



Positioning marketing analytics for organisational agility in the ready-made garments industry in an emerging country context

Md Asadul Islam, Dieu Hack-Polay, Mahfuzur Rahman & Francesca Dal Mas

To cite this article: Md Asadul Islam, Dieu Hack-Polay, Mahfuzur Rahman & Francesca Dal Mas (12 Apr 2024): Positioning marketing analytics for organisational agility in the ready-made garments industry in an emerging country context, Journal of Strategic Marketing, DOI: [10.1080/0965254X.2024.2325530](https://doi.org/10.1080/0965254X.2024.2325530)

To link to this article: <https://doi.org/10.1080/0965254X.2024.2325530>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 12 Apr 2024.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Positioning marketing analytics for organisational agility in the ready-made garments industry in an emerging country context

Md Asadul Islam^a, Dieu Hack-Polay^b, Mahfuzur Rahman ^b and Francesca Dal Mas^c

^aSunway Business School, Sunway University, Selangor, Malaysia; ^bLincoln International Business School, University of Lincoln, Lincoln, UK; ^cDepartment of Management, Ca' Foscari University of Venice, Venice, Italy

ABSTRACT

This study aimed to examine the complex forces that influence the adoption of marketing analytics in the ready-made garments (RMG) industry in an emerging country context. The forces for change and those that impede the adoption of marketing analytics in the industry were explored. We used Lewis's Force Field Analysis framework to inform the research. Semi-structured interviews with managers, technology experts, and government officials were conducted using face-to-face and virtual meetings. The results reveal that RMG buyers' demand, competitors, lack of employee performance, and climate change issues are central forces pushing for implementing marketing analytics in the industry. However, the lack of knowledge, interest, and technology-skilled people, high cost, employee resistance, privacy issues, high employee turnover, and government policies are significant impediments to marketing analytics adoption in the RMG industry. The theoretical, organisational, policy, and professional implications are then discussed. Theoretically, this study contributes by creating a conceptual framework using Lewin's Force Field Analysis. In practical terms, this study suggests that marketing analytics in the Industry 4.0 era offers significant opportunities for businesses and policymakers to increase their flexibility, competitiveness and responsiveness.

ARTICLE HISTORY


Received 17 April 2023
Accepted 26 February 2024

KEYWORDS

Marketing analytics; force field analysis framework; ready-made garments (RMG) industry; emerging country

1. Introduction

The future of organisations is becoming more complex than ever due to industry 4.0 innovations (Bagnoli et al., 2019). Business entities must be aware of market conditions to forecast and take swift actions to reach customers faster, owing to unprecedented competition. To meet the challenges of uncertainty, tremendous technological integration has been observed in various sectors (Cavazza et al., 2023; Mahmood & Mubarik, 2020). In this regard, marketing analytics (MA) is one of the key technological innovations that has experienced a significant rise in interest recently due to the big data revolution and the advent of artificial intelligence (AI) (Aker et al., 2022, 2023; Petrescu & Krishen,

CONTACT Mahfuzur Rahman  marahman@lincoln.ac.uk

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

2022; Wedel & Kannan, 2016). However, many industries in emerging regions, including South Asia, are still lagging in using industry 4.0 innovations (Berg et al., 2021; Islam et al., 2018; Szász et al., 2021), including MA.

MA has already transformed collecting, managing, and analysing data to obtain helpful information for enhanced marketing decision-making (Germann et al., 2013; Wedel & Kannan, 2016). As such, MA is remarkably supporting companies not only to reach the market but also to formulate proactive marketing strategies for greater market achievement (Liang et al., 2022). MA based on cloud-sharing platforms has brought many marketing solutions for personalisation, pricing, sales management, promotions, segmentation, targeting, positioning, and customer relationship management (Akter et al., 2022; Iacobucci et al., 2019). However, the literature underlines how the application of MA in some industries still presents considerable challenges. Among these sectors, we may mention the ready-made garments (RMG), which stands as one of the most relevant industries in emerging countries.

Since the shift of RMG industry from Western countries to East and South Asian countries in 1980s (Zhang et al., 2016), strategic marketing, management, supply chain, and financial aspects have changed remarkably. Market volatility, political disparities between governments, technological disruptions, and the entrance of competitors have made it clear that conventional strategies are not enough to stay competitive in the market. Moreover, buyers' demand for RMG products i.e. clothing, has changed due to various trends (Munni, 2023). Therefore, reconfiguration in marketing efforts to forecast and offer the right products is critical.

Academics and practitioners are still pondering the contribution of MA to marketing success in production-based industries like the RMG one. Furthermore, there is a paucity of studies based on empirical evidence on MA's value creation potential in the RMG industry in the present digitalised world integrated by industry 4.0 technologies. Among the few that studied the potential of MA within the RMG sector, Hossain et al. (2022) underlined the tremendous potential of such a technology to increase the competitive advantage, especially in sensing, seizing, and reconfiguring the market. Still, there are very few studies on how MA can be effective in developing agility in RMG organisations, defined as the ability to respond quickly to the needs of the market and customers, maintain low costs, and increase quality. Agility is required to envision change accurately, reconfigure operations flawlessly, and offer transparent value additions to products and services.

In the context of RMG, Bangladesh is one of the highest exporters in the world, just behind China (Statista, 2022). However, the country competes with several players, including China, Vietnam, the Philippines, India, Turkey, Pakistan, Korea, the European Union etc (Chowdhury & Keya, 2022). Some studies suggested that the RMG industry must welcome technologies and data-driven approaches to gain more advantage (Mohiuddin Babu et al., 2022). Bangladesh requires MA to position itself as a leader in the world's RMG industry, and it represents an exciting context in which to conduct investigations.

Liang et al. (2022) argued that the effective deployment of MA to improve firms' agility is a complex process. This complexity, therefore, calls for further study in different contexts i.e. geographical, industrial, theoretical, and so on (Wang et al., 2021). Hence, the aim of this study is to examine the underlying forces urging the application of MA to enhance the agility of RMG organisations in the context of Bangladesh, which is

embracing the use of novel industry 4.0 technologies. The paper employs a qualitative approach by conducting semi-structured interviews with a panel of field leaders, namely, managers, technology experts, and government officials. The study aims to dig deeper into the barriers, issues, and perceived benefits in the application of MA in the critical and lively RMG industry, starting from the results borrowed from the recent literature.

This paper makes several contributions to the existing knowledge. Firstly, the study contributes to the MA literature, as it sheds an in-depth light on the factors that urge the adoption of this technology in developing countries. Secondly, the article examines the challenges that impede applying MA to improve agility in RMG organisations.

The study presents relevant insights for practitioners and policymakers, with special reference to the RMG industry in Bangladesh. Adopting MA in this industry may make organisations more agile. There appear to be no studies that can provide a clear understanding to stakeholders of why and what the reasons are to bring the change in the current marketing practice by adopting MA, and about the factors that hinder the adoption of marketing analytics to enhance organisational agility. Hence, we offer a timely and critical contribution to the stakeholders in the RMG industry. Thirdly, the investigation contributes to the Force Fields Analysis Framework (Lewin, 1951) to identify the forces that impede the adoption of marketing analytics in developing countries like Bangladesh.

The remaining of the article is developed as follows. The next section reports a review of the literature on the key concepts used to conduct the investigation. The following paragraph underlines some methodological remarks. The investigation's results are then reported, followed by an in-depth discussion and implications.

2. Literature review

2.1. MA and agility of organisations

Agility can be defined as the ability of an organisation to renew itself, adapt, change quickly, and succeed in a rapidly changing, ambiguous, turbulent environment. In this regard, data-driven technology or process, for example, MA, derived from industry 4.0 revolution, has a strong influence on developing agility (Mohiuddin Babu et al., 2022). MA is effective in understanding market changes from different perspectives (Germann et al., 2013; Tarn & Wang, 2023), for example, diverse customer segments (male versus female, young customers versus senior ones, ...) or even beyond borders and technological trends (Akter et al., 2022; Aljumah et al., 2021; Wedel & Kannan, 2016). MA capability on a cloud sharing platform (e.g. Google Cloud, AWS, Microsoft Azure) includes collecting, storing, processing, and analysing various data (e.g. sales & revenues, app and weblogs, transactions, social data, and surveys) to apprehend insights on marketing effectiveness using descriptive, diagnostic, predictive and prescriptive tools (Wedel & Kannan, 2016). Thus, MA is significant in making marketing decisions quickly in rapidly changing and turbulent market environments. Many corporations are investing vast amounts of money in MA. However, mega-companies are at the forefront of the use of MA with the interest of their stakeholders only (Montes & Goertzel, 2019). Due to the conjunction of different computational, statistical, machine learning, technological, analytical, and research

trends, we are currently standing in a time of ubiquitous MA (Liang et al., 2022; Paschen et al., 2019).

The literature underlines how business analytics, including MA capabilities, improve organisational resources such as information quality and innovative capacity, that in turn, significantly and positively impact a firm's agility, but also managers' satisfaction (Haverila et al., 2023). Industry dynamism and technological turbulence moderate organisational agility and finally firms' performance (Khan et al., 2022; Mahfuz Ashraf et al., 2019). Hence, it is critical to develop MA to enhance market agility. However, the role of MA is still ambiguous because it is currently beset with various algorithmic biases, such as data, model, and contextual biases, which question its applications. Hence, the role of MA in developing agility in organisations is yet to be explored in-depth in various contexts through further research (Akter et al., 2022; Hajli et al., 2020).

2.2. Challenges in applying MA for organisational agility

The literature has examined some of the challenges in the adoption of MA (Cao et al., 2022). There are substantial challenges deriving from the combined impact of regulatory processes and market and non-market incentives throughout the process of developing new capabilities (Rahman et al., 2021). Thus, organisations that can deal with these challenges can learn faster, respond more quickly, and achieve the advantage of innovation.

MA can be used for both short and long-term strategies so that firms can develop agility. In this regard, the data privacy issue has been highlighted in key literature (Petrescu & Krishen, 2022). Lack of MA expertise (Ndlovu & Ndlovu, 2021) is a main barrier to developing MA in SMEs. To build MA for specific segments or particular areas, organisations have to collect data from various sources (Iacobucci et al., 2019; Wedel & Kannan, 2016). Expert employees represent the prerequisite for effective data use to develop MA to improve agility (Ding et al., 2020; Liu & Burns, 2018; Wedel & Kannan, 2016). Additionally, regulatory environments facing the company can have a major impact on MA adoption (Branda et al., 2018). Last but not least, financial barriers arise (Willets et al., 2022).

2.3. Theoretical framework

Lewin (1951) argues that some critical forces push organisations to the point where change is required in terms of their direction, operations, and processes. Lewin's Force Field Analysis Framework helps identify forces that restrain such moves in achieving agility. The competing forces can alter organisational competitiveness i.e. agility, if respective management personnel does not take the initiative to explore the factors refraining forces to change and increase the forces for change. In the context of Bangladesh's RMG industry, these forces include competitors, sustainability concerns, environmental degradation, dynamic buyers' demand, technological change, poor technological infrastructure, and a lack of employee performance. At the same time, some opposing forces resist the change and support the maintenance of the status quo, such as a lack of interest among higher officials, poor skills and training, and

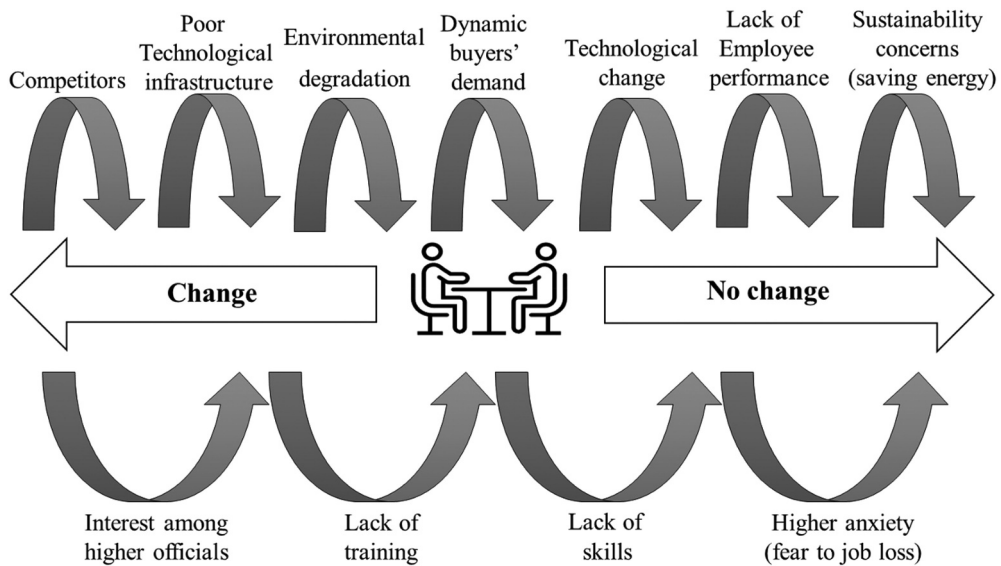


Figure 1. Conceptual framework: force field analysis adapted from Lewin (1951).

higher anxiety. Lewin's framework enables identifying the imperative issues in changing social (local and international) phenomena to establish fundamental constructs that typify them. Figure 1 summarises the conceptual framework of this study (Lewin, 1951; Rahman et al., 2021).

3. Methodology

This study is based on the interpretive philosophical approach designed to explore the participants' subjective experiences, employing a qualitative approach. These include a panel of four technology experts, eleven industry managers, and two government officials. The technology experts were interviewed on the specific aspects of MA preparatory and application processes in a factory-based industry, basing the semi-structured interview questions on the theoretical framework explained above (Lewin, 1951; Rahman et al., 2020). Industry managers and government officials were interviewed to explore the forces for change and the resisting forces to apply MA to enhance organisational agility.

Semi-structured interviews have the benefit of being focused while still giving the investigator the autonomy to explore pertinent ideas that may come up during the discussion. This qualitative approach's functionality allows capturing some details that could not be analysed through large-scale quantitative studies. Investigators can dig deeper into the barriers and perceived opportunities and benefits of employing advanced MA tools with respect to the academic literature.

The authors used the snowball sampling technique to reach the participants of this study. Snowball sampling allows to get hard-to-reach group participants (Hack-Polay et al., 2022). In the Bangladeshi context, it is crucial to tap into qualified interviewees for qualitative studies, as trust plays a crucial role (Islam et al., 2023; Rahman et al., 2020).

Table 1. Demographic information of the participants.

No.	Gender	Roles	Location of workplace	Interview Mode
1	Male	Manager	Dhaka	Face to Face
2	Male	Manager	Dhaka	Face to Face
3	Male	Manager	Dhaka	Face to Face
4	Female	Manager	Dhaka	Virtual
5	Male	Manager	Savar	Face to Face
6	Female	Technology Expert	Dhaka	Face to Face
7	Male	Manager	Savar	Virtual
8	Male	Manager	Dhaka	Virtual
9	Male	Manager	Dhaka	Face to Face
10	Male	Manager	Dhaka	Face to Face
11	Male	Technology Expert	Gajipur	Virtual
12	Male	Manager	Gajipur	Virtual
13	Female	Government Official	Dhaka	Virtual
14	Male	Government Official	Dhaka	Face to Face
15	Male	Technology Expert	Dhaka	Face to Face
16	Male	Technology Expert	Dhaka	Face to Face
17	Male	Manager	Savar	Face to Face

Hence, technology experts, industry managers, and government officials were contacted using authors' extended networks. However, we acknowledge the limitation of snowball sampling in terms of the potential for bias. We minimised this risk by reaching a data saturation point, particularly for industry managers. After the 10th interview, discussions were not yielding new information, implying data saturation, and thus, we halted data collection with industry managers.

However, the number of experts and government officials included in this study was constrained by the need to have an expert view of MA applications in the RMG industry. Such higher officials and experts are not numerous. Still, expert views do not require a minimum number of participants, as panels need to find the right size to balance the ability to reach solid conclusions and the difficulty of managing ample groups of participants (Bardy et al., 2015; Cobianchi et al., 2022).

Interviews were conducted using virtual and face-to-face meetings. We followed the three-stage method to analyse the collected qualitative data (Guest et al., 2012). Firstly, we transcribed interviews. Secondly, the data were manually coded because of the small number of interviews. Thus, researchers also paid 'human' attention to the opinions provided by participants. Finally, all the transcripts were reviewed using the thematic approach to find repeated themes presented in the study's discussion section. Participants, whose characteristics are reported in Table 1, required to remain anonymous. They were provided with their interview transcript to double-check their statements' accuracy.

4. Results

4.1. Forces in favor of applying MA

4.1.1. RMG buyers' demand

The demand for RMG among Western buyers keeps changing. This was identified as a crucial force that calls for applying MA in Bangladesh's RMG industry. An industry manager outlined that:

Buyers demand of RGM changes overnight and every year. For this, we must keep our employees, technologies, supply chain process, outsourcing, procurement, raw materials etc. ready. That's why we need MA to develop our organisations' agility to respond to the market.

Other participants underlined similar insights, highlighting how buyers' changing demand forces the adoption of MA. An industry manager opined that:

If a trend happens, we get new orders immediately. For example, the FIFA World Cup 2023 final result made us unexpectedly busy delivering only Argentinian jerseys.

The above arguments align with the views of technological experts and government officials.

4.1.2. Competitors

All participants identified the competitors as the forcing factor in applying MA. An industry manager shared that:

We used to try to deliver what our buyers wanted, big western brands like H&M, Adidas, Primark, etc. But nowadays, we must discover Western to prepare for any order to deliver faster. Otherwise, customers have more agile RMG suppliers from China, Vietnam, and other countries.

In support of the case for agility, a technology expert commented that:

Using Internet-based technologies, live bargaining between merchandisers and buyers is common. In this regard, our local companies are far behind competitors from other countries, especially China.

A government official explained that:

If we cannot run with competitors, we won't get buyers. Technologies reduce dependency on human resources. We rely on our human capital, but without modern technologies like MA, we cannot improve the agility of our RMG organisations.

Other participants also identified competitors as a forcing factor in applying MA.

4.1.3. Lack of employee performance

The performance of employees in Bangladeshi RMG organisations is often criticised, as reflected in 8 industry managers' views. Due to a lack of performance, production in Bangladeshi RMG organisations is low as these firms are not agile. Thus, participants outlined it as a burning factor to apply marketing analytics to enhance organisational agility. An industry manager commented that:

Employees in every department are not performing as expected. They often complain they lack the needed technology. So, if we had MA technology, their performance might increase, and we could train them to meet expectations.

Another participant opined that:

We are slow and sometimes demotivated, and performance is deficient. MA may be a catalyst because it can save time and resources by reducing the huge waste of materials, clothes, energy. I can say we need it.

All the technology experts and government officials were concerned regarding poor employee' performance.

4.1.4. Climate change issues

Several participants agreed that climate change issues represent pushing factors in applying MA. An industry manager opined that:

We get pressure from Western buyers, local government, and communities to comply with sustainability issues, preserving the environment. MA may help us to save energy and comply with sustainability issues.

A technology expert stated:

Manual work processes consume more time, energy, and money that negatively impacts climate. Manual marketing will not enhance agility but increase carbon emissions. I can strongly say that MA is a burning need for this industry to grow and save climate.

Government officials highlighted some similar concepts. Indeed, one of them outlined that:

The present government is very concerned regarding the environment. As a result, the government is urging companies to integrate more technology-driven processes.

4.2. Resisting forces in applying MA

4.2.1. Lack of knowledge and interest

All participants unanimously reported the lack of knowledge and interest in MA as a significant resisting force in applying it. An industry manager claimed that:

My boss doesn't know what MA is. Therefore, you cannot expect he knows how MA can help a company to be agile. My boss' lack of knowledge and little interest are the main culprits behind the absence of MA in our company.

An industry manager also recalled the lack of knowledge and interest in MA as a major problem, by saying:

From the top to the bottom, we have little understanding about agility and how it can improve. We have little knowledge about MA.

Another manager opined:

We came to discover industry 4.0 technologies only a few years ago. My boss does not care about these because he does not know much about them. For this reason, I could not convince him how MA can boost the company's capability.

Other industry managers, technology experts, and government officials also stated that RMG people have poor knowledge about MA's contribution to making organisations agile. As a result, they lack interest in MA.

4.2.2. High cost

The high cost of sourcing MA technologies and qualified people is one of the resisting forces in applying MA. One participant raised the dollar crisis issue:

I raised the competition concern. I told the company's owners, but they didn't take my suggestion because of the high costs. Now, in a dollar crisis period, we cannot even think of it.

Moreover, a technology expert claimed that:

Acquiring computers, high-speed internet facilities, smooth electricity systems, and skilled employees are important to introduce MA because we cannot outsource it. It is costly, though.

All other participants also named higher costs a significant resisting factor in applying MA.

4.2.3. Lack of technologically skilled people

All of the participants underlined that the lack of skilled people represents a crucial barrier in the application of MA tools. An industry manager claimed that:

Only a decade ago, digital things got familiar in Bangladesh. There are only a few digital technical experts. We don't have many people who understand the benefit and can align the technologies.

An industry manager opined that:

The RMG industry is still in progress. We used to do things manually. We didn't need to compete with other countries. Now, the situation has changed. However, we don't have the needed human resources.

In line with industry experts and managers, government officials raised the issue that there is a significant lack of technologically advanced professionals in Bangladesh.

4.2.4. Employee resistance

Employee attitude is also identified as a resisting factor by both industry managers and technology experts. However, government officials did not mention it. An industry manager claimed that:

Technology is changing fast. We had to change our managing software a couple of times. So, some work processes were changed, but employees didn't like the change. That's why some employees, especially in higher positions, are reluctant to bring new technology. This is an invisible barrier, but it's resisting the MA establishment in our industry.

Technology experts blamed top-level employees who do not like change and thus resist any innovation. They fear technology and experience barriers to its acceptance. One of the technology experts underlined that:

RMG industry managers or board of directors or other top executives are normally more than 45–50 years old. This group of people in Bangladesh is reluctant to change. They raise barriers to innovation or new technology. They think traditional manual things are fine.

4.2.5. High employee turnover

Higher employee turnover is a significant issue in Bangladesh. Most people move abroad rather than stay in the country. A manager underlined:

I joined my actual company two years ago and have been working in the industry for more than 15 years. I saw how our employees, especially managers, leave the workplace to go elsewhere. This turnover creates a problem for the project's completion. Our MA adoption process will likely not be implemented if the turnover is not reduced.

Another executive outlined that:

Technology-related employees are few in Bangladesh, and most leave the company if they find better opportunities. As a result, new technology adoption becomes tough.

5. Discussion and implications

5.1. Discussion

The study, supported by the existing literature, confirmed that MA could significantly enhance the agility of RMG organisations. Results show that MA not only directly benefits the RMG industry with higher agility but also contributes to a more sustainable RMG processing. Conventional RMG operations have been slower in responding to meet the buyers' demand, which changes over time. Enhancing the agility of RMG organisations is a prerequisite for their survival (Rahman et al., 2021). Moreover, the study shows that the main competitors of the Bangladeshi RMG industry, such as Chinese, Vietnamese, and other countries' RMG organisations are perceived as more agile. Hence, it is an opportune time to enhance the agility of Bangladeshi RMG organisations for their survival in the global industry. Furthermore, the study revealed that there is a performance gap among employees in this vital industry. There are issues with product quality and the innovative capacity of employees that can be overcome using MA, as participants suggested. These results are consistent with Khan et al. (2022), who found that MA improves organisational resources and outcomes and could be effective for employees' performance development. MA can reduce time and resource wastage while optimizing the performance of the RMG industry. Such findings are in line with the literature (Barlette & Bailleterie, 2022; Khan et al., 2022; Mahfuz Ashraf et al., 2019). Following the new regulation and emerging trends, environmental sustainability stands as a critical issue for Bangladeshi organizations, and RMG companies also need to align with climate change issues and standards to keep the climate free from harm. MA may represent a valuable tool for preserving the environment and being more agile in responding to the current demands. Thus, we posit that some driving forces push for the application of MA, given the increasing agility in the RMG sector.

However, on the opposite side of the spectrum, there are strong forces that resist MA engagement in the RMG sector. The first of these forces is the lack of knowledge and interest among top officers about technological and human capital issues. However, a clear understanding of MA effectiveness is vital to establish it (Osaysa, 2022). Our study outlined that the costs associated with the development and application of MA represent a significant barrier in Bangladesh; this is consistent with the argument of Willetts et al. (2022). Investment costs could be turned into profits, but due to a lack of knowledge regarding the benefits of MA among top managers, it is pretty challenging to establish. On the other hand, there is a lack of technologically skilled people in Bangladesh (Rahman et al., 2021), which is a factor impeding the adoption and application of MA to enhance agility. The study reaffirms the perspective that several employees raise resistance to change, being it a significant issue that requires vigorous action. Finally, privacy issues should not be underestimated as they represent a vital barrier.

5.2. Implications

There is a burning need for MA as it is linked to the development of agility in the RMG sector. Sustainability and competitiveness require RMG owners to pay attention to industry 4.0 technologies and innovations. In addition, RMG organisations need skilled people related to MA. In this regard, our findings can represent a significant source of knowledge about the forces restraining the establishment of MA in enhancing agility. Based on our conceptual framework, which adopted Lewin's Force Field Analysis (Lewin, 1951), barriers to change can be weakened to pave the way for more environmentally friendly and agile activities to meet the global competition and environmental requirements. Existing regulatory standards in emerging countries are not sufficiently robust and active and, thus, unable to meet the environmental protection requirements (Rahman et al., 2021). Therefore, it is essential to motivate industry owners and policymakers to increase investment in people and technologies as a sine qua non-condition agility and environmental responsiveness in the RMG sector. Government officials could advance efforts to stamp out corruption, which allows some in the industry to violate the regulatory frameworks (Berweger et al., 2020).

The theoretical contribution of this study is situated in the extension of current literature on the necessity to develop industry 4.0 technologies like MA in contemporary workplaces in developing countries (Rahman et al., 2020) generally and the RMG industry. Employees may also benefit from MA as precious allies and tools to increase performance and design new career paths, reducing turnover (Haverila et al., 2023). Our study postulates that MA in the industry 4.0 era presents strategic opportunities for organisations to be more malleable, responsive, and competitive.

6. Limitations and directions for future research

Although this study offers significant insights based on Lewin's Force Field Analysis, there are some limitations that may lead to future research avenues. In this regard, while qualitative research allows for the in-depth explanation of some phenomena, it does not contribute to the findings' generalisability. Hence, future researchers could draw on larger samples and a quantitative approach. Other developing countries with major RMG industries could represent significant contexts to compare data to understand better the environmental impact of RMG production to bring about concerted actions. Issues like technology acceptance dynamics should be further investigated to lead to dedicated educational policies and programs by policymakers and specific marketing campaigns by technology providers.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Mahfuzur Rahman  <http://orcid.org/0000-0002-3386-9613>

References

- Akter, S., Hani, U., & Sharma, A. (2022). The future of marketing analytics in the sharing economy. *Industrial Marketing Management*, 104, 85–100. <https://doi.org/10.1016/j.indmarman.2022.04.008>
- Akter, S., Hossain, M. A., & Leonidou, E. (2023). How does quality-dominant logic ensure marketing analytics success and tackle business failure in industrial markets? *Industrial Marketing Management*, 109, 44–57. <https://doi.org/10.1016/j.indmarman.2022.12.005>
- Aljumah, A. I., Nuseir, M. T., & Alam, M. M. (2021). Traditional marketing analytics, big data analytics and big data system quality and the success of new product development. *Business Process Management Journal*, 27(4), 1108–1125. <https://doi.org/10.1108/BPMJ-11-2020-0527>
- Bagnoli, C., Dal Mas, F., & Massaro, M. (2019). The 4th industrial revolution: Business models and evidence from the field. *International Journal of E-Services and Mobile Applications*, 11(3), 34–47. <https://doi.org/10.4018/IJESMA.2019070103>
- Bardy, R., Rubens, A., & Massaro, M. (2015). The systemic dimension of sustainable development in developing countries. *Journal of Organisational Transformation & Social Change*, 12(1), 22–41. <https://doi.org/10.1179/1477963314Z.000000000033>
- Barlette, Y., & Baillette, P. (2022). Big data analytics in turbulent contexts: Towards organizational change for enhanced agility. *Production Planning & Control*, 33(2–3), 105–122. Taylor & Francis. <https://doi.org/10.1080/09537287.2020.1810755>
- Berg, A., Chhaparia, H., & Magnus, K. H. (2021). What's next for Bangladesh's garment industry, after a decade of growth? *McKinsey & Company*. <https://www.mckinsey.com/industries/retail/our-insights/whats-next-for-bangladeshs-garment-industry-after-a-decade-of-growth>
- Berweger, M., Hack-Polay, D., & Rahman, L. (2020). Can new corruption legislation drive guanxi out of business? – Western and Chinese multinational managers' perceptions. *International Journal of Business Governance and Ethics*, 1(1), 1. <https://doi.org/10.1504/IJBGE.2020.10032225>
- Branda, A. F., Lala, V., & Gopalakrishna, P. (2018). The marketing analytics orientation (MAO) of firms: Identifying factors that create highly analytical marketing practices. *Journal of Marketing Analytics*, 6(3), 84–94. <https://doi.org/10.1057/s41270-018-0036-8>
- Cao, G., Tian, N., & Blankson, C. (2022). Big data, marketing analytics, and firm marketing capabilities. *Journal of Computer Information Systems*, 62(3), 442–451. <https://doi.org/10.1080/08874417.2020.1842270>
- Cavazza, A., Dal Mas, F., Paoloni, P., & Manzo, M. (2023). Artificial intelligence and new business models in agriculture: A structured literature review and future research agenda. *British Food Journal*, 125(13), 436–461. <https://doi.org/10.1108/BFJ-02-2023-0132>
- Chowdhury, F., & Keya, A. (2022). Readymade garments exports from Bangladesh: Challenges and possible way-out. *International Journal of Business & Management*, 17(7), 19. <https://doi.org/10.5539/ijbm.v17n7p19>
- Cobianchi, L., Verde, J. M., & Garcia Vazquez, A. (2022). Artificial intelligence and surgery: Ethical dilemmas and open issues. *Journal of the American College of Surgeons*, 235(2), 268–275. <https://doi.org/10.1097/XCS.0000000000000242>
- Ding, Y., DeSarbo, W. S., & Lehmann, D. R. (2020). The past, present, and future of measurement and methods in marketing analysis. *Marketing Letters*, 31(2), 175–186. <https://doi.org/10.1007/s11002-020-09527-7>
- Germann, F., Lilien, G. L., & Rangaswamy, A. (2013). Performance implications of deploying marketing analytics. *International Journal of Research in Marketing*, 30(2), 114–128. <https://doi.org/10.1016/j.ijresmar.2012.10.001>
- Guest, G., MacQueen, K., & Namey, E. (2012). *Applied thematic analysis*. SAGE Publications.
- Hack-Polay, D., Dal Mas, F., & Rahman, M. (2022). Barriers to the effective exploitation of migrants' social and cultural capital in hospitality and tourism: A dual labour market perspective. *Journal of Hospitality & Tourism Management*, 50, 168–177. <https://doi.org/10.1016/j.jhtm.2022.01.012>
- Hajli, N., Tajvidi, M., & Nadeem, W. (2020). Understanding market agility for new product success with big data analytics. *Industrial Marketing Management*, 86, 135–143. <https://doi.org/10.1016/j.indmarman.2019.09.010>

- Haverila, M., Li, E., & McLaughlin, C. (2023). The quality of big data marketing analytics (BDMA), user satisfaction, value for money and reinvestment intentions of marketing professionals. *Journal of Systems & Information Technology*, 25(1), 30–52. <https://doi.org/10.1108/JSIT-10-2022-0249>
- Hossain, M. A., Agnihotri, R., & Sumi, S. F. (2022). Marketing analytics capability, artificial intelligence adoption, and firms' competitive advantage: Evidence from the manufacturing industry. *Industrial Marketing Management*, 106, 240–255. <https://doi.org/10.1016/j.indmarman.2022.08.017>
- Iacobucci, D., Petrescu, M., & Bendixen, M. (2019). The state of marketing analytics in research and practice. *Journal of Marketing Analytics*, 7(3), 152–181. <https://doi.org/10.1057/s41270-019-00059-2>
- Islam, M. A., Hack-Polay, D., & Kordowicz, M. (2023). Gender and leadership in public higher education in South Asia: Examining the individual, socio-cultural and organizational barriers to female inclusion. *Studies in Higher Education*, 48(8), 1197–1215. Routledge. <https://doi.org/10.1080/03075079.2023.2187771>
- Islam, M. A., Jantan, A. H., Hashim, H., Chong, C. W., Abdullah, M. M., & Abdul Hamid, A. B. (2018). Fourth industrial revolution in developing countries: A case on Bangladesh. *Journal of Management Information & Decision Sciences*, 21(1). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3417813
- Khan, A., Talukder, M. S., & Islam, A. K. M. N. (2022). The impact of business analytics capabilities on innovation, information quality, agility and firm performance: The moderating role of industry dynamism. *VINE Journal of Information and Knowledge Management Systems*, ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/VJIKMS-01-2022-0027>
- Lewin, K. (1951). *Field theory in social science*. Harper and Row.
- Liang, X., Li, G., & Chen, F. (2022). Firm performance and marketing analytics in the Chinese context: A contingency model. *Journal of Business Research*, 141, 589–599. <https://doi.org/10.1016/j.jbusres.2021.11.061>
- Liu, X., & Burns, A. C. (2018). Designing a marketing analytics course for the Digital Age. *Marketing Education Review*, 28(1), 28–40. <https://doi.org/10.1080/10528008.2017.1421049>
- Mahfuz Ashraf, M., Razzaque, M. A., & Hasan, M. R. (2019). Social business as an entrepreneurship model in emerging economy: Systematic review and case study. *Management Decision*, 57(5), 1145–1161. <https://doi.org/10.1108/MD-04-2017-0343>
- Mahmood, T., & Mubarik, M. S. (2020). Balancing innovation and exploitation in the fourth industrial revolution: Role of intellectual capital and technology absorptive capacity. *Technological Forecasting & Social Change*, 160(August), 120248. <https://doi.org/10.1016/j.techfore.2020.120248>
- Mohiuddin Babu, M., Akter, S., & Hack-Polay, D. (2022). The role of artificial intelligence in shaping the future of Agile fashion industry. *Production Planning & Control*, 1–15. Taylor & Francis. <https://doi.org/10.1080/09537287.2022.2060858>
- Montes, G. A., & Goertzel, B. (2019). Distributed, decentralized, and democratized artificial intelligence. *Technological Forecasting and Social Change*, 141, 354–358. <https://doi.org/10.1016/j.techfore.2018.11.010>
- Munni, M. (2023), "RMG export rebounds, with US market upswing", *The Financial Express*, Retrieved October 3, 2023. <https://thefinancialexpress.com.bd/trade/rmg-export-rebounds-with-us-market-upswing-1673146073>
- Ndlovu, T., & Ndlovu, S. (2021). Marketing Analytics. In M. Kehal, & S. El Alfy (Eds.), *Data Analytics in Marketing, Entrepreneurship, and Innovation* (Chapter 6). Auerbach Publications.
- Osaysa, E. K. (2022). Improving the quality of marketing analytics systems. *International Journal for Quality Research*, 16(1), 119. <https://doi.org/10.24874/IJQR16.01-08>
- Paschen, J., Kietzmann, J., & Kietzmann, T. C. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of Business & Industrial Marketing*, 34(7), 1410–1419. <https://doi.org/10.1108/JBIM-10-2018-0295>
- Petrescu, M., & Krishen, A. S. (2022). Co-creating transformative value in marketing analytics. *Journal of Marketing Analytics*, 10(1), 1–2. <https://doi.org/10.1057/s41270-022-00159-6>
- Rahman, M., Billah, M. M., & Alam, A. (2020). The use of biotechnologies in textile processing and environmental sustainability: An emerging market context. *Technological Forecasting and Social Change*, 159, 120204. <https://doi.org/10.1016/j.techfore.2020.120204>

- Rahman, M., Hack-Polay, D., & Igwe, P. A. (2021). Dynamic capability of the firm: Analysis of the impact of internationalisation on SME performance in an emerging economy. *International Journal of Emerging Markets*, 18(9), 2383–2401. <https://doi.org/10.1108/IJOEM-02-2021-0236>
- Statista. (2022). "Global apparel market – statistics & facts", *Consumer Goods & FMCG Apparel & Shoes*, Retrieved October 3, 2023. Available at: <https://www.statista.com/topics/5091/apparel-market-worldwide/#topicOverview>
- Szász, L., Demeter, K., Rácz, B.-G., & Losonci, D. (2021). Industry 4.0: A review and analysis of contingency and performance effects. *Journal of Manufacturing Technology Management*, 32(3), 667–694. <https://doi.org/10.1108/JMTM-10-2019-0371>
- Tarn, D. D. C., & Wang, J. (2023). Can data analytics raise marketing agility?—A sense-and-respond perspective. *Information & Management*, 60(2), 103743. <https://doi.org/10.1016/j.im.2022.103743>
- Wang, Y., Deng, Q., & Ji, S. (2021). A thematic exploration of social media analytics in marketing research and an agenda for future inquiry. *Journal of Strategic Marketing*, 29(6), 471–491. <https://doi.org/10.1080/0965254X.2020.1755351>
- Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. *Journal of Marketing*, 80(6), 97–121. <https://doi.org/10.1509/jm.15.0413>
- Willetts, M., Atkins, A. S., & Stanier, C. (2022). In Sharma, N., Chakrabarti, A., Balas, V.E. and Bruckstein, A. M., (Eds.), *Quantitative study on barriers of adopting Big data analytics for UK and Eire SMEs BT – Data management, analytics and innovation*. Springer Singapore.
- Zhang, M., Kong, X. X., & Ramu, S. C. (2016). The transformation of the clothing industry in China. *Asia Pacific Business Review*, 22(1), 86–109. <https://doi.org/10.1080/13602381.2014.990204>