sensitivity prompts open-mindedness and nonjudgmental attitudes to foster better understanding of cultural differences in values and verbal/nonverbal cues. Cultural adroitness prompts an awareness of how to act effectively in a new cultural environment without offending anybody. To build collective cross-cultural KSAs, GVSTs need to establish cultural norms before launch or in the first few meetings. Socialization and team-building activities can be utilized to recognize, accommodate, or overcome cultural differences.

Together, the four dimensions mentioned above present a GVST with the knowledge, skills, and abilities to manage and solve global sales challenges using collaborative and culturally sensitive approaches. A selling organization’s investments in training and developing globally competent GVST members can enhance collective intellectual capital in teams and could, ultimately, lead to global competitive advantage (Harvey, Novicevic, and Garrison 2005). As Ingram notes, “Essentially, the sales organization as a learning organization increases customer value by developing and sharing intellectual capital” (2004, p. 20). However, to access, share, and leverage accumulated intellectual capital, GVSTs rely mainly on electronic modes of communication. As a result, they are more attuned to the transfer of explicit knowledge rather than tacit knowledge (Griffith, Sawyer, and Neale 2003). To share tacit knowledge, GVSTs can attempt to staff teams with holders of desired tacit knowledge assets. Further, for future reference and to assist new teams or members, implicit knowledge (e.g., new knowledge learned from the performance of a task) must be transformed to explicit knowledge (e.g., by listing key factors that aided the performance of the task) so as to permit transmission and storage as permanent records (Coff, Coff, and Eastvold 2006; Griffith, Sawyer, and Neale 2003). Hertel, Geister, and Konradt (2005) emphasize the importance of encouraging team members to actively share information to promote greater awareness of who on the team knows what (i.e., transactive memory).

As GVST members learn from experience, they (1) perform future activities more efficiently; (2) become more competent in acquiring, disseminating, and processing information; (3) apply their acquired knowledge to newer situations; and (4) make quicker decisions and fewer mistakes. In such instances, teams’ decision-making processes are accelerated and their decisions are better (Sarin and McDermott 2003), that is, as GVSTs develop, manage, and apply their intellectual capital, they have a higher likelihood of achieving strategic global objectives in terms of sales, customer service, market leadership, and operational effectiveness (Qureshi, Briggs, and Hlupic 2006; Zack 1999). Sales task–work KSAs, teamwork KSAs, technology KSAs, and cross-cultural KSAs contribute to the development of varied approaches toward problem solving, member expertise in roles and functions, and confidence in their own abilities (Subramaniam and Younou 2005). The resulting team independence and self management of activities are strongly related to efficacy beliefs (Bandura 1997). Efficient management of these knowledge resources reduces costs in manpower and infrastructure, and leads to improved customer service, better decision making, quick problem resolution, and efficient transfer of best practices (Alavi, Kayworth, and Leidner 2005–6). These are expected to influence members’ shared positive perceptions about the team, belief in the team’s potency, and confidence in the team’s abilities. Hence, the following proposition is offered:

Proposition 4: GVST intellectual capital, as represented by sales task–work KSAs, teamwork KSAs, technology KSAs,
and cross-cultural KSAs, is positively related to (a) GVST climate, (b) GVST efficacy, and (c) GVST potency.

**GVST Social Capital**

Social capital is defined as the collection of actual and potential resources embedded within, available through, and derived from the network of relationships possessed by social unit (Nahapiet and Ghoshal 1998). Adapting from Subramaniam and Youndt, GVST social capital “enhances the quality of group work and the richness of information exchange among team members” and “is epitomized in how it facilitates interactions and the exchange of ideas” (2005, p. 453). GVSTs combine salespeople with varying national, cultural, educational, and technical backgrounds. To function effectively, team members need to communicate and collaborate with each other, share and provide sales task–related knowledge, and establish relationships with each other. As Riemer and Klein (2008) propose, only those virtual teams with sufficient social capital will be able to overcome the challenges of dispersed teamwork and manage complex tasks. Following Nahapiet and Ghoshal (1998), social capital is conceptualized as having structural, relational, and cognitive dimensions.

In the context of a GVST, the structural dimension involves the extent to which team members are connected, the patterns of such connections, and the usefulness of such connections. When team members are more connected, they are more likely to engage in close and personal interactions, conduct frequent consultations, and invest effort into coordinating activities with other team members (Atuahene-Gima 2002), that is, it is important to develop strong network ties that facilitate frequent and meaningful interactions. Social interactions through network ties enable team members to integrate knowledge on task- and team-related activities (Robert, Dennis, and Ahuja 2008). Structural capital is dependent on intensity (i.e., the extent to which team use their ties to interact) and decentralization (i.e., the distributed pattern of interactions) (Rulke and Galaskiewicz 2000). That is, the mere existence of network ties and the usage of such ties by a few dominant members are inadequate for beneficial effects to accrue. In contrast, when GVSTs integrate multiple exchanges from several different communicators, they are likely to have strong structural capital. Some empirical research suggests, given their structural and operational design, effectively managed virtual teams can produce better communication flows and more casual communication than more traditional teams (Martins, Gilson, and Maynard 2004). Further as Robert, Dennis, and Ahuja (2008) add, structural capital in virtually connected teams leads to more open and participative discussions, along with greater information use, sharing, and contribution. In short, when GVSTs are able to develop “thicker” (i.e., meaningful and timely) communication (i.e., increase connectedness), they tend to experience greater team cohesiveness and structural ties (Kozlowski and Bell 2003). Ultimately, cohesiveness in virtual teams leads to more effective decision making (Chidambaram 1996).

In the context of a GVST, the relational dimension refers to the nature and quality of interrelationships among GVST members that have been developed over time. Although the social capital literature has examined various relational subdimensions, in the context of global virtual teams, trust has been identified as the most important relational mechanism for team development and collaboration (Henttonen and Blomqvist 2005; Jarvenpaa, Knoll, and Leidner 1998; Jarvenpaa, Shaw, and Staples 2004). Virtual collaboration entails substantial vulnerability, and trust among team members is necessary for members to value relationships and continue to be vulnerable (Mayer, Davis, and Schoorman 1995). Specifically, trust refers to the confidence in exchange partners’ motives and the willingness to rely on their words, actions, and decisions (McAllister 1995). Trust is an important factor in successful interpersonal relationships as it encourages team members to cooperate with each other and provides a basis for future collaborations. Importantly, within-team trust is critical in GVSTs as face-to-face interactions are greatly reduced (Peters and Manz 2008). Therefore, team members work toward fulfilling team and task objectives by completing their assigned work while simultaneously trusting other team members to deliver their share of work with acceptable quality (Aubert and Kelsey 2003). Further, within-team trust is especially important in GVSTs as other mechanisms used to observe, monitor, and control partners are absent (Aubert and Kelsey 2003; Jarvenpaa, Knoll, and Leidner 1998). Therefore, trust becomes a substitute for control and the binding force for members who work from dispersed locations (Kirkman et al. 2002).

In virtual interactions, frequent communication is the best approach for facilitating the development of trust, which in turn promotes within-team collaboration and cooperation (Jarvenpaa, Knoll, and Leidner 1998). Research evidence suggests that trust develops incrementally in global virtual teams. As Henttonen and Blomqvist (2005) note, swift trust or initial trust forms in the early stages of team development; social trust emerges as members commit to member well-being, common culture, and procedures; and competence trust evolves when members fulfill promises and achieve performance goals. Although there is contrasting evidence on the direct relationship between trust and task performance, Jarvenpaa, Shaw, and Staples emphasize “increases in trust are likely to have a direct, positive effect on a team member’s attitudes and perceived outcomes” (2004, p. 263). Hence, selling organizations utilizing GVSTs must carefully build and manage within-team trust in GVSTs to influence member perceptions about team environment.
Finally, in the context of GVSTs, the cognitive dimension of social capital refers to those resources that provide shared representations, interpretations, and systems of meaning among parties (Cicourel 1973). Thus, the cognitive dimension of social capital requires that GVST members demonstrate a common language to share narratives, common goals, and shared values through exchange of information (Nahapiet and Ghoshal 1998). In virtual collaborations, such shared understanding underlies the communication of team objectives and member capacities (Peters and Manz 2008). Selling organizations using virtual collaboration must use communication to familiarize every team member with the overall objectives of the team as well as the roles and responsibilities of other members. Correspondingly, every team member must take ownership of team goals instead of just their individual goals and clearly understand roles played by team members in achieving team goals (Peters and Manz 2008). As Baan and Maznevski add, “although all team members start with different knowledge, shared understanding can be built from individual understanding through dialogue among team members about the nature and impact of differences” (2008, p. 351). This improves team members’ ability to align their expectations and perceptions about team and task performance (Etgar 1979). Also, such communication helps build team cohesiveness by providing GVST members with a mechanism for working toward team objectives and resolving disputes. As team members value the importance of collaborative activities, they are likely to engage in and experience teamwork. In turn, shared knowledge about team and member performance and capabilities influences members’ perceptions about the efficacy and potency of the team. Therefore, the following proposition is offered:

**Proposition 5:** GVST social capital, as captured in the structural, relational, and cognitive dimensions, is positively related to (a) GVST climate, (b) GVST efficacy, and (c) GVST potency.

**SUMMARY AND CONCLUSIONS**

The use of GVSTs is becoming more prevalent in an increasingly global marketplace that is characterized by geographically dispersed customer bases and newer emerging global opportunities (Mulki et al. 2008; Sheth and Sharma 2008). Although Sheth and Sharma observe, “As firms begin competing globally, they require sales organizations that are also global, specifically requiring salespeople and supplies in all of their global areas” (2008, p. 266), they caution that additional research is required to better understand such developments. Recent industry reports also reveal that the full potential of global account management, in general, is yet to be realized. In fact, only a third of all firms implementing global account practices report satisfactory progress in their initiatives (Yip and Bink 2007). However, Yip and Bink (2007) report that within a few years of their introduction, successful global account programs can increase customer satisfaction by more than 20 percent and profits and revenues by more than 15 percent. Further, they add that these results double for more mature programs. Along with marketing, R&D, and other functional teams, GVSTs could play a prominent frontline role in ensuring the success of global initiatives through securing larger shares of customers’ purchases, strategic partnerships, and additional value-adding businesses.

However, as GVSTs are a relatively recent phenomenon, much remains to be known about factors affecting their effectiveness. This paper presents an integrated framework that identifies key factors that influence GVST effectiveness as represented by market effectiveness and team effectiveness. The framework combines the literature on virtual teams, selling teams, global teams, intellectual capital, and social capital. According to the framework, collective intellectual capital and social capital in GVSTs influence the GVST environment (affective GVST climate, GVST efficacy, and GVST potency).

The framework advances several variables and relationships that have not received adequate attention in the sales literature. First, although extant research indicates the potential informational, interpersonal, and network advantages of social capital and intellectual capital to selling organizations, these constructs have received little attention in the sales literature. Therefore, in addition to discussing intellectual capital and social capital in GVSTs, we propose unique dimensions that are especially relevant in the context of GVSTs. Specifically, we argue that sales task-related KSAs, teamwork KSAs, technology KSAs, and cross-cultural KSAs are important dimensions of GVST intellectual capital. Likewise, extending prior research on social capital, we explore the nature of structural, relational, and cognitive dimensions of GVST social capital. Next, building on efficacy and psychological climate research, we integrate climate, efficacy, and potency under the conceptual umbrella of GVST environment. Again, in the sales literature, these variables have not been examined much at the group level of analysis. Finally, using existing theoretical bases, we integrate these constructs and develop a framework to promote further research in the promising area of global virtual sales networks. Note that this framework is an initial step in identifying certain factors that influence GVST effectiveness and requires further empirical validation. Because of the relative newness of GVSTs, several areas of research remain underexamined. As a guideline to future researchers, we offer the following suggestions.

**Empirical Investigation.** Drawing from existing theoretical and empirical works, this paper proposed a parsimonious framework on GVSTs. Although the constructs introduced in the framework have well-developed scales, they have not been adapted and employed in the context of GVSTs.
Therefore, empirical verification of the proposed relationships and inclusion of related variables are necessary to further our knowledge on GVSTs. As stated earlier, several contemporary organizations use GVSTs, and researchers can qualitatively and quantitatively assess factors influencing the effectiveness of GVSTs across specific sales tasks and situations.

**Building Intellectual and Social Capital.** As the framework indicates, the performance of GVSTs can be improved by building collective intellectual and social capital within GVSTs. To achieve team effectiveness and sales goals, any sales team must possess a wide range of competences and cross-functional abilities needed for complex selling tasks. With GVSTs, a challenge for managers is to search across the entire organization and analyze employee skill sets before selecting appropriate GVST members. Team composition is a critical factor in determining the amount of complementary resources possessed by the team as well as the idiosyncratic resources created by the team. Further, given the transitory nature of memberships in GVSTs, creating the social networks and relations that foster social capital could be challenging. Although GVSTs lack face-to-face interactions, interactions during team formation stage and in corporate get-togethers may be beneficial in establishing relational ties. Future researchers could investigate these issues and provide further guidance on how collective intellectual and social capital could be developed in GVSTs.

**Leadership Styles.** Future research on remote leadership of GVSTs and effective management styles are of critical importance. Given the dispersed nature of the team, managing from a distance poses novel challenges for traditional sales managers. Researchers could provide insights on promising topics such as leader-member exchange, effective leadership styles, team autonomy, and self-governance in GVSTs.

**Training.** As Attia, Honeycutt, and Jantan (2008) note, global sales training programs have the potential to influence sales force motivation, effectiveness, and performance. In addition to routine training procedures, salespeople need specialized training before becoming a part of GVSTs. Cultural sensitivity, technological efficacy, time sensitivity, and psychological impact of isolated coordination (Mulki et al. 2008) are some unique areas that need attention. At the same time, firms should attempt to balance training investment with potential rewards. For instance, in certain situations, selling firms can bring together employees who already possess sales task–related, team–related, technology, and cross-cultural KSAs instead of attempting to train employees. Future research should examine the impact of these and other possible training areas toward guiding the development of effective GVST training programs. Along with training guidelines, appropriate performance appraisal measures must also be developed.

**Cross-Cultural Issues in GVST Management.** Although somewhat related to training issues, it is necessary to focus separately on some of the cross-cultural issues in GVST management. GVST members received from distinct cultures may have experienced different training practices. What is taught (e.g., product knowledge versus customer knowledge) and how it is taught (e.g., on-the-job versus demonstration classes) vary from culture to culture (Attia, Honeycutt, and Jantan 2008). Therefore, researchers need to investigate how to develop culturally sensitive training programs that standardize certain topical areas while preserving unique localized skills. In addition to intrateam cross-cultural issues, researchers should also analyze how GVST members can understand and adapt to the cultural expectations of buyers.

**Sales Task Assessment.** Future research could examine whether GVSTs are particularly effective in certain stages of the selling and relationship-building process. Also, their feasibility to sell and service various product types needs to be investigated. Such research can provide guidance on requisite individual competences and functional expertise that support the development and maintenance of buyer–seller relationships. As CRM is a strategic imperative in most organizations, the role of GVSTs in supporting CRM needs to be studied.

**Determining the Form of GVSTs.** Depending on extent of incremental advantages, global sales approaches must balance global integration and local autonomy (Yip and Bink 2007). Therefore, future research should evaluate the level of coordination between GVSTs and local/national sales operations and resultant impact on customers and the selling organization. Dyadic perspectives from both parent and regional sales organizations could prove to be beneficial in this context.

**Determining the Need for GVSTs.** Although GVSTs have the potential to be more effective and efficient than traditional collocated and global account teams, firms should carefully evaluate the need for such teams. If they are merely superimposed on traditional selling units, they are only likely to entail higher costs. Factors such as customer size and revenue potential, nature of products and services sold, strategic importance of global customers, technological and global integration capabilities, and possible competitive advantages (Yip and Bink 2007) must be given due consideration before choosing GVSTs. Future research must specifically address when GVSTs are appropriate and also develop scorecards for evaluating candidate situations.

Next, we turn our attention to managerial implications. Although our work is conceptual in nature, it offers important implications for practice. The integrative, yet parsimonious, conceptual framework developed in this paper has strong theoretical foundations and, therefore, can provide guidance for practitioners. First, practitioners can use our discussion of GVST effectiveness to define and evaluate effectiveness according to specific contexts. Firms need to pay attention to both market effectiveness and team effectiveness while using GVSTs to compete in mature product markets. Second, based on prior research, we propose affective GVST climate,
GVST potency, and GVST efficacy as critical influencers of GVST effectiveness. Again, practitioners can (1) develop an affective GVST climate and use it as a social control mechanism; (2) support collective beliefs in team abilities through guidelines, communication, performance appraisals, feedback, and rewards; and (3) support efficacy beliefs by recognizing team strengths and offering access to technologies that enable GVSTs to overcome global sales challenges and achieve targeted outcomes.

Third, the different dimensions of intellectual capital that are proposed and discussed in this paper (sales task–related KSAs, team-related KSAs, technology KSAs, and cross-cultural KSAs) have unique implications for GVSTs. Collectively, the four dimensions can provide a GVST with the knowledge, skills, and abilities to manage and solve global sales challenges using virtual, collaborative, and culturally sensitive approaches. In fact, practitioners can use the dimensions of the intellectual capital for auditing purposes. For example, firms can review their GVSTs in terms of sales task–related KSAs, team-related KSAs, technology KSAs, and cross-cultural KSAs, and determine the dimensions that require specific attention. Consequently, firms may be required to pay attention to (1) acquisition, training, and development of sales task–related KSAs that are necessary for global sales success; (2) team characteristics, dynamics, leadership, support, and other team-related KSAs that support interpersonal collaboration; (3) adoption of new technologies and training in technology KSAs for efficient utilization of technological interfaces; and (4) promoting cultural awareness, cultural sensitivity, and cultural adroitness bridging cultural differences and eradicating problems such as cultural biases, stereotyping, and ethnocentrism. Fourth, using the dimensions of social capital, practitioners could focus on the connectivity and the strength of the network of relationships in GVSTs, the nature and quality of relationships among the GVST members, and the common language among GVST members in terms of shared representations, interpretations, and systems of meaning.

In summary, GVSTs are exciting and promising combinations of sales talent for selling organizations in an increasingly competitive global marketplace. The establishment of globally connected sales teams no longer hinges on technological feasibility. Therefore, both academicians and practitioners must explore ways to better understand, monitor, and optimize the effectiveness of the selling team of the twenty-first century.

REFERENCES


