Sustainable integrity: how reverse auctions can benefit suppliers in emerging markets

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Abstract

Purpose – The growth of international business persists, particularly in emerging economies. Business in these developing nations is heavily influenced by national culture. In the Middle East and North Africa (MENA) region, buyer-supplier relationships are often negatively influenced by "*wasta*" – a term associated with power, influence, connection and corruption. Technology-enhanced business processes diffuse as globalization increases. The purpose of this research was to explore whether and, if so, how electronic reverse auction (e-RA) use might be effective in a MENA national culture.

Design/methodology/approach – The authors use a case study method based on data collected from 13 interviews with supply chain members extending beyond the dyad to explain: why Middle Eastern bidders participated in an e-RA; the nature of a unique phenomenon in Middle Eastern culture called *wasta*; and (3) how *wasta*, e-RA use, and procurement integrity interact in a sustainable way.

Findings – This case study extends knowledge in the area of global supply chain management by identifying new opportunities and providing a mechanism to ameliorate risks. It demonstrated that e-RAs can ameliorate some of the deleterious effects of *wasta* by increasing transparency and procedural fairness associated with MENA-based buyer-supplier relationships.

Originality/value – E-RAs have been criticized as being unfair to suppliers. This study unveils cultural idiosyncrasies where e-RAs overcome a moral hazard associated with MENA buyer-supplier relationships and become a supplier's favored sourcing medium. As economic growth in MENA is expected to outpace all other regions, this study has implications for understanding how regionally specific cultural variables impact B2B sourcing strategy adoption and outcomes.

Keywords Procurement, Ethics, Integrity, Trust, Electronic reverse auction, Wasta

Paper type Research paper

Introduction

An electronic reverse auction (e-RA) is an increasingly successful means of business-to-business interaction (Amelinckx *et al.*, 2008; Hawkins *et al.*, 2009). E-RAs typically save buyers 5-40 percent (Tully, 2000), with an average of 20 percent reduction in the costs of purchased goods and services (Cohn *et al.*, 2000). Beyond price, e-RAs also reduce award cycle-time (up to 40 percent), increase bidding transparency, enhance price visibility, and improve operational performance (Beall *et al.*, 2003; Kaufmann and Carter, 2004; Power *et al.*, 2010; Schrader *et al.*, 2004; Smart and Harrison, 2002). Given these results, it is not surprising that 31 percent of firms reported using e-RAs as one of their strategic sourcing strategies (Amelinckx *et al.*, 2008).

ERA use has primarily been studied in the Asian, European, Latin American, and North American contexts (Jap, 2002), as evidenced by Caniels and van Raaij (2009). This study found a negative relationship between the gross domestic product of a supplier's home nation and that supplier's favorable view of e-RAs. However, the research did not explain empirically why suppliers from less developed nations hold stronger affinities for e-RAs.

Little attention is given to e-RA adoption and use in emerging markets, particularly in the Middle East and North Africa (MENA) region. Developing nations are often characterized as lacking structure to ensure business integrity. This omission suggests that the impact of e-RAs as a sustainable sourcing strategy in developing nations remains

unknown. As e-RA use expands globally, cultural effects on e-RA success and failure suggests a compelling research area. Supply chain efficiency and effectiveness hinge on effective buyer-supplier relationships. Therefore, international buyers should know whether eRAs can be successfully integrated into sourcing practices in these developing markets.

Increasing global connectivity is providing a platform supporting e-RA expansion. This is particularly true in the MENA region, where there are an estimated 72 million internet users (Central Intelligence Agency, 2012). Along with growth in connectivity, the economic growth in the MENA region is outpacing all other regions (Kapur, 2009). According to the Economist Intelligence Unit's forecast, growth in the MENA region's 2008 GDP of $1.1 trillion hit 4.9 percent by 2012 (International Bank for Reconstruction and Development, 2008). Approximately 70 percent of that GDP is in merchandise trade.

Understanding how cultural idiosyncrasies affect international business is important in order to manage risk. Global sourcing risk is comprised of supply risk, process and control risk, environmental and sustainability risk, and demand risk (Christopher *et al.*, 2011). Supply risks may be manifested not only in poor quality, unreliable delivery, inadequate safety, human rights violations and natural disasters, but also in supplier opportunism such as unethical business practices. Research surrounding supply management ethics is not sufficient (Eltantawy *et al.*, 2009; Miemczyk *et al.*, 2012), yet supply chain management ethics is critically important (Svensson and Baath, 2008). If supply risk is excessive, global sourcing firms will hesitate to enter emerging markets. Therefore, the cultural characteristics of suppliers should be assessed (Christopher *et al.*, 2011). Furthermore, "companies which source globally must (re)design supply networks, by considering criteria other than cost and customer service, since they are exposed to different types of risks compared to members of conventional supply chains" (Christopher *et al.*, 2011, p. 71). We contend that in ethically challenged contexts such as emerging markets, procurement integrity is a worthy criterion.

The purpose of this research, therefore, is to explore how electronic reverse auction use might be effective in an emerging market. We do so by studying e-RA use in a MENA context. This is important because "as business markets become more global, procurement strategies will also become more global" (Jap, 2002). The success or failure of these strategies in MENA may hinge on understanding the cultural dynamics.

A case study methodology was employed to uncover the key constructs and relationships associated with e-RA use in the MENA region. Kuwait was used as the country for the study due to the differences in measurable cultural constructs and the lead author's access to a Kuwait-based e-RA. The specific research questions addressed are:

- why Middle Eastern bidders participated in an e-RA;
- the nature of a unique phenomenon in Middle Eastern culture called *wasta*; and
- whether e-RA use is a sustainable sourcing strategy in the MENA region.

The remainder of this paper is organized as follows. First, the pertinent literature is summarized. Second, the method and data analysis are described. Following that, the results and findings are discussed. Lastly, theoretical and managerial implications are presented.

Literature review

To explore e-RA participation and continued use, the underlying literatures surrounding technology adoption and e-RA use are most informative (see Table I). Since sustained business practices may be affected by cultural idiosyncrasies, before reviewing these literatures, the MENA culture and business climate are discussed.

Middle East and North Africa (MENA) culture

Hofstede (1980, p. 43) defines culture as "the programming of the mind which distinguishes the members of one human group from another". Hofstede developed five distinct dimensions of national culture:

1 individualism/collectivism (IC);
2 power/distance (PD);
3 uncertainty/avoidance (UA);
4 masculinity/femininity (MF); and
5 long-term orientation.

While his research has been criticized (Clark, 2003; Craig and Douglas, 2006), his five dimensions of national culture can be useful to scholars whose activity involves comparisons of behavior at the country level (Clark, 2003).

A comparison of Hofstede's cultural dimensions (Table II) indicates that UA and PD are much higher for Kuwait than for the USA (At-Twaijri and Al-Muhaiza, 1996). At the same time, MF, and IC for Kuwait are much lower. These differences support research aimed at uncovering cultural factors that could affect the efficacy of e-RA use in non-Western cultures. Research supports the influence of cultural differences on buyer-supplier outcomes. For instance, Lee (1998) showed that greater cultural difference increases the chances of opportunism among trading partner. Volkema (1997, 1999) found that managers who deal with high-PD and high-UA cultures need to pay particular attention to culture and make extra effort to build trust.

Understanding the Middle East and North Africa (MENA) business climate

Although the MENA business area is rapidly expanding, business research in the area is sparse, mostly involving global reports and indexes. These reports indicate that business relationships are keenly shaped by negative factors. Government and business practices in the MENA region are characterized as corrupt (Hutchings and Weir, 2006). Bribery, collusion, favoritism, and secrecy are not uncommon, and in 2008, MENA countries earned a median ranking of 92 out of 180 countries on the corruption perception index (Transparency International, 2009).

Early in our investigation, we identified a phenomenon called *wasta* that has significant influence on business outcomes. *Wasta*, a consistent relational construct underlying MENA business, is a form of social capital that bestows power, influence, and connection to those who possess it (El-Said and Harrigan, 2009). Often, *wasta* – more than product or service value – wins a procurement tender. As *wasta* emerged, we followed it further in to the field and in to the literature.

Table I Culture dimensions

Dimension	Definition	Kuwait's score
Individualism/ collectivism (IC)	Captures how individuals in a society define themselves	Kuwait scored low (38) in IC (Hofstede, 1980; At-Twaijri and Al-Muhaiza, 1996), suggesting that an individual's ability to succeed on merit is less important than succeeding as a collective unit, team or group. Individuals who value collectivism appreciate the relationship building aspect of succeeding as a group (Elahee et al., 2002). A downside of this collective trait is that collective groups are trusting and empathetic to each other but will do whatever they can get away with to outsiders (Triandis and Vassiliou, 1972)
Power distance (PD)	"[T]he extent that large differentials of power, and therefore inequity, are accepted in a culture" (Srite and Karahanna, 2006, p. 682). Can be due, in part, to birthright. In some cultures, men are entitled to more power than women	Kuwait's score (80) was high, implying that employees will follow a supervisor's directive simply because he or she is the boss (Hofstede, 1980; At-Twaijri and Al-Muhaiza, 1996). Relationship building is also important because high-PD cultures often have higher rates of coercion and opportunism than countries with small PD (Elahee et al., 2002)
Uncertainty avoidance (UA)	Defined as "the level of risk accepted by a culture, which can be gleaned by emphasis on rule obedience, ritual behavior, and labor mobility" (Srite and Karahanna, 2006, p. 682)	Kuwait scores high in UA (68) (Hofstede, 1980; At-Twaijri and Al-Muhaiza, 1996; Parboteeah et al., 2005), suggesting that Kuwaiti businessmen place a high value on formal rules to overcome risk. Since e-RA sourcing is new in MENA, uncertainty surrounds its use with respect to procedures, technology, identity protection, and process integrity
Masculinity/ femininity (M/F)	"[R]efers to culture differentiation on the basis of gender and activity" (Srite and Karahanna, 2006, p. 682)	Kuwait scores 52, i.e. in the middle of this category (Hofstede, 1980; At-Twaijri and Al-Muhaiza, 1996), suggesting that men and women are equally likely to share similar categories of employment (Srite and Karahanna, 2006)

Table II Cross-cultural comparison of national culture dimensions

Dimension	Hofstede (1980) (Arab world)	At-Twaijri and Al-Muhaiza (1996) (Kuwait)	Hofstede (1980) (USA)
UA	68	103	46
PD	80	51	40
IC	38	31	91
MF	53	43	62

Little is known about MENA business practices in general, and more specifically key cultural constructs such as *wasta* (Hutchings and Weir, 2006). *Wasta* is something akin to a magical wand (Loewe *et al.*, 2008), a secret covenant, or a royal bloodline (Cunningham and Sarayrah, 1993). *Wasta* literally means "to employ a middle man, a broker, a go-between or an intermediary – usually a person of high social status and accepted rank – to achieve one's ends" (Fathi, 1993, p. 61). "In modern language, *wasta* means a connection or influence" (El-Said and Harrigan, 2009, p. 1238). *Wasta* is used to gain tangible benefit such as promotion, admission to universities, to resolve disputes, and to win contracts (Loewe *et al.*, 2008).

Since *wasta* has a significant influence on contract awards, managers and academics involved in buyer-supplier relationships in the MENA region need to understand *wasta* in detail (Hutchings and Weir, 2006). Understanding how emerging practices (such as e-RA) may ameliorate the negative influence of *wasta* offers significant potential. Despite an awareness of *wasta* as a tangible form of social capital, there is little research into the *wasta* phenomenon (Hutchings and Weir, 2006). The global realignment of economic power suggests that looking again at theory and practice from both a Western and a non-Western lens is needed. Having neglected the effects of national culture on B2B exchange (Singelis, 2000), many of our theories may be, at best, incomplete and, at worst, misleading.

While e-RAs have been studied in the context of the USA, Europe, Asia, and Latin America (Jap, 2002), the MENA region has been overlooked. A study of eRA adoption, use, and outcomes in a MENA context is likely to highlight how national culture in regions with significant differences from Western cultures impacts e-RA adoption and success. Such an understanding could improve the sourcing success across a variety of cultural contexts that affect e-RA use (Jap, 2003). Studying e-RAs in a MENA setting provides insight into how culture affects purchasing strategy and technology adoption.

Technology adoption

This study relies on the technology adoption model (TAM) to explore cross-cultural e-RA adoption and use. TAM centers on two constructs:

1 perceived usefulness (PU); and
2 perceived ease of use (PEOU).

PU is "The prospective user's subjective probability that using a specific application will increase his or her job performance within an organizational context", and PEOU is "the degree to which the prospective user expects the target system to be free of effort" (Davis, 1989, p. 320). Together, PU and PEOU affect an individual's attitude toward technology adoption and

ultimately, his or her behavioral intention and actual use (Ajzen and Fishbein, 1980).

As PD increases, an individual's willingness to innovate and trust technology decrease (Srite and Karahanna, 2006). Additionally, a high willingness to innovate increases PEOU, and a high trust in technology increases an individual's behavioral intent to use technology. These findings suggest that nations with high PD will resist innovative technology due to lack of trust and because they are not willing to innovate. Notwithstanding, high UA scores decrease how individuals perceive the usefulness of technology (Parboteeah *et al.*, 2005; Zakour, 2004). Since Kuwait scored high in UA, we would expect suppliers to perceive e-RAs as risky, and therefore, to avoid them.

Reverse auctions

A number of factors influence a buyer's decision to use e-RAs. The appropriateness of e-RA use is defined as "the degree to which a sourcing professional views the use of an e-RA as a fit between the attributes of the tool, the specific requirement being sourced, and the supply market" (Hawkins *et al.*, 2009, p. 56). ERA appropriateness is determined by many factors, such as:

- how attracted suppliers are to the business;
- the degree of competition (Aloini *et al.*, 2012);
- the ability to define the need;
- category of spend (a proxy for the criticality of the item or service and the relative importance of price versus non-price selection factors);
- expected savings;
- social influence;
- prior e-RA use satisfaction; and
- buyer confidence in fair and reasonable pricing (Hawkins *et al.*, 2010a, b).

Since e-RA success relies on adequate competition, buyers should be concerned that suppliers perceive the technology as useful. National cultures characterized by business climates fostering mistrust and asymmetrical information might find a sourcing tool that offers unparalleled transparency useful.

Methodology

Case study

This research used a case study methodology to uncover the cultural influences of *wasta*. A qualitative case study methodology is appropriate when three conditions exist:

1. the type of research question is exploratory in nature and takes the form of a "what" question;
2. the researcher has no control of the behavioral events being researched (i.e. cannot manipulate behaviors then measure results as in a controlled experiment); and
3. the focus is on contemporary events (Yin, 2009, p. 8).

Our research met all three criteria. Furthermore, case study research is particularly useful when researchers need to provide insight and depth to a unique phenomenon (Ellram, 1996).

The case involved an e-RA bidding event used to purchase and install 29 standby power generators. The buyer was a US government agency located in Kuwait; the sellers were private corporations operating in Kuwait. Since e-RA success hinges on adequate competition, market research was conducted by

the buyer and by the third-party auctioneer to identify prospective suppliers. The buyer held site visits prior to the e-RA to ensure that the bidders fully understood the scope of work. The third-party auctioneer was Sorcity, Inc. – a US-based firm with the capability to understand the worldwide industry for mobile and temporary power generation.

Since e-RAs can invoke collaborative pricing and strategy among supply chain members beyond the dyad, we included a tier-two supplier and the third-party auctioneer – Sorcity – due to its key role interfacing with the suppliers. The e-RA transaction saved 20 percent ($395,000) by leveraging competition among six suppliers who submitted 278 bids over six hours. Subsequent supplier performance was deemed satisfactory, and the contract experienced no cost or scope growth.

Data collection

The interview protocol (Appendix 1) was based upon archival review of contractual documents, the literature, and discussions with academic experts. In all, 13 interviews were conducted. The interviews, conducted in English, lasted between 45 and 120 minutes. Each interview was recorded then transcribed. Transcripts were sent to informants for an accuracy check, thereby enhancing construct validity (Flint *et al.*, 2002; Yin, 2009).

Initial interviews with Kuwaiti participants were held at their business locations by researchers familiar with the culture of both the buyer and suppliers. The researchers were able to observe non-verbal cues and to probe deeper into answers requiring more detail. Due to the relational nature of Middle Eastern managers, in-person interviews were most appropriate in order to establish trust necessary to permit open dialogue of a sensitive nature. Following the interviews, informants were asked to complete a short survey (Appendix 2). The purpose was to investigate antecedents to suppliers' decisions to participate in the e-RA, and to explore the moderating role of trust. The survey was used, in a more structured manner than conversation, to explore whether trust modified the relationship between perceived usefulness (i.e. as a novel source of fairness) and a supplier's decision to participate in the e-RA (i.e. adoption). Follow up interviews to explore emergent themes (Appendix 3) occurred via telephone.

We interviewed a broad range of participants, including the buyer, the prime offerors, one subcontractor, one firm that declined to participate in the e-RA, the internal customer, the e-RA service provider, and a US government procurement policy official (Table III).

We further confirmed our interpretations by weaving into our analysis a review of archival data (Yin, 2009). The data that helped corroborate findings included 58 e-mails, 17 contractual documents, and several policy letters.

Data analysis

We began with a process of identifying constructs, defining those constructs, and then positing relationships between them (Van Ecke *et al.*, 2006). We coded each interview to identify themes and then tested whether these themes remained consistent in subsequent interviews or in reexaminations of previous interviews. The participant interviews continued over a period of six months. Initial coding led to new interviews, either with previous or new participants, to gain clarification and validation. In all, 192

Table III Informant demographics

Company	Company description	Full-time employees	HQ location	Years with USAF tenders	Years of power generation experience	E-RA experience (number of events)
A	Construction/general trading – interested bidder but did not participate in auction	25	Kuwait	9	6	0
B	Design and construction with construction indicated as overall classification – auction participant	45	Kuwait	4	5	1
C	General trading company with 22 years of construction/power generation experience. Participated in e-RA event	150	Saudi Arabia	20	20	4
D	General trading and construction. Participated in e-RA event. Note: Procurement Manager has 23 years of construction experience	200-250	Kuwait	4	3	1
E	Power generation supplier. Did not compete in e-RA but was interested in the tender	48	Saudi Arabia	25-30	20	0
Sorcity, Inc.	Full-service reverse auction service provider. Supported the event		USA		N/A	N/A
USAF	Contingency Contracting Officer responsible for the e-RA procurement	N/A	USA	N/A	N/A	0
USAF	Civil Engineer #1. Developed and coordinated the power generator requirement. Was involved with site visits, acquisition strategy, the e-RA event and initial performance	N/A	USA	N/A	N/A	0
USAF	Civil Engineer #2. Provided oversight of contractor performance after the e-RA was concluded	N/A	USA	N/A	N/A	0

codes were generated and these codes were applied 2,114 times throughout the documents. We used software known as MAXQDA to facilitate construct emergence. The software assisted our efforts to find co-occurrences of codes efficiently, and helped to identify patterns of codes. This resulted in a large matrix of coded concepts (Miles and Huberman, 1994). The repeated intersection of codes suggested that the two concepts might be related. We followed up on those co-occurrences with follow-on interviews to test suspected relationships specifically.

Validation

In order to maintain construct validity, we used multiple sources, i.e. interviews, surveys, and an analysis of archival data. We allowed key informants to review interview transcripts prior to analysis as part of "member checking" (Yin, 2009). We triangulated data from the different sources to minimize bias and to explore the different perspectives surround the e-RA event. We presented our findings to procurement experts, bidders, and e-RA service providers, as shown in Table IV. Lastly, two outside academic researchers familiar with e-RAs also reviewed and validated the findings.

Results

The following section provides an overview of the constructs that emerged. Once the constructs are related, the propositions are provided. In each of the sections, we consider the phenomenon observed and then compare that against the literature. Doing so allowed us to build on previous knowledge related in a new context (Hunt, 2000).

The first construct to emerge during the study was *wasta*. As one informant commented:

> Informant: So, there's a monopoly. This market if you ask me, in business problems that we read in the book, this market is really not a competitive market in the terms of market forces, you see. If we are studying the subject of market forces and it was the Middle East market, and the company in the market because many business units are being formed by few people. 90 percent of the companies in the Middle East is owned by 10 percent of the population, which is ridiculous. This 10 percent, the *wasta* runs abound, you see.
> Researcher: You mean in order to be a big company, you would have to find a big backer or an owner that has a lot of *wasta*?
> Informant: Yes, sir. Definitely. That is the name of the game in Kuwait and particularly in the Middle East.

The literature depicts multiple meanings, suggesting some confusion as to what exactly *wasta* is:

Table IV Member checking sessions

e-RA provider	US supplier	MENA supplier	US supplier	Multinational buyers	MENA purchasing consultant
2	2	4	3	3	1

- influence, power, favoritism (sometimes corruption), and reciprocity or self-gain (El-Said and Harrigan, 2009; Hutchings and Weir, 2006);
- a cultural social norm: solidarity, mutuality, loyalty, and allegiance (Loewe et al., 2008); and
- self-worth: status, reputation, and respect (Hutchings and Weir, 2006).

One explanation for the variety of definitions is a lack of empirical research on *wasta* (Hutchings and Weir, 2006; Whiteoak et al., 2006). The conflicting definitions led us to create a second interview protocol (Appendix 3) to explore the meaning of *wasta*.

The three managers interviewed suggested the terms "influence", "power", "favoritism", "corruption", "allegiance to friends and family", and "status". One manager commented:

> In *wasta*, there exist no competitiveness, no rules, no systems, and no principles.

Two of the managers also considered respect and reputation as elements of *wasta*. They noted that when *wasta* is used as a social norm to show loyalty, allegiance and mutuality, it may serve a positive purpose. Conversely, when *wasta* is used in business, the connotation is generally negative. These findings suggest that *wasta* adopts a positive or negative affect based upon context.

Transparency and fairness

The terms "transparency", "procedural fairness", "*wasta*", and "offeror satisfaction" occurred most frequently in the interviews. While there are many operationalizations of procedural fairness (Hamilton, 2006), consistent with Tyler (1990), we defined it as neutrality (impartiality). Procedurals fairness meant equal opportunity to compete. Consistent with Gelos and Wei (2005), transparency emerged as the availability of information. We consider procurement integrity to encompass procedural fairness and transparency – important constructs in B2B relationships (Rottig et al., 2011).

We found that e-RAs create a transparency that increases procedural fairness. Turning to the literature, Lin (2006) concluded that a decrease in asymmetric information creates a fair market. Consistent with the relational exchange literature (Zeithaml et al., 1996), this fairness results in greater post-transaction satisfaction. These findings were supported by survey responses where participants suggested that the transparency of the e-RA bidding process "strongly motivated" all three managers to participate in the e-RA. In the follow-up interviews, each informant affirmed that e-RA use increased transparency and fairness. One manager told us,

> That [e-RA is] even more fair. I mean, that's even more fair and transparent at the same time. I mean, because the e-RA – you can see the bidders, what they are bidding, [and] so there's no cheating , it's very transparent.

The informant associated an ability to see competing suppliers' bids (transparency) with an absence of cheating (fairness). Based upon our analysis, we posit that:

P1. There is a positive relationship between transparency and procedural fairness.

The relationship between eRA use, offeror satisfaction, transparency, and procedural fairness

We were surprised to learn how effective *wasta* is as a competitive strategy. Effectively utilized, *wasta* is a highly profitable procurement strategy. During one interview, a manager told us:

> My company made 3.2M Kuwaiti dinar [KD] last year [...] using *wasta*, we could have easily increased that to 200M KD.

This finding suggests that those companies that rely on *wasta* do not find e-RAs attractive, and, conversely, those without *wasta* would appreciate the leveling effect of e-RAs.

Two managers stated that, in their minds, e-RAs increased perceptions of fairness and transparency. As attested by one informant, "E-RA is very fair and transparent". The buyer in the case commented:

> I think with the level of effort that we took to make sure that everything was understood, everything was out in the open, all the instructions were out in the open, everybody was getting the same instructions. I think that made a difference.

Considering all of these testimonies, we posit that:

P2. There is a positive relationship between e-RA use and procedural fairness.

P3. There is a positive relationship between e-RA use and transparency.

Another conversation depicts the offeror's satisfaction ensuing from the transparency and fairness:

> Researcher: So, the big question here was given the way that this was set up, even though you didn't win, did it [transparency and fairness] kind of increase your satisfaction with the tendering process in any way?
> Informant: Oh, yes. That's right. That's right, because we knew exactly what went down. Once we qualified, you knew that you were qualified or not. Once you knew that round two of the process – of the bidding process – we know if we're the lowest bidder, we got the job.

This is consistent with the literature that favorable outcomes occur when procedures are fair (Brockner, 2002). In the MENA environment, *wasta* is many times a barrier in which a firm or an individual who has limited *wasta* has little recourse. The idea that an e-RA would level the bidder playing field would, of course, be highly attractive to some bidders. Thus, e-RAs are likely to provide a highly favorable post-transaction satisfaction even if such a bidder did not win the tender. For in the case of the e-RA, the loss was not due to a lack of *wasta* but was due to the value of the bidder's offer. The offered value is within the offeror's control; whereas, in many cases, *wasta* is not.

> Researcher: Hey, we're doing the e-RA and we fixed all the things you talked about. You know, we're doing apples to apples, bid specifications, we've provided some training, and we've researched who it is that's trying to compete to make sure that everybody is an equal competitor. See, we've done those things and you're competing in the e-RA so then your margins are lower now because of this competition. Are you still satisfied with that? Are you okay with getting lower margins because you've got this increased transparency?
> Informant: Oh, certainly. Yes, of course.

Similarly, another informant commented:

> To compete on a level playing field with other suppliers [i.e. fairness], I can relate to my experience when I was sitting on the laptop, I felt very good [i.e. satisfaction] because you see I felt that with the project at my back and with my competitive prices, I was sitting over here eye-to-eye – I would face, I would say, look right into the suppliers with my stand and I felt okay. If a vendor loses once, it should prepare better for the next bid. And this process here really, really gave me that insight into, okay, what are my weaknesses, where could I be strong, and even if there weren't weaknesses – even if there

were strengths, how could I highlight those strengths next time [i.e. perceived usefulness]?

We followed up on this insight by testing the relationship between offeror satisfaction and transparency in the transcripts, where we found 38 co-occurrences. Similarly, offeror satisfaction and procedural fairness co-occurred 42 times.

The informants felt that e-RAs increased procurement integrity (transparency and procedural fairness), and increased their level of satisfaction even if they lost the bid. Our analysis therefore yields the following propositions:

P4. There is a positive relationship between transparency and offeror satisfaction.

P5. There is a positive relationship between procedural fairness and offeror satisfaction.

E-RA use and *wasta*

Again, we began with the initial interviews and found intersections of e-RA use and *wasta* 22 times. One informant, an internal customer, noted that:

> I think that the eRA basically showed them (offerors) that they can't gouge us. I think it was a very positive thing. It was a true competitive environment that caused them to realize that we have to pay – that they can't charge more than fair price.

Separate testimony from one offeror reinforces the connection:

> Researcher: Do you think if we're doing e-RAs right, you know, apples to apples, and everything that we've talked about, that the e-RA process could actually help kind of decrease some of the collusion in this environment that's going on over there?
> Informant: Well, certainly it could. That's what I'm telling you. [inaudible] in the system in e-RA which has been created to correct these things.

The success of an e-RA hinges on true competition (Hawkins *et al.*, 2009). The transparency of the e-RA, coupled with its mechanism to allow multiple reacting bids, stimulated true competition negating the effectiveness of using *wasta*. Unsurprisingly, we found that firms that rely on *wasta* as a source of competitive advantage are likely to find e-RAs unattractive and elect not to compete. This finding is supported by Loewe *et al.* (2008, p. 266) who concluded that "tenders are often 'window dressing.' Decisions are taken before [the publication of the tender] following informal criteria". Our findings suggest that eRAs provide a coping mechanism for companies who either do not have *wasta* or do not want to use *wasta* to compete for tenders. The mechanism operates by providing a transparent and fair bidding process. Thus, we posit that:

P6. E-RAs enable firms not desiring or unable to compete using *wasta* to be successful in competitive tenders.

We found that the use of *wasta* affects, and is affected by, procedural fairness (35) and transparency (21). Offerors felt strongly that the use of *wasta* decreased their perception of procedural fairness. In follow up interviews, we asked "In your opinion, does wasta decrease fairness?". We asked two managers; one said "Yes" and the other said, "Of course, 100 percent". Therefore, we posit:

P7. There is a negative relationship between *wasta* and procedural fairness.

Relationship between trust, transparency, and procedural fairness

We asked why participants decided to participate in an e-RA event. We were curious because, in theory, the e-RA should have been unattractive due to high power-distance and uncertainty avoidance scores associated with Kuwait's culture (At-Twaijri and Al-Muhaiza, 1996). Additionally, suppliers naturally dislike e-RAs since they force suppliers to drive down operating costs and profit margins. What we found instead was that the e-RAs were, moreover, associated with trust.

In the relationship marketing literature, trust is defined as one party having confidence in an exchange partner's reliability and integrity (Morgan and Hunt, 1994). Two dimensions of trust include honesty and benevolence – the faith that an exchange partner is genuinely interested in the other supply chain member's wellbeing and achieving joint gains (Geyskens *et al.*, 1998). Trust is a central construct in relational exchanges (Geyskens *et al.*, 1998) enabling acquiescence, cooperation, and functional conflict and decreasing uncertainty (Morgan and Hunt, 1994). Trust increases investments in transaction-specific assets, information sharing, innovativeness, timeliness, quality, supplier responsiveness, and financial performance, and decreases transaction costs and perceived risk (Delbufalo, 2012). In buyer-supplier relationships, trust is closely linked to ethical perceptions (Bell *et al.*, 2002; Saini, 2010; Tenbrunsel and Smith-Crowe, 2008). In e-marketplace transactions such as e-RAs, trust is a prerequisite in order to reduce uncertainty, which is particularly acute in e-marketplace exchange due to a lack of physical contact and unknown credibility of trading partners (Chien *et al.*, 2012).

We reviewed the coded text and found trust in several aspects of a procurement – i.e. trust in the buyer, trust in the eRA service provider, and trust in the process. These types of trust correspond to those found in the e-commerce literature (Tan and Thoe, 2001) – trust in the other party (e.g. buyer and e-RA service provider) and trust in the control mechanism (e.g. process). Co-occurrences of text suggest a pattern of relationship between procurement integrity and trust:

> Informant: I would feel with an e-RA more comfortable than another procedure, the normal bidding procedure. I mean, the government's over the buyer. It would be one degree more reliable this method than another method because of the transparency and that you know who is bidding. I mean, we know who is bidding but we know what are the prices at the same time. So this is – it cannot be more transparent than this, you know? So, I mean – but if somebody I don't trust completely I wouldn't, I would not bid with an e-RA.

One explanation for the initial success of e-RA use in the Middle East might be the trust the bidders put into the US government buyer. This might explain why offerors chose to participate in the e-RA whereas they would not participate with B2B buyers in the Kuwaiti commercial sector. When we asked why the managers felt high levels of trust with the US government, we were told it was because of the rules and procedures. In essence, they could trust that the rules would guarantee fairness and transparency. Thus, e-RA use is fostered by an overall rules-based procurement climate. Based on the findings, it is posited that:

P8. There is a positive relationship between transparency and trust.

P9. There is a positive relationship between procedural fairness and trust.

To explain this further, we then explored how the bolstered trust contributed to sustainability of the eRA. Trust emerged as a critical construct. We found the three types of trust coincided with a supplier's decision to participate in the e-RA as follows buyer (24), process (23), and e-RA service provider (nine). When asked about suspected nefarious behavior by the buyer in the e-RA, one informant replied, "No. With the [US government], no". When asked whether a Kuwaiti businesses would act nefariously, the informant replied "Yes, definitely. I think 110 percent they would do that". We followed up with two managers; both indicated that they were inclined to participate in an e-RA with a buyer only if they felt the firms were trustworthy. Thus, trust appeared as a key moderating variable. Hence, high trust in the buyer, the sourcing process, and the e-RA service provider will increase the positive relationship between perceived usefulness of the e-RA and a decision to participate in the e-RA. Likewise, with low trust, the prospective supplier will be less likely to participate in the e-RA – despite its usefulness (due to greater transparency). Most informants agreed that they would participate in an e-RA if they could rely on the process to be fair, but otherwise would not participate. Therefore:

P10. Trust positively moderates the relationship between perceived usefulness and a decision to participate.

Relationship between transparency and e-RA perceived usefulness

The informants described how e-RA use in the MENA region adds value by improving the integrity of the procurement process. This is particularly true for those firms that did not possess *wasta*. One informant stated:

> Informant: We know e-RA was very, very useful. It was very helpful, you know.
> Researcher: Now, would it matter if the company that you were dealing with ... were a company that you didn't trust as much? Would you still want to use the e-RA? Would you still want to participate?
> Informant: Yes, because the e-RA would make more transparent and structured.

The e-RA provided suppliers transparency that decreased distrust among supply chain members. Previous e-RA research focused only on efficiency gains and cost savings. This research suggests that e-RA use extends beyond those classic benefits. The e-RA reduced uncertainty by removing the unpredictability of *wasta*, and thus added utility by increasing the offeror's ability to accurately predict their probability of winning the tender. When asked whether he had a better chance of winning in the e-RA, one informant responded:

> ... considering if we put our best pricing in, then, yeah, we have a better chance of winning. I would say yes.

As such, it is posited that:

P11. There is a positive relationship between transparency and perceived usefulness of e-RAs.

Figure 1 shows the phenomenon of e-RA use in the MENA region. Our research suggests that e-RA use is sustainable in the MENA region. As offerors experience satisfaction with the eRA, they will be inclined to participate in further auction

opportunities. This is consistent with previous findings that past behavior predicts future behavior (Ouellette and Wood, 1998).

Discussion

The purpose of this research was to explore whether an e-RA is a useful and sustainable procurement strategy in a MENA national culture. Examining a successful e-RA event in Kuwait, this research explains how the integrity of the e-RA, coupled with trust in the buying organization's use of the e-RA, countered a unique phenomenon to the region – *wasta*. Due to the uncommon transparency and fairness inherent in the e-RA, offerors perceived the tool to be quite useful – enough to overcome their cultural inhibitions to innovate stemming from high uncertainty avoidance and to overcome a threat to profits. Given the MENA region's economic growth prospect and given the presence of ethical malfeasance in regions outside of MENA, the following theoretical and managerial implications of the findings are important to the prosperity of global supply chain members.

Theoretical implications

First, understanding the situations where e-RA sourcing is appropriate is important (Hawkins *et al.*, 2010b; Kumar and Maher, 2008) since appropriateness can indicate e-RA success (Hawkins *et al.*, 2009). An e-RA is an appropriate sourcing medium in situations in which the supplier is attracted to the business, there is ample competition, the buyer's need can be clearly specified (Hawkins *et al.*, 2009), the category of spend is either "non-critical" or "leverage" (Tassabehji, 2010), expected savings are significant, social influence is high, and the buyer is satisfied with prior e-RA use (Hawkins *et al.*, 2010a, b). We found that an e-RA can be an appropriate sourcing tool in the MENA region since suppliers were highly satisfied due to a novel utility afforded by the tool – i.e. transparency and procedural fairness. Procedural fairness affords suppliers the ability to compete on the merits of their quality and price (i.e. efficiency) rather than on social influence, power, and connections (*wasta*) – phenomena that drive excess transaction costs, stymie innovation, and often preclude opportunity. *Wasta* deteriorates trust. But trust in a procurement system that offers fair opportunity is a requisite condition for foreign investment, and therefore economic development. This maxim extends beyond the MENA to other developing regions such as Central and Eastern Europe.

Notably, suppliers' preference for e-RAs is quite paradoxical and resembles a metaphorical "black swan". E-RAs have received criticism for being unethical (Emiliani and Stec, 2005) due to a vacuum of fairness. However, in a context characteristic of *wasta*, it was the promise of procurement integrity (transparency and fairness) that attracted suppliers to participate in the e-RA, and the realization of it that left them satisfied *ex post*. Concerning the latter, the ethics of e-RA use has rarely been explored empirically. The consensus of the few critics thus far is that suppliers unfairly get the short end of the stick (Tassabehji, 2010). This study is the first to reveal perceived ethical benefits to suppliers from participating in eRAs – the benefit being able to better affect the probability of winning business.

Figure 1 Model of sustainable ethics in e-RA use
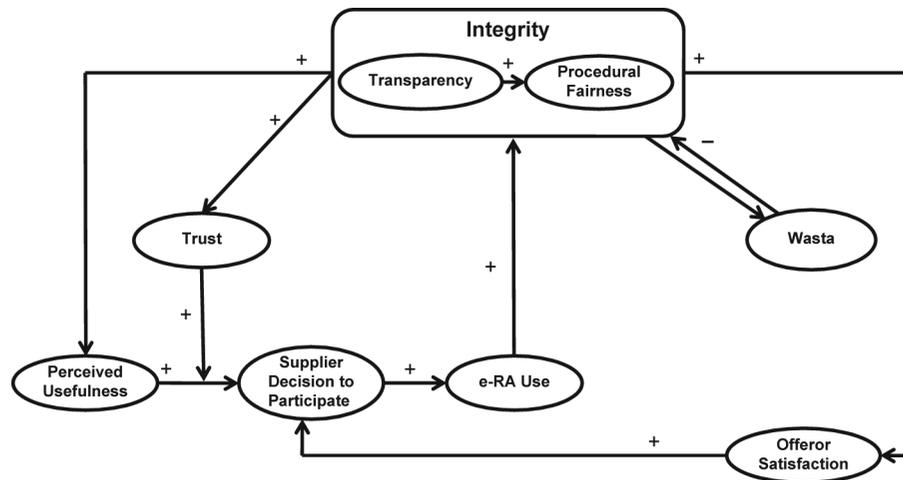
That e-RAs enhance transparency is nothing new (Beall *et al.*, 2003). However, this case study unveils how this occurs and the limiting nuances of its use in a MENA culture. Only by establishing trust in the buyer, trust in the buying process, and trust in the e-RA service provider can the e-RA be a sustainable procurement strategy in the MENA region. Culturally context-specific idiosyncrasies of trust are garnering increased research attention, and more is needed (Delbufalo, 2012). This research shows that national culture is a critical, yet thus far omitted, factor in e-RA research. While some research of e-RA use shows that suppliers' suspicion of buyer opportunism could cast doubt on trust, and therefore harm a buyer-supplier relationship (Jap, 2003), we find that in the MENA culture, e-RAs can actually build trust. The severely negative effects of *wasta* were so loathed that suppliers crave an effective defense – to the point that even when they lose a tender, they are satisfied. Furthermore, even when they win at unusually low margins, they are satisfied. This is in stark contrast to mature markets, where suppliers are commonly bitter toward e-RA use due to the perceptions of buyer opportunism and reduced margins in a perceived zero-sum bargain (Emiliani and Stec, 2005). Taken a step further, the findings suggests that e-RAs can be used as a tool to build trust between buyers and sellers in different regions of the world.

This research unveiled two antecedents to a supplier's perceived usefulness of an e-RA – transparency and procedural fairness. In a culture of *wasta*, suppliers highly value the transparency and fairness afforded by the tool. Hence, MENA suppliers desire to trade off lower margin for the increased opportunity for revenue. Given the findings and discussion above, channel theory and technology adoption theory should account for these effects of national culture.

Finally, the research introduces the phenomenon of *wasta* to the supply chain domain. *Wasta* is a complex, multidimensional construct involving more than simple favoritism, influence, and power. Often, the literature cites parts of the meaning of *wasta* (e.g. power), but omits others. *Wasta* also entails loyalty to referent others, status, and can be associated with corruption. In many cases, the use of *wasta* is considered "bad"; however, in others, it is considered "good". It is important in such cross-cultural settings not to simplify

regionally specific constructs as synonymous with Western paradigms.

Managerial implications

Our findings support emerging research that suggests enhancing transparency positively influences economic growth. The 2005 *World Development Report* cites three techniques to deal with corruption:

1   increase competition and reduce undue government interventions;
2   reduce unnecessary ambiguity in policies and regulations; and
3   enhance transparency.

Of the three methods, transparency is the most promising (International Bank for Reconstruction and Development, 2005). One technique referred to in the report is the use of "computerization" to increase transparency, reduce corruption, and improve the investment climate (p. 114). According to Transparency International (2009), auctions may serve as a good method to increase competition and reduce the likelihood of corrupt dealings. Robust competition, information flow, and simple sales contracts are important to improve capital markets in developing nations. Since 2006, 181 international economies have passed acquisition reforms to improve their business climate (International Bank for Reconstruction and Development, 2008). Of 180 countries, Kuwait ranked 65th in CPI, meaning 115 countries have higher levels of perceived corruption. These countries could use e-RAs to increase transparency and reduce corruption. Given this number, there is ample opportunity for e-RAs to make a global impact on procurement integrity. For example, Central and Eastern European nations seeking membership of the North Atlantic Treaty Organization are required first to decrease corruption in their business practices (Tagarev, 2010). E-RAs could offer a means to improve toward this end.

Second, since the sustainability of e-RAs in MENA cultures hinges on trust in the buyer, procuring organizations planning to employ an e-RA must first establish trust among the supply base. Key to doing so will be to cease the use of opportunistic tactics with suppliers (Morgan and Hunt, 1994), and to

increase integrity. One way to do this effectively is to publish and follow an e-RA code of ethics (Beall *et al.*, 2003). Fundamentally, however, buyers must surrender any unstated preference for a particular supplier. Once a group of suppliers is qualified to do the work, the winner must be determined solely by a priori disclosed evaluation criteria. Our research also suggests that suppliers need to witness this process in order to build confidence in it.

Finally, as demonstrated, an e-RA can be an effective sourcing tool in the MENA region, and buyers have much to gain by its use. Assuming one third of the $770bn of merchandise trade (International Bank for Reconstruction and Development, 2008) is B2B commerce, and that 25 percent of total spend is appropriate for e-RA sourcing (Hawkins *et al.*, 2010a), a 20 percent saving would yield $38.5bn. A drastic reduction in costs of goods sold would render MENA buyers more competitive in a global market.

Limitations and future research

This research was not without limitations. First, we developed our propositions using a single case. While comparing multiple bidding events in order to increase the range, number, and depth of observations builds credibility, single case studies of e-RAs are not uncommon (Charki and Josserand, 2008). Second, while testimony from all supply chain member roles was collected, we relied on a small number of informants. Third, the tendency of Middle Eastern cultures to acquiesce (Smith, 2004) and save face (Zaharna, 1995) raises the possibility of socially desirable response bias. We took several measures to mitigate the bias. First, we conducted face-to-face interviews in order to detect non-verbal cues. Interviews were conducted in private at the informant's place of business. We also deployed researchers who were not associated with the transaction in any way and not affiliated with the organizations involved in the e-RA (McMurray *et al.*, 2004). We also waited until contract performance and final payment were complete.

Given the limitations above, future research should validate and build upon the findings. Our research highlights the need for additional research surrounding *wasta*. The meaning of and the extent of the utility of *wasta* may differ by region, by individual ethics, or by firm differences. Future research should first develop a multidimensional scale to measure *wasta*. This will permit further exploration of its effects. Additionally, future research could compare the effects of *wasta* to those of *guanxi* – a relational supply chain construct originating in the Far East. Finally, since a trusted buyer is paramount, future research could seek the optimal method(s) to build the greatest trust of the supply base.

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Appendix 1. Interview protocol excerpts

Background and business practices

1 Prior to this acquisition, what was your knowledge of e-RAs? Auctions in general? Had you ever participated in one? Have you since?

2 Why did you decide to participate/bid in the e-RA?

3 If another [non-US Government] customer asked you to compete in an e-RA, would you do it? What reservations would you have? If the answer "depends," what factors would influence your decision?

4 At the time of this event, describe your dealings with the [buyer]. Did you interact with her often? Did that interaction impact your decision to compete?

5 Was Sorcity helpful in preparing for the e-RA? In what ways did Sorcity help you prepare for the e-RA bidding event?

6 Do you continue to receive RFPs from the [US Government buyer] since the RFP for the generators? If so, did you continue to bid?

The pre-bid strategy process

7 Do you believe the [US Government buyer's] technical proposal submission and evaluation sufficiently weeded out companies that were not qualified to perform the project to the technical specifications and schedule?

8 Prior to the bidding event, did you know the identity of any other companies you would be competing against?

9 Were you reluctant to compete in the e-RA? If so, why?

10 Do you believe that using an e-RA in concert with a technical proposal evaluation was appropriate for buying the generators? Why or why not?

11 Do you believe that using an e-RA without requesting and evaluating any technical proposals for the generators would have been prudent (i.e. selecting the "winner" solely on price)? Why or why not?

12 In general, do you see e-RAs more as an opportunity or as a threat? Would you use them to purchase supplies or services for your firm? Do you think your competitors would use e-RAs?

13 Did you believe the specifications/statement of work (as amended) was very clear (unambiguous) and thorough?

14 Did you believe the solicitation (RFP) clearly stated the basis for contract award?

15 Do you believe the solicitation completely and clearly stated the requirements for proposal submissions?

16 Do you believe the solicitation clearly explained the e-RA bidding process? How could it have been made clearer?

17 Prior to the bidding event, what did you perceive to be the greatest risks to your company in participating in the e-RA?

18 In general, how would you characterize your firm's relationship with the [US Government buyer]? Choose one of the following: strictly transactional, a series of discrete transactions/contracts, a long-term relationship with some mutual dependence, a long-term partnership with mutual and total dependence, or a strategic alliance?

19 Prior to the RFP for the generators, had you done business/contracted directly with the [US Government buyer]? If not, did you participate in order to get in the door (i.e. the prospect of additional future business)?

20 When you bid for the generators, how badly did you or your chosen subcontractor/supplier need to sell off inventory?

21 How badly did your firm *need* to win the tender in order to gain the revenue and/or profits from the sale?

22 Similarly, how badly did your firm *want* to win the tender in order to gain the revenue and/or profits from the sale?

23 Prior to submitting a proposal, did you believe the [buyer] would do what she said she would in the RFP? Did you believe the [buyer] would follow the evaluation process stated in the RFP? Do you feel the [buyer] followed the procedure stated in the RFP? Do you believe the evaluation process was fair? Do you believe the evaluation process was biased toward any particular bidder?

24 By using the e-RA, did you think [the buyer] was taking advantage of your firm? Behaving opportunistically? Trying to achieve a lower price for the [US Government buyer] while deliberately and knowingly harming your firm?

The bidding event

25 Did you suspect any nefarious behavior by the [US Government buyer]? (For example, some suppliers are suspicious that the buyer will create "phantom bidders" to fraudulently act as one of the bidding suppliers in order to bid the price down lower.) Did you suspect the [US Government buyer] of partaking in such behavior? Why or why not?

Business culture

26 Prior to the generators procurement, had you, or your company ever participated in a reverse auction in the Middle East? How was it similar or different to your [US Government buyer] e-RA experience?

27 Is e-RA a sourcing tool used in the Middle East? If not, why do you think this is so? Why should Middle Eastern companies use e-RAs? Why do you believe it has/has not been widely adopted in the Middle East?

28 In the Middle East, how would you characterize business transactions and pricing (e.g. transparent, open, honest, absence of deceit, absence of withholding information, some deceit, some withholding of information)?

29 In the Middle East, is it common for competing suppliers to discuss business opportunities prior to the tender? If so, do they disclose or share bidding strategies? Do they disclose teaming arrangements? Do they share prices prior to the tender?

30 If some "sharing" of information among competing suppliers (as referenced in question above) occurs, do you think the buyer's use of e-RAs would reduce, limit, or prevent such pre-bid discussions? If yes, how would an e-RA curtail pre-bid communication?

31 How does your company feel about e-Commerce? Any barriers in the Middle East?

32 Is friendship or a personal relationship important in your business strategy? Is it important to have a friendly relationship?

Outcome(s)

33 Overall, was the e-RA a positive or negative experience? Why?

34 At project completion (all units delivered and installed), did your firm perform to the [US Government buyer's] expectation? Do you believe the [US Government buyer] is pleased with your company's performance?

35 Do you believe that the [US Government buyer's] use of an e-RA impacted your relationship with the [US Government buyer] in any way? If so, how?

36 During the bidding event, at the time you bid your lowest bid (final bid) did you anticipate being able to make a profit on the project? If so, how much percent? _____ percent (voluntary disclosure if you're comfortable)

37 Do you anticipate bidding in an e-RA in the future if your client/customer requests or requires it and if the business is otherwise sufficiently attractive? Does it depend on who the company is? If so, why?

38 What did you like the least (resent the most) about the entire experience?

39 Did you deliberately attempt to alter the level of quality of your company's performance in order to recoup profit? If you did not win the contract, is this a practice that you would have considered?

40 Do you feel that your commitment to the [US Government buyer] is altered in any way by the [US Government buyer's] use of an e-RA? If so, why?

41 Do you feel that your loyalty to the [US Government buyer] is altered in any way by the [US Government buyer's] use of an e-RA? If so, why?

42 Do you believe the bidding event made the transaction appear more transparent (open, honest, trustworthy)?

Appendix 2. Survey excerpts

Figure A1 Survey excerpts

Please list 3 companies that you sell to (do business with) that you trust to different degrees. Hence, name a company that you trust completely (firm A). Now, name a company that you are not sure whether to trust or distrust (firm B). Then, name a company that you completely distrust (firm C). The names/identities of these businesses will remain confidential and will NOT be released.

Firm A _____

Firm B _____

Firm C _____

	Strongly Agree	Mostly Agree	Slightly Agree	Agree	Slightly Disagree	Mostly Disagree	Strongly Disagree	N/A

I would participate in an E-RA if I believed the E-RA bidding & selection process would be <u>completely</u> unfair and/or biased.

Firm A	1	2	3	4	5	6	7	
Firm B	1	2	3	4	5	6	7	
Firm C	1	2	3	4	5	6	7	

I would participate in an E-RA if I believed the E-RA bidding & selection process would be <u>somewhat</u> unfair and/or biased.

Firm A	1	2	3	4	5	6	7	
Firm B	1	2	3	4	5	6	7	
Firm C	1	2	3	4	5	6	7	

I would participate in an E-RA if I were <u>unsure</u> whether the E-RA bidding & selection process would be <u>fair and/or unbiased</u>.

Firm A	1	2	3	4	5	6	7	
Firm B	1	2	3	4	5	6	7	
Firm C	1	2	3	4	5	6	7	

I would participate in an E-RA if I believed the E-RA bidding & selection process would be <u>completely</u> fair and/or unbiased.

Firm A	1	2	3	4	5	6	7	
Firm B	1	2	3	4	5	6	7	
Firm C	1	2	3	4	5	6	7	

I trusted the 3rd party E-RA service provider (Sorcity) prior to the bidding event	1	2	3	4	5	6	7	
My level of trust for the E-RA service provider changed after the event	1	2	3	4	5	6	7	
I trusted the [US Government buyer] prior to the E-RA	1	2	3	4	5	6	7	
My level of trust in the [US Government buyer] changed after the E-RA	1	2	3	4	5	6	7	
I trusted the [US Government buyer] contracting/bidding process prior to the E-RA - that it would be fair, impartial, and that the contract would eventually be awarded to a firm	1	2	3	4	5	6	7	
My level of trust in the [US Government buyer] contracting/bidding process changed after the E-RA - that it would be fair, impartial, and the contract would eventually be awarded to a firm	1	2	3	4	5	6	7	
I would have participated in the E-RA if I did not trust the 3rd party E-RA service provider	1	2	3	4	5	6	7	

Appendix 3. Interview protocol excerpts – follow-on interviews

From our initial interviews, the concepts of fairness, transparency, trust in the procurement process and trust in the buying organization emerged as a dominant themes. In order to complete the research, we need to understand how fairness and eRA use might be related; thus, we have a few additional questions.

Several of our informants suggested a lack of fairness in the Middle East due to personal relationships. Our questions will explore this idea.

1   What is *wasta*?
2   How does *wasta* affect business deals?
3   Does *wasta* mean having influence?
4   Does *wasta* mean having connections?
5   Does *wasta* mean having power (the ability to get someone to do something they otherwise would not have done)?
6   Does *wasta* mean favoritism?
7   Is there a cultural norm of *wasta* in the Middle East business environment?
8   If so, is the norm of *wasta* due to solidarity, mutuality, loyalty, and/or allegiance? Are these norms of solidarity, mutuality, loyalty, and allegiance due to family ties?
9   Do family ties affect business relationships (e.g. which company wins a contract)?
10 If you have high status, do you have *wasta*?
11 If you have a good reputation, do you have *wasta*?
12 If you are respected, do you have *wasta*?
13 How important to your business is having *wasta*? Can your business thrive without having *wasta*?
14 Is *wasta* attributed to an individual or a business – or both? In other words, can a business have *wasta*, or is it only resident in a person?
15 The Middle East business climate has been characterized by favoritism, some distrust, and sometimes corruption. Do you think this business climate necessitates that you have *wasta* in order to maximize your chances to be successful?
16 In your opinion, does *wasta* decrease fairness?
17 From our interviews, participants like the e-RA because it is transparent – you can see who bid what; thus, you have more information about the contract award decision. Do you agree that the transparency builds trust in the procurement process?
18 Does that transparency build trust in the buying organization?
19 Our initial interviews suggest the following relationship. We want to confirm them, and give you the opportunity to elaborate if you want to.
    •   Does eRA use increase your perception of fairness in the procurement process? (Note: fairness means every bidder has an equal opportunity to win).
    •   Does eRA use increase your perception of transparency in the procurement process? (Note: transparency means you know what the selection rules and procedure will be; they are open and the buyer is not hiding anything.)
    •   Informants told us that they would participate in another e-RA with the [US government buyer]. Whether or not you won the tender, do you believe the transparency and/or fairness of the e-RA process increased your satisfaction with the tender process?
20 In your opinion, in tenders with the US government, can the transparency and fairness of e-RAs in any way substitute for *wasta* (influence and workarounds) in achieving desired outcomes (fair competition, odds of winning a tender, or bidder satisfaction)?
21 In general, does the use of an e-RA increase your perception of procurement integrity?
22 Do you believe *wasta* can be both good (positive outcomes) and bad (negative outcomes)?
23 Can you think of examples of how *wasta* can be "good?" (positive outcomes).

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