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# Editorial

Eldon Y. Li

## *Editorial Objective*

*JBM* is a double-blind refereed, authoritative reference addressing working or potential business and management theories/practices as well as the emerging issues of interest to academics and practitioners. The primary editorial objective of the *JBM* is to provide a forum for the dissemination of theory and research in all areas of business, management, and organizational decisions areas. We invite research articles, comprehensive reviews, and case studies that provide insights into the business phenomena occurring every day. Authors of *JBM* are always encouraged to offer recommendations to readers exemplifying the applicability of their research findings.

## *Research Topics*

In this issue, we have accepted four research papers for publication in *JBM*. The research topic of the first paper is "Understanding the factors and their relative effect on offshored data privacy: Client and vendor perspectives," authored by Anupam Kumar Nath. The second one is "Guiding principles for ethical change management," reported by Pamela A. Kennett-Hensel and Dinah Payne. The third one is "Risks and their management in ready-made garment industry: Evidence from the world's second largest exporting nation," examined by Suborna Barua, Dipon Kar, and Fariza Binte Mahbub. Finally, Varsha Jain, B.E. Ganesh, and Amrita Bansal present a study on "Understanding bi-directional media consumption in online shopping: A case of 3 cities in India." Please note that the views expressed in these articles are those of the authors and not of the editors, editorial board, *JBM*, WDSI, National Chengchi University, or Chung Yuan Christian University. We hope these papers are interesting to read and useful to your future research. On behalf of the Editorial Board, I thank you very much for your continuous support.

**Reference** to this paper should be made as follows: Li, E.Y. (2018). Editorial. *Journal of Business and Management, 24 (2)*, September, i-ii.



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# Towards Understanding the Factors and Their Effect on Offshored Data Privacy

Anupam Kumar Nath

*Offshoring of services has become an integral part of business strategy. While businesses are deploying service offshoring for quite some time now, preserving the privacy of the sensitive information of offshored data remains as one of the major challenges and concerns. In this paper, we identify factors that affect the privacy-preservation of the offshored data and the conduct of the offshore vendors and their employees towards clients' data. We deploy a positivist case study method to examine the proposed relationships. We collected qualitative data through semi-structured interviews with the project managers of client organizations as well as from the project managers of vendor organizations to test our proposed model. The result shows that the code of conduct set by the vendor organizations plays the most effective role in the privacy-preserving behavior of the vendors' employees.*

**Keywords:** Offshoring, data privacy, positivist case study.

**Reference** to this paper should be made as follows: Nath, A. K. (2018). Towards understanding the factors and their effect on offshored data privacy. *Journal of Business and Management*, 24(2), September, 1-18. DOI: 10.6347/JBM.201809\_24(2).0001.

## Introduction

Information Technology (IT) service offshoring has emerged as a viable strategic option for many Western firms. However, these firms looking to offshore their services face several risks (Polak & Wójcik, 2015). One of the most prominent risks of IT offshore outsourcing is that it often involves transferring various sensitive and propriety data overseas and authorizing service providers located in different

countries to access and use that data (Palvia & Jain, 2017). There have been several allegations that employees based in foreign countries have stolen data outsourced to the service providers (Polak & Przemyslaw, 2015). Due to difficulties related to enforcing privacy laws in foreign countries' courts, privacy has been a major concern in offshore outsourcing decisions. Offshore outsourcing might cause political, reputation, and even financial risks because of the misuse of the offshored data (Overby, 2010). For example, recently a US-based organization's breach took place through the employee(s) of its outsourcing partner in an offshore law firm (Zelijka, 2017). Such incidents refer to the underlying importance of offshore vendors' employees' role in the privacy preservation of the offshored data. Hence, in this paper, we essentially identify the factors that affect the conduct of the employees who handle the offshored data.

Preserving the privacy of data is a major challenge for the offshoring practice. However, in the extant literature, we found diminutive instances of comprehensive empirical investigation of the factors that affect privacy preservation of behavior of the vendors' employees and overall privacy preservation, especially from both client and vendor's perspective in the same study. We address this gap in the literature through the following research question that guides our research: *What are the factors that affect the privacy-preservation of the offshored client data?*

In this research, based on the existing literature we develop a model by identifying the potential variables that affect privacy preservation of the offshored data. Then we adopt a qualitative positivist case study to confirm the relationship between different identified factors and the privacy preservation of the offshored data. We adopt the guidelines suggested by Dubé & Paré (2003) and Shanks (2002) in conducting the positivist case study.

The findings of the research will help to understand the relative effectiveness of different factors which affect the privacy preservation of the offshored data. We believe that with our findings client company t would be able to identify the important factors in privacy preservation behavior of the offshore vendors and their employees. Consequently, this can help them to make the necessary adjustments in offshore arrangements. An important and unique aspect of our research is that we study the effects of different factors from both clients' and vendors' perspective. Having both perspectives give us an opportunity to attain a holistic picture of privacy preservation in offshoring arrangements.

## **Theoretical Development and Hypothesis**

Offshoring is a type of outsourcing (Swartz, 2004). Offshoring simply means having the outsourced business functions done in another country. In the extant literature, authors used different theoretical lenses to describe the offshoring

phenomenon and different aspects of it. Among them, Institutional Theory is one of the most frequently used theoretical lenses (Tate, Ellram, & Bals, 2009). Institutional theory concerns the study of organizational isomorphism, i.e., the process by which certain processes or routines are adopted by all organizations and therefore gradually attain legitimacy in that field. Unlike decision-making models that focus mainly on economic motivations, institutional theory hypothesizes that organizations might adopt certain practices for legitimacy even in the absence of any economic benefit (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). This premise is important for our study as it helps us to find out the factors outside the economic factors that influence the behavior of the offshore vendors and their employees.

With the widespread illegal use of intellectual property, violation of privacy, and breaches in security, ethical issues are particularly important in IT today. Interestingly, according to the 2003 CSI/FBI Computer Crime and Security Survey report, employees ranked just below independent hackers and above competitors as likely sources of attack. A recent FBI Cyber Security Report also reiterates the employee as a potential threat to data security (Audit of FBI's, 2016). Moreover, in the current state of IT offshoring, in many IT projects people from different parts of the world who belong to different cultural dimensions are participating. A client company in most cases does not have direct control over the privacy preservation behavior of such workforce (Nath & Bejou, 2012; Overby, 2010). Consequently, how these employees themselves make their ethical judgment regarding issues like Intellectual Property Law or privacy preservation, and their consequent behavior is very important factors in preserving the privacy of the data (Culnan & Williams, 2009; Moores & Chang, 2006). Hence, the way we develop our hypothesis includes employee behavior towards client data as part of the hypothesis.

### ***Code of Conduct and Other Requirements Set By the Client***

In an outsourcing arrangement, regulatory controls such as legal documents, policies, formal systems, standards, and procedures establish the relationship between the client and the vendor as well as specify boundaries (Bender, 2007; Das & Teng 2001). One of the most important components of any outsourcing deal is the contract which describes the services that a vendor is to provide, discusses financial and legal issues, and essentially becomes the blueprint for the lifespan of an outsourcing arrangement (Tafti, 2005). One of the major steps that might affect the privacy preservation of the offshored data is the code of conduct set by the client on the vendors, mostly through these contracts. (Internet Business Law Service). The contracts with the vendors should and can include requirements mentioning that the offshore vendor adheres to policies and standards for protecting data to which the outsourcing firm is itself subject. In addition, the contract includes procedures for the offshore provider to follow for notifying the outsourcing firm of privacy breaches, controls to help prevent certain employees and third parties from obtaining access to

certain confidential customer data, and language requiring the vendor to conduct regular privacy audits and report the findings to the company. As per suggested by the Internet Business Law services, the agreement should require the vendor to educate employees about the outsourcing company's data protection and privacy policies, and require the vendor to have employees with access to sensitive data sign confidentiality agreements. Moreover, as there is a trend of subcontracting projects in the several offshore clients to an even cheaper location such contract should also include that the vendor may not subcontract in the absence of outsourcer approval of the subcontract and should give the outsourcing company a right to have the subcontract terminated for inadequate privacy. According to a panel of Internet Business Law lawyers, these clauses in the contract will play an important role in the privacy preservation of the offshored client data.

Moreover, as suggested by Ferrell and Gresham (1985) the rule, regulations or guideline such as code of conducts is one of the major factors that affect the ethical behavior of the employees. Hence, we posit:

*H1a: Code of conducts and other requirements for data protection set by the clients positively affects the privacy-preserving behaviors of the offshore vendors' employees.*

*H1b: Code of conducts and other requirements for data protection set by the clients positively affects the privacy preservation of the offshored data.*

### ***Code of Conduct and Other Requirements Set by the Vendor Company***

An offshoring arrangement requires a huge investment of resources from both the client and the vendor company. To justify the level of investment both parties normally look towards a long-term contract (Nath & Bejou, 2012). Therefore, realizing privacy preservation of the offshored data is a major concern for the client company, the vendor companies place rules, regulations, and code of conduct for their employees to preserve the privacy of the client data. These rules, regulations, and code of conducts might include additional ones in addition to what is required by the client in the contract (Barney, 1991). Vendor companies have direct control over the people handling the client data and are the authority responsible for enforcing the rule, regulations, and code of conducts to preserve the privacy of data. Therefore, we assert that a vendor company placed rules, regulations, code of conduct and other requirements will positively affect the privacy-preserving behavior of the workforce.

*H2a: Code of Conduct and other requirements for data protection set by the vendors positively affects the privacy-preserving behaviors of the offshore vendors' employees.*

*H2b: Code of Conduct and other requirements for data protection set by the vendors positively affects the privacy preservation of the offshored data.*

### ***Code of Conduct and Other Requirements Set by the Professional Organizations***

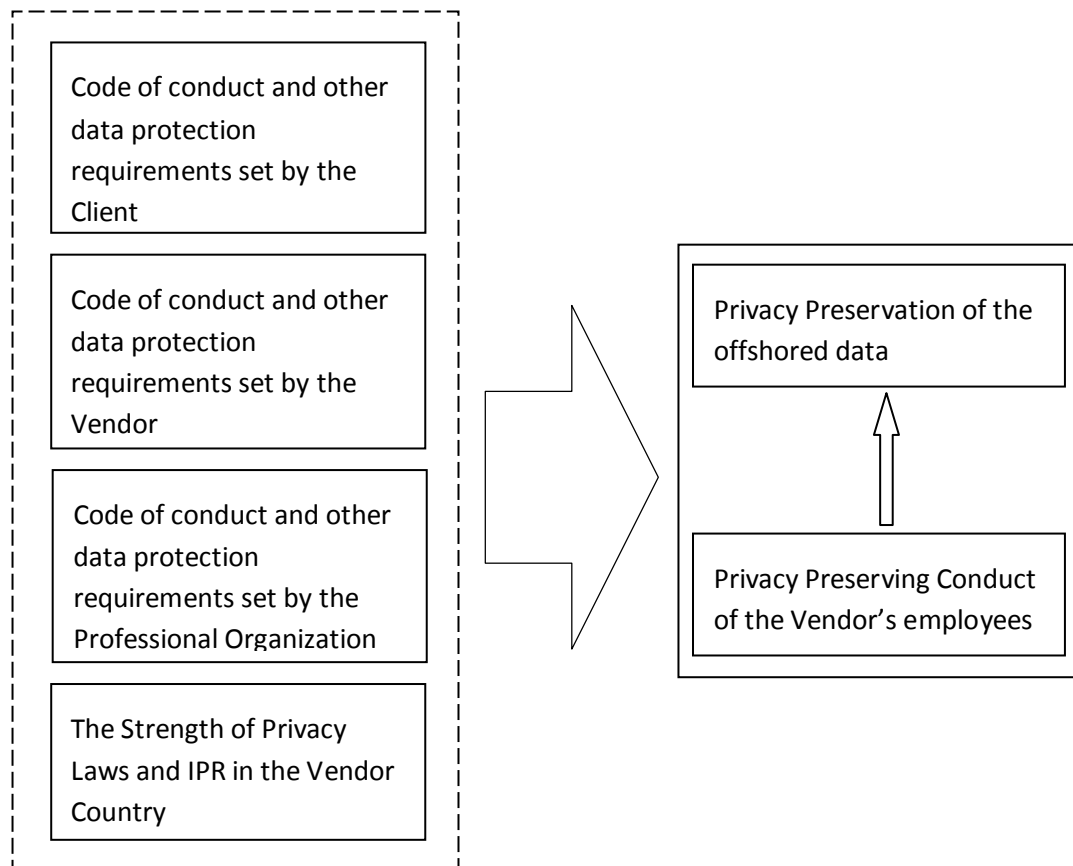
If the vendor country does not have a “strong” rule of law, then it could be inferred that the existing institutions are not effective enough to implement and exercise laws like Intellectual Property Right effectively to ensure the protection of the foreign clients’ data. In that scenario, formal rules, regulations, guidelines, as well as a code of conducts placed by a higher authority, will affect the conduct of the employees of the vendors and overall privacy of the clients’ data. As there is increasing concerns around data security and privacy in India NASSCOM, one of the most recognized and vocal trade organizations in the information technology (IT) software and services industry in India, has put in place several measures to address data security concerns regarding service provider employees. Many of NASSCOM’s roles to an extent reflects India’s weak regulatory environment. (Trombly & Yu, 2006). India does not have a strong law in place requiring the protection of personal data. Therefore, NASSCOM has introduced “assessment and certification” programs for the new employees in an attempt to fill the regulatory lacking and to discourage illegal and unethical behaviors (The Economist, 2006). In addition to these efforts, NASSCOM has also launched an independent self-regulatory agency to improve privacy and data protection standards for the country’s offshore IT services and BPO clients.

Kshetri and Dholakia(2009) suggested that in a developing country where the rule of law is “week” or “ignored with impunities” (Bratton, 2007), the professional associations can become more effective in shaping the members’ behavior. The effectiveness and the “success” of India’s National Associations of Software and Service Companies (NASSCOM) in preserving the privacy of the offshored data in India is an example of such a phenomenon.

Hence, we posit the following:

*H3a: Code of conducts and other requirements for data protection suggested by the professional associations in the vendor country will positively affect the privacy-preserving behaviors of the offshore vendors’ employees.*

*H3b: Code of conducts and other requirements for data protection suggested by the professional associations in the vendor country will positively affect the privacy preservation of the offshored data.*



**Figure 1.** Research Model

### *The Strength of Privacy Laws and IPR in the Vendor Country*

Every country governs Intellectual property and privacy of Data based on own distinct national law. These laws vary from one country to another. Many US and Europe-based companies are concerned about privacy preservation of the offshored data as in many of those countries there is a weak legislative environment and is difficult to enforce privacy (Engardio, Puliyeenthuruthel, & Kripalani, 2004; Ravindran, 2004). In outsourcing, USA's privacy legislation is quite a lenient comparison to European Union (EU) regulations. U.S. privacy protections effectively end at the border, placing the obligation directly and solely on the shoulders of the U.S. client company if there is any privacy breach offshore. However, European consumers are afforded considerably greater protection by an EU law that permits personal data to be sent offshore only to countries whose privacy laws are perceived to provide equivalent privacy protection and that have been found to have strong enforcement capabilities. Essentially as perceived by the EU law, the Privacy Protection law and Intellectual property law in the vendors' country will help them to protect the privacy of the offshored data. Hence, we posit:

*H4a: The strength of Privacy preservation law in the vendor country will positively affect the privacy-preserving conducts of the offshore vendors' employees.*

*H4b: The strength of Privacy preservation law in the vendor country will positively affect the privacy preservation of the offshored data.*

## **Research Approach and Methodology**

The use of case study research to test theory requires the specification of theoretical hypothesis and related testable hypothesis derived from existing theory. The results of case study data collection and analysis are used to compare the case study findings with the expected outcomes predicted by the hypothesis (Cavaye, 1996). The positivist studies are epistemologically premised on the existence of prior fixed relationships within phenomena which could be identified and tested using "hypothetico-deductive" logic and analysis (Dubé & Paré, 2003). Hypotheses are tested by comparing their predictions with observed data. To test the hypotheses through deductive testing, as per suggestion by Lee (1989), we look for observations that confirm a prediction to establish the truth of a hypothesis as well as we involve looking for disconfirming evidence to falsify the hypothesis. Falsified hypotheses might need to be refined based on the reasons for falsification and subjected to further empirical testing (Shank, 2002).

We deploy a qualitative positivist case-study approach to test the hypotheses. Our adoption of positivism is consistent with the views that are held by scholars in the fields of organizational studies (Eisenhardt, 1989), and information systems (Sarker & Lee, 2002; Lee, 1989; Orlikowski & Baroudi, 1991; Orlikowski, 1993), and follows a similar path. "Hypothetico-deductive logic" is central to the world of positivist research today, which essentially is a synthesis of three traditions: empiricist, rationalist, and critical rationalist (Sarker & Lee, 2002). There is an empiricist influence in our positivist approach that is reflected in the rigor of our research process, drawing mainly on Yin (1994). The rationalist and the critical-rationalist traditions are reflected in the use of pattern matching to deductively test falsifiable statements derived from the literature (Sarker & Lee, 2002).

As this research is principally positivist in nature, using clearly defined methodological guidelines we satisfy the four criteria of rigor (Shanks, 2002): construct validity, internal validity, external validity, and reliability (Lee, 1989; Yin, 1994). In table 1, we summarize how we address the requirements of the positivist case-study method.



**Table1.** Steps to Achieve Rigor of the Study as Per Qualitative Case-Research Criteria

Rigor Criterion	Guidelines to achieve rigor based on Lee (1989), Yin (1994) and Sarker and Lee (2002)
Construct validity	Use of multiple sources of evidence Review of the report by the key informants Chain of evidence
Internal validity	Pattern matching
Reliability	Case-study database (consists of case-study notes, documents, and narratives) creation and maintenance Case-study protocol
External validity	Increased degree of freedom Replication logic

Based on this plan, we collect data to test the proposed hypotheses.

### *Case Selection*

Case selection is a critical aspect of conducting a case study. Not only does the population define the set of entities from which the research sample is to be drawn, but the selection of an appropriate population also controls extraneous variation and helps to define the limits for generalizing the findings (Eisenhardt, 1989). According to the recommendations by Yin (2003), and Eisenhardt (1989) we based the case selection for our study on two factors - theoretical background and feasibility.

The first factor includes theoretical relevance, purpose, similarities, and differences across data sources with regard to the data sources' appropriateness for the study. In our case, we want to study the uses and effects of Web 2.0 based KM at the group levels. Hence, we selected two organizations which have been part of the offshore arrangement for a sufficient length of time to identify and understand the effects of different factors related to privacy preservation of data. Both organizations are leading firms in their respective fields in the IT industry and have branches or offices in many countries. However, they are different regarding the role they play in an offshoring arrangement. While organization A is an offshore vendor dealing with client data, organization C is the client. The second factor, feasibility, was largely determined by each organization's willingness to participate in the study and to

provide the required information. In our research, the organizations we selected had to be willing to provide us the necessary information and share their experience so that we could study the effects of different factors regarding privacy preservation.

Organization A is an information technology Services Company in India with more than 100 thousand professionals. It has offices in 22 countries and development centers in India, China, Australia, UK, Canada, and Japan. In 2009, organization A was recognized as one of the best performing and innovative companies in the software and services sector in the world by Forbes and Business Week.

Organization C is an American multinational corporation that designs and sells consumer electronics, networking and communications technology and services. C has more than 65,000 employees and annual revenue of more than 36 billion dollars. C has more than 190 branches worldwide.

Organizations A and C are in different offshoring arrangements for various IT services, C as a client and A as an offshore vendor, for more than a decade.

We interviewed three managerial level persons from organization C. All these managers been overseeing IT offshored projects for several years and working extensively with the vendor organizations in India. While one of them no longer are responsible for overseeing offshore projects because of his recent promotion and change in job description, others are still managing and overseeing more than one ongoing offshored projects with Indian vendors.

On the vendor side, we could also include three managerial level individuals from organization A. All of them are involved in managing US-based clients' IT projects and have worked on such a project in different capacities. The interviewees have worked on different sorts of offshored IT projects such as product development, testing, and sales management.

### ***Data Collection and Analysis***

Our principal data collection method is semi-structured interviews. Each of the interviews lasted around 25-50 minutes on an average. We recorded the interviews whenever possible and transcribed before starting the data analysis. To enhance the validity of the answers, wherever possible, we verified summaries of the major findings with the interviewee after the end of each interview session. Furthermore, to ensure consistency and reliability, we used structured interview guides for all interviews. The interview guide includes several open format questions based on our research model which is based on existing literature. However, to allow the participants flexibility in their responses, we used open-ended questions.

As a second data source, wherever possible, we also investigated the internal documents (e.g., draft of contracts) which the organizations use in an offshoring arrangement. Existing literature suggests that it is preferable to have multiple investigators in such case studies. Hence, wherever possible, we made sure that at least two researchers were present for the interviews. A significant characteristic of our research is the overlap of data analysis and collection, and we achieve this through field notes. Overall, we followed the same guidelines we followed in phase1 which was provided by Lee (1989), Yin (2003) and Sarker and Lee (2002) to achieve rigor in our case study.

## Hypotheses Testing Results and Discussion

We present the results of propositions testing in the following section, and summary of the results in table 1.

### *Hypotheses 1s:*

We have some interesting conflicting findings on these propositions. While we found strong support for this hypothesis from the client's perspective, we did not get ample support from the vendors' point of view. The managers of the client organizations thought that the requirements such as code of conducts for employees they impose on the vendor side through the contract they sign with the vendors play the most important part in protecting their data from any misuse when they offshore them. The managers identified three major aspects of any contract that they thought plays the most important role in protecting their data as follows.

First, as per the contract, if a vendor organization fails to protect the client organization's data, then the vendor will pay a large monetary penalty to the client organization. A project manager from the client organization mentions:

*"If somehow, they (the vendor organization) fail to meet the requirements mentioned in the contract, they have to pay us (the client organization) a huge amount of fine."*

Second, the client organization ultimately has the authority to decide who will work on the project and who from the vendor organization will have access to the data. As a project manager mentions,

*"The contract requires them (i.e., vendor organization) to have clearance for every employee they use in my project from me."*

Third, most of the contracts are short term. Hence, to keep on renewing the contract, the vendor organization has to keep the client data safe which is one of the requirements of the clients. A project manager mentions,

*“Most of our contracts are only three months long initially. The contract gets renewed for another 3-6 months based on the performance in those three months. So, if I am not convinced of the safety of my data, then I will not renew the contract.”*

On the other hand, the management of the vendor organization thought that the aspects mentioned by the clients are important. But what matters most is the guidelines, code of conduct, rules and regulations they have in place to protect any sensitive data. Interestingly, it appeared to us that the managers of the client organization felt almost offended when we emphasized the importance of clients' suggested guidelines and code of conducts for protecting data. According to the vendor organization, they have enough sensitive data of their own, and they need to protect that from competitors or any other unauthorized users and uses. Hence, to protect data, they make sure all the employees working for them abide by the code of conduct and other rules and regulations. As a manager explains,

*“We have to eat our own dog food you know. We have those data security and privacy measures in place for our information too as we need to protect the sensitive information from the outsiders.”*

They also thought that their employees do not interact with the client organizations' representatives frequently enough to be driven by their code of conducts. However, they admitted that the manager who is working on behalf of the vendor organization might take extra effort to convince the clients about the integrity of their (client's) data. To do so, as one of the managers from the client side has described, it can become “sand is hotter than the sun” scenario. One of the examples a manager provided is like this:

*“When one of the employees working with the client's data ran a query who is not supposed to run by mistake, that employee got fired immediately. Finding no other way, that employee contacted the manager from the client organization, describing the scenario and how he did it by mistake and not with any bad intention. Under the circumstances, the manager from the client company thought it was little “too harsh” and recommended giving back his job.”*

Examples like these lead us to conclude that guidelines and code of conduct set by a client are important for the vendor organization to an extent. However, they are not the most influential factor in the privacy-preserving behavior of the employees as the client organizations do not or cannot implement those directly in most cases.

### ***Hypotheses 2s:***

We found the strongest support for this hypothesis. Both client and vendor organizations thought that code of conducts set by the vendor organizations is the most influential factor. From vendor's point of view, they thought as they are the party who is responsible for enforcing any code of conduct as well as rules and regulations, they are the most influential factor no matter whether those rules have been proposed by a client or a professional organization or vendor country. They emphasized that their employees mostly are not aware or concerned about from whom the guideline, code of conduct or rules and regulations have been originated. What matters to them most is that to work for that vendor organization (and in some cases in certain projects), they have to abide by those rules, regulations, and code of conducts. Otherwise, the employee(s) sees job loss or another type of punishment carried out by the organization they are working for as the immediate effect.

The client organization to a large extent had a similar opinion. They emphasized that while based on the nature of the project and the sensitivity of the data, they might want the offshore vendor to take additional measures to protect their data, the vendors are responsible for putting them in place. The representatives from client organizations also mention that the code of conduct for employees and other rules and regulations they want to be placed are through the contract they sign, and, in most cases, they are not involved in the micro-management of actually making sure they are implemented and followed properly. However, they have emphasized that it is because they have been working with a specific offshore vendor(s) for a long time and they have mostly positive experience up to that point. But, for an entirely unknown offshore vendor, this scenario could be different.

### ***Hypotheses 3s:***

We did not find ample evidence to support this hypothesis. Neither the client side nor the vendor organization thought that professional organizations have a very strong role to play in the privacy preservation in the current state of the offshoring arrangements between USA and India. Surprisingly, it appeared to us that client organization has very little awareness of the role of the most prominent professional organization of India NASSCOM. They know that it is there and it plays a certain role internally. However, interviewees from the client side did not think that professional organization would play a significant role in preserving the privacy of their data. As a project manager from client organization mentions,

*"Yes. I know about NASSCOM. However, I am not so sure how effective they are in preserving the privacy of our data."*

On the other hand, the interviewees from the vendor organization had an interesting perspective. They thought a professional organization like NASSCOM could play an important role in privacy preservation of the client data. However, they did not think it plays a significant role in affecting the privacy-preserving behavior of their employees and their organization as they thought they already had strong rules and regulations to protect their data as well as client data.

The managers of vendor organizations provided examples regarding employee screening process and the behavioral guideline they had in place claiming that these processes are stronger than what a professional organization suggests. However, they thought it might help relatively newer organizations to shape up rules and regulations in a way that would help them to protect client data. Not only that, they thought the professional organizations could play a very important role in protecting client data.

**Table2.** Summary of the hypotheses testing

Hypotheses	From Clients' Perspective	From Vendors' Perspective
P1: Rules by Client	Supported	Moderate Support
P2: Rules by Vendor	Supported	Supported
P3: Rules by professional organization	Moderate Support	Moderate Support
P4: The strength of privacy preservation law in the vendor's country	Moderate Support	Supported

#### ***Hypotheses 4s:***

We found fairly strong support for this hypothesis regarding the role of privacy preservation law. The client organization's management thought having a strong privacy preservation law strongly affects the privacy-preserving conducts of the offshore vendors and their employees. As mentioned by a project manager from client organization,

*"It certainly makes us feel more comfortable if we know that there is strong privacy preservation law in that (i.e., vendor's) country."*

One thing was quite apparent that the client organizations thought that having strong privacy preserving law would help and that was somewhat a concern at the beginning of the offshoring arrangements. However, over the time as they had worked with the certain offshore vendor(s) and had mostly positive experience with

the vendor(s), the strength of privacy preservation law in the vendor country has become less concern for them. A project manager from client organization mentions

*“... over the time we have come to know some key persons in vendor organization, and we rely on them.”*

On a similar note, we asked them about their Indian offshore vendor's practice of offshoring to China where arguably privacy preserving laws is weaker than India and whether that concerns them or not. They responded that they trust their offshore vendor and rely on the contract that they had with them. Therefore, no matter where their Indian offshore vendors send their works to get it done, they are the responsible party and will be held accountable for any misuse of data. However, as per their contract, the offshore vendors must get clearance from their client for each of the team members who will have access to their sensitive data. Hence, if a vendor organization in India wants to involve team members from China, then they are required to get clearance from their clients. But as a project manager mentions,

*“The contract requires them (i.e., vendor organization) to have clearance for every employee they use in my project from me. However, in most cases, it becomes merely a formality as I know him (i.e., the project manager/representative on vendor's side) and sort of think that he will make a right judgment. In any case, if anything goes wrong, they would be held responsible.”*

The vendor organizations thought that having a strong privacy preservation law is a big help. Most of the employees in a vendor 's organization have a very vague or no idea about what conduct would be an invasion of privacy as they grow up in society and earn an education in a system where sensitive things like intellectual property law and privacy preservation law either do not exist or not practiced properly. Therefore, the management of the vendor organization thought that it becomes a quite steep learning curve for the newly hired workforce to get accustomed to the all the new rules and regulations they should follow to preserve the integrity of any data they would handle. The vendor organization from India mention that they face the similar change when they hire people from China as they also grow up in a weaker “rule of law” country. Hence, having an environment where there is a strong “Rule of Law” to protect data or any intellectual property positively affects the privacy-preserving behavior of the people they would hire to work in projects and that in turn will increase the safety of data.

## Conclusion

Offshore outsourcing certainly has its benefits. However, it comes with a risk of misuse of sensitive information. Different institutional factors might affect the privacy preservation of the offshored data. In our study, we identified the mimetic, coercive, and normative institutional factors that would affect the privacy preservation of the sensitive offshored data and empirically tested their effectiveness. The findings show that the code of conduct set by the offshore vendors plays the most important role followed by the code of conduct set by the clients and the strength of privacy preservation law in the vendor's country.

The findings of our research shed light on an important aspect of the literature as we included both client and vendor managements' perspective to verify the effects. However, one limitation of our finding is that the client and vendor organizations in our case study are industry leaders and very well reputed firms and have been in offshoring arrangement with each other for at least last ten odd years. Hence, it appeared to us that the response from client management is mostly based on the trust they have in the vendor organization, and it might change if they get into an offshoring arrangement with a relatively new company. Hence, to address this limitation, we intend to have more than one vendor organization with a varied level of reputation in the market.

## References

- Audit of the Federal Bureau of Investigation's Cyber Threat Prioritization. Retrieved from <https://oig.justice.gov/reports/2016/a1620.pdf>.
- Barney, J.B. (1991), Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17(1), 99-120.
- Bender, D. (2007) Internet Law- Outsourcing Offshore May Pose Problems for Protecting Data. Retrieved from [http://www.ibIs.com/internet\\_law\\_news\\_portal\\_view.aspx?s=latestnews &id=1635](http://www.ibIs.com/internet_law_news_portal_view.aspx?s=latestnews &id=1635).
- Bratton, M. (2007) Formal Versus Informal Institutions in Africa, *Journal of Democracy* 18(3), 96-110.
- Cavaye, A. L. M. (1996). Case study research: A multi-faceted research approach for IS. *Information Systems Journal*, 6, 227-242.
- Culnan, M. J., & Williams, C. (2009) How Ethics Can Enhance Organizational Privacy: Lessons from the ChoicePoint and TJX Data Breaches, *MIS Quarterly*, 33(4), 673-687.
- Das, T. K., & Teng, B. (2001) Instabilities of Strategic Alliances: An International Tensions Perspective, *Organization Science* 11(1), 77-101.



- DiMaggio, J., & Powell, W. (1983) The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality Organizational Fields, *American Sociological Review* 48(2), 147-160.
- Dubé, L., & Paré, G. (2003). Rigor in information systems positivist case research: Current practices, trends, and recommendations. *MIS Quarterly*, 27(4), 597-634.
- Eisenhardt, K. (1989) Building Theories from Case Study Research, *The Academy of Management Review*, 1(4), 532-550.
- Engardio, P., Puliyyenthuruthel, J., & Kripalani, M. (2004). Fortress India? *Business Week* (3896), 42-43.
- Ferrell, O.C., & Gresham, G. L. (1985) A Contingency Framework for Understanding Ethical Decision Making in Marketing, *Journal of Marketing*, 49(3), 87-96.
- Kshetri, N. & Dholakia, N. (2009). Professional and trade associations in a nascent and form ative sector of a developing economy: a case study of the NASSCOM effect on the Indian offshoring industry. *Journal of International Management*. 15(2), 225-239.
- Palvia, S., & Jain. C. (2017) Global Sourcing of Services: A Two-Stage Model for Selecting a Vendor. *Global Sourcing of Services: Strategies, Issues, and Challenges*, 407.
- Polak, J. & Przemyslaw, W. (2015) Knowledge management in IT Outsourcing/Offshoring Projects, *PM World Journal*, 4(8).
- Lee, A. (1989) A Scientific Methodology for MIS Case Studies, *MIS Quarterly*, 13(1), 33-50.
- Meyer, J.W., & Rowan, B. (1977) Institutionalized Organizations: Formal Structure as Myth and Ceremony, *American Journal of Sociology*, 83(2).
- Moores, T.T., & Chang, J.C.J. (2006) Ethical Decision Making in Software Piracy: Initial Development and Test of a Four-Component Model, *MIS Quarterly*, 30(1), 167-180.
- Nath, A. & Bejou, A. (2012). Offshored Data Privacy: Determining the factors and their relative effect, *Proceedings of the 18th Americas Conference on In-formation Systems (AMCIS)*, Seattle, USA, 2012.
- Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research*, 2(1), 1-8.
- Orlikowski, W., (1993), Case Tools as Organizational Change: Investigating Incremental and Radical Changes in Systems Development, *MIS Quarterly*, 17(3), 309-340.
- Overby, S. (2010), Offshoring: The 25 Most Dangerous Cities for Outsourcing in 2010. Retrieved from CIO.com [http://www.cio.com/article/596533/offshoring\\_The\\_25\\_Most\\_Dangerous\\_Cities\\_For\\_Outsourcing\\_in\\_2010](http://www.cio.com/article/596533/offshoring_The_25_Most_Dangerous_Cities_For_Outsourcing_in_2010).

- Polak, J., & Wójcik, P. (2015, August). Knowledge management in IT outsourcing/offshoring projects (2nd ed.). *PM World Journal*, 4(8), 1-10.
- Ravindran, P. (2004) Factors That Are Worrying For BPO Sector., *Business Line*. Retrieved from <http://www.thehindubusinessline.com/2004/04/03/stories/2004040302210300.htm>
- Sarker, S. & Lee, A. (2002) Using Positivist Case Research Methodology to Test Three Competing Theories-In-Use of Business Process Redesign, *Journal of AIS*, 2(7), 1-72.
- Shanks, G. (2002, November). Guidelines for conducting positivist case study research in information systems. *Australasian Journal of Information Systems*, 10(1), 76-86.
- Special report: watch out, India-outsourcing to China. Outsourcing to China, *The Economist*, 379(8476), 80, 2006. Retrieved from <http://www.economist.com/node/6878397>.
- Swartz, N., (2004), Offshoring Privacy, *Information Management Journal*, 38(5), 24-26.
- Tafti, M. H. A., (2005) Risks factors associated with offshore IT outsourcing, *Industrial Management & Data Systems*, 105(5), 549-560.
- Tate, W., Ellram, L., & Bals, L. (2009) Offshore Outsourcing of Services: An Evolutionary Perspective, *International Journal of Production Economics*, 120(2), 512-524.
- Trombly, M., & Yu, W. (2006) Outsourcing resilient in India, *Securities Industry News*, 18(26), 1-21.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, C. A.: Sage.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, C. A.: Sage.
- Zelijka, (2017) Offshore Law Firm Appleby Confirms Data Breach. Retrieved from <https://www.helpnetsecurity.com/2017/10/26/appleby-confirms-data-breach/>.

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# Guiding Principles for Ethical Change Management

Pamela A. Kennett-Hensel  
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*Change is omnipresent in business. Business must effect positive change to benefit itself in its mission to provide benefit to society; society must accept positive change to garner the benefits of change and to make possible the changes business prompts. Intensifying the need to understand the role of ethics in effective change management is the failure rate of effective change. Utilizing Aristotelian virtues and Kantian analysis, this article addresses issues related to change management and fills a void in the literature by developing a proposal of change management principles that incorporates the use of these well-established business ethics principles.*

**Keywords:** Ethical change management, Aristotelian virtues, Kantian analysis.

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## Introduction

With the almost unbelievable changes surrounding us and with the rapidity with which they occur, change is omnipresent in our personal and business lives. The benefits reaped as a result of change are enormous, but change is difficult at best; effective change is very difficult. Change, however, is also required in the world we live in: it is inevitable. "(C)hange has become more regular and pervasive over the past few years. The pressures of change today in organizations are formidable. The competitive landscape is ever changing. Economic conditions, labour markets,

demographics, consumer preferences and especially technological changes affect how business is conducted and managed... (Coetzee, Visagie, & Ukpere, 2014, p. 827)." Jones, Aguirre, and Calderone (2004) also address the need for change, as represented in the virtual destruction of the status quo by virtue of increased market transparency, labor mobility, global capital flows and instantaneous communications. Indeed, they assert that firms are forced into changes as a result of this new dynamic. "... (H)eightedened global competition has concentrated management's collective mind on something that, in the past, it happily avoided: change (p. 1)."

Such on-going development of culture in the face of change is the subject of this paper: we believe that the firm must adapt its culture to achieve positive, effective change. Inherent in this culture and continuous adaptation to the environment, the concept of business ethics is key (Boatright, 1991; Cohen, 1993): successful change can only occur with ethical change management.

Organisations have to move beyond general statements of ethics...and actually evaluate the ethical values of leaders and their actions and determine whether they are compatible with the wider interests of the organization and its stakeholders. This requires them to understand ethics both in policy and practical terms, and to be clear about the ethical basis of different approaches to leadership and change (Burnes & By, 2012, p. 248).

Burnes and By (2012, p. 248) state that the "leadership and change literature has demonstrated the symbiotic relationship" between the concepts of leadership and change; further, they assert that leadership and change are "underpinned by ethical values which influence the outcomes of these two processes." Burnes (2009) also notes the cooperative and social systems that constitute organizations. As both cooperative and social systems, businesses and society acting independently and/or dependently are connected and can be symbiotically benefited by effective change management. It is logical and reasonable that, while leadership in change management must be ethical for the organization to be successful, so should the organization's actions be ethical to fit their needs with society's needs, resulting in a mutually beneficial relationship between the two. Business must effect positive change to benefit itself in its mission to provide benefit to society; society must accept positive change to garner the benefits of change and to make possible the changes business prompts.

Intensifying the need to understand the role of ethics in effective change management is the failure rate of effective change. Antonellis (2014) reports that organizational change is only effective 25 to 35% of the time, while Balogun and Hope Hailey (2004) report that 70% of all change initiatives fail. In citing an approximately 30% failure rate for effective change, Burnes and By (2012, p. 240) assert that "(I)f the main task of leaders is to bring about change, then this (failure rate) implies that only a minority of leaders are successful in their job, which is what

research has shown and the relatively high turnover in senior executives demonstrates.”

This article addresses issues related to change management with ethics as the underlying foundation. Further, we develop a code of ethics designed to highlight and utilize ethical principles in the development of culture and change. Topics covered include theoretical foundation, signs that change is necessary, issues relative to dealing with resistance to change, measures that must be taken to affect effective change, and characteristics of the organizational culture that allow change. Within these topics, the existence, different types and different influences of leaders, power structures and communications networks are also addressed. It has been noted that there is little research on ethics in leadership and all the attendant issues, such as successful change management (Burnes & By, 2012; Schaubroeck et al., 2012). Ultimately, this article fills a void in the literature by developing a proposal of change management principles that incorporates the use of basic, well-established principles of business ethics.

## **Theoretical Foundation for Ethical Change Management**

Before crafting a code of ethics that combines the best aspects of both basic change management principle and business ethics, it is well to present the metaethical background of change management. Stakeholders should be defined and identified, and the nature of culture and organizational culture and the types of culture one might find within an organization should be examined to provide a common base of reference for the ethical scheme later developed. This section introduces those concepts as we will use them in this effort.

### ***Stakeholders***

The purpose of change management using the stakeholder theory of management is to allow the organization to positively contribute to society (Parmer, Freeman, Harrison, Wicks, Purnell, & de Colle, 2010; Armenakis, Brown, & Mehta, 2011). To do this, the firm must recognize its responsibilities to society and individual stakeholders and groups of stakeholders (Bowen & Power, 1993). An examination of the economic, legal, moral and philanthropic obligations owed to these stakeholders is required. The precursor to a review of these obligations requires the identification of pertinent stakeholders. “It is often the stakeholders...who will be able to provide the most insight” into the business environment ripe for change, as well as the possible alternative changes available (Antonellis, 2014, p. 81-82).

Stakeholders are those people and organizations which may be directly or indirectly affected by an action, in a positive or negative way (Raiborn & Payne, 1990). "A stakeholder is any individual, group, organization or institution that can affect, as well as be affected by an individual's, group's, organization's or institution's policy or policies (Wood-Harper, Corder, Wood, & Watson, 1996, p. 71)." In the area of change management, the identification of and care for stakeholders is immensely important (Long & Spurlock, 2008) and requires incorporation of stakeholder welfare into the firm's operation. Two noteworthy groups are more highly affected than any others: the leadership team that envisions the change and the members of the workforce who must implement and live/work with the change. Depending on the size, scope and intensity of the change anticipated, the number of stakeholders can be large. We define stakeholders in the management of change to include, but not be limited to: all levels of management, all workers/followers of the firm, shareholders, current and future creditors, customers, suppliers and competitors, pertinent government regulatory agencies, pertinent professional associations, society as a whole and the environments, physical, cultural, economic and competitive, in which the firm does business.

### *Ethics*

Very simply, ethics is the ability to judge between right and wrong; it is closely associated with the concept of morals and the study of morality. "Ethics studies morality. Morality is a term used to cover those practices and activities that are considered importantly right and wrong; the rules that govern those activities; and the values that are embedded, fostered, or pursued by those activities and practices (DeGeorge, 2010, p. 12)." Velasquez (1998), another noted business ethicist, states that "(B)usiness ethics is a study of moral standards and how these apply to the systems and organizations through which modern societies produce and distribute goods and services, and to the people who work within these organizations (p. 15)."

A closely associated question arises about the nature of ethics versus the nature of law. Law is promulgated and is generally derived from what society believes as a whole is right or wrong: once the ethics have been determined, if that principle is sufficiently broadly and consistently held, the ethical principle develops into legally enforceable principle, i.e., a law. In the discussion of ethical change and ethical leadership, it is vital to understand the difference between this spirit of the law versus the letter of the law. Raiborn and Payne (1990) cite that the law and ethics are not necessarily the same, though sometimes they do intersect: again, the law is the prevailing sense of the ethical right. However, the spirit of the law speaks more to the ethical principle, rather than the legally mandated behavior of a statute. Burnes (2009) recognizes this difference relative to change management: effective change leaders must "move from doing the minimum the law requires to doing the

right thing (p. 360).” In an article linking increased return on investment to ethical rather than legal measures, Jaeger (2013, p. 34) pits ethics against mere compliance: “...it is far better to build a structure where employees feel the need to do the right thing out of the emphasis on shared values rather than on a series of rules to follow.” Thus, our presentation of a code of ethical change management is based on doing more than the legal minimum: we seek to establish practices that not only abide by the spirit of the law, but also that embrace the spirit of the law and all the ethical principle that that spirit encompasses.

### *Culture and Organizational Culture*

Millman (2007) writes in the vernacular that culture is “the way we do things around here (p. 44).” More formally, “(C)ulture is a matter of what people believe deep down, and no one can force or buy such belief (Millman, 2007, p. 45).” Corporate culture is “the whole collection of assumptions, practices and norms that people in an organization adopt over time (p. 44).” He notes that one element of corporate culture is that immediately affected stakeholders, like employees, must accept the cultural characteristics such that they become unconsciously held and communicated to new stakeholders. It is in this way and over time that culture and corporate culture change and develop. Further, corporate culture is shaped to a large extent by those who began the company, “who expect the people they hire to comply with their way of doing things. If the company survives, prospers and grows, those processes get the credit, and people continue to do them because that arrangement works (p. 46).” Shieh and Wang (2010) define corporate or organizational culture as the set of leading common values and behaviors within the firm, formed by long-term managerial influence; it is recognized by all within the firm. They further note that corporate culture combines with corporate economic development to form the basis of corporate power: the power to enable the firm to adapt to new environments. The point of strengthening corporate culture is that it allows enhanced competitiveness, which, in the current, rapidly changing and challenging business environment, is equitable to enhanced competitive advantage.

In Schaubroeck et al’s (2012) examination of ethical leadership across organization levels, the idea of culture and ethical culture were central. “(C)ulture (is) a system of shared assumptions that can have a strong influence in directing followers’ behaviors and beliefs. Organizational culture is represented as varying in layers, with the deepest layer being a broad system of assumptions and deeply held shared meanings, and the surface layer representing more tangible, observable factors that reflect those assumptions (p. 1054).”

The ethical orientation of the firm is represented in cultural elements such as firm artifacts, espoused beliefs and values and the assumptions giving rise to the beliefs and values. This ‘ethical culture’ is the mark of an organizational culture that



would be open to effective to change (Schein, 2004; Schaubroeck et al., 2012). “By influencing these surface elements, leaders can help others interpret their unit and organization’s culture in terms of how it relates to their roles and expectations.” Schaubroeck et al. (2012) also offer the concept of ethical culture: “ethical culture is ‘a subset of organizational culture, representing a multidimensional interplay among various ‘formal’ and ‘informal’ systems of behavioral control that are capable of promoting either ethical or unethical behavior (p. 1054).” Important for the current effort is their presentation of formal and informal ethical culture systems. Formal ethical culture systems include enforceable codes of ethics, authority structures, reward systems and ethics training, while informal systems include peer behaviors, use of ethical history and story and the imposition of ethical norms. As we propose to develop a code of ethics for the ethical development and implementation of change, the concept of formal ethical culture systems is integral to the effort.

### *Change*

Since we propose a code of ethics for change management, it is well to define change, in both basic terms and in terms related to the true management of change. Change can “involve a simple policy change, a procedural change, a personnel shift, an organizational change, or anything subject to change from a prior state (Antonellis, 2014, p. 81).” According to Moran and Brightman (2001), change management is “the process of continually renewing an organization’s direction, structure, and capabilities to serve the ever-changing needs of external and internal customer (p. 111).”

Litch (2005) offers the types of change that might occur in the workplace. She cites Evans and Schaefer (2001): “(c)hanging is the continuous process of an organization attempting to align itself with shifts in its marketplace and with the realities of its external financial, physical, social, political, and technological environment (p. 21).” She notes that this is what organizations actually do, rather than something that is done to them: organizations are organic, just as those who cause the organization to exist and act are organic, growing and changing in accord with and in response to the ever-changing physical and mental environment in which it and they operate. Change can be represented in employee motivation and morale, corresponding leadership styles, communications, timing, and perceptions of the necessity to change among those affected by the change. Jin, Drozdenko, and DeLoughy (2013) state that it is the organic firm that adopts a “humanistic, democratic, enabling, open and trusting organizational environment, rather than a mechanistic firm, which is characterized by authoritarianism, control, enclosure and coercive bureaucracy (p. 17).” The former, open to change and with an environment conducive to participative empowerment, is more representative of the ethical firm open to embracing organizational change. It is within that organizational context

that our code of ethical change management is most likely to be well-received and effective.

Long and Spurlock (2008) assert that the nature of the change is also a factor in effective change management. "Change is the planned or unplanned response of an organization to some internal or external pressure (Long & Spurlock, 2008, p. 30)." They identify developmental, transitional and transformational changes. Developmental changes are those that merely refine existing managerial structures and styles, not prompting significant upheaval. Transitional and transformational change, however, involve greater levels of change and come with greater levels of uncertainty. Transitional change "involves the controlled introduction of new processes and technology. Transformational change is the emergence of an unknown from an old state (p. 30)." In each of these kinds of changes, there is a newness, a higher level of uncertainty and risk; these kinds of changes, therefore, require more careful management. Transformational change in particular "requires a 'leap of faith' and occurs when dramatic change is needed within the organization (p. 30)." Management must therefore develop the trust among their followers that will allow the changes to be developed and implemented: the trust comes in when convincing workers that the changes are needed and will ultimately be of benefit to the firm and, finally, to the stakeholders, including employees designing and implementing the changes.

As previously noted, the success rate of change is low (25-35%). By (2005) suggests a reason for this failure. "It may be suggested that this poor success rate indicates a fundamental lack of a valid framework of how to implement and manage organizational change as what is currently available to academics and practitioners is a wide range of contradictory and confusing theories and approaches (p. 370)." We add to that reason the element of ethics: those attempting to affect change may also lack a valid foundation in business. "Instead of attempting to change behavior by imposition and coercion, what is required is an approach to change which promotes ethical behavior and allows those concerned to change of their own free will (Burnes, 2009, p. 361)."

### ***Leadership: the Change Leader***

There are many definitions of leadership; leadership theory abounds, with as many questions about what leadership really is still remaining. A leader has several attributes that set him apart from a manager: one can be a good leader, but not necessarily a good manager or vice versa. Tucker and Russell (2004) and Ackoff (1999) offer the following definitions. Management is the accomplishment of the task as specified by the actor's superior, but in the manner specified by the manager; in this instance, there is a direct relationship between the person who wants the task done and the person actually doing the task. Leadership is a much more

comprehensive concept, including in its realm the leader's ability to guide and encourage. Further, leadership is also marked by the ability of the leader to engage his followers by having them accomplish tasks the leader has set, but completing those tasks according to their own method(s) they have approved. These authors go on to define the transformational leader "as one who formulates an inspiring vision, facilitates the vision, encourages short-term sacrifices, and makes pursuing the vision a fulfilling venture (Tucker & Russell, 2004, p.104)."

Tucker and Russell (2004) further describe themes of transformational leadership, as well as characteristics of such leadership. Two themes were identified as being inherent to transformational leadership: transformational leadership questions assumptions and encourages creative thinking and it values subordinates. So, problem-solving and intellectual creativity are valued, as is the development of the whole worker into a leader in his own right. To accomplish these ends, the transformational leader must be able to generate a bond between himself and his subordinates through his own development as a transformational leader. Further, the transformational leader must have "self-confidence, inner integrity, honesty, and personal values (p. 104)." Tucker and Russell continue with the thought that the transformational leader must not only use his rational faculties, but also his empathic faculties to lead transformation. In this way, the leader can further engage his followers: he appeals to their minds and their hearts in leading them through positive change. "Such leaders attract internally motivated people, inspire them with a mission, and initiate new ways of thinking... The result is new influence on the culture of the organization (p. 105)."

As this article promotes ethical change management, the role of the leader as ethics proponent is clear. "(I)t is up to the leader...to determine what political and ethical impact the proposed change may have on the organization... (Antonellis, 2014, p. 82)." Further, "(t)he goal should be to bring about change that is effective and ethical; (the leader) must consider the politics, culture, and ethics as a system and know that he cannot totally control the system but can influence it by being an active participant (p. 87)."

### *Change Ready Cultures*

Long and Spurlock (2008) also cite authority as having impact on acceptance of change: decisions can be made autocratically or through consultation with stakeholders or as a group. Additionally, they listed a number of variables within the organization's culture that would dictate which of these models to use in effecting change, including amounts of information possessed by stakeholders, the likelihood of acceptance of change, the levels of cooperation, disagreement and creativity to be expected, and the level of change acceptance to be achieved with or without participation. Long and Spurlock (2008) identify "change ready" cultures.

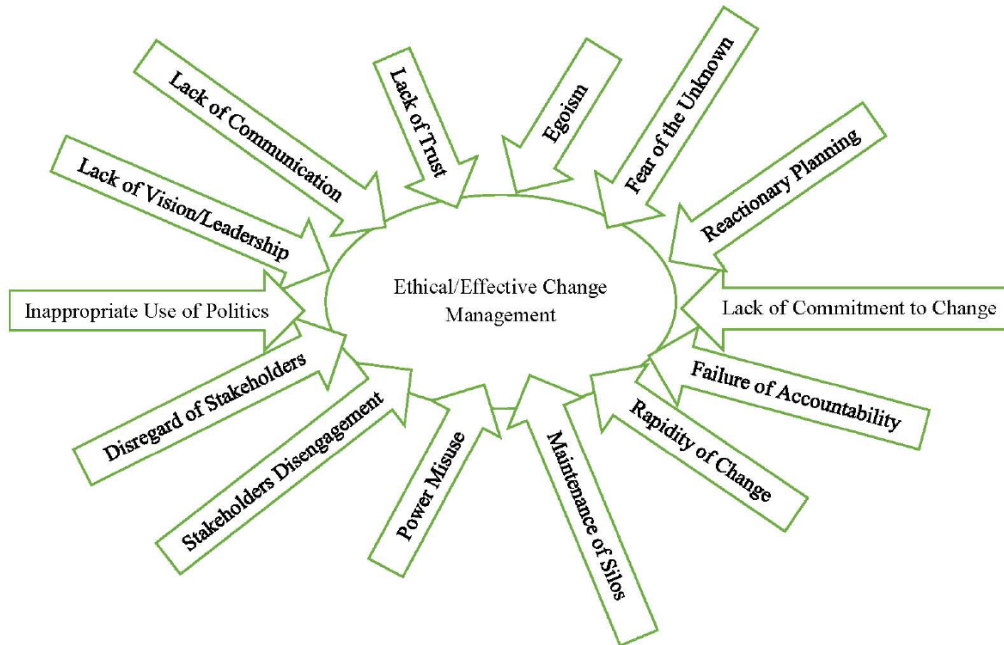
These cultures rest on the foundation of the vision of the leaders and the willingness of stakeholders to follow. They cite the issue of trust as of critical importance in the success of the change: the more trust the leader has, the more likely the changes will be designed and implemented successfully. "The stronger the level of change required, the more apparent the inherent trust (or distrust) of the employees for top management becomes (p. 30)."

Prokesch (2009) lists a set of attributes of innovative organizations: the characteristics of the culture that make it more amenable to change. Challenge/involvement is the trait that allows team members to feel a commitment to and to be challenged by their work, in which they take pride. Freedom and trust or openness represent the empowerment that team members feel when they know they are free to try something different, while trust allows them to feel safe in taking those risks, safe in sharing ideas and working with others. The attribute of idea time is connected to the concept of idea support: once the idea has been generated, it is important to foster an environment that supports the exploration and implementation of the idea. Idea time and playfulness/humor also seem to be closely connected. What he calls idea time is the time allotted to team members to think about and develop new ideas; the sense of humor is conducive to the workplace being a fun place to work, with easy going colleagues with whom one can relax. Conflict is his idea that team members may experience personal tension and interpersonal warfare: with change comes resistance and associated conflict. Two final attributes are risk taking and debate, both potentially related to conflict. Risk taking involves decision choice and implementation in uncertain conditions, a hallmark of change, while debate refers to the exploration of alternatives that could be chosen. These attributes of an innovative organization are such that allow a culture to be more amenable to change and more accepting of change when it happens.

Tucker and Russell (2004) raise the issue of knowing when it is time for organizational change. Citing Dess, Picken, and Lyon (1998), they assert that "(L)eaders must not only question the status quo of their organizations, but they must also engage in a process that yields transformational change (p. 105)." Long and Spurlock (2008) also note that there are indicators as to when it is time to change. They suggest that change is spurred by a response to a crisis situation, a more reactive stance, or, in a more proactive approach, the leaders precipitate change because they have anticipated changes in their environments in the future. In either of these situations ripe for change, "(T)iming is essential in the introduction and management of change. Supporting structures must be in place and communications plans must be well-developed prior to the adoption of change (p. 30)."

### *Obstacles to Change*

We know that successful change is the exception, not the rule. Much research has been done to identify reasons for change management failure. These pressures threatening ethical, effective change management are summarized in Figure 1.



**Figure 1.** Pressures Threatening Ethical/Effective Change Management

Long (2014) lists the bunker mentality as a symptom of resistance to change. "The sense that 'this too shall pass' is pervasive and understandable given [the political process] (p. 19)." Zanko, Badham, Couchman, and Schubert (2008) also note silos "have acted to resist and restrict many 'best practice' cross-functional innovations such as total quality management, business process re-engineering, teamworking and concurrent engineering (p. 565)." Boscherini, Chiaroni, Chiesa, and Frattine (2010) identify inertia to change as an obstacle to change. Further, they cite the idea of "unfreezing" of the status quo as being essential in change management. Gebert, Piske, Baga, Lanwehr, & Kearney (2006) identified stress as a problem in implementing change. Viewing change as a threatening environment, they note that people then attempt to cope with the stress. This coping mechanism is itself, in a way, part of the problem of resistance to change: first, those threatened must assess the threat (i.e., the change) and then determine how to respond. These cognitive processes are time and energy intensive, thereby detracting time and energy from an effective change process. According to Armenakis et al. (2011), some people's personal characteristics may not be as conducive to change as others, i.e., there may be issues with locus of control or core self-evaluation. Further, the differences could be on a more social plane: engineers may be more amenable to change than non-engineers, for example, or union members may be more comfortable with change than less highly protected non-union workers.

Long and Spurlock (2008) also address the issue of managing resistance to change. They cite the deviation from long-standing organizational traditions (i.e., "we've always done it this way"), as well as the fear of corresponding disruption that accompanies change associated with the introduction of new technology or new management strategies, including possible new staffing patterns. "(T)here is a level of resistance due to the move outside the organizational norms and comfort zones (p. 31)." Long and Spurlock (2008) identify a number of factors that increase resistance to change: lack of trust, belief that change is not necessary or feasible, economic threat, potential expense, fear of personal failure, loss of personal status or power, values and ideals are threatened, and interference is resented.

Again, they suggest that trust and communication are critically important in dealing with these factors. The fullness of the communication and the level of participation among followers in designing and implementing change can be of tremendous influence: the better the communication and the more participation that is allowed/encouraged breeds trust in the process and in the changes themselves.

## **Change Management Guidelines**

Tanasoaica (2008) offers eight phases to sustain change once the inertia associated with change has been overcome:

- Define the need and necessity for making improvements
- Create and communicate a unifying purpose
- Identify formal and informal work alliances and ensure their participation
- Create a plan for action
- Empower people to take action
- Create opportunities for small, meaningful accomplishments
- Expand the accomplishments and complete the unfinished change activities
- Reinforce the new approach

She also offers five steps designed to the change process. Initially, the change should be assessed and the changes approved and scheduled. Her third suggestion is that the change implementation be well-coordinated. Fourth, the change should actually occur: it should be prepared, disseminated and implemented. Finally, the changes should be reviewed and closed at the appropriate time. "Successful programs cross functional boundaries-people, processes, technology and physical infrastructure. Technology is an important consideration, but so are the people who operate the new system, the business process it supports and the work locations (p. 623)." Tanasoica (2008) also emphasizes the importance of the employee: not only should they be communicated with appropriately, but also given the opportunity to provide their own ideas as to the change and how it should proceed.

Boscherini et al. (2010), also basing their thoughts in part on Lewin's work (1947), note that change is a process: "a sequence of interconnected phases or stages, which allows for 'encapsulating the essentials of the richness of processes in a simpler account of stepwise development or typical activities (p. 1070)." The stages of a pilot project are presented in a way that allows for transference from the changes merely associated with a pilot project to a general model of change management. They suggest that there are three steps a project goes through that are commensurate with organizational/culture change: conception of what needs to be changed and how, realization of the changes and a transfer of the changes into the organization as a whole. In the first two stages, what are called the ideation and realization stages, again we see that what needs to be changed should be identified, through environmental scans and an honest organizational assessment with regards to what needs to be done and that the changes should be folded into the firm's ongoing operations. The third stage, the transfer stage, is the point at which the entire organization feels the effect of the changes as they are subsumed into the everyday operations of the firm. This is a good progression in that an honest assessment of what is wrong must be the precursor to positive change and in that change should be incremental. This incremental introduction of significant change has the merit of potentially reducing the resistance to the change and making it more likely that the change will be accepted and implemented properly throughout the entire organization.

Building on Lewin's work (1947), Armenakis et al. (2011) tailor the three phase model of unfreezing, moving and freezing into two models: the readiness model and the adoption and institutionalization model of organizational change. The readiness model encompasses a wide array of ideas, including that the change leader must "sell" the change to the recipients. They identify global (upper level management) and local (lower level management/employees) change agents, as well as horizontal agents, also identified as opinion leaders. The latter type of change agents, the horizontal change agents, are characterized by their credibility: their honesty, competence, inspiration and vision. The credibility of the change agent is vitally important as a source of trusted communications, communications which can do much to overcome resistance to change. The horizontal change agent can influence employee beliefs: why the change is needed (discrepancy), why the change is right for the organization (appropriateness), why change recipients should have confidence in their knowledge, skills and abilities to successfully implement the change. Two other beliefs that can be influenced include the concept of principal support and valence. Principal support is the message that the change agents are themselves experiencing the change and all that goes with it, including senses of anxiety, doubt, perhaps hope and the attempt to discern goal achievement. Valence is the notion that change recipients should feel some connection to the change, i.e., how the change will affect them and whether the affect will be positive in nature or not.

In order to more effectively precipitate change, Armenakis et al. (2011) suggest that the message is of vital importance, not just the content of the message, i.e., what the change is or why it is needful, but the delivery and reception of the message, as well. They list numerous facets of a message that can impact its successful dissemination and acceptance. Persuasive communication is suggested: this includes multiple venues or paths down which the message can travel, such as scripted live speeches to groups, informal discussion among various stakeholders and written, formal communications. Active participation is the element of communication which allows the information recipient to be involved through self-discovery (vicarious learning, enactive mastery or participative problem-solving/decision-making). Such participation allows for the 'buy-in' noted by many authors as important for the change success: empower the employees in the success of the changes to give them a positive sense of ownership in the changes. The authors also suggest, relative to communications, that external information be well-managed: what the change recipients see in newspaper and on the Internet can have an impact on how they view the change, i.e., do they know about the changes, did management alert them to changes before it alerted others not immediately or personally connected with the changes, etc. Finally, in the readiness model, assessment was defined as "a measure (of the beliefs) of how ready the change recipients are to begin the implementation process (p. 301)." Once this assessment has been made, to determine how ready the organization is to receive the changes, the institutionalization model can be incorporated into change management.

The institutionalization model proposed by Armenakis et al. (2011) includes a number of the same ideas as the readiness model, namely the elements for the change agents and recipients and the message. The difference is in the issue of whether the changes will 'stick:' "(W)hereas the readiness strategies are intended to get change recipients to embrace the idea of the change, the seven institutionalization strategies are intended to reinforce [their emphasis] each belief comprising the change message transmitted in the readiness program during the implementation process (p. 311)." Their ideal of commitment, a key component of reinforcement, encapsulates the ideals of compliance to commitment (be rewarded for adoption of change or punished for failure to do so), identification of commitment (intensity and personal belief in change) and internalization of commitment (organizational values are internalized within the change recipient). The seven strategies of the institutionalization model are the use of persuasive communication and symbolism, the incorporation of diffusion practices, a formalization of activities associated with the changes, active participation, the management of internal and external information and the assessment piece similar to that found in the readiness model. Some of these strategies are similar to those described in the readiness model; the idea of diffusion practices, however, needs a bit of explanation. Diffusion practices include mechanisms by which the changes are actually made: organized sessions to discuss the changes, how to implement the changes, what effect the changes are hoped to have, etc. should be held.



In a presentation concerning corporate performance management (CPM) systems, Lawson, Hatch, and Desroches (2013) offered six elements necessary for effective change. They first suggest that the firm's mission and vision should be clear: "contributors (should) understand how their actions support or detract from them (p. 46)." The development of goals for both or either individual and organizational units can aid in those individual's and/or unit's alignment with the overall goals of the firm and aid in the achievement of those goals: it is easier to work towards a known goal than to work in a mission or vision vacuum. A second requirement to development and implementation of effective and ethical change is the requirement that among all stakeholders there is transparency and accountability. "This entails having full, accurate, and timely disclosure of information within each area and throughout the company. Accompanying this is the need for managers to report, explain, and be answerable for the consequences of their actions (p. 47)." This reflects the need to those involved in the proposed changes to be able to trust those in leadership positions and to know that their own as well as their leaders' actions will in fact be noted: they will be responsible for their successes and failures.

The third element Lawson et al. offer is that there are mechanisms for the management function of control. Information should be gathered and reviewed and actually used to improve performance. The authors assert that learning organizations are those that review pertinent information and act upon it appropriately in decision making. Conflict resolution is also an integral element of effective, ethical change management. This requires "the identification of issues, consideration of all factors involved, and the resolution of the conflict on a fair and reasonable basis (p. 48)." Not only do principles of good management abide here, but also basic principle of ethics: fairness and justice in the resolution of differences is an inherent process of good management by any definition.

The final two elements of an effective change management process are the establishment of trust in the data used to develop and implement the change, as well as the availability and currency of the information. Noting cynically that there may not be just one "truth" in the firm, the authors suggest that multiple, competing sources of data and the "lack of a single, consistent set of data can lead people to distrust it (p. 48)." The issue with a lack of trust, particularly in information, is that poor information leads to poor decisions being made, hardly a positive outcome for change management. Finally, the availability and currency of information was cited as being important: this was seen as "the ability to easily retrieve up-to-date information (p. 49)" when needed. Having good information in a timely fashion is key from a change management prospective.

Many of the elements offered here of successful plans for change management are similar across the research. They are also remarkably apt in terms of ethical application. Table 1 is a summary of the change management processes as described above. In our development of a code of ethical change management, we

will use the ideals presented to tie change management processes to ethical principles.

**Table 1.** Change Management Guidelines (Tanasoica, 2008; Boscherini et al., 2010; Armenakis et al., 2011; Lawson et al., 2013)

Principle	Tanasoica (2008)	Boscherini et al.(2010)	Armenakis et al.(2011)	Lawson et al. (2013)
Planning	Design of plan	Conceptualization of what needs to change and how	Planning	Alignment with mission
Honest, credible, good faith trust	Communication of unifying purpose		Trust and Credibility	Common trust in data
Constant communication, transparency and accountability	Reinforcement of changes		Communication, symbolism, formalization	Transparency and accountability
Unification of workforce	Identification of work alliances		Support and camaraderie	
Empowerment, democratic participation	Empowerment and participation		Empowerment and active participation	Conflict resolution
Change implementation	Creation of opportunities for discreet change success, as well as expansion of changes	Change assimilation opportunities Implementation of changes	Incorporation of diffusion practices	Availability of information
Review, revision of change success	Necessity for change defined	Honest organizational assessment	Assessment	Action on insights

## The Ethical Model

Jin, Drozdenko, and DeLoughy (2013) offer that mindset, or “persisting patterns of human value and action judgments,” is pertinent to ethical change management (p. 15). “Organizations which were more socially responsible were also more ethical and more morally reflective (p. 16).” In writing about the financial markets crisis of 2008, those authors develop the theme that a fresh mindset is required, mandating ethical, independent thought that is greater than mere legal, economic or business models. Such a mindset should be grounded in “virtues, respect for human dignity, and the common good. This basic premise is consistent

with a strong bent of social responsibility commitment (p. 16).” We offer our chosen “mindset” of ethics, embodied in a code of ethics that is commensurate with both the dictates of effective change management and good business ethics. To develop our code, we use two deontological analyses: the Aristotelian virtues and the Kantian analysis are most conducive to this effort, particularly in light of Jin et al.’s statement that virtue, respect and the common good are key elements to an ethical, effective change management strategy. We have reviewed the concept of ethics: the ability to judge between right and wrong. We now turn to the practical application of ethics; it can be applied as to a person’s characteristics or to his actions. The virtues are relative to a person’s, in this case a leader’s, actions, while the Kantian analysis is particularly apt to the actions of leaders in change management initiatives.

Virtues are traits that are morally desirable (Barnes & Smith, 1984; Bragues, 2006). “A moral virtue is an acquired disposition that is valued as part of the character of a morally good human being and that is exhibited in the person’s habitual behavior.” Virtues are acquired in a similar way to the acquisition of culture in that virtues grow and develop within that person, in a reasoned and sought-out way. The moral virtues envisioned by Aristotle are the median ground of a continuum of extreme behaviors. Virtues that are particularly pertinent to change management include courage, self-control, generosity, magnificence, magnanimity, justice, and sociability.

Courage is the ability to regulate fear. Change takes a good deal of courage: this virtue, then, for both change leaders and followers, requires the strength of character to accept that change is necessary and the courage to proceed with development and implementation of change. Self-control reflects attitudes towards pleasure and self-gratification: the change leader should not ‘seize power’ for personal gain. The change leader should limit his ego and restrict the use of his power to appropriate venues and efforts. Commensurately, stakeholders involved in the change should control their reactions to change: they should exercise temperance in their measured responses. Generosity is related to the attainment of wealth. This too is pertinent to ethical change management: all stakeholders seek the best value for their efforts, in the provision of goods or services, in the use of goods and services or in the existence of goods and services in society; effective change management equates to better value.

Closely related to the idea of generosity is the concept of magnificence, the expenditure of large sums in the right way for a good reason. This reflects the idea that the firm should use its assets appropriately, usefully in effecting change management. In this way, not only the firm benefits from increased efficiency, for example, but so does society as a whole. Another virtue closely related to both magnificence and generosity is magnanimity: the idea that one should have value and respect for great honors, in this case, the receipt of trust from stakeholders involved in development and implementation of the changes envisioned.

Sociability and justice are the final two virtues we find relevant to the discussion of ethical change management. Sociability is the ideal that one should act pleasantly and professionally with others. Regardless of venue or circumstance, this virtue should be present in all interactions in person, in business, among all stakeholders. We find that this virtue could be especially important in change management given the obstacles to change that management must overcome, obstacles like fear of the unknown, lack of communication, lack of trust, inappropriate use of politics/power, etc. Lastly, justice is a virtue reflecting the allocation of goods exactly as they are deserved. "Aristotle wants people to value things at their real worth in their exchanges, but he recognizes the cultivation of proper tastes is the task of moral education (Bragues, 2006, p. 350)." Thus, one should consider in change management each stakeholder, how they are affected by the potential change and how to ameliorate negative consequences and heighten positive circumstances. It is our belief that the adoption of these virtues can counteract, if not obviate most, if not all, of the reasons for resistance to change. If one acts according to these virtues, one will, as a matter of course, act in an ethical, morally correct way - this is no less true for effective change management and leadership.

The use of virtues does require self-discipline of the stakeholders, actors and action recipients. The Kantian analysis also requires a type of self-discipline among actors. The Kantian analysis (Kant, 1964) can be simplified into three questions, which are deemed Kant's Categorical Imperatives. The Kantian analysis can be even further reduced to the simple statement that one should do unto others as they would have others do unto them. The three questions, the Categorical Imperatives, are the first order moral principles. Thus, we are categorically commanded to follow the moral law. The answers to these questions provide second order moral principles.

The decision maker must be in a rational state in order to appropriately utilize this moral decision-making model. All three moral rules prompted by the questions are absolutely required to be followed; the answers to the questions must all be positive for a moral duty to exist. First, the action should be universally consistent: it must be an action that one would accept being done to oneself and it must be an action that one would accept being done to anyone/everyone else, from a beloved family member to a sworn enemy. Second, the action must respect individuals as inherently valuable in and of themselves, apart from any benefit that they might provide the actor. Third, the action must acknowledge and respect the autonomy of all rational beings, their freedom of choice. If the answers to any one of the questions are negative, there is a moral obligation not to engage in the action. Like the Aristotelian virtues, the Kantian analysis represents a deontological approach to ethical decision making, that is, the approach that an action is right or wrong inherently, without regard to the consequences of the action.

A brief application of Kant to change management principles indicates that this approach to business ethics is an appropriate one. For example, good change management requires effective communication and the building of trust among stakeholders. If one were asked whether one would like to be effectively communicated with and whether one would accept others being effectively communicated with, the principle of communication meets Kant's first question positively. With regard to treatment of people as ends in and of themselves, the change management principle of communication is inherently important: stakeholders who will be affected by potential changes should be told so that they can arrange their actions in suitable response. Finally, ethical change management principles are commensurate with the idea of respecting people's freedom of choice: all stakeholders are free to work within the system that is changing or they are free to exit that system and find one that suits their skills, abilities and knowledge best.

Table 2 represents the streamlining of the ethical values found in the Aristotelian and Kantian analysis. We further compare those values to main principles of effective change management offered in Table 3. From these two tables, we construct a set of practices that reflect ethical change management, presented in Table 4.

**Table 2.** Ethical Principles Refined (Adapted from Payne, Lundberg, & Zingoni, 2014)

Concepts	Aristotelian Virtues (Barnes & Smith, 1984; Bragues, 2006)	Kant (1964)
Consistency	Self-control	Universally consistent actions
Respect individuals	Generosity	Respect individuals as inherently valuable
Autonomy for all	Sociability	Respect autonomy of all rational beings
Integrity	Courage	
Justice	Justice	
Utility	Magnificence	
Competence	Magnanimity	

**Table 3.** Ethical Principles Match Change Management Principles

Ethical Principle	Change Management Principle
Utility, competence	Planning
Consistency, respect, autonomy, integrity	Honest, credible, good faith trust
Consistency, respect, integrity, justice	Constant communication, transparency and accountability
Respect, justice, utility, competence	Unification of workforce
Respect, justice, utility, competence	Empowerment, democratic participation
Consistency, respect, autonomy, utility,	Change implementation

competence	
Consistency, integrity, utility, competence	Review, revision of change success

**Table 4.** Code of Ethical Change Management

<b>Ethical Principle</b>	<b>Change Management Principle</b>	<b>Ethical Practice</b>
Utility, competence	Planning	Understand and communicate to all stakeholders the reason for and goal of the proposed change; Align change with mission/vision of organization; Implement inclusive planning allowing an opportunity for stakeholders to participate if they so desire.
Consistency, respect, autonomy, integrity	Honest, credible, good faith, trust	Consider the short and long-term impact on all stakeholders; Commit to responding to questions and concerns regarding the proposed change with a mandate of providing consistent and truthful responses across all inquiries.
Consistency, respect, integrity, justice	Constant communication, transparency and accountability	Stakeholders should be informed throughout the process and channels for two-way flow of communication be provided and respected.
Respect, justice, utility, competence	Unification of workforce	Members of the workforce at all levels and across all departments should be involved in the process of change; Identify and eliminate silos and the “us versus them” mentality among discreet business units within the organization.
Respect, justice, utility, competence	Empowerment, democratic participation	The members mentioned above should have a meaningful role and voice in the process of change.
Consistency, respect, autonomy, utility, competence	Change implementation	As the change moves from the planning to implementation stage, the workforce should be informed, incentivized and motivated to participate.
Consistency, integrity, utility, competence	Review, revision of change success	Once implemented, the success/failure of the change should be assessed by all stakeholders with a goal towards continuous improvement.

Change managers are encouraged to adhere to these practices outlined in Table 4 to achieve the desirable results. During the process of change, managers must understand and communicate to all stakeholders the reason for and goal of the proposed change. In 2008, Grupo Santander acquired a number of established UK financial institutions and set about communicating to all stakeholders its reasons for doing so and the “value of shedding its old ways” (Arnold, 2015). Stakeholder buy-

in was critical to this successful acquisition. In addition, change must align with the mission and vision of the organization. Texas Children's Hospital implemented an electronic medical records system as it aligned with its mission of continuous improvement of patient care and safety (Elam & Christensen, 2009). Further, the hospital implemented inclusive planning by forming a change management team and on-the-ground peer mentors.

Managers must consider the short and long-term impact on all stakeholders and should commit to responding truthfully and candidly to questions and concerns regarding the proposed change. Stakeholders should be informed throughout the process, and channels for two-way flow of communication should be provided and respected. Shell Oil implemented major change in 2004 as a result of the oil reserve crisis. The project, named Shell Downstream-One, included briefing all impacted stakeholders and listening to concerns. This allowed Shell to make adjustments early in the process, thus ensuring a successful implementation (Arnold, 2015). This also provided stakeholders with a meaningful role in the change and gave them a true voice in the process.

In addition to involving members of the workforce at all levels and across all departments in the process, management must identify and eliminate silos and the "us versus them" mentality in the organization. This may require management to engage in more targeted buy-in efforts amongst groups resisting change. A clear explanation of the resulting greater good and benefits for all should help overcome these silos.

The workforce should not only be involved in planning, but also in implementation. Motivating employees to participate in the change and incentivizing them to do so is critical. Punitive approaches in change management are cancerous, and it, therefore, is critical for managers to understand what the workforce values and leverage this value system (i.e., Chowdhury, 2007; Keller & Szilagyi, 1976; Locke, Latham, & Erez, 1988; Whitney, 2010). Lastly, once change is implemented, all stakeholders will be involved in the assessment of change and work towards continuous improvement.



## Limitations and Future Research

This paper is limited in several ways which also form the opportunities to engage in continued research on this issue of the ethics of change management. One limitation is the qualitative focus of our assertions that good ethics equals good business equals good change management. The next step in addressing this limitation is to develop an instrument that could be used to empirically support our proposal. Thus, we can ask whether leaders and/or followers use good business ethics principles in effecting change management and whether such incorporation of good business ethics principles in change management actually make a positive difference in the management of the change.

Further, industry specific applications of our proposed scheme of ethical change management principles are encouraged and should prove fruitful for future researchers. For instance, higher education is undergoing tremendous change at this time in history and is thus ripe for the application of effective and ethical change management principle. A detailed case analysis such as this could provide support for our proposed code and be beneficial to academics and practitioners. Other industries such as healthcare and information technology are good targets for this form of investigation, too.

Finally, it is important to note that this proposed approach is only suitable for organizations that have developed a culture that values democratic and participative work environments. Given the heavy reliance on workforce and stakeholder participation, feedback and buy-in, organizations relying on autocratic leadership and unwilling to change would be not be open to this approach to ethical change.

## References

- Ackoff, R. (1999). Transformational leadership. *Strategy & Leadership*, 27, 20-25.
- Antonellis, Jr., P. J. (2014). How politics and ethics can affect change management. *Fire Engineering*, June, 81-88.
- Armenakis, A., Brown, S., & Mehta, A. (2011). Organizational culture: Assessment and transformation. *Journal of Change Management*, 11(3), 305-328.
- Arnold, P. (2015). The 5 greatest examples of change management in business history. *Change Management Institute*. Retrieved from <http://www.managers.org.uk/insights/news/2015/july/the-5-greatest-examples-of-change-management-in-business-history>.
- Balogun, J., & Hope Hailey, V. (2004). *Exploring Strategic Change* (2<sup>nd</sup> ed.). London: Prentice Hall.

- Barnes, J. A., & Smith, W. D. (1984). *The Complete Works of Aristotle the Revised Oxford Translation* Edited by Jonathan Barnes.
- Boatright, J.R. (1991). Bridging the gulf between management practice and ethical theory. *Business Ethics Quarterly*, 1(4), 449-459.
- Boscherini, L., Chiaroni, D., Chiesa, V., & Frattine, F. (2010). How to use pilot projects to implement open innovation. *International Journal of Innovation Management*, 14(6), 1065-1097.
- Bowen, M.G., & Power, F.C. (1993). The moral manager: Communicative ethics and the Exxon Valdez disaster. *Business Ethics Quarterly*, 3(2), 97-116.
- Bragues, G. (2006). Seek the good life, not money: The Aristotelian approach to business ethics. *Journal of Business Ethics*, 67 (4), 341-357.
- Burnes, B. (2009). Reflections: Ethics and organizational change – time for a return to Lewinian values. *Journal of Change Management*, 9(4), 359-381.
- Burnes, B., & By, R. T. (2012). Leadership and change: The case for greater ethical clarity. *Journal of Business Ethics*, 108, 239-252.
- By, R. T. (2005). Organisational change management: A critical review. *Journal of Change Management*, 5(4), 369-380.
- Chowdhury, M.S. (2007). Enhancing motivation and work performance of the salespeople: The impact of supervisors' behavior. *African Journal of Business Management*, 1(9), 238-243.
- Coetzee, R., Visagie, J., & Ukpere, W. (2014). Responding to change in a large organization from a leadership angle. *Mediterranean Journal of Social Sciences*, 5(20), 827-837.
- Cohen, D.V. (1993). Creating and maintaining ethical work climates: Anomie in the workplace and implications for managing change. *Business Ethics Quarterly*, 3(4), 343-358.
- DeGeorge, R. T. (2010). *Business Ethics* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.
- Dess, G., Picken, J., & Lyon, D. (1998). Transformational leadership: Lessons from US experience. *Long Range Planning*, 31(5), 722-731.
- Elam, S., & Christensen, T. (2009). Helping employees to adapt to change at Texas Children's Hospital. *Prosci*. Retrieved from <http://blog.prosci.com/helping-employees-adapt-to-change>.
- Evans, J., & Schaefer, C. (2001). *Ten tasks of change: Demystifying changing organizations*. Hoboken, NJ: Wiley.

- Gebert, D., Piske, R., Baga, T., Lanwehr, R., & Kearney, E. (2006). Empowerment in the context of transformational change: A study of acquisitions and privatizations in Eastern Europe. *Journal of Leadership & Organizational Studies*, 12(3), 101-118.
- Jaeger, J. (2013). Shop talk: The ROI of a strong ethical culture. *Compliance Week*. Retrieved from <https://www.complianceweek.com/news/roundtable-coverage/shop-talk-the-roi-of-a-strong-ethical-culture#.WXeL3YjyviU>.
- Jin, K. G., Drozdenko, R., & DeLoughy, S. (2013). The role of corporate value clusters in ethics, social responsibility, and performance: A study of financial professionals and implications for the financial meltdown. *Journal of Business Ethics*, 112, 15-24.
- Jones, J., Aguirre, D., & Calderone, M. (2004). 10 Principles of change management: Tools and techniques to help companies transform quickly. *Resilience Report: Strategy + Business Magazine*, Booz & Company, Inc., April 15, 1-4.
- Kant, I. (1964). *Groundwork of the metaphysics of morals*, translation by H. J. Paton. New York: Harper & Row.
- Keller, R.T., & Szilagy, A.D. (1976). Employee reactions to leader reward behavior. *Academy of Management Journal*, 19(4), 619-627.
- Lawson, R., Hatch, T., & Desroches, D. (2013). How corporate culture affects performance management. *Strategic Finance*, January, 42-50.
- Lewin, K. (1947). Frontiers in group dynamics. *Human Relations*, 1, 5-41.
- Litch, B. (2005). Facing change in an organization: How to chart your way through the chaos. *Healthcare Executive*, SEPT/OCT, 20-24.
- Locke, E.A., Latham, G.P., & Erez, M. (1988). The determinants of goal commitment. *Academy of Management Review*, 13(1), 23-39.
- Long, V. (2014). Turning the local government ship starboard: Six keys to activating organizational culture change. *Public Management*, Jan/Feb, 16-19.
- Long, S., & Spurlock, D. G. (2008). Motivation and stakeholder acceptance in technology-driven change management: Implications for the engineering manager. *Engineering Management Journal*, 20(2), 30-36.
- Millman, G. J. (2007). Corporate culture: More myth than reality?. *Financial Executive*, July/August, 44-47.
- Moran, J. W., & Brightman, B. K. (2001). Leading organizational change. *Career Development International*, 6(2), 111-118.
- Parmer, B., Freeman, R., Harrison, J. Wicks, A., Purnell, L., & de Colle, S. (2010). Stakeholder theory: The state of the art. *The Academy of Management Annals*, 4(1), 403-445.

- Payne, D., Lundberg, O., & Zingoni, M. (2014). Professional Codes of Conduct for Academics: Not Just an academic exercise. *Ethics & Critical Thinking Journal*, 4, 53-85.
- Prokesch, S. (2009). How GE teaches teams to lead change. *Harvard Business Review*, January, 99-106.
- Raiborn, C., & Payne, D. (1990). Corporate codes of conduct: A collective conscience and continuum. *Journal of Business Ethics*, 9, 879-889.
- Schaubroeck, J. M., Hannah, S. T., Avolio, B. J., Kozlowski, S. W. J., Lord, R. G., Trevino, L. K., Dimotakis, N., & Peng, A. C. (2012). Embedding ethical leadership within and across organization levels. *Academy of Management Journal*, 55(5), 1053-1078.
- Schein, C. (2004). *Organizational culture and leadership* (3<sup>rd</sup> ed.). San Francisco, CA: Jossey-Bass.
- Shieh, C.J., & Wang, IM. (2010). A study of the relationships between corporate core competence, management innovation and corporate culture. *International Journal of Organizational Innovation*, 2(3), 395-411.
- Tanasoaica, L.G. (2008). Change management – Resistance to the change. *Romanian-American University, Faculty of European Economic Studies*, 1. Retrieved from <http://steconomice.uoradea.ro/anale/volume/2008/v4-management-marketing/112.pdf>.
- Tucker, B. A., & Russell, R. F. (2004). The influence of the transformational leader. *Journal of Leadership and Organizational Studies*, 10(4), 103-111.
- Velasquez, M. G. (1998). *Business Ethics, Cases and Concepts* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.
- Whitney, K. (2010). Shifting gears - managing change using motivation, rewards and incentives. *Premium Incentive Products Magazine*. Retrieved from [http://pipmag.com/feature\\_print.php?fid=201003fe03](http://pipmag.com/feature_print.php?fid=201003fe03).
- Wood-Harper, A. T., Corder, S., Wood, J. R. G., & Watson, H. (1996). How we profess: The ethical systems analyst. *Communications of the ACM*, 39(3), 69-77.
- Zanko, M., Badham, R., Couchman, P., & Schubert, M. (2008). Innovation and HRM: Absences and politics. *The International Journal of Human Resource Management*, 19(4), 562-581.

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# Understanding Bi-directional Media Consumption in Online Shopping: A Case of Three Cities in India

Varsha Jain  
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Akansha Boaz  
Amrita Bansal

*The aim of the study is to develop a framework that simultaneously studies the intended purchase and the nature of the medium. The primary rationale for this study is to develop an actionable framework that can deal with the dimensions of the technological medium and the intended usage as simultaneous factors that interact and influence each other in a bi-directional format. To address the objectives of the paper, qualitative methods including Netnography, Focus Group Discussions (FGD), and In-depth interviews were carried out. The analyzing of data helped in the development of a robust and comprehensive framework that engages with the bi-directional dynamism of the acceptance of the medium and its intended usage.*

**Keywords:** Bi-directional media, intended usage of media, generation Y.

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## Introduction

The global e-retail market is growing exponentially at a rate of 839.8 billion US dollars' sales. This is projected to grow to 1.5 trillion US dollars by 2018. North America and UK are leaders in this sector. However, this growth has stagnated. Conversely, there has been a consistent growth in the Asia Pacific region for online shopping. Currently, this market accounts for 33% of the market for e-commerce industry. The growth in these markets is observed specifically in nations such as India as it has had 10.68 billion USD sales for online shopping in 2015 (Statista, 2015). The Indian e-commerce market has huge potential as consumers extensively use the internet, explore e-commerce websites intensely and buy widely from the online platforms. Thus, brands use different media platforms to attract more consumers. These brands expose e-consumers to multiple channels with consistent messages (LithExcelMarketing, 2009)

Historically, they used traditional channels such television, print and radio. However, brands have started using these platforms for multi-channel communication (Laroche, Kiani, Economakis, & Richard, 2013). Specifically, social media emerged as the most promising medium as it has real time features and consumers can connect with the brands immediately and increase their engagement levels. This engagement could be further enhanced by integrating new media platforms such as company websites, digital platforms, vlogs and electronic mails. This behavior encouraged the professionals to focus on the synergy of supplementary media. It was further observed that seventy percent of viewers used another device while watching TV (Kirkpatrick, 2017).

Further, the consumption of multiple channels was sequential. This type of media consumption has oriented marketers to integrate media channels (Du Plessis, 2017). Additionally, it was identified that this media consumption was undertaken primarily by Generation Y (Chaffey, 2016). Here, India is home to for 200 million consumers who use online platforms and 900 million consumers who use mobile phones indicating the potential of Generation Y (BCG & IMAI, 2015). This segment is referred to as the Millennial (Howe & Strauss, 2003), born between 1980 and 2000 (Weingarten, 2009). These consumers widely and simultaneously use integrated multiple media channels. However, studies have only considered online behavior (Jayanti, 2010; Sicilia, Ruiz, & Reynolds, 2006 and Patwardhan & Yang, 2003) and usage of multiple media by consumers (Hajli, 2014; Chu & Kim, 2011 and Van Noort, Antheunis, & Verlegh, 2014). Most studies have treated intended transactions and the medium as discrete units. These studies have not considered that the intended transaction and the medium mutually influence each other. This mutual influence is bi-directional and the former see patterns of Generation Y consumers being uni-directional. Thus, the effectiveness of these extant studies is reduced. In order to maximize their effectiveness, this present study focuses on the interactions between media and the consumption by the consumers.

Further, the medium's characteristics are evaluated before the medium is used as a platform for consumption. This evaluation influences the products and services consumed. Thus, a positive evaluation of the medium used for consumption positively influences the consumption of products and services. This key characteristic has not been considered by extant studies. Therefore, the marketers and scholars would benefit from this re-synchronized consumption pattern by Generation Y consumers.

Thus, most models and studies do not simultaneously consider the influence of the intended purchase on the assessment of the medium. Thus, our study will be a unique and revisionary contribution because its framework simultaneously studies the intended purchase and the nature of the medium. This framework will focus on and explicate the bi-directional interactive dynamics of the medium, user and intended usage of the medium.

## **Literature Review**

There is literature on online shopping behavior, multiple channel consumption by the consumers and generation Y attributes. Hence, this study will use and extend it to develop a unique and key contribution. This intended contribution is to establish the synchronization between the media of consumption and the objects of consumption. Establishing this synchronization would show that the media and the objects of consumption are not discrete. Rather they influence each other in a bi-directional format.

In order to do so, the subsequent sub sections will deal with the relevant literature for the same.

### ***Multiple Media Consumption by Generation Y***

Generation Y refers to the generation born between the years 1980 and 2000 (Weingarten, 2009). Generation Y try out new things like online shopping. The benefits such as the availability of wide variety of assortments, time saving, heavy discounts, easy use and being informative make it more attractive for them (Singla, 2013). Another behavior that they exhibit is the consumption of content using multiple devices. A study states that a user accessing multiple media outlets used by service and product providers searches more extensively for the brand online (Nielsen, 2011).

It states that television and the internet is far more effective than the combination of commercial radio and internet in generating searches online (Laroche

et al., 2013). The new digital platforms include banner advertising, search and display advertising and sync apps. These media platforms play a significant role in enhancing the consumer interaction with the brand (Cho, 2003). Research has also shown that the active results of search and display based advertising have played a significant role in enhancing the consumer and brand interaction. Here, internet and online advertising have increased the brand awareness and consumer- brand interactions (PR Newswire, 2002). It has enhanced connectivity with the brand (Shalhoub, Aversano, Marsh, & Jacobs, 2014). Thus, it is inevitable that the traditional media platforms such as print, television, radio, sales promotion need to be integrated with the new medium to increase consumer interaction (Naik & Raman, 2003). The common feature in all these formats of behavior is that the usefulness and practical benefits of a medium are not inherently present in the medium itself. That is to say that a medium is not favored or preferred over another medium because the medium is known to be or associated with specific characteristics. Rather, these characteristics emerge in tandem with the intended use of the medium. This means that the user of the medium encounters and engages with the advantages in the context of the product or service consumed via that medium. Thus, the selection of the medium is a bi-directional phenomenon influenced by the intended usage and the product or service shopped. And this is influenced by the medium's characteristics. This usage is explicitly observed in the context of online shopping patterns of Generation Y.

### *Internet enhanced buying pattern of Generation Y*

The literature has emphasized on the factors driving the online purchase intentions of the consumers. Technology and dependability are important influences governing the users; engagement with online shopping. The reason for the same is that lack of certainty is greater in online shopping. Concerns about uncertainty results in trust being important for online shopping (Tan & Thoen, 2002). Thus, this element becomes imperative for the brands to develop credibility. Here, trust can range from speedy delivery to secure payment options (McKnight, Choudhury, & Kacmar, 2002). Brands would need to establish a longitudinal base of trust online (Johnston & Werkentin, 2014).

This includes reviews from friends, previous experiences and the brands' digital media presence. Further, to develop trust among these consumers, online e-commerce brands need to constantly interact with them. Hence, it is very important to understand their media consumption patterns. These patterns are different from those of the earlier approaches of this segment. This difference is primarily seen in the bi-directional pattern which has not been studied in the earlier literature. Further, Laudon and Traver (2009) have studied the role of web sites featuring the firm's abilities, the marketing communication's stimuli and the consumer's skills. Scholars (Prasad & Aryasari, 2009) have demonstrated the negative influence of poor

technology adoption on consumer preference of a shopping experience. Other scholars (Wang, Zhang, Ye, & Nguyen, 2005) have studied the positive influence of technology aided convenience on online shopping.

Zhou, Dai, and Zhang (2007) demonstrated those consumers' characteristics, the internet's efficacy, previous experience of online shopping, expectations of benefits and perception of risk play a significant role in adopting a technological medium. Further, the imperative of maintaining a high standard of service and product quality provided through various channels and enhancing the consumers' ability to search, compare and purchase products were fore grounded (Pantano & Viassone, 2015). Finally, the nature of online shopping has been studied extensively (Hill, Beatty, & Walsh, 2013). Despite this, most studies offer a unidirectional link between technology and online consumption. Further, they have not considered the medium's nature and online purchases and their constitution of the larger environment in which they interact. Thus, we need theoretical frameworks that study this sequential behavior of consumers across various media channels in the context of online shopping.

### ***Medium Theory***

According to medium theory, media such as television, newspaper, radio and internet are not only media through which messages are disseminated. Rather, they represent the symbolic environment of any communicative act. According to McLuhan (2010), it is imperative to understand the difference in media channels as the message is disseminated across different channels (Gupta, 2006). In medium theory, the medium's characteristic becomes important. Thus, every medium has a message, its content notwithstanding (Meyrowitz, 2008). This theory is invaluable to the study of the bi directional media consumption pattern of Generation Y in terms of online shopping.

The first reason is that the medium's message allows the individuals to interact more deeply with service providers and producers (Ruotsalainen & Heinonen, 2015). Another is that the individual becomes the content (Levinson, 2001). Finally, media facilitate change and are constantly shaped and reshaped by these individuals. This is because media are societal institutions (Klinger & Svensson, 2014) existing in the minds of the users and actualized through their actions. This can be understood as the development of meaning through the interaction created between the space and person over time as a transactional process affecting both the user and settings (Carr, 1992).

One of the most specific points where this interaction can be seen is the figure and ground. Figure refers to the medium used. Ground refers to the usage of the medium. The figure also refers to the capacities of the medium being used. The

ground also refers to the changes brought about in a medium after using it (Memarovic, Langheinrich, & Schieck, 2014). This interaction links medium theory to the consumers' online shopping. When these dimensions are incorporated in our study, the bi-directional characteristic of online shopping by Generation Y can be more explicitly developed. This development requires a greater understanding about technology acceptance. This will be dealt with in the subsequent section.

### ***Technology Acceptance***

Technology acceptance is an attitude towards the technology akin to its evaluation (Renaud & Biljon, 2008). Acceptance is a procedural interaction with the technology preceding adoption (Haddon, 2003). Most studies of technology acceptance deal with key factors such as technological features, organizational dimensions, individual characteristics, and their nexus (O'Neill, 2012). Further, technology has been studied through a technology predominant mode where technology's characteristics are the prime factors of acceptance (Davis, Bagozzi, & Warshaw, 1989 & Venkatesh & Davis, 2000) and a human-dominant mode where social elements are the primary drivers of the acceptance and adoption decisions (Rogers, 1983). This section understands technology acceptance by bridging the technological and human predominance. Thus, this study adopts the domestication of technology proposed by Silverstone and Haddon (1996). The first dimension is appropriation; this dimension is the means of possession or ownership of technology. It includes the motivation or requirement to own possess or use a technology or a medium. Thus, the user's perceived end results play a role from commencement to appropriation. The next dimension is objectification. This dimension ascertains the medium's roles. They are dependent on the user's socio economic micro elements. Here, the medium moves from being an impersonal facility/facilitator to being an extension and embedment of the consumer's activities. Lastly, the meanings and the functions there of are not fixed but dependent on the larger context of the user's socio cultural macro elements. The next dimension is incorporation which is the process of interacting with the medium. It is context specific to the individual episodes and complete span of the medium's usage. Further, incorporation is the process of the medium's usage for specific purposes. Here, the consumer continues the evaluation and extension of the medium.

Further, incorporation refers to the extended and reciprocal link between the actual intention of using the medium and the levels of difficulty or ease involved in using it. The final dimension is conversion which refers to creating multiple uses for the medium. This is affected by the previous usage of the medium with regards to specific contexts, especially online shopping. Further, conversion refers to the medium's ability to be an integral part of the consumer's life associated with their self and identity. Now, we need to understand the nuances of the user's perspective to understand these dimensions. This understanding would help us discover the bi-

directional nature of the medium consumption in terms of online shopping by Generation Y. This can be achieved as these dimensions elevate technology acceptance and medium theory. This elevation of the two theories would thus help us achieve the objectives of the study. In order to strengthen the means of achieving the objectives, another key framework is required. This structure is the design of technology.

### ***Design of Technology***

There is another structure needed to understand how technology influences the consumers' perceptions about self-efficacy (how effectively technology can be used to maximize the individual's effectiveness in terms of shopping), goals and behavioral dynamics. The primary reason is that technologies are interfaces playing a key role in the consumers attaining their goals and influences the overall context of the consumers' usage (Szalma, 2014). Further, technology needs to be designed in terms of the goals they are supposed to help attain (Olphert & Domadaran, 2004).

Thus, human-technology interface needs to be synchronized in a manner by which the medium, the user and the intended purchase perfectly complement each other. Thus, we will deal with the dimensions to ensure that it is affected by following Szalma's recommendations (2009). Here, the first dimension is autonomy. This refers to the optimal choice technology human interface provides the consumer in terms of achieving short term, long term goals and task performance. Also, autonomy is the synchronization of the media and user/consumer to ensure that the user/consumer is rewarded for their choice. The second dimension is competence which is the interface's characteristics related to the user's skills. It means that the medium needs to maximize the users' interaction with their environment. Competence is also the necessary changes in the medium that allows the consumers to achieve their goals through information feedback loops. This maximizes the fit of the medium with the consumers' requirements. These element needs to be supported by the earlier deliberations. This support will help us achieve the key objective of the study. We can now understand the research gaps of the study.

## **Research Gaps & Objectives**

This study's primary rationale was to develop an actionable frame work that helps us understand the bi directional of medium consumption in terms of online shopping carried out by Generation Y. To do so, we have to understand the technological medium or the intended purchases are linear successive stages following logic of progression. This logic is bi-directional dimensions and simultaneous. This element was not captured by the earlier literature.

Thus, our framework positions them as simultaneous bi directional factors. Further, our framework does not position the medium's functional ease as an inherently independent factor. Thus, the adoption of technology in this framework is not a singular end. Rather, it is a dimension affected by the users and the intended purchase's characteristics. More specifically, Davis, Bagozzi, and Warshaw (1992) have utilized perceived usefulness and perceived ease of use in explaining the users' beliefs towards the acceptance of technology. Venkatesh, Morris, Davis, & Davis (2003) improved the understanding of the accepting of technology by embedding motivation and positioned extrinsic and intrinsic motivations as predictors of the latter. Going further, the perceived usefulness of a medium or technology was studied and found to be a fundamental factor influencing the possibility of usage and changes over time with greater usage of the technology and the medium (Polger & Adamson, 2011). Yet, these studies have not considered the technological medium or the intended purchase as bi-directional constructs. Finally, there are almost no studies that consider the effect of the intended purchase on the medium's selection and the same on the intended purchase. Equally, there are studies that have investigated the effect of the medium on the user.

Thus, most studies focus on the effects of the medium on the user as precedent factors influencing the adoption of the technology. They do not realize that the medium's effects on the user play a consistent role through the purchase process and adoption of the medium, especially in the context of digitally savvy consumers, the Generation Y. Therefore, this study comprehends the bi-directional media consumption in the context of online shopping for Generation Y.

## Methodology

This study understands the multiple channels and factors affecting the consumers and their attitude in the case of online shopping. It will comprehend the bi directional consumption through various media channels vis a vis online shopping (Assael, 2011). Subsequently, this approach will be a nuanced engagement with the bi directional pattern of the consumers during online shopping. Thus, different techniques of qualitative research were used to understand this (Denzin & Lincoln, 2005). This led to the comprehension of bi directional media usage and online shopping processes of Generation Y in India. Hence, it is imperative to analyze the online shopping behavior through the relevant phases. The different phases gauged the varied complexities of the users' behavior *vis a vis* different media channels yielded directions for this study. The participants chosen for the study were of the age group 21-35 and residents of prominent cities.

These consumers used multiple screens and consumed supplementary media channels. They owned devices such as smart phone, laptops, and tablets. They were chosen for the study as a study by Google said that in India, there would be 100 million online shoppers by 2016. Specifically, 50 million would originate from Tier 1 cities (LiveMint, 2014). The study was carried out in different phases. These phases were imperative in understanding the entire process of online shopping behavior. This understanding would lead to a deeper engagement with the bi-directional media consumption of Generation Y which is the core objective of the study.

### ***Phase 1: Pre- Test***

Pre-Test a key aspect if research carried out on a selection of the intended population (Grimm, 2010). This reduces errors in framing the discussion and attenuating the researcher's bias (Denzin & Lincoln, 2005).

#### ***Pre-Test 1: Selection of Media Channels***

Based on Pre-Test 1, investigative and supplementary research was affected to comprehend the different contact points for the consumers online for shopping. The top five brands were finalized on the basis of their appeal, market leadership and growth (PWC India, 2015; Silicon India, 2016 and WiproCampusArena, 2016). A group of 40 respondents were mobilized. A selection of channels was offered. The respondents were requested to rank the media channels. The ranking was based on the maximum number of digital advertisements they had seen (WiproCampusArena, 2016 and LiveMint, 2014).

The respondents were provided with the following list - television, newspaper, magazines, radio, emails, SMS, Facebook ads, Twitter ads, mobile ads, in game mobile ads, banner ads on websites, YouTube Skippable/Non-Skippable Ads, out of home ads and search ads. Using the responses, the top five media channels were television, newspaper, Facebook ads, email and SMS.

### ***Phase 3: Qualitative Research***

We used different types of qualitative research methods to generate consumer insights from FGDs, netnography and in-depth interviews.

*FGDs*



FGDs were invaluable to the researchers as discussion were organic and capable of generating better insights. Also, the researcher's intent was explicitly provided and the discussion centered on the topics presented by the scholars (Morgan & Kreuger, 1993). Respondents generated several insights that helped the researchers figure out their perspectives (Malhotra & Dash, 2011). They tended to complement each other on most areas enabling the respondents to discuss the topic (Stern, 1992). Therefore, the Focus Group Discussions (FGD) helped us develop a deeper understanding of the online shopping behavior of Generation Y (Denzin & Lincoln, 2005).

### *Sampling and Protocol*

A composite of three FGDs were affected with representatives from the selected cities in India. These participants were primarily from Tier 1 cities such as Mumbai, Delhi and Bangalore. There is a very high internet rate in these cities (Richa, 2012). In Table 1, there is justification for these cities:

**Table 1.** Justification for Selection of Cities

City	Population	Demographics of the city	Consumption pattern of population
Mumbai	11.98 million	<ul style="list-style-type: none"> <li>- The highest population among Indian cities.</li> <li>- Called as "financial capital" of the country.</li> <li>- Urbanization and density of population is maximum.</li> <li>- The "cultural hub" of the country.</li> </ul>	<ul style="list-style-type: none"> <li>- Consumption of media by the (these) consumers are maximum.</li> <li>- Many (of these) consumers set trends, they are young professionals and HNIs (High Net Worth Individuals).</li> <li>- The film and television city of India. Exposure to these industries impacted consumption pattern of media platforms.</li> </ul>
Delhi	9.87 million	<ul style="list-style-type: none"> <li>- The 2nd most populated city of India.</li> <li>- The national capital, hence hub of trading and the largest center for small scale industry in Northern India.</li> <li>- Majority of the population belongs to the age group of 15-59 years.</li> <li>- Has 85% literacy rate which has enhanced the awareness of media platforms.</li> </ul>	<ul style="list-style-type: none"> <li>- The major city of Northern India, all the major brands on online media are available.</li> <li>- Consumers are brand conscious in the context of online shopping.</li> <li>- Penetration of internet is quite high.</li> <li>- Consumers use online platforms to buy products and avail the services.</li> </ul>
Bangalore	8.4 million	<ul style="list-style-type: none"> <li>- Urbanization and high</li> </ul>	<ul style="list-style-type: none"> <li>- More empowered consumers</li> </ul>

		demography. - The third most populous city. - Known as the "it hub" of India.	with high spending power. -The internet penetration rate is very high. - Two-thirds of the population explores online for any type of product or service information.
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(Sources: United Nations, 2014, Government Census Data, 2011 and Nielsen, 2014)

Each FGD had eight participants as this is the ideal strength (Malhotra & Dash, 2011). The three FGDs had an equal number of males and females. Each discussion was carried out for 45 minutes and facilitated by the author. Categories and themes were developed from the FGDs. The themes were supplemented by the relevant stages of qualitative research and aligned with the research objectives for effective analysis. Further, we conducted netnography to understand the online behavior of the consumers in the context of media consumption and online consumption and shopping.

### *Netnography*

Netnography helped gain rich qualitative data (Kozinets, 2010). The respondents' online behavior was studied through digital interactions, images, and preferences. The meanings and contexts of the activities were analyzed and used in the in-depth interviews. Additionally, we carried out active and passive netnography. Passive netnography analyzed the Facebook pages of the key e-commerce players like Myntra, Jabong, Flipkart and Amazon. Comments posted over the last 30 days were analyzed. Quora and relevant blogs were analyzed in a passive format. Quora was a top favorite for posting queries. Thus, Quora and YourStory.com, FreeKaMaal.com were liked by online shoppers. They were used to understand the consumer queries that were posted there.

### *In-Depth Interviews*

In-depth interviews were used to collect deeper and develop elaborate insights. After the FGDs, more insightful data were required about online shopping among Generation Y in India. Therefore, we conducted in depth interviews with 25 respondents. In depth interviews provided intense insights that helped understand the nuances of multi directional media consumption pattern by the consumers while shopping online (Kothari, 2006). These complementary methods helped us understand the bi directional nature of online shopping behavior of Generation Y. The demographic details of the respondents are provided in Table 2. Further, these

methods were complementary as this behavior was complex. Comprehending the same via one method was not feasible. Therefore, the subsequent section will deal with analysis of the insights developed through the same.

**Table 2.** Demographics of Target Group

Phases of research	Total Respondents	Age			Gender		City		Profession	
		21-25	26-30	31-35	Male	Female	Tier1	Tier2	Student	Working
PreTest	40	18	17	5	21	19	25	15	27	13
FGDs	24	14	10	0	12	12	14	10	18	6
In-depth Interviews	25	9	9	7	12	13	11	14	15	10

## Data Analysis

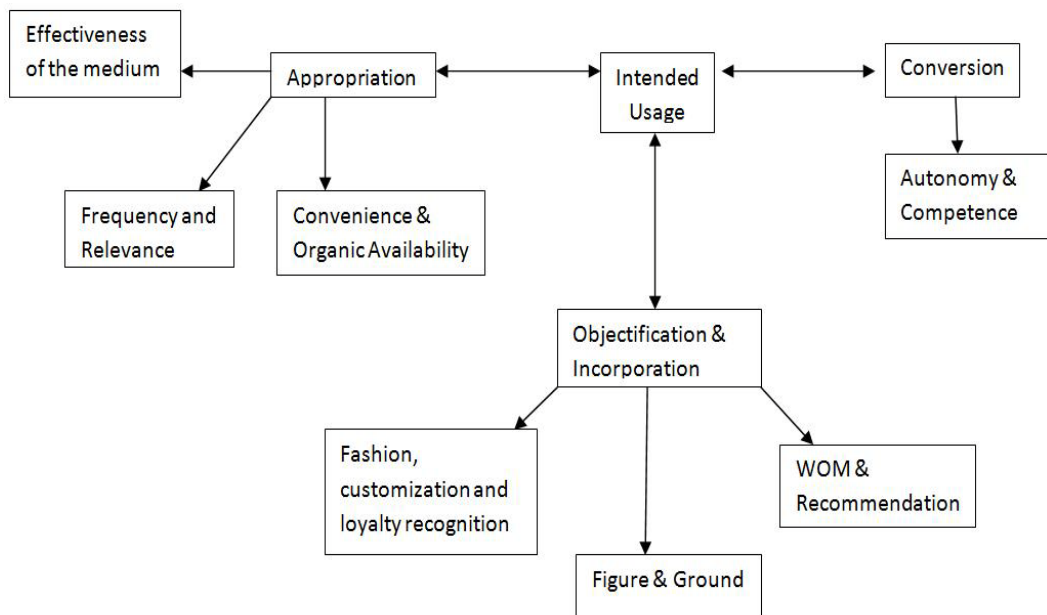
A sequential analysis of different methods was carried out to achieve the objectives of the study. Subsequently, the findings were evaluated to understand the bi-directional consumption of multiple channels for online shopping by generation Y. Open solicited diaries helped understand the present behavior of the users and encouraged them to share information in an unrestricted manner (Milligan, Bingley, & Gatrell, 2005). Subsequently, verbatim examination of the transcripts through open coding helped support our study (Strauss & Corbin, 1998). Further, it helped decode the sequential consumption of multiple media channels. Subsequently, a framework developed showcased the consumption of different channels' information by consumers belonging to the Generation Y segment.

The framework was consolidated on the basis of the themes developed from the FGDs, netnography and in-depth interviews' analysis (Refer Table 3). To consolidate the respondents' perceptions and observations from the three phases, the study used three progressive and inclusive stages: initial design, in course extension and full frame development. Initial design was developed by deploying the deductive and inductive forms of reasoning to understand the simultaneous dimensions of the medium and the intended usage (Pettigrew, 1977). Continuing, in course extension was achieved by selecting, merging and operationalizing the contributions of our respondents. Finally, full frame development, i.e. a framework was developed by merging, integrating and separating the data gained from the respondents (Singh, 2015). Thus, we maximized the heuristic value of the study by delving into the contexts influencing the interaction and bi-directional dynamics of media and intended usage. With the dimensions of engaging with the bi-directional and simultaneous dynamics of the medium and the intended use of the medium

developed using McLuhan (2010), the stages of domestication of technology proposed by Silverstone and Haddon (1996) and the recommendations of Szalma (2009), the following themes were developed: Conversion, Objectification and Incorporation and Appropriation. Thus, our theoretical base was developed comprehensively. Further, the respondents' observations and our treatment of the same were in tandem.

Data analysis involved open coding corresponding to the conversion of observations into individual units of analysis to be classified as concepts. The next stage was axial coding that developed a more granular conceptualization. The items developed were placed in a "continual cycle" (Hennink, Hutter, & Bailey, 2011) of rigorous analysis and comparison till our study was able to synchronize the three stages above. Thus, information saturation was reached and the framework stabilized (Maxwell, 2005). The final stage was reached and the study fixed the framework developed on the respondents' insights, theories and frames. We merged and extended them to develop a robust and actionable framework for comprehending the bi-directional dynamics and functioning of the medium's nature and intended usage in the context of online shopping demonstrated in Figure 1.

This framework had major categories and themes which are explained in the next section. Thus, our FGDs, netnographic analyses and interviews developed a granular engagement with the bi-directional dynamics and functioning of the nature of the medium and the intended usage of the medium.



**Figure 2.** Technology Acceptance with the Influence of Media Consumption: Bi-Directional Framework in terms of online shopping

## **Appropriation**

### *Effectiveness of the Medium*

Our study foregrounded this key dimension affecting the choice of the medium and the reciprocal effect on intended purchase. Here, the respondents discussed digital advertisements and new advertisements featured on relevant websites. A respondent stated, *"Most of my visits to ecommerce websites happen through after I click on the Facebook ads."* The choice of the website as a medium was deeply influenced by the advertisements shown on these media channels.

This was corroborated by a respondent, Pooja, who said, *"Display advertisement of Style Tag (a new apparel website), influenced me to click and check their collection."* Specifically, we found that for Generation Y, Facebook is an intimate platform for consumers to interact with those close to them their friends. Going on, they invest time exploring things that are of interest. A respondent Himanshu, stated, *"Most of my visits to online shopping sites are through the FB newsfeed advertisements."* These insights were primarily generated in the context of online shopping of Generation Y through the three methods of our study.

### *Frequency and Relevance*

Our respondents stated that that a medium's selection and the resultant effects on the intended purchase were affected by the frequency and medium's relevance and usage in terms of online shopping. Our respondents considered SMS as an effective medium when backed by relevant offers. However, the respondents' acceptance of the medium was compromised by excessively bombarded SMSs. A respondent, Mahima, stated, *"Myntra sends me a message about grand sales twice in a single day."* This amplification crystallized the negative effect of a medium's excessive usage. A respondent, Rohan, elaborated, *"If Myntra send me a Sale message every day, I will feel that they are generally overpriced without a sale and will not consider visiting it."* They opined that SMSs should communicate effective and relevant messages, but not on a daily basis. Further, they were categorical in their evaluation of Emails. Consumers do not approve of extraneous mails flooding their mail boxes

A respondent, Sukanya, stated, *"I have made a separate email for waste mails. I register for all ecommerce sites with that mail."* Thus, information provided by the medium actually acted as information about the medium. This dual function aids the medium's evaluation.

### *Convenience and Organic Availability*

Our study highlighted the importance of convenience in the context of Generation Y consumers. The respondents stated that they sought a convenient life. A respondent, Rohan, said, *"Online shopping has made my life easy; I can buy anything and anytime"*. Convenience comprised of several benefits such as 24/7 services, cash payments and timely operations. Thus, a respondent stated, *"I find online shopping good because it is available 24/7"*. Another respondent Mehak, *"I don't have to waste my car fuel to go and buy clothes and I can do things in my own time"*. A majority of the respondents equated online shopping with convenience. Thus, a respondent, Arushi, stated *"Shopping is about leisure and convenience and online shopping provides that completely."* Our respondents stated that they would interact with those shopping brands that offer them the maximal convenience. Simultaneously, respondents placed a great premium on organic searches. They emphasized that consumers turned a blind eye to paid advertisements. In fact, they trusted organic search results. Thus, a respondent, Akash, expressed, *"Any day, I would choose a search result over any search advertisement"*. However, paid results showcasing good offers and deals with images also help know about the website. Thus, a respondent, Milos stated, *"I click on search Ads, if they look good to me"*. Thus, the following research propositions were developed:

P1: *Effectiveness of the medium, frequency, relevance and convenience and organic availability constitute the bi-directional dynamism between appropriation of the medium and the intended use of the medium*

P1a: *The bi-directional dimension of appropriation is a prerequisite for understanding the intended use of the medium and the acceptance of the medium*

### **Objectification and Incorporation**

#### *Fashion, Customization and Loyalty Recognition*

We found that that the majority of the respondents evaluate online shopping sites, based on the products' and services' variety and customization. Generation Y consumers consider being up to date with trends to be very important. Thus, online shopping platforms are stores and a complete provider of fashion tips for the same. A respondent, Rehana, stated, *"I like it when Myntra offers special fashion tips and shows me dresses that might suit me."* A respondent, Parneet, explicated on information provision, *"Being a loyal customer I get online catalogues from Myntra which contain a huge variety of products, which is amazing."* The majority of the respondents stated that they valued customization and variety. Thus, a respondent, Rekha, stated *"I love the variety available on these sites, it spoils me for choice."* Several respondents stated that they visited online sites to check for offers and discounts. They had also expressed that they had shifted from regular store buying to online medium due to high

discounts offered. Thus, a respondent, Neeraj, stated, *"Advertisements with good creative and good discounts make me click the link."*

Another respondent stated that the consumer's purchase intention is bolstered by discounts. Thus, a respondent, Ankit, said *"The huge amount of sales that I get to see every day encourages me to come back Jabong again and again; I hope this would never stop."* This was extended till they associated services with specific websites. A respondent, Arvind, said, *"I know that whenever I log in to Myntra, there would be an ongoing sale."*

### **Figure and Ground**

Our study discovered an important dimension to the acceptance of the intended use of the medium. The key is that the medium's context and the medium itself are complex and multiform. This was specifically defined by the respondents as a combination of digital and conventional media of online shopping. A respondent, Jeewant stated, *"Flipkart could make a mark on our minds because of its advertising on TV."* Most of the respondents also surfaced another important aspect of the multiplatform nature of medium usage and intended use. This was the ability of conventional media to accord a sense of authenticity and dependability. Thus, a respondent, Gargi, said, *"The moment you see a TV advertisement about any brand, you know the brand is into serious business."* Further, our respondents observed that messages on traditional media like the television need to be supplemented by sufficiently conducive messages to ensure that the consumers visit the website. Thus, television advertisements always have a carryover effect and influence the consumers' interactions with other media. Here, a respondent, Arijit, stated, *"The big Billion Flipkart Sale and Snapdeal give full page advertisements and they definitely stay in your mind."* Our respondents opined that clear information and good quality are imperative for the advertisements' persuasiveness. Thus, a respondent, Arsh stated, *"Naptol ads in the newspaper look so bad in quality that I never feel like visiting the site"*. To summarize, television and newspapers are mass awareness media that reach the maximum audience and provide brand recall to the consumers in terms of online shopping.

### **Word of Mouth and Recommendation**

Our study surfaced another dimension about the acceptance of a technological medium and intended purchase. This was Generation Y consumers' proclivity to talk about their activities experiences with near ones. However, the same consumers are reticent about their online shopping experiences online. The personal touch is highly valued and preferred by the consumers. Thus, a respondent, Ashima, said, *"I would rather tell my friend directly about what I shopped online than share*

on her timeline or ping her about it." These consumers dislike reviewing their experiences on websites. Further, visits to online shopping sites emerge from friends and near ones. Thus, a respondent, Ishita, stated, "I visited Fashion Era because a friend of mine told me about the dresses it offers at exceptionally low prices." Thus, a majority of the respondents expressed that new brands should maximize the quantum of direct recommendations. Thus, a respondent, Maithreyi, said, "My friend bought a dress from Jabong and recommended it to her and I visited the website immediately." Thus, two propositions regard the acceptance of a medium and the intended usage of the medium are:

P2: *Figure and Ground; Fashion, Customization and Loyalty Recognition and Word of Mouth and Recommendation constitute the bi-directional dynamism between Objectification and Incorporation of the medium and the intended use of the medium*

P2a: *The bi-directional dimension of Objectification is integral to the comprehension of the intended use of the medium and the acceptance of the medium*

## **Conversion**

### *Autonomy and Competence*

Our study discovered that a majority of the respondents placed a great amount of importance on trust and competence. Presently, online shopping is dominated by a few players such as Myntra, Jabong, Flipkart and Amazon. A respondent, Ashish, stated, "When you talk about online shopping in India, only some four or five brands come to your mind." Thus, they need to invest heavily into building trust. The respondents placed a premium on efficiency as a primary means of developing trust. A respondent, Rashi, stated "I don't really know how authentic the website is when I see it on Facebook." An important reason why consumers do not try new websites is the time taken by new players to deliver products. A respondent Nina, exclaimed "I would choose Amazon over a new website, because I get the same product in far lesser number of days." Thus, the following propositions can be stated about the acceptance of a medium and its intended usage:

P3: *Autonomy and Competence constitute the bi dimensional dynamics between Conversion and the acceptance of the medium*

P3a: *The bi-directional dimension of Autonomy and Competence is integral to the comprehension of the intended use of the medium and the acceptance of the medium*



**Table 3.** Categories, themes and codes developed from Analysis

Category	Theme	Codes
Appropriation	Effectiveness of the Medium	<i>"Most of my visits to ecommerce websites happen through after I click on the Facebook ads."</i> <i>"Display advertisement of Style Tag (a new apparel website), influenced me to click and check their collection"</i>
	Frequency and Relevance	<i>"I have made a separate email for waste mails. I register for all ecommerce sites with that mail"</i>
	Convenience and Organic Availability	<i>"Online shopping has made my life easy, I can buy anything and anytime"</i> <i>"Any day, I would choose a search result over any search advertisement"</i>
Objectification and Incorporation	Fashion, Customization and Loyalty Recognition	<i>"I like it when Myntra offers special fashion tips and shows me dresses that might suit me"</i>
	Figure and Ground	<i>"Flipkart could make a mark on our minds because of its advertising on TV."</i> <i>"The big Billion Flipkart Sale and Snapdeal give full page advertisements and stay in your mind"</i>
	Word of Mouth and Recommendation	<i>"I would tell my friend directly about what I shopped online than share on her timeline or ping her about it"</i>
Conversion	Autonomy and Competence	<i>"When you talk about online shopping in India, on four or five brands come to mind"</i> <i>"I would have chosen Amazon over a new website, because I get the same product in lesser number of days."</i>

## Discussion and Implications

The significant contribution of the present study is a robust and comprehensive engagement with the bi-directional dynamism of the acceptance of the medium and its intended usage in terms of online shopping. There are other specific and significant developments too. First, this framework will aid academicians thoroughly ground their treatment and comprehension of a technological medium and intended usage. Subsequently, this framework focuses on the requisite elements for the dimensions.

Third, there are very limited studies that robustly and comprehensively deal with the bi-directional dynamism of the acceptance of the medium and its intended usage. Thus, our study represents a high degree of potential to the fields of

marketing and technological studies. Earlier studies (Venkatesh et al., 2003) had dedicated themselves to the study of the prediction of the acceptance of a technology. Further, the role of emotions, contextual influence and cognition were studied by Straub (2009). They had been unable to integrate the dimensions of technological medium acceptance with the intended usage in a simultaneous and reciprocal format. Thus, our format offers highly valuable praxeological themes which are potential check points for the study and investigation of online shopping. It also offers a fine grained and rich background by merging the metaphors developed by McLuhan (2010), the stages of domestication of technology proposed by Silverstone and Haddon (1996) and Szalma's recommendations (2009). Further, our study provides an effective and integrated framework to understand the dynamism of media acceptance and the intended usage for online shopping. Thus, the framework developed three themes: Conversion, Objectification and Incorporation and Appropriation. By a reflexive incorporation of the dimensions, respondent observations and theories, the three themes were developed into three dimensions. These dimensions offer a practical tool supplemented by theoretical premises. Thus, our study has significant achievements and contributions. Earlier studies had found that the interactions between emotions, contextual influence, acceptance of technology and cognition were illustrated in a linear format. Our study has identified the bi-directional framework that primarily focuses on intended usage and its influence on the choice of the medium for online shopping. This element has further three dimensions; appropriation, objectification and conversion. In appropriation, the effectiveness of media, frequency and relevance and convenience are explained.

Objectification has three elements, fashion and customization, figure and ground and word of mouth and recommendation. Conversion has autonomy and competence as its key elements. This bi-directional framework facilitates the understanding of technology acceptance and media consumption among the consumers. These elements and relationships are unique and unavailable in earlier literature. Finally, this study understands technology acceptance and bi-directional usage of media studied in silos by earlier scholars in the context of online shopping. The bi-directional dynamism of the dimensions of technological medium's acceptance and intended use can be an extremely effective resource for marketing. Thus, bi-directional dynamism can be comprehended by an individualized and customized approach. Thus, marketing managers can use enhanced efficiency, maximized frequency and optimal relevance to develop appropriation. Additionally, academicians and practitioners can focus on contemporariness, recognition of loyalty and word of mouth to ensure that objectification and incorporation are set and in place for online shopping. Finally, academics and practitioners could include objectification and incorporation to ensure that the technological medium reaches the stage of conversion.

## **Conclusions and Recommendations**

The current study has considered the bi-directional nature of media shopping in the context of online shopping. The study has major salience for digital marketers in terms of integration with smart homes and machine learning applications. Going further, the study also offers an extensive base to understand the nature of new semiotics and semantics that understand the nature of bi-directional media. Such advances in semiotics and semantics would need to be supplemented by a system of logical interpretation and investigation. Such a logical system would reduce arbitrariness in the development of communication patterns for marketers. Our study also offers unique opportunities to understand the nature of image deployment and development in line with the bi-directional consumption. The image deployment and development would offer great chances of collaboration with image processing experts and technicians. Here, extremely effective algorithms and protocols can be developed in conjunction with technology experts. Moving on, specific progress can be achieved in terms of developing the comprehension of bi-directional consumption and online shopping in the context of vernacular content. The Indian context is highly apposite for such an investigation. In order to effect these recommendations, research methods that are highly customized for the understanding of bi directional consumption could be developed. These methods could integrate correlations, algorithms and setting of boundary conditions. Thus, these conclusions and recommendations would be based on the foundations of the study. These conclusions and recommendations would enrich the fields of online shopping and bi-directional media consumption.

### **Limitations and Future Research**

The present study is mainly qualitative owing to the exploratory nature of the study. This could be supplemented by a quantitative study allowing for variables to be studied in terms of causal links. In continuance, future studies could explore the development of technological medium and intended usage from a phenomenological perspective too. The present study can be further extended by focusing on metaphors that can enrich the acceptance of a medium and intended usage in terms of online shopping. Further, cross cultural research among the developing nations and developed countries could help consolidate the cultural nuances of the acceptance of medium and intended usage. The current scope of the study precluded an extended time scale for its investigation. An effective means for extending the scope of the study is to incorporate a longitudinal scale. The current study focused on a specific demographic in order to achieve its stated purpose. Extensions of this line of investigation would include comparing extensive research modes between different demographic groups. Our study developed a logic of investigation that encompassed online shopping. Future studies could use this logic to investigate online shopping specific to industrial purchases and business to business purchases. Our study had considered the dynamics of bi-directional media in online shopping. These dynamics

could be specifically contextualized to specific genders and realize the effects of the same. In conclusion, the current study has rigorously explored its stated directions. The extensions of these directions have been explored in the current section.

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## References

- Assael, H. (2011). From Silos to Synergy. *Journal of Advertising Research*, 51(1) 50th Anniversary Supplement, 42-58.
- BCG & IAMAI, (2015). *India@Digital.Bharat Creating A \$200 Billion Internet Economy*. Retrieved May 2, 2016, from <http://www.bcgindia.com/documents/file180687.pdf>.
- Carr, S. (1992). *Public space*. Cambridge [England]: Cambridge University Press.
- Census (2011). Retrieved Mar 9, 2016, from <http://www.census2011.co.in/census/city/3014ahmedabad.html>.
- Chaffey, D. (2016). *Global social media research summary 2016*. Retrieved Apr 6, 2016, from <http://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/>.
- Cho, C. (2003). The Effectiveness of Banner Advertisements: Involvement and Click-through. *Journalism & Mass Communication Quarterly*, 80(3), 623-645.
- Chu, S. & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (eWOM) in social networking sites. *Int. J. Adv.*, 30(1), 47.
- Davis, F., Bagozzi, R., & Warshaw, P. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982-1003.
- Davis, F., Bagozzi, R., & Warshaw, P. (1992). Extrinsic and Intrinsic Motivation to Use Computers in the Workplace. *Journal of Applied Social Psychology*, 22(14), 1111-1132.

- Denzin, N. & Lincoln, Y. (2005). *The SAGE handbook of qualitative research*. Thousand Oaks: Sage Publications.
- Du Plessis, Charmaine. (2017). The role of content marketing in social media content communities. *South African Journal of Information Management*, 19(1),3-5.
- Grimm, P. (2010). Pretesting a Questionnaire. *Wiley International Encyclopedia of Marketing*.
- Gupta, O. (2006). *Encyclopaedia of journalism and mass communication*. Delhi: Isha Books.
- Haddon, L. (2003). Domestication and Mobile Telephony. In: *Machines that Become Us: The Social Context of Personal Communication Technology*, 1st ed. New Jersey: Transaction Publishers, 43-56.
- Hajli, N. (2014). A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3), 387.
- Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative Research methods*. SAGE.
- Hill, W., Beatty, S., & Walsh, G. (2013). A segmentation of adolescent online users and shoppers. *Journal of Services Marketing*, 27(5), 347-360.
- PWC India. (2015). *eCommerce in India Accelerating growth*. 1st ed. Retrieved Apr 30, 2016, from <http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf>.
- Howe, N. & Strauss, W. (2003). *Millennials go to college*. Great Falls, Va.: LifeCourse Associates.
- Jayanti, R. (2010). A Netnographic Exploration. *Journal of Advertising Research*, 50(2), 181-196.
- Johnston, A. & Werkentin, M. (2014). The Online Consumer Trust Construct: A Web Merchant Practitioner Perspective. *Southern Association for Information Systems*.
- Kirkpatrick, D. (2017). EMarketer: 70% of US adults "second-screen" while watching TV. Retrieved October 8, 2018, from <https://www.marketingdive.com/news/emarketer-70-of-us-adults-second-screen-while-watching-tv/510341/>
- Klinger, U., & Svensson, J. (2014). The emergence of network media logic in political communication: A theoretical approach. *New Media & Society*, 17(8), 1241-1257.
- Kothari, C. (2006). *Research methodology*. New Delhi: New Age International (P) Ltd.
- Kozinets, R. (2010). *Netnography*. Los Angeles, Calif.: SAGE.

- Laroche, M., Kiani, I., Economakis, N., & Richard, M. (2013). Effects of Multi-Channel Marketing on Consumers' Online Search Behavior. *Journal of Advertising Research*, 53(4), 431-443.
- Laudon, K. & Traver, C. (2009). *E-Commerce*. Pearson.
- Levinson, P. (2001). *Digital McLuhan*. New York: Routledge.
- Malhotra, N. & Dash, S. (2011). *Marketing Research: An Applied Orientation*. Noida: Dorling Kindersley and Pearson Education.
- Maxwell, J. (2005). *Qualitative research design*. Thousand Oaks, Calif.: Sage Publications.
- McKnight, D., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, 13(3), 334-359.
- McLuhan, M. (2010). *Understanding me*. New York: McClelland & Stewart.
- Memarovic, N., Langheinrich, M., & Schieck, A. (2014). Community is the message: Viewing networked public displays through McLuhan's lens of figure and ground. *Media Architectur Biennale*.
- Meyrowitz, J. (2008). Power, Pleasure, Patterns: Intersecting Narratives of Media Influence. *Journal Of Communication*, 58(4), 641-663.
- Milligan, C., Bingley, A., & Gatrell, A. (2005). Digging deep: Using diary techniques to explore the place of health and well-being amongst older people. *Social Science & Medicine*, 61(9), 1882-1892.
- Morgan, D. & Kreuger, R. (1993). When to use focus groups, and why. In: *in Successful Focus Groups: Advancing the State of the Art*, 1st ed. SAGE, 3-19.
- Naik, P. & Raman, K. (2003). Understanding the Impact of Synergy in Multimedia Communications. *Journal of Marketing Research*, 40(4), 375-388.
- Nielsen (2011). *Surging Internet Usage in Southeast Asia Reshaping the Media Landscape*. Retrieved Mar 25, 2016, from <http://www.nielsen.com/us/en/insights/news/2011/surging-internet-usage-in-southeast-asia-reshaping-the-media-landscape.html>.
- Nielsen.com. (2014). *Understanding The New Indian Shopper*. Retrieved Sep 9, 2016, from <http://www.nielsen.com/in/en/insights/reports/2014/understanding-the-new-indian-shopper.html>.
- Olphert, W. & Domadaran, L. (2004). Getting what you want, or wanting what you get? Beyond user centered design. In: B. Raton, ed., *Design and emotion: The experience of everyday things*, 1st ed. Taylor & Francis, 126-130.

- O'Neill, D. (2012). *How organizational culture as perceived by senior administrators influences the adoption of information technology systems in two 4-year public universities*. University of Idaho.
- Pantano, E. & Viassone, M. (2015). Engaging consumers on new integrated multichannel retail settings: Challenges for retailers. *Journal of Retailing and Consumer Services*, 25, 106-114.
- Patwardhan, P. & Yang, J. (2003). Internet Dependency Relations and Online Consumer Behavior. *Journal of Interactive Advertising*, 3(2), 57-69.
- Pettigrew, A. (1977). Strategy Formulation as a Political Process. *International Studies of Management & Organization*, 7(2), 78-87.
- Polger, J. & Adamson, G. (2011). *New generation of portal software and engineering*. Hershey, PA: Information Science Reference.
- Prasad, C. & Aryasri, A. (2009). Determinants of Shopper Behaviour in E-tailing: An Empirical Analysis. *Paradigm*, 13(1), 73-83.
- PR Newswire (2002). *Packaged goods brands*. Retrieved Mar 4, 2016, from <http://search.proquest.com/docview/447056688?accountid=82913>.
- Renaud, K. and Biljon, J. (2008). Predicting Technology Acceptance and Adoption by the Elderly: A Qualitative study. *SAICSIT*.
- Richa, D. (2012). Impact of demographic factors of consumers on online shopping behavior: A study of consumers in India. *International journal of engineering and management sciences*, 43-52.
- Rogers, E. (1983). *Diffusion of innovations*. New York: Free Press.
- Ruotsalainen, J. & Heinonen, S. (2015). Media ecology and the future ecosystemic society. *European Journal of Futures Research*, 3(1), 7-8.
- Shalhoub, H., Aversano, D., Marsh, P., & Jacobs, D. (2014). Sync apps: Leveraging the power of second screen apps for TV advertising. In: *Think Conference*.
- Sicilia, M., Ruiz, S., & Reynolds, N. (2006). Attitude formation online - how the consumer's need for cognition affects the relationship between attitude towards the website and attitude towards the brand. *International Journal of Market Research*.
- Silverstone, R., & L. Haddon (1996) "Design and the Domestication of Information and Communication Technologies: Technical Change and Everyday Life", in R. Silverstone and R. Mansell (eds) *Communication by Design. The Politics of Information and Communication Technologies*, 44-74. Oxford: Oxford University Press.
- Singh, K. (2015). Creating Your Own Qualitative Research Approach: Selecting, Integrating and Operationalizing Philosophy, Methodology and Methods. *Vision: The Journal of Business Perspective*, 19(2), 132-146.

- Singla, D. (2013). Study on growth of Online Shopping in India. *International Journal of Computer Science and Mobile Computing*, 2(6), 65-68.
- Statistics and facts about global e-commerce. (2015). Retrieved Jun 6, 2016, from <http://www.statista.com/topics/871/online-shopping/>.
- Silicon India. (2016). *10 Best E-Commerce Companies in India*. Retrieved Sep 9, 2016, from <http://www.siliconindia.com/news/business/10-Best-ECommerce-Companies-in-India-nid-143370-cid-3.html>.
- Stern, B. (1992). Historical and Personal Nostalgia in Advertising Text: The Fin de siècle Effect. *Journal of Advertising*, 21(4), 11-22.
- Strauss, A. & Corbin, J. (1998). *Basics of Qualitative Research – Techniques and Procedures for Developing Grounded Theory*. 2nd ed. London: SAGE.
- Straub, E. (2009). Understanding Technology Adoption: Theory and Future Directions for Informal Learning. *Review of Educational Research*, 79(2), 625-649.
- Szalma, J. (2009). Individual differences in human-technology interaction: incorporating variation in human characteristics into human factors and ergonomics research and design. *Theoretical Issues in Ergonomics Science*, 10(5), 381-397.
- Szalma, J. (2014). On the Application of Motivation Theory to Human Factors/Ergonomics: Motivational Design Principles for Human-Technology Interaction. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 56(8), 1453-1471.
- Tan, Y. H., & Thoen, W. (2002). Formal aspects of a generic model of trust for electronic commerce. *Decision Support Systems*, 33(3), 233-246.
- Tandon, S. (2014, November 20). 100 million online shoppers in India by 2016: Report. Retrieved October 8, 2018, from <https://www.livemint.com/Industry/nWCyKyN5flefBDTQPU5AwM/100-million-online-shoppers-in-India-by-2016-Report.html>
- The New Multi-screen world: Understanding Cross-platform Consumer Behaviour. (2012). Retrieved May 5, 2016, from <https://www.thinkwithgoogle.com/research-studies/the-new-multi-screen-world-study.html>.
- United Nations (2014). Retrieved April 12, 2016, from <http://www.un.org/en/development/desa/population/publications/trends/compact-report2014.shtml>
- Van Noort, G., Antheunis, M., & Verlegh, P. (2014). Enhancing the effects of social network site marketing campaigns: if you want consumers to like you, ask them about themselves. *Int. J. Adv.*, 33(2), 235.



- Venkatesh, V. & Davis, F. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, p.425.
- Wang, C., Zhang, Y., Ye, L., & Nguyen, D. (2005). Subscription to fee-based online services: What makes consumer pay for online content? *Journal of Electronic Commerce Research*, 6(1), 301-311.
- Weingarten, R. (2009). Four generations, one workplace: A Gen XY staff nurse's view of team building in the emergency department. *Journal of Emergency Nursing*, 35(1), 27-30.
- LithExcelMarketing (2009). What is Cross Media Marketing? Retrieved Apr 4, 2016, from <http://lithexcel.com/news/archives/what-is-cross-media-marketing.html>.
- WiproCampusArena. (2016). *Wipro - Campus Arena: Social Media & eCommerce*. Retrieved Sep 9, 2016, from <http://www.wipro-campusarena.com/social-media-and-ecommerce.html>.
- Zhou, L., Dai, L., & Zhang, D. (2007). Online shopping acceptance model - A critical survey of consumer factors in online shopping. *Journal of Electronic Commerce Research*, 8 (1), 41-63.

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# Risks and Their Management in Ready-Made Garment Industry: Evidence from the World's Second Largest Exporting Nation

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*A smooth supply chain is critical for clothing exporters to profit and remain competitive in the global clothing industry. Several risks including the lower profit share, alongside cost reduction pressure from the buyers threaten the survival of the clothing (Readymade Garment) exporters. This paper explores the variety of risks faced by the Ready-Made Garment (RMG) exporters and their management practices in the World's second largest exporting nations, Bangladesh. Conducting detailed case studies and in-depth interviews on 10 RMG exporters, the paper identifies that the exporters face eight different types of risks, however, have a less-than-par awareness and understanding on formal risk management. Overall findings identify a significant multi-dimensional vulnerability of the RMG exporters in Bangladesh, which serves implications for the other competing nations in the global clothing market.*

**Keywords:** Readymade garment, risk management, clothing, textile, RMG exports, international business.

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## Introduction

The world Ready-Made Garment (RMG) exports market is led by developing economies, mainly, China, Bangladesh, Vietnam, and India. Many of these countries are considered as 'emerging economies' that are expected to lead the world in the coming decades. For many of them, RMG exports generate the lion share of exports revenue, which works as a key driver of their economic growth. As a result, vulnerability of the RMG industry in these economies would implicate at least two-fold challenges; first, the economies will lose their growth momentum coupled with unemployment and loss in trade competitiveness, and second, the parties to the supply chain of global RMG market would be adversely affected (Ahmed, 2009). As a result, the RMG exporting firms need to understand the risks they face (either explicit or implicit) and the need for their appropriate management in order to protect their market share and profitability. However, the story appears quite dissimilar as most of the exporting nations are developing economies, and several structural and economic problems create a diverse range of risks. These risks often adversely affect business volume and profitability of the exporting firms via different channels, e.g., international buyers cancelling orders. In addition, there is an on-going buyer pressure for cost reduction due to several factors, e.g., increasing levels of wholesale and retail market competition, aiming for maximizing profit margin, increased frequency of financial and economic crises or shocks, etc. Facing these multi-facet challenges, the RMG exporting firms in many of the developing economies, for example, Bangladesh and India, often struggle to maintain their competitiveness and profitability in the world market, putting the countries' economic performance at risk.

Given the significance of understanding the risks and their management strategies, this paper aims to explore the true nature of the risks, their impacts and management at the firm level in the world's leading RMG exporting countries, particularly in the context of developing economies. In order to fulfill this aim, this paper examines ten large RMG exporting firms in Bangladesh. By applying two-fold methods (case study and in-depth interview), the paper identifies three key aspects: (i) the key risks faced by the exporters, their nature and sources (ii) the perceived impacts of these risks on five key business dimensions of the exporters, i.e., productivity, profitability, exports volume, reputation or image, and stakeholder relationship, and finally, (iii) the current risk management strategies adopted and an evaluation on their adequateness. There are several reasons why Bangladesh is an ideal case for this research: (i) Bangladesh is the second largest RMG exporter in the world market, mainly driven by abundance of cheap, unskilled and semiskilled labor, and the sector earns about 80% of its foreign currency earnings, employing about 4 million people in the country (Faruque, 2009; Hossain & Hafiz, 2017; BGMEA, 2015), (ii) the lessons would be useful for other competing nations with similar socio-economic characteristics, e.g., India, Sri Lanka, Vietnam, due to the similarity of their socio-economic profile to Bangladesh, (iii) it is identified as one of emerging economies to lead the world in the coming decades (e.g., a member of the N-11 listed by Glodman Sachs (Sandra, David, & Anna, 2007)), and (iv) finally, several unique uncertainties and risks can be found in Bangladesh

(for example, the collapse of Rana Plaza and the fire damage at Tazreen Fashion), which are peculiar to the global clothing market and could be a vital source of risk information. Therefore, the contribution of this paper are multifaceted: it explores risks and management practices critical to the global RMG manufacturers and exporters, especially in a developing economy context while providing a novel evidence on Bangladesh. The paper draws critical information for the managers and entrepreneurs in the global RMG supply chain and explores insights that could be useful for policy makers and regulators in protecting the industry.

The rest of the paper is organized in the following sections: section 2 provides a brief overview on the world RMG exports and Bangladesh's relative position, section 3 reviews the theories on risks in business and their management, followed by a brief literature review specific to RMG industry, section 4 outlines the methodology, section 5 presents the analysis and discussion, followed by conclusion and policy implications in section 6.

## **World RMG Exports and Bangladesh**

Table 1 presents the global RMG exports data as reported by World Trade Organization (WTO). Global exports of RMG appears to grow at a healthy average rate of 2.41% annually over five year period from 2012 to 2016, largely dominated by China. China holds its top exporter position consistently over the years with an average market share of 36%. However, in the recent periods China has been losing its market share mainly due to higher cost of production and shortage of skilled workforce, diverting its benefits to the closest competitor Bangladesh (Mirdha, 2016). The table shows that China's exports declined by 6.4% from 2014 to 2015 and about 9.0% in 2015 to 2016. On the other hand, in the same two years, Bangladesh experienced a growth of 9.6% and 26.1%, respectively. Consistently for over the five years, Bangladesh holds the second largest exporter position in the global exports market although its market share (5.6%) is significantly lower than that of China. Compared to these two countries, the closest competitors in terms of five-year average market share are: Italy (4.7%), Vietnam (4.4%), Hong Kong (4.3%), Germany (4.0%), and India (3.6%). With respect to Bangladesh in particular, its exports are on the rise, as work orders at competitive prices appear increasing. Only five items (e.g., shirts, trousers, jackets and sweaters) covered 78.6% of the total garment export earnings in the 2014-15 fiscal year (Mirdha, 2016).

**Table 1: World RMG exports from 2012-2016**

Exporters	World Top Exporting Nations (billion USD)					Shares of in World Exports (%)				
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016
World	405.11	440.25	474.68	442.35	442.12	100	100	100	100	100
China	148.27	165.04	173.44	162.35	147.79	36.60	37.49	36.54	36.70	33.43
Bangladesh	19.27	19.57	24.21	26.53	33.45	4.76	4.44	5.10	6.00	7.57
Viet Nam	14.08	16.75	19.70	21.43	24.66	3.48	3.80	4.15	4.85	5.58
Turkey	13.85	14.96	16.26	14.85	14.78	3.42	3.40	3.42	3.36	3.34
Germany	17.65	18.30	19.46	16.66	17.12	4.36	4.16	4.10	3.77	3.87
India	12.90	15.70	16.54	17.13	16.96	3.18	3.57	3.48	3.87	3.84
Italy	20.35	21.64	22.94	19.40	19.97	5.02	4.92	4.83	4.39	4.52
Hong Kong	21.28	20.72	19.39	17.45	14.92	5.25	4.71	4.08	3.94	3.37
Cambodia	4.01	4.81	5.32	5.92	10.28	0.99	1.09	1.12	1.34	2.32
Indonesia	7.18	7.38	7.36	7.28	7.17	1.77	1.68	1.55	1.65	1.62
Sri Lanka	3.78	4.27	4.68	4.55	4.60	0.93	0.97	0.99	1.03	1.04
Pakistan	3.70	3.96	4.39	4.49	5.61	0.91	0.90	0.92	1.01	1.27

Source: International Trade Center, World Trade Organization (WTO) as of June 04, 2017

According to industry research (Mirdha, 2016), a large number of the world's leading brands prefer Bangladesh as the source of their RMG products. Key buyers and their average purchase volume include: Swedish retail giant H&M (nearly \$3billion in a year, purchasing T-shirts, cotton trousers, woven shirts, jackets and sweaters), the US retail giant Walmart (about \$2.5 billion yearly, purchasing T-shirts, kidswears, trousers and sweaters), Li & Fung (nearly \$1.5 billion annually, buys mainly trousers, T-shirts, shirts and sweaters), the British retailer Primark (\$1.0 billion, buying mainly jeans pants, shirts and other denim products), the Spanish retailer Inditex (about \$1.5 billion annually, purchasing women's wear and trousers and under its different brands like Zara, Lefties and Bershka), and C&A (more than \$800 million in a year). Other top buyers include German's posh brand Hugo Boss and Olymp, Tesco, M & S, Gap, Nike, VF Asia, Levi's and Adidas. However, the Bangladesh RMG industry faced major setbacks when two major accidents significantly damaged reputation of the industry and exposed the high-level compliance vulnerabilities. Tazreen Fashions factory fire in 2012 (November 24) took lives of more than 112 employees. In 2013 (April 24), the Rana Plaza, an eight storied building accommodating five garment factories, collapsed and more than 1100 lives were lost in the accident. The pair of consecutive events exposed the extremely high compliance gaps and called for immediate actions from the global RMG customers for responsible purchase with stricter compliance enforcement. Although a slowdown in work-orders was evident in the short run after

the accidents, the industry has been able to significantly improve its compliance levels and restore its pace of growth over time.

Table 1 provides an important picture in relation to this research. On the list of 12 top exporters, it is worth noting that most of the countries are developing economies and contain similar socio-economic profiles. For example, of the 12, four are South Asian including India, Pakistan and Sri Lanka who are the close neighbors of Bangladesh. On the other hands, top exporting nations like Vietnam, Cambodia, and Indonesia are from Southeast Asia whose socio-economic characteristics are much similar to that of Bangladesh. Given that Bangladesh is the second largest RMG exporter and has a socio-economic environment that is similar to most of the world's leading RMG exporting nations, examining the RMG exporters' risks and their management practices could deliver valuable insights for all the major competitors. Therefore, the insights from this research is expected to produce important lessons for both Bangladesh and other competing nations, especially the developing economies from South and Southeast Asia.

## **Literature Review**

In this section, we first present a theoretically brief on the general business risks and their management, and then review the literature specific to the Bangladesh RMG industry.

Risk generally refers to the uncertainty regarding deviation from expected outcome (Jordão & Sousa, 2010), in other words, it is the probability of an undesirable outcome (Holton, 2004). For businesses, Barumwete and Rao (2008) defined risk as the unpredicted changes that may have unfavorable impact on an organization's profitability, value and cash flow. While businesses are encompassed with various types of risks, their nature and extent escalates when firms engage in business across the border, i.e., international business. For example, exchange rate risk and country risk are specific to generally internationally-oriented business (Hou, 2013; Oxelheim, 1984). The prevalence of wide scale risks in international business could damage broader financial performance of corporations if not managed properly; yet firms tend to go international expecting higher returns (Barua, Khan, & Barua, 2018; Barua, 2017; Khan & Barua, 2017).



**Table 2: Different types of risks and their sources**

<b>Risk</b>	<b>Definition</b>	<b>Key Sources</b>
<i>Political Risk</i>	Effect on investment as a result of political changes or instability in a country (Berg, 2010)	Political unrest and violence, abrupt changes in regulations, changes of political ideology
<i>Technological Risk</i>	Incurring loss from the installation of a technical process with uncertain outcome (Hou, 2013)	Obsolete technology, new technology, technical failure, external attacks, e.g., malware
<i>Financial Risk</i>	Shortage of cash flow for meeting the financial obligations of the organization (Wengert & Schittenhelm, 2013)	Higher amount of debt, leading to higher principal and interest repayments
<i>Operational Risk</i>	Loss resulting from inadequate or failed processes, people and systems or from external events (Hou, 2013)	Production risk, quality risk, external and internal fraud
<i>Supply Chain Risk</i>	Loss from the unavailability of necessary raw material as well as ineffective delivery of the finished goods to the customers (Merna & Al-Thani, 2008)	Choosing wrong supplier(s), undesired behaviour of suppliers, quality mismatch of materials
<i>Environmental Risk</i>	The threat of adverse effects on living organisms and the environment by emissions, wastes, resource depletion, etc., arising out of an organization's activities (Govori, 2012)	Pollution, lack of proper waste management policies, diseases arising from chemicals or hazardous work
<i>Logistics and Transportation Risk</i>	The possibility that raw materials or finished goods are not delivered to the customers effectively and timely due to transportation and logistics failure (Wright & Datskovska, 2012)	Mechanical failure of transports, accident, port lockouts
<i>Compliance Risk</i>	The risk of legal sanctions, financial loss, or loss to reputation that the firm may suffer as a result of its failure to comply with laws, its own regulations, code of conduct, and standards of best/good practice (Jordão & Sousa, 2010)	Intentional or unintentional non-compliance with relevant laws and regulations, internal policies or prescribed best practices.

Source: Based on literature review

There are several types of risk that can have diverse impacts on business activities. Based on the literature, a summary of the different types of risks is shown in Table 2. Since firms have to deal with a diverse range of risks, they need to manage them in order to sustain and grow. Risk management is a process through which risks are identified, recognized and assessed, strategies are developed to manage and mitigate those risks using managerial resources efficiently (Berg,

2010). However, it is true that not all risks are equally vital for an organization as some have higher 'likelihood' of occurring and some may cause greater 'damage' (impact), over the others (Berg, 2010). As a result, it is critical and useful to evaluate all risks using a 'likelihood-impact' approach. A generic risk management process follows the four sequential actions: (i) *Risk Identification*: identification and preparation of a checklist of the potential risk, (ii) *Risk Evaluation*: evaluating the likelihood and potential impact of each of the risks identified and developing a rank of priority or significance, (iii) *Risk Mitigation*: based on the rank, all risks need to be mitigated through adopting appropriate risk mitigation strategies (Berg, 2010); usually, in any or a combination of four ways: risk avoidance, risk sharing, risk reduction and risk transfer, and (iv) *Contingency Plan*: outlining action plans for a sudden or unexpected risk event that may arise in future (Berg, 2010).

In this study, our main purpose is to explore the sources, impacts and management process of different types of risks associated with the RMG exporters of Bangladesh. Literature specific to the RMG industry risks or challenges appear to be very limited, which we review in this section. The growth of the export-oriented RMG industry has been remarkable for Bangladesh; however, it appears crippled with a diverse range of challenges and uncertainties that generate significant levels of risks (Mottaleb & Sonobe, 2011). Although the list could be long, it would include: frequent violations of working conditions, international labor standards, and codes of conduct, using inconsistent factory or office building construction, use of poor construction materials, congested air circulation or poor workspace ventilation, no safety inspection of working conditions and building, frequent labor unrest, poor artificial and natural lighting system, illegal power connection and improper wiring, no or insufficient emergency staircases, careless smoking, overload on electricity, and poor fire safety measure (Barua & Ansary, 2016; Ahmed, Raihan, & Islam, 2013; Islam, 2014; Absar, 2001; Afrin, 2014; Rakib & Adnan, 2015; Carlson & Bitsch, 2018).

In addition to the firm-specific problems, the overall business environment of Bangladesh is also influenced by different political unrest of which the RMG industry cannot be alienated, for example, Hartal/Strike, blockade, political violence etc. Roy and Borsha (2013) found a sizable negative impact of 'Hartal/Strike' on the socio economic development of Bangladesh, so is expected for the RMG industry. Political instabilities are often complemented by frequent labor unrest in the RMG industry of Bangladesh that significantly disrupt production (Aziz, 2011). Moreover, the RMG producers frequently face the risk of very high employee turnover by the workers, which creates risk of production delay and business loss (Kaikobad & Bhuiyan, 2012). Other risks appear relevant could be obsolescence of technologies used by most of the RMG manufacturers, upgrade of which is essential for this labor-intensive industry in order to sustain the output growth (Khan, n.d.). Nuruzzaman (2013) found that, due to over dependence on foreign buyers' demands and imported raw materials; this industry faces a very high degree of supply chain related uncertainties. Moreover, the industry also faces climate change risk, mainly through increases in labor cost, reduction in supply of raw materials (Faruky, Uddin, & Hossain,

2011). Islam, Rakib, and Adnan (2016) found that the industry faces a number of challenges that may create a significant level of risky business environment, for example, unskilled workers, improper infrastructure, energy crisis, high cost of capital, high tax rate, intricate social compliance, political crisis, lack of market and product diversification, compliance pressure from buyers and lack of integration. Given the diverse range of risks faced by the industry, yet it remains unsure how the exporting firms manages the risks. No study so far has examined the issue.

In the world RMG market, Bangladesh is the second largest exporter, and insights from this country would be highly useful for any other RMG exporting nation, especially the close competitors with similar socio-economic profiles, e.g., Vietnam, India, and Sri Lanka. As such, identifying the existing and potential risks is also equally important for the industry. Faced with various types of risks, the RMG industry in Bangladesh has to manage them appropriately to sustain and grow in the international market. Effective risk management fundamentally requires top managements' role in identification, evaluation and mitigation of the risks (Islam & Tedford, 2012). However, in the overall manufacturing sector in Bangladesh, such management practice appears significantly weak or absent (Islam & Tedford, 2012). As the literature review suggests, there are a number of research on RMG industry in Bangladesh, most of which are on the overall performance of the industry in terms of competitiveness, working conditions, problem and prospects. To the best of authors' knowledge, no study has explored the multi-dimensional risk aspects associated with the industry. This paper attempts to fulfil this literature gap.

## **Methodology**

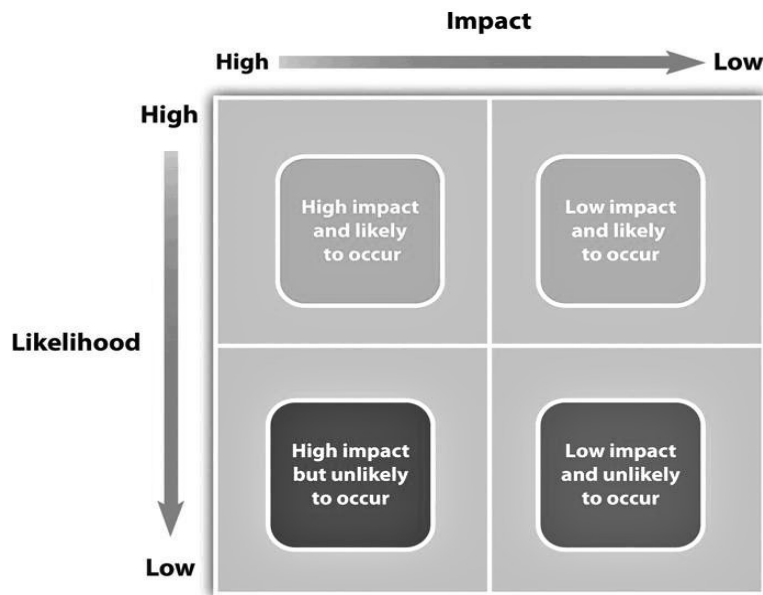
In line with the objectives set, the paper uses two methods - case study and in-depth interview, involving a non-probability sampling technique. Case study method is useful when there is a requirement of in-depth investigation and acquiring large sample population is not easy (Zainal, 2007). According to Yin (1994), case study approach is mostly useful when the investigator is looking for how or why type questions and has little control over the variables. For this study, obtaining a large sample size appears difficult since the RMG manufacturers are very reluctant to disclose their business information. Moreover, case studies and in-depth interviews can explore deep insights, which will serve the purpose of this research.

Most of the RMG manufacturers and exporters in Bangladesh are private limited companies or sole proprietorship. As a result, public data and information on them often appears unavailable or limited. As explained earlier, the RMG manufacturers treat data and information relevant to their businesses as a matter of secrecy and hence, they are very conservative while about data or information disclosure. A total of 10 RMG exporters are selected for this research. To acquire necessary data and information, detailed case study on each exporter is carried based

on publicly available information and data collected through direct visits and observations for the last five years from 2011 to 2015. Further, in-depth structured interview of the top management of each manufacturer is conducted to complement with the case study analysis. Both the interviews and the case studies are carried in the second quarter of 2016. Combining these two methods, data and information collected are utilized to identify three critical aspects:

- (i) the types of risks the manufacturers face, their frequencies and sources. Average frequencies for the risks are calculated on annual basis – minimum, maximum, and average number of times.
- (ii) the perceived level of overall impacts of each risk on five key business indicators: productivity, profitability, exports volume, reputation or image, and stakeholder relationship. The severity and significance of each risk is then evaluated using the Likelihood-Impact (L-I) framework (described below).
- (iii) key strategies that the RMG exporters adopt to mitigate or prevent these risks, followed by an evaluation of the strategies.

The likelihood-impact (L-I) model is widely known in the area of risk management, in particular in project management Amado et al. (2012). Following L-I model is used to complement the analysis (ii) above:



Source: Amado et al. (2012)

**Figure 1.** Risk Likelihood-Impact matrix

Once the risks are identified, scores are assigned for each risk based on the perceived level of impact magnitude and likelihood of each risk, using a five-point scale. These magnitude and impact scores are then used to develop a Risk Matrix to identify the overall risk-impact positioning of the exporters. Figure 1 shows the Risk Matrix utilizing the Likelihood-Impact framework. Each quadrant represents a different zones of likelihood-impact combinations of a risk. A company can be on any quadrant based on its own likelihood-impact scores for each risk individually. The likelihood and impact of a particular type of risk is scored using the scale presented in Table 3. The scores are assigned based on blind evaluations of the authors and the respondent so that untoward bias can be minimized.

**Table 3: Risk scores**

Scale	Score
Very High	5
High	4
Moderate	3
Low	2
Very Low	1

### *About the RMG Manufacturers Selected*

Table 4 shows that all the selected RMG manufacturers are fully export-oriented, meaning that they only export and do not sell their products in the domestic market. The manufacturers employ a minimum of 500 to a large pool of 15,000 employees, which show the depth and breadth of production and business activities of the exporters. Table 5 presents the export volumes, key export destinations, key import sources, and major customers for all the exporters. It is important to note from both Table 4 and 5 that the samples selected varies greatly in terms of size, business volume, and export destinations, which captures potential variations across large and small exporters making the findings more generally applicable. Almost all exporters rely on China and India for their raw material. The exporters have fairly balanced exports portfolio of USA and Europe, which helps to immune from systemic risk of being too focused on one particular region.

**Table 4: Basic information of surveyed RMGs**

Name	Address	Year of Establishment	No. of Workers	Export Orientation	Company Type
Diganta Sweater Ltd.	Noajoor, Tangail Road, Chandana Chowrasta, Gazipur 1702	2007	15000	Fully	Private Ltd
Gold Star Garments Ltd.	13/1, Ring Road, Shamoli, Dhaka	1992	1000	Fully	Private Ltd
National Garments Ltd.	14, Ring Road, Shamoli, Dhaka	1995	1200	Fully	Private Ltd
Bando Apparels Ltd.	Baribad, Mohammadpur, Dhaka-1207	2005	1200	Fully	Private Ltd
Prince High Design Ltd	Hakim Tower (2 <sup>nd</sup> & 3 <sup>rd</sup> floor), E-6 Middle Badda, Pragati Sarani Road, Dhaka	1996	800	Fully	Private Ltd
Ambition Garments Ltd.	Al-Amin Plaza, 320, East Rampura, Dhaka-1217	2009	500	Fully	Private Ltd
Anam Garments Ltd	67, Mirpur Road, (1st Floor), Kalabagan	1998	1500	Fully	Private Ltd
Birds Garments Ltd	9/9 Iqbal Road, Mohammadpur	2000	1300	Fully	Private Ltd
Virtual Knitwear Ltd	S.A. 7,8, R.S. 11,12,13, Karamtola, Pubail, Gazipur	2007	700	Fully	Private Ltd
Niagara Textiles Ltd	27, Bijoy Nagar, Suite No. C-1 (1st Floor) Dhaka-1000, Bangladesh.	2000	1500	Fully	Private Ltd

Source: Author constructed based on company provided data

**Table 5: International trade activities of the selected RMG manufacturers**

Name	Exports (million USD)						Imports (million USD)						Major Exports Destinations	Major Imports Sources	Major Buyers
	2012	2013	2014	2015	2016	2010	2011	2012	2013	2014	2015	2016			
Diganta Sweater Ltd.	27.04	44.58	45.45	41.44	41.19	26.01	29.18	17.30	25.99	26.01	23.94	23.62	USA, UK, Germany, Italy, France	China, India	M & M and Tema
Gold Star Garments Ltd.	5.00	4.50	6.98	7.52	8.55	1.89	2.34	3.75	3.38	5.23	5.63	6.40	Germany, USA, Brazil Canada	China	NKD Services GMBH, MGL
National Garments Ltd.	4.38	5.00	7.50	7.39	8.16	2.75	3.71	3.75	3.13	5.00	4.84	5.23	USA, Italy Germany	China	Bright Way, KZM
Bando Apparels Ltd.	6.00	6.50	6.25	7.01	7.43	3.50	4.00	4.50	5.35	5.00	5.68	6.06	UK, Italy Germany	Hong Kong, India	Metro D.D., Elvina Fashion
Prince High Design Ltd	6.00	6.50	5.00	6.40	6.80	2.50	3.19	4.38	4.85	3.00	4.38	4.65	Spain, Italy USA	China, Hong Kong	Louise Parise, Reliance Fashion
Ambition Garments Ltd.	3.38	3.50	3.75	4.11	4.40	1.50	2.25	2.50	2.56	2.75	3.16	3.44	Belgium, France, UK	China	M&M, Bright Way
Anam Garments Ltd	5.00	5.50	5.63	6.08	6.43	3.13	3.63	3.94	4.31	4.38	4.83	5.15	Belgium, Poland, France	India, Taiwan	Elvina Fashion, Pattaya Unique Fashion Co.
Birds Garments Ltd	5.13	5.38	5.75	6.19	6.59	2.75	3.88	4.00	4.13	4.75	5.18	5.60	Thailand, France, USA	China	KAN SP 200, Life style International
Virtual Knitwear Ltd	7.13	7.25	7.50	7.86	8.15	3.75	4.13	4.28	4.35	4.50	4.72	4.89	USA, Canada	India	Innovation Qualities, Truerex Ltd.
Niagara Textiles Ltd	9.38	9.13	10.00	11.19	12.10	5.00	6.00	8.13	7.50	8.50	9.58	10.43	Australia, Canada, Middle East	China	Sova, GTA Fashion

Source: Author constructed based on company provided data

## Analysis and Discussion

This section presents the analysis of the cases and in-depth interviews. The first sub-section presents the risk types and their nature, sources and frequencies. The second sub-section provides a detail on the risks' impacts and likelihood of occurrence, and finally, the risk manage strategies are discussed in third sub-section.

### *Types, Frequency and Sources of Risks Faced*

**Table 6: Types and frequency of risk face faced**

Risk Type	Annual Frequency (no. of times occurred in a year, considering all companies)		
	Minimum	Maximum	Mean
Political Risk	2	15	9
Technological Risk	2	25	14
Financial Risk	2	5	4
Operational Risk	5	20	13
Supply Chain Risk	5	10	8
Environmental Risk	2	5	4
Logistics & Transportation Risk	10	15	13
Compliance Risk	3	8	6

Source: Author constructed based on company provided data

Table 6 suggests that the RMG manufacturers face eight different types of risks in their international business activities. Expectedly, the most frequent risk faced by the companies is the logistics and transportation risk. Companies faced this risk from a minimum of 10 to a maximum of 15 times in a year. Technological and operation risks are closely related and both of them appear to be highly frequent. Consistent with the Bangladesh's history of frequent political turbulences, the RMG manufacturers appear to face political risk up to as many as 15 times in a year, which more than once in a month. The least frequency is associated is with compliance risk and environmental risk. One reason for these two risks taking the least frequency may be that these two are closely related since environmental protection is often a matter of compliance, and the regulatory authorities or the customers of the RMG manufacturers do not enforce compliance requirements much. The statement reflects the fact that compliance (e.g., worker safety, building codes) is often an overlooked matter in the Bangladesh RMG industry while environmental protection is probably the least considered matter in consideration to the industry activities. In the following section, a detailed discussion on the findings of the case studies is presented, organized by the types of risk.



### *Political Risk*

Bangladesh has a long history of unstable political environment since its independence. For example, during 2015, national election-centered political crises erupted in a multifaceted manner, creating a complex set of problems and posed huge risks for the export oriented RMG industry. Consequently, the RMG manufacturers and exporters were hit hard. Considering the factual history, the respondents identify this as a highly frequent risk. According to the survey, the RMG exporters face loss or damages from political risk a minimum 2 to a maximum 15 times in a year. The major sources of political risk are: unrest and violence, nation-wide strike and blockade, politically motivated adverse changes in government regulations, politically motivated industry unrest etc. It is not uncommon that political figures often intervene in company operations demanding financial benefits. According to the respondent, due to the risk, companies often face several outcomes, for example, delay in supply chain, direct financial losses due to casualties and damages of employees/workers, physical property damages from violence, losing work-order due to not being able to maintain commitment with the customers.

### *Technological Risk*

Although, the RMG industry in Bangladesh is in general labor intensive, yet they run with plenty of machineries and mechanical equipment. The heavy reliance of technology poses a great deal of risk also, for example, technology becoming obsolete, injuries resulted from mechanical failure. The exporters identify that they often face such technology related risk generally in the range of 5 to 25 times in a year. Fast obsolescence of technical and mechanical equipment is one of the main source of this risk. The respondents reveal that they find their newly or recently introduced machineries and technology becoming obsolete too fast, mainly due to the invention of new and advanced technology far before the expected life of the existing technology. Sometimes, they install new technology replacing their current one to comply with the requirements of their buyers. In addition, system breakdown, mechanical failure, and safety issues are also key sources of this risk. According to the respondents, they generally take enough safety measures to safeguard the workers from injury or accidents, however, yet it proves to be inadequate. The exporters perceive that technological risk affects their productivity, reputation and stakeholder relationship significantly higher than the direct effects on export volume.

### *Financial Risk*

Financial risk may arise due to the possibility of direct financial losses or in ability to meet its financial obligations. Most of the (seven out of the 10) RMG exporters

identified this risk as relatively infrequent risk. Exporters reporting affirmatively revealed a much infrequent occurrence of such risk (2-5 times in a year). Three main sources of this risk is explored examining the firms' cases: defaulting on a financial obligation, adverse changes in foreign exchange rates, and not receiving timely export payments. The case studies revealed that the RMG exporters often take large loans from private and public commercial banks, which they may be unable to service at times. On the other hand, almost all of them transact with the banks in spot exchange rate and as a result incur loss in value of the receipts due to adverse exchange rates movement. Only two of the RMG exporters identify that doing business would have been almost impossible without adequate supply of credit and regular export payments, and if they can mitigate the foreign exchange risk properly, they may incur more profit.

### *Operational Risk*

Operational risk is a frequent risk for any RMG manufacturer and exporter. As the case studies reveal, the frequency of occurring this risk is relatively higher, between 5 to 20 times in a year. Generally, operation risk occurs when a company fails to meet the target production or quality standards and cannot finish the production within a deadline. The case studies reveal that the absence of workers, process breakdown, mechanical failure etc. can significantly influence RMG production levels. If the workers and line chief fail to deliver production within their assigned deadlines, overtime works to catch the ultimate deadline may increase the production cost significantly and also may lead to a loss of reputation. In addition, below-standard quality of RMGs due to operational failure may result in reduced future order size or loss of customers.

### *Supply Chain Risk*

Although Bangladesh is the second largest RMG exporter in the world, the industry is largely dependent on external suppliers of raw materials, mainly from overseas. Such heavy reliance on international suppliers creates the possibility of supply chain risks. The RMG exporters studied normally collect their supplies locally from Savar and Comilla EPZ and internationally from China, India and other countries. The RMG exporters identify that the frequency of supply chain risk generally varies within the range of 5-10 times in a year. Several sources create supply chain risk, e.g., inability of suppliers to supply the required (in terms of both quantity and quality) raw materials, lack or failure of transportation facilities. The poor performance of the raw materials suppliers is a key source of the risk which affects quality of finished products. The RMG exporters reveal that late delivery of raw material can also delay finished product delivery exceeding the deadline set by the buyers (production shut-

down in extreme cases), which generally results in a cut of 5%-10% of total export payment. Moreover, higher the price during high demand season also increases supply chain risk. Overall, they adversely affect the level of profitability. The RMG exporters agreed that supply chain risks have a strong impact on productivity, profitability, reputation, and stakeholder relationship.

### *Environmental Risk*

RMG factories often release hazardous materials as waste that can impact the environment significantly, e.g., different colors, chemicals etc. Huge amount of wastages are produced by this industry which can be an alarming threat for the environment, if proper waste management is not undertaken, e.g., installing Effluent Treatment Plant (ETP). Such environmental damages often create severe health complications and diseases for the workers. Of course, such complications may also arise due to the direct contact of the workers with different chemicals during the production process. However, the RMG exporters reveal a relatively lesser frequency of occurrence of environmental risk, varying in the range of 2-5 times in a year. It is important to note that majority of the exporters studied believe that, environmental risk has no or little impact on production, profitability, export volume and stakeholder relationship; and as a result, they often overlook the environmental damages.

### *Logistics & Transportation Risk*

Logistics and transportation play a vital role in the RMG value chain globally, and there are several risks associated with these activities. Negligence and delay of the carriers may result in loss of money, resources, and customers. The RMG exporters revealed that incidences like robbery, theft, hijacking during transporting goods is not uncommon both at the local and international levels. Moreover, carrier cost frequently increases during special occasions, such as religious festival (e.g., Eid-ul-Fitre), and also due to unstable political conditions like strike, blockade etc. Increased carrier cost ultimately increases the overall cost and reduces profitability. The case studies reveal facing the logistics & transportation risk at an annual frequency of 10-15 times. And the exporters strongly believe that logistics and transportation risks have a large impact on productivity, profitability, reputation and relationship among stakeholders.

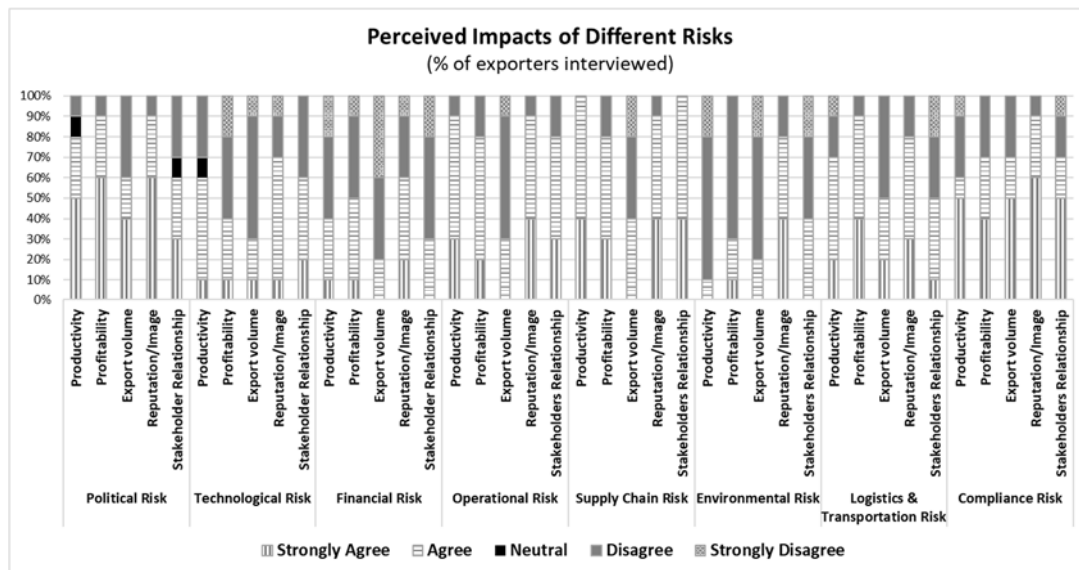
### *Compliance Risk*

International buyers or importing country governments often impose compliance requirements that need to be ensured by the RMG exporters from Bangladesh. The compliance requirements became stricter after the unfortunate

incidents of Rana Plaza collapse and Tazreen Fashion fire that killed many workers. Since then, different audits are being conducted focusing mainly on compliance requirements. The RMG exporters reveal that compliance risk has risen in the last couple of years and its general frequency of occurrence falls in the range of 3-8 times in a year. Bangladeshi RMG factories, especially those who are located in and around the capital city Dhaka are famous for very poor compliance history, e.g., not following proper building codes, not using any scientifically approved construction design, not having any worker safety measures, and lack of minimum wage. Such no-compliance practices have led to building collapse and loss of many lives. In addition, RMG exporters reported that they do not have enough arrangements to ensure hygienic food and clean drinking water for all the workers. All these again increase compliance risk. The RMG exporters studied strongly believe that compliance risk has strong impact on productivity, profitability, export volume, reputation and stakeholder relationships. If any accident occurs in a factory and the lack of compliance is proved, international buyers tend to cancel relationship with that particular exporter and switch to the more compliant factories. However, the RMG exporters reveal that increased level of measures have been undertaken to avoid compliance risk, especially in the face of the two major accidents and the subsequent compliance pressures from all stakeholders.

### ***Perceived Impacts of the Risks***

The impacts of different types of risks on RMG industry are given below on a percentage basis, perceived by the exporters interviewed in this research. The perceived impacts are expressed across five major dimensions of their businesses: Productivity, Profitability, Export volume, Reputation, and Stakeholder Relationship. Note that the previous section provided brief on the potential impacts of each risk.



(Relative frequency as % of total respondents)

Source: Author constructed based on interview data

**Figure 2.** Perceived impacts of different risks

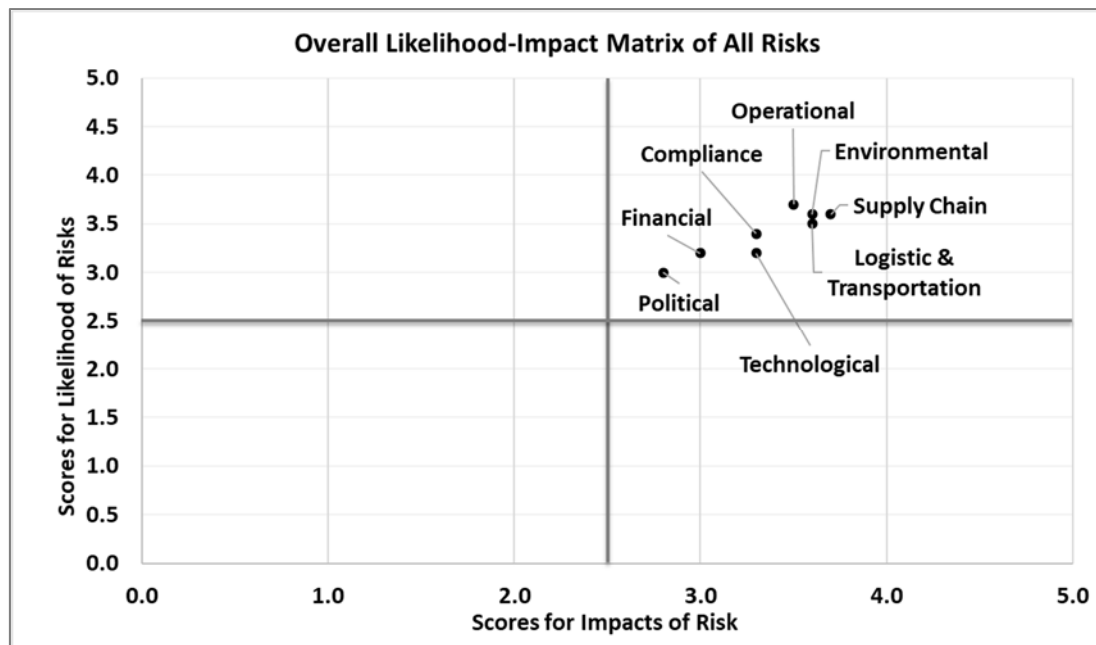
Figure 2 shows that most of the exporters perceived political risk (with mostly strongly agreed) has a significant level of negative impacts across all dimensions, especially on profitability (90%), productivity (80%) and reputation (90%). However, they believe it has a less direct effect on their exports volume. On the other hand, technology risk is perceived to have significant effects on productivity (60%), reputation (70%) and stakeholder relationships (60%). Most of exporters believe financial risk damages only profitability (50%) and reputation (60%). However, the most severe is probably the operational risk. Most of the exporters reveal that operation risk destroys their performance across all dimensions with a little lesser direct effect on exports volume (30%). Most of the exporters perceive its adverse effects on productivity (90%), profitability (80%), reputation (90%) and stakeholders Relationship (80%). Similarly, supply chain risk is also perceived by most exporters as another risk having great impacts on almost all the dimensions, i.e., productivity (100%), profitability (80%), export volume (40%), reputation (90%), and stakeholder relationship (100%). However, environmental risk is still considered as having lesser impacts on the five dimensions, for example, only 10% agree with its effects on productivity, 30% agree on profitability, 20% agree on exports and the another 30% agrees with its effects on stakeholder relationship. It means that most exporters believe environmental risk does not have a significant level of effects on these four business dimensions. Only reputation appears to be the key recipient of the risk impacts as agreed by about 80% of the exporters. Logistics and transportation risk on the other hand is a critical risk factor perceived by most of the exporters. Majority of the respondents believe that it has a significant level of impacts across all dimensions: productivity (70%), profitability (90%), export volume (50%), reputation (80%), and

stakeholder relationship (50%). It is important and perhaps, a matter of hope that, majority of the exporters now identify compliance risk as a key risk significantly affecting all the business dimensions productivity (60%), profitability (70%), export volume (70%), reputation (90%), and stakeholder relationship (70%). This understanding may be helpful in bringing compliance discipline of the overall industry in the future.

### Overall Risk Matrix

The following 'Risk Matrix' shows the average riskiness of the selected RMG exporters using the L-I framework. Each risk was initially assigned a score from 1 to 5 for both Likelihood and Impact, based on possibility of occurrence and severity of impacts, respectively. The overall score for each risk is created by taking the average value of 'Likelihood' and 'Impact' across all the RMG exporters. Figure 3 presents the plotting of the average values, i.e., overall positioning of each risk in the risk matrix.

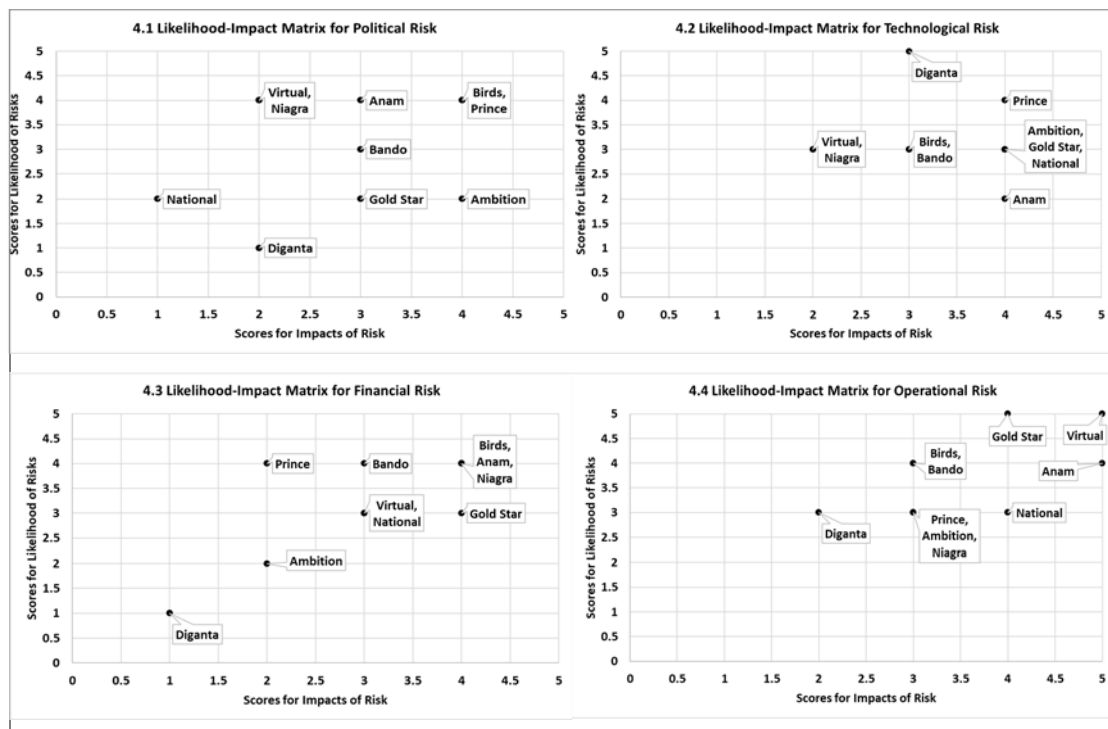
The overall likelihood-impact matrix clearly shows that the significance and severity of each risk is at the top-right corner, suggesting that all the risks identified in the previous sections have high-significance and high-severity. In other words, each of the risks has relatively high possibility of occurrence, combined with high impact.

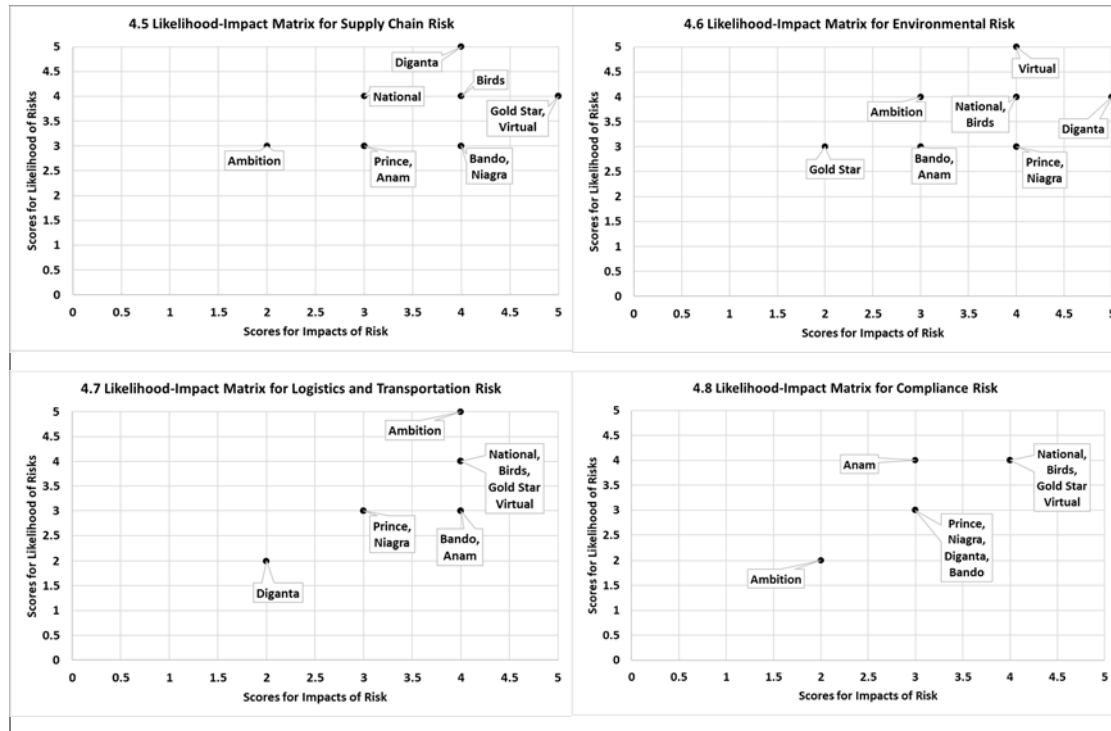


Source: Author constructed based exporter responses

Figure 3. Overall risk matrix (average basis)

In a comparative view, supply chain risk appears to carry the highest average likelihood of occurrence and the highest levels of average impacts on the business of the RMG exporters. It is then followed by operational, logistics and transportation, and environmental risk. This is expected since the RMG exporters are fully export-oriented and therefore, operational, logistics, transportation and supply chain risk are to be more critical for them than anything else. Technological, financial and compliance risks appear to have relatively less likelihood associated with fewer impacts. The least combined likelihood-impact is associated with political risk, although, Bangladesh has a known history of political instability. More detailed risk-wise matrices are shown through Figure 4.1 to 4.8 below. It is important to note that most of the companies fall in the top-right corner, in other words, the high likelihood-high impact zone of the matrices presented. Only for political and financial risk matrices, three of the exporters fall in the relatively lower likelihood and lower impact zones. As most of the RMG exporters are falling in the high likelihood-high impact zone of almost each risk, it clearly suggests that the exporters are carrying business with higher degree of risk. These matrices also explain the outcome presented in the overall matrix in Figure 3.





Source: Author constructed based exporter responses

**Figure 4.** Company position in the Likelihood-Impact matrix of each risk

### Strategies for Managing the Risks

The RMG exporters reveal a number of strategies, both preventive and mitigating, to deal with the risks faced. Table 7 reports the summary of the key strategies adopted for each risk type. The table shows that most of the management strategies are damage or loss preventive, meaning that the exporters intend either to prevent a risk from occurring or to prevent damages from a risk if occurs. Very few mitigating strategies are adopted, indicating the RMG exporters have less instruments or preparations at hand to minimize the loss arising from a risk.



**Table 7: Risk management strategies adopted by the RMG exporters**

<b>Risk Type</b>	<b>Key Management Strategies Adopted</b>	<b>Strategy Type</b>
Political Risk	- Insurance for shipments during blockade/strike or violence	Preventive
	- Assistance from the security agencies (police)	Mitigation
Technological Risk	- Frequent check-up of machineries and equipment	Preventive
	- Training for workers to familiarize with technology	Preventive
	- Protective measures, e.g., health insurances, especially for those who interact directly with the heavy machineries.	Preventive
Financial Risk	- Unethical practices, e.g., bribing bank officials for loans	Mitigation
	- Pressurizing local agents of the foreign buyers to pay timely	Mitigation
Operational Risk	- Setting weekly production target for line chief/workers	Preventive
	- Matching the measurements and designs of buyers' sample	Preventive
	- Employing skilled and efficient workers etc.	Preventive
	- Quality control checking of each and every unit of production	Preventive
	- Buyer representative monitoring for product quality	Preventive
Supply Chain Risk	- Contracting with more than one buyer	Preventive
	- Critically checking raw material quality before accepting	Preventive
	- Motivating suppliers to provide good quality supplies	Preventive
Environmental Risk	- Developing and adopting wastage management strategies	Preventive
	- Setting up Effluent Treatment Plant (ETP)	Preventive
	- Procuring advisory services from waste management experts	Mitigation
	- keeping the garments premises neat and clean.	Preventive
Logistics & Transportation Risk	- Using own pool carriers/vehicles	Preventive
	- Installing safety devices in the carriers	Preventive
	- Tightening security of the factory premises to reduce theft	Preventive
	- Insurance policies for the goods in transport and shipment.	Preventive
	- Following the compliance requirements set by the buyers, the importing country government and the local government	Preventive
Compliance Risk	- Separate funds to ensure the required compliances	Preventive
	- Regular testing of fire safety, noise level and building strength	Preventive

Source: Author constructed based on case study and in-depth interview

The respondents reveal that insurance schemes for the outward or inward shipments during the blockade/strike or any other political violence help manage political risk, at least partially. The only other mitigating mechanism they often pursue is taking the help of security agencies (police). In order to address the technology risk, the exporters frequently check machineries and equipment used in the production process and arrange training for workers to make them familiar with the new or existing technology. In addition, protective measures, e.g., health insurances are also undertaken, especially for those who interact directly with the heavy machineries. To manage financial risk from occurring, the RMG exporters revealed of adopting unethical approaches such as bribing the bank officials for approving emergency loans through "Fraud L/C". Also, they often pressurize local agents of the foreign buyers to pay timely. To manage operational risk, the exporters set weekly production targets for line chief/workers, carefully match the measurements and designs of buyers' sample, employ skilled and efficient workers, and ensure quality control for every unit of production. Often, buyer representatives monitor products' quality during production process. To address supply chain risk, the companies usually contract with more than one buyer, critically check the quality of raw materials delivered, and motivate suppliers to provide good quality supplies through financial and non-financial incentives. Although not enough, the RMG manufacturers revealed of adopting some strategies and actions to reduce environmental risk, e.g., setting up ETP, appointing waste management experts, keeping the garments premises neat and clean. To manage transportation and logistics risks, the exporters often use own carriers, install safety device in the carriers, tighten the security system of the garments to reduce theft, take appropriate insurances for the goods in transport and shipment.

Compliance risk is addressed carefully by following the compliance requirements set by the buyers, the importing country governments, and the local government. Sometimes, they keep extra funds separately to ensure the required compliances. Further, they frequently test fire safety, air and water quality, noise level and building's strength and capacity. However, the RMG exporters reveal that much of these compliance measures have increased significantly in the face of the two major accidents and the subsequent compliance pressures from all stakeholders, both locally and internationally. The risk management strategies outlined in Table 7 provides some critical implications about the industry's dealing with risks. It is clear that the RMG exporters have a minimal weapon available for risk mitigation purposes, which might prove very costly in the long-run. Effective risk mitigating strategies can minimize the loss or damage arising from a risk whenever it occurs. However, if such mitigation strategies are not available or whatever available proves to be ineffective, firms would embrace whole cost.

The risk management story presented here indicate that the RMG exporters do not have adequate risk mitigation strategies at hand and therefore, are exposed to collateral damage whenever a risk occurs. For example, on the technological risk, in case of a mechanical failure, immediate arrangements of alternative machineries to

keep the production uninterrupted would help the exporters to minimize the production and time delay effects. On the environmental risk, in case where the hazardous materials are released, there should be effective strategies to remove them in order to minimize pollution, and impacts on worker and community health. While the RMG exporters appear to be over-reliant on preventive approaches, they might eventually prove ineffective and inadequate. For example, in order to reduce the possibility of supply chain risk, futures or forward contracts could be a better alternative strategy for the RMG exporters. Again, on the financial risk, derivatives, especially, forward exchange rate contracts with banks could be more useful in removing potential exchange rate risk.

Overall, the risk management strategies explored reveal that the RMG exporters actually have a very minimal formal expertise in risk identification, measurement and management in international business, particularly with respect to the global RMG and clothing market. The case studies also identified that none of the ten exporters had any official, department, or section formally assigned to deal with risk management. In addition, the in-depth interviews revealed that only two of the exporters' top management had awareness about the necessity of a formal risk management approach in the RMG exports business. It is found from the interviews that the RMG exporters had 'no' to 'very little' idea about many of the risks they inherently carry, meaning that there is a large gap in risk identification ability – the first step towards formal risk management practices. For example, all the exporters believed exchange rate variation does not pose much risk for them, whereas in practice, often they face loss in the value of exports receipts or increased import payments due to adverse changes in the USD-BDT exchange rates.

## **Conclusion**

Bangladesh is the world's second largest Readymade Garments industry (RMG) exporter, led by China and followed by India and other developing countries. The RMG industry generates more than eighty per cent of foreign currency earnings industry for Bangladesh and employs millions of people. The industry appears to have exposure to a variety of risk, however, the industry and the policy-makers fall short of both awareness about the risks and expertise in managing them. As a novel effort, this research provides insights on the different types of risks faced, their sources, potential impacts and management practices in the industry, by conducting case studies and in-depth interviews on 10 selected RMG exporters of Bangladesh. Findings suggest that the RMG exporters face eight different types of risks: political, technological, financial, operational, supply chain, logistics and transportation, environmental, and compliance-related. Sources of each risk varies greatly due to the difference of the attribute of each risk. However, these risks on an average occur throughout the year annually and the frequencies vary across risks (on average 4 to 14 times). Most of the

exporters believe the risks affect their productivity, exports volume, profitability, reputation and stakeholder relationship significantly, and all the risks on average have a high likelihood-high impact severity. The exporters appear to adopt different strategies, mostly preventive, having a weak preparation to minimize the loss or damage when a risk occurs. While the strategies adopted appear inadequate to protect the exporters, the understanding of the top management of almost all the exporters on the risks and their management is found very minimal (e.g., they failed to identify a real risk 'as a risk' e.g., foreign exchange risk). Further, it appears that the exporters neither assess their level of riskiness on a regular basis nor they have dedicated manpower to do that. While the industry is considered as the main engine of Bangladesh's economic growth, the high-level of vulnerability in terms of know-how about the risks and their poor management practices may prove to be costly in the long-run. If not addressed appropriately, large risk events may shut the industry growth, leading to a major slowdown in the country's clothing-industry centric economy. While the findings posit important insights for Bangladesh, these may be useful lessons for other nations, especially the developing ones that closely compete with Bangladesh in the world market.

## References

- Absar, S. S. (2001). Problems surrounding wages: The readymade garments sector in Bangladesh. *Journal of Labour and Management in Development*, 2(7), 3-17.
- Afrin, S. (2014). Labour condition in the apparel industry of Bangladesh: Is Bangladesh labour law 2006 enough? *Developing Country Studies*, 4(11), 70-78.
- Ahmed, N. (2009). Sustaining ready-made garment exports from Bangladesh. *Journal of Contemporary Asia*, 39(4), 597-618.
- Ahmed, S., Raihan, M., & Islam, N. (2013). Labor unrest in the readymade garment industry of Bangladesh. *International Journal of Business and Management*, 8(15), 68-80.
- Amado, M., Ashton, K., Ashton, S., Bostwick, J., Clements, G., Drysdale, J., Francis, J., Harrison, B., Nan, V., Nisse, A., Randall, D., Rino, J., Robinson, J., Snyder, A., Wiley, D., & Anonymous. (n.d.). *Project management for instructional designers*. Retrieved from <http://pm4id.org/>.
- Aziz, A. (2011). RMG trading scenario in India and other major countries – comparative performance & issues. *International Journal of Business and Management*, 6(6), 267-275.
- Bangladesh Garment Manufacturers and Exporters Association (BGMEA). (2015, February 03). BGMEA B2B Web Portal. Retrieved from [http://www.bgmea.com.bd/home/pages/tradeinformation#.VgwL\\_318XIV](http://www.bgmea.com.bd/home/pages/tradeinformation#.VgwL_318XIV)

- Barua, B. (2017). Firm characteristics and bank internationalization in an emerging economy. *Asian Economic and Financial Review*, 7(12): 1167-1178.
- Barua, S., Khan, T., & Barua, B. (2018). Internationalization and performance: Evidence from Bangladeshi banks. *The Journal of Developing Areas*, 51(2), 105-118.
- Barua, U. & Ansary, M. A. (2016). Workplace safety in Bangladesh ready-made garment sector: 3 years after the Rana Plaza collapse. *International Journal of Occupational Safety and Ergonomics*, 23:4, 578-583.
- Barumwete, L. A. & Rao F. (2008). *Exchange rate risk in automobile industry: An empirical study on Swedish, French, and German multinational companies*. UMEA School of Business, Sweden.
- Berg, H.P. (2010). Risk management: Procedures, methods and experiences. *RT&A*, 1, 79-95.
- Carlson, L. A. & Bitsch, V. (2018). Social sustainability in the ready-made-garment sector in Bangladesh: an institutional approach to supply chains. *International Food and Agribusiness Management Review*, 21(2): 269-292.
- Faruky, K. N. B., Uddin, A., & Hossain, T. (2011). Understanding the challenges of climate change on business: A study on RMG sector in Bangladesh. *World Review of Business Research*, 1(1), 34-49.
- Faruque, A. A. (2009). Current status and evolution of industrial relations system in Bangladesh. Cornell University Industrial Publications.
- Govori, A. (2012) 'Measuring and managing the impact of risk on organizations: The Case of Kosovo', Munich Personal RePEc Archive, [Online]. Available at: <https://mpra.ub.uni-muenchen.de/38975/> (Accessed: 10 August 2015).
- Holton, G. A. (2004). Defining risk. *Financial Analyst Journal*, 60(6), 19-25.
- Hossain, M. S. & Hafiz, E. (2017, August 06). Readymade garment industries going green. The Financial Express. Retrieved from: <http://thefinancialexpress.com.bd/2017/08/06/79126/Readymade-garment-industries-going-green>
- Hou, A. X. (2013). *Risk management*. Society of Actuaries.
- Islam, A. & Tedford, D. (2012). Implementation of risk management in manufacturing industry - An empirical investigation. *International Journal of Research in Management & Technology*, 2(3): 258-267.
- Islam, M. S., Rakib, M. A. & Adnan, A. T. M. (2016). Readymade garments sector of Bangladesh: Its contribution and challenges towards development. *Journal of Asian Development Studies*, 5(12), 50-61.
- Islam, S. (2014). *The political economy of industrial accidents in readymade garments factory in Bangladesh: A case study of rana plaza tragedy*. Bangladesh: University of Dhaka.

- Jordão, B. & Sousa, E. (2010). *Risk management*. New York: Nova science publishers.
- Kaikobad N. K. & Bhuiyan M. Z. A. (2012). Job switching of garment workers decreasing productivity: An analytical research. *IOSR Journal of Business and Management*, 4(4), 1-7.
- Khan, M. H. (n.d.). Technological upgrading in Bangladeshi manufacturing: Governance constraints and policy responses in the readymade garments industry. University of London.
- Khan, T. & Barua, B. (2017). Internationalization of Bangladeshi Banks: What Can We Learn?. *American Journal of Trade and Policy*, 3(3), 109-118.
- Merna, T. & Al-Thani, F. (2008) *Corporate risk management*, Chichester, England: Wiley.
- Mirdha, R. U. (2016, July 17). Bangladesh remains second largest garments exporter, against all odds. The Daily Star. Retrieved from <https://www.thedailystar.net/country/bangladesh-remains-second-largest-garments-exporter-against-all-odds-1255084>
- Mottaleb, K. & Sonobe, T. (2011). An inquiry into the rapid growth of the garment industry in Bangladesh. *Economic Development and Cultural Change*, 60(1), 67-89.
- Nuruzzaman, M. (2013). Improving competitiveness of readymade garment (RMG) industry of Bangladesh - analysis of supply chains. Curtin University, Graduate School of Business.
- Oxelheim, L. (1984). Exchange risk management in the modern company-A total perspective Scandinavian institute for foreign exchange research. Scandinavian Institute for Foreign Exchange Research.
- Rakib, M. A. & Adnan, A. T. M. (2015). Challenges of Ready-Made Garments sector in Bangladesh: Ways to overcome. *BUFT Journal*, 3, 77-90.
- Roy, M. & Borsha, F. H. (2013). Hartal: A violent challenge to the socio-economic development of Bangladesh. *International Journal of Scientific & Technology research*, 2(4), 86-97.
- Sandra, L., David, H. & Anna, S. (2007). *BRICS and beyond*. Goldman Sachs Research Global Economics Group.
- Wengert, H. and Schittenhelm, F. (2013) *Corporate Risk Management*, Berlin, Heidelberg: Springer Gabler.
- Wright, J. and Datskovska, D. (2012). New perspectives on Global Risk, *Logistics Management*, May (2012), pp.42-44.
- Yin, R., (1994). *Case study research: Design and methods*, 2nd Edition, Beverly Hills, CA: Sage Publishing.
- Zainal, Z. (2007). Case study as a research method. *Jurnal Kemanusiaan Bil*, 9, 1-6.

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