

Enhancing Negotiation Strategies for Service Industry Workers in the Age of Artificial Intelligence

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Abstract. This paper examines the methods for improving the negotiation strategies of service industry workers in the era of artificial intelligence (AI). It uses secondary research methods including a case study of Meituan service industry delivery workers and their position with regard to negotiations on their platform. Further, it analyzes the traditional strategies of negotiation and compares them to emerging strategies for negotiating between employers and employees in an employment relationship. It is established that delivery service workers suffer from the impact of algorithmic management and data asymmetry, which hinders their ability to negotiate under the game theory framework. Consequently, it is proposed that the negotiation strategies could be enhanced through the improvement of digital literacy and data awareness and, the use of innovative models and collaborative frameworks. This can guarantee better outcomes for service workers during negotiation processes with their employers. Finally, the paper concludes with the best way forward to enhance negotiations in the era of AI.

Keywords: Artificial intelligence, service workers, algorithmic management, labor negotiation, empowerment.

1. Introduction

In labor relations, negotiation is the process whereby employees and employers discuss and strike an agreement on issues related to employment, including work conditions and the benefits that the former are entitled to. Parties may be required to apply effective negotiation strategies to attain a fair and mutually beneficial agreement. In many cases, this involves setting clear goals, nurturing open communication, and exploring alternative solutions. Importantly, understanding the other party's perspective and ability to compromise is critical in navigating negotiations. AI, by transforming traditional negotiation dynamics through algorithmic decision-making and human-machine bargaining, has reshaped negotiation strategies in labor relations [1]. AI has automated tasks used in production while complementing labor. In this case, the use of statistical models such as machine learning has helped in providing answers to challenges where formal rules may be difficult to codify. For example, unions and workers unions embrace AI at the organizational level to create awareness of employees' rights while at the same time providing framework agreements that are based on algorithmic negotiations. Therefore, AI supports collective bargaining in such relationships or settings. It has also been used to restructure labor relations between employers and employees [2]. Here, AI is used to support negotiations by assisting prospective workers who receive offers to make comparisons on whether their employment interests are fulfilled. AI could also help such individuals to determine their leverage when negotiating such as the power exercised by employers or platforms vis-à-vis their position in relation to them.

However, problems that AI has created for workers are multiple, including weakened bargaining power and increased platform control. AI use in the workplace or during negotiations tends to grant employers more power over employees because of the fact they control the platforms used for negotiating. Specifically, employers who have integrated AI into their systems through the use of algorithms have more control over different aspects of the employment relationship. For instance, in the service industry such as delivery workers, employers control the dispatch of orders, deliveries, and other terms of engagement like employees' pay. In such a scenario, the employer controls the access and use of the data, which can affect the outcomes during negotiations. Again, this impacts

the decision-making process because such employers would rely on the data that help to buttress their position over labor issues. Here, employees who do not have access to the algorithmic control and management of their employment issues end up with weakened bargaining power. Therefore, they could become vulnerable to unfair labor practices and become vulnerable to exploitation as demonstrated by the case of Meituan delivery service workers in China who went on strike to agitate against poor work conditions and terms [3]. The bargaining power is further aggravated because employees are evaluated as individuals rather than as a group on the platforms. This hinders their ability to collectively bargain for most of their employment rights.

This paper researches the methods for improving the negotiation strategies of service industry workers in the era of artificial intelligence. The first question to be addressed is on the conditions of service workers in the AI era. Second, the paper seeks to understand the current negotiation strategies of service industry workers in the era of artificial intelligence. The fourth is to analyze the pathways for enhancing the negotiation power of service industry workers in the era of artificial intelligence with a focus on a Chinese company, Meituan.

This paper adopts a secondary research methodology incorporating the use of secondary materials including scholarly articles and books as well as a case study to answer the research question. The case study involves the Meituan delivery service workers' strike in China to evaluate how to improve negotiation strategies among industry workers in the era of AI. The insights gained from this research could be used to enhance negotiations between employers and employees in the service industry in the era of AI.

2. Negotiation Strategies in the AI Era

2.1. Theoretical Framework

2.1.2 Principled Negotiation Theory

This theory is also referred to as interest-based negotiation and is a collaborative mechanism for resolving conflicts by focusing on and understanding the interests and needs of parties instead of their stated positions. It is based on four distinct negotiation skills that emphasize the objective resolution of an issue in a fair and independent manner. First, it is important to separate individuals from the problem as strong emotions could be concealed with substantive issues in a negotiation; hence complicating it even further [4]. Therefore, principled negotiation requires that negotiators operate or handle emotions and personal issues separate from those at stake. Second is that there is a focus on interests rather than positions so that the negotiation looks beyond the hard and soft positions to identify the underlying interests.

Negotiators in principled negotiation devote most of their time to trying a broad range of possible options before selecting the most appropriate [5]. Here, options include any available choices that parties may consider to meet their interests, including conditions and trades. The fourth important principle is that such a type of negotiation applies an objective criterion to avoid a situation whereby parties cannot agree on pertinent facts. As such these types of arguments are likely to end in an impasse or lack of compromise, negotiators will focus more on objectivity by seeking a fair, standard, and independent position.

2.1.2 Resource Dependence Theory

The Resource Dependence Theory was theorized by Pfeffer and Salancik who highlighted particular key propositions. First is the idea that firms are embedded in a web of relationships whereby they inevitably depend on other organizations that have control over critical resources needed by the focal firms [6]. The second proposition is that such dependence limits a firm's autonomy and establishes uncertainties in the firm's strategies and operations. In response to this, firms become motivated to manage their inter and intra-organizational resource exchanges and power dynamics to take in, countervail, or avoid their dependence limitations. Fourth is the fact that dependence-

managing strategies can be hindered by internal and external barriers, and therefore vary in their effectiveness.

Firms embrace different dependence-managing strategies as solutions that help them to withstand or cope with dependence constraints. These strategies include but are not limited to acquisitions, strategic alliances, joint ventures, political actions, and executive successions among others [7]. Besides, these strategies for managing dependence may be constrained and present different impacts and outcomes. In addition, the party that controls a critical resource obtains power over the dependent entities with organizations attempting to minimize uncertainty and dependence for them to be autonomous. Finally, certain strategies are employed to manage dependence with the most common ones being acquisitions, joint ventures, or entering into strategic alliances.

2.2. Conditions of Service Workers in the AI Era

2.2.1 Impacts of AI

AI has a profound impact on service workers operating in the AI era. AI supports the algorithmic management of service workers by increasing efficiency while at the same time relying on data-driven insights in decision-making [8]. Algorithmic management systems also enable companies to understand and follow up on employees' performance and productivity. AI has also been used in performance scoring systems based on predefined criteria or metrics like the efficiency or productivity of the employee [9]. The significance of this approach is that it eliminates possible biases that may be based on an individual's characteristics. Essentially, this contributes to more equitable outcomes in assessing employees. It is also used in intelligent scheduling by utilizing historical and real-time data for informed decision-making. This is achieved through the analysis of data by identifying patterns and predicting future demands as well as optimizing workers' schedules.

2.2.2 Challenges faced by workers

However, the use of AI by service workers poses the challenge of creating information asymmetry, high job replaceability, and ambiguous labor rights. The decisions of artificially intelligent agents tend to be less rationally bounded compared to those of human agents. As such, deploying agents among employees may lead to information asymmetry [10]. The introduction of AI in negotiations between workers and employers or platforms amplifies information asymmetry because it is the latter party that develops and implements it. Therefore, they possess more knowledge about its capabilities, pros, and cons than workers. The consequence is that this can create issues related to fairness, transparency, and possible exploitation of workers during the negotiation process. Further, a major challenge is that workers are likely to be replaced by AI-enabled tools that perform tasks that would have been performed by humans. AI involves using machines and technologies that possess human cognitive skills, and its implementation is likely to reduce the need to rely on workers. Therefore, the employer is likely to reduce or eliminate the reliance on human employees to deliberate on workplace issues. Additionally, it becomes difficult to enforce ambiguous labor rights in the era of AI as it is difficult to determine the boundaries between such rights and those created by technology. AI has the ability to automate tasks and assist in decision-making, which could blur the traditional boundaries that exist between work done by human beings and machines. This makes it challenging to determine the party required to enforce labor standards like work conditions among others. Besides, AI can introduce certain biases that would in turn disproportionately impact workers' rights.

2.3. Analysis of Current Negotiation Strategies

2.3.1 Traditional strategies

These are negotiation strategies that emphasize the position of a party and are adversarial in nature as compared to collaborative models like principled negotiation among others. Unions are organized groups of workers who come together to collectively bargain or agitate with employers on issues such as wages, conditions of work, and other labor-related matters. The strength of unions in negotiations is that their collective power creates greater leverage such that they have more negotiating power than

individual employees [11]. They also enjoy legal protections under the prevailing labor laws and their negotiations are based on principles of equity and fairness. However, their limitations are that negotiations done through unions tend to be rigid or slower because of the need for consultations and voting to approve outcomes. They also face the risk of strikes and conflicts when negotiations break down or fail.

Collective bargaining in negotiations refers to the process where workers or employees negotiate with their employers on the terms and conditions of employment through their unions. Usually, this process of negotiation leads to a legally binding agreement that must be fulfilled by all parties. Negotiating collectively increases the bargaining power of members, which often leads to standardized terms in the collective bargaining agreement [12]. Its strength is that it also outlines the dispute resolution mechanism while at the same time being representative. However, it is rigid or inflexible because it adopts a given standard of negotiations and agreement. It is also time-consuming while also suffering from the pressure to conform to the interests or desires of the whole group.

Legal rights defenses are used in negotiations to assert a party's legal rights while at the same time overriding or challenging an opposing party's claims [13]. As they are based on the law or legal position, they stipulate minimum acceptable terms of agreement. They also offer party leverage and credibility as the defenses have been made based on informed decisions while also backed by the law. Therefore, a negotiator using legal rights defenses is better placed as such a party comes from a stronger negotiating position. However, they require legal knowledge to understand and negotiate how to use the defenses. As such, only negotiators with legal background and knowledge may use it as a defense during negotiation.

2.3.2 Emerging strategies

Recent strategies for negotiation have emerged including digital protests, in-platform complaint systems, and data rights advocacy among others. Digital protests refer to protests that take place in the online digital space with tools like social media, online petitions, and forums being used to create awareness, mobilize support, and advocate for changes towards a particular cause. In negotiations, digital protests can be used to personalize engagement by facilitating communication and coordination on digital spaces and platforms [14]. Digital protests also play a role in mobilization as digitally networked individuals can facilitate the sharing of information between different communities of employees or workers. This can in turn bring the negotiating parties to the negotiation table or a discussion of the pertinent issues.

In-platform complaint systems offer software solutions that are designed to support the collection and management of complaints based on a specific platform or application. The significance of these platforms is that they streamline the process of handling complaints from the point they are submitted by providing tools to track, communicate, and escalate the issue [15]. Presently, in-platform complaint systems are leveraged in the field of negotiations to support open communication, prompt addressing of concerns, and get a mutually agreeable solution. This structured process fosters trust and transparency when parties are negotiating.

Data rights advocacy emphasizes the need for individuals to have control over their personal data and its use. The objective is to promote fair and equitable data practices in the use of data. The significance of data rights advocacy in negotiations is to ensure that data is ethically and responsibly used, especially when dealing with sensitive information [16]. Besides, it establishes clear legal frameworks and expectations when sharing and using data. Data may also be used as a tool for advocating for employees' goals. Therefore, data possesses the transformative potential of elevating worker-centric goals and advocating for workers' rights.

2.4. Case Study

A case study in point is the Meituan Delivery Worker Strike that involved delivery workers going on strike. Significantly, this platform used algorithms to reduce delivery time, but late deliveries resulted in loss of income and penalties [17]. Workers in many cities participated in strikes protesting

"algorithmic exploitation" with the media exposure leading to limited adjustments on the platforms even though there were no structural changes.

The use of algorithmic management was a major point of contention during the Meituan delivery workers' strike as employees challenged the platform's algorithmic control of different labor issues affecting them. This included protests against the algorithm for unfairly assigning delivery duties, levying penalties for delays, and the inability of such employees to control how they work. As such, the platform was perceived as a tool that oppressed workers while at the same time maximizing profits for its owners.

However, it is reiterated that the company's employees applied the Principled Negotiation Theory approach because it is collaborative and resolves the conflict based on understanding these parties' needs and interests. Research indicates that platform delivery workers can adopt certain strategies to mitigate algorithmic control [18]. As already indicated in the case of the Meituan strike, there were conflicts between the workers and the company because of data asymmetry. This included the fact that information on the principles, processes, and the manner in which the platform's algorithm performs automated decision-making was not openly communicated to workers. During the negotiation process, the workers spontaneously experimented with how the platform permitted or limited the ability to game it. To this extent, the workers used online discussion forums and in-person meetups to establish social relationships with each other. During the Meituan workers' strike, the gaming of the system supported by AI helped to overcome the algorithmic management at the company. Particularly, the workers used collective bargaining to represent and advocate for their interests when engaging with the platform.

3. Pathways to Enhance Negotiation Power

3.1. Improve Digital Literacy and Data Awareness

This has been identified as one of the ways of enhancing the negotiation power of Meituan delivery workers. First, the workers could be trained on their digital rights focusing more on the need to understand and advocate their rights in the digital space and platforms [19]. Therefore, parties can be trained on their freedoms like access to information and privacy to assist them when training. Besides this, understanding the algorithmic logic helps employees to know how work is allocated and the pay to avoid unfair labor practices. This also requires being aware of how digital tools could be used to protect their labor rights. For instance, they should be taught how they could engage in digital protests to negotiate for better employment rights.

3.2. Flexible and Innovative Union Models

Platform-based virtual unions could be used to organize employees on online platforms to perform roles that would have otherwise been assigned to physical unions [20]. This is an emerging trend that is cost-effective and prompt in dealing with workers' issues and agitation for their rights. Additionally, cross-platform labor alliances would enable Meituan employees to engage with other like-minded labor unions to fight for workers' rights on issues such as allocation of work, delivery times, and commensurate pay. Again, all these should leverage the advantages offered by AI tools to increase the efficiency and innovativeness of their negotiations.

3.3. Integrated Collaborative Negotiation Strategies

This may involve the use of third-party platforms like those offering legal aid and media to negotiate for better terms of service. Here, negotiators may be called upon to use legal support services and the media to elevate and present their positions during the negotiation. The strength of this is that the negotiation will be backed by legal defenses and positive publicity. Additionally, digital tools may be used to counter algorithmic control over employees' functions [21]. The result is that the workers could be better placed to agitate for their rights during the negotiation.

4. Conclusion

This research paper evaluates the mechanisms used to enhance the negotiation strategies of service industry workers in the era of artificial intelligence. It has been found that service industry workers, especially those engaged in the delivery of commodities ordered through online platforms are disadvantaged during the negotiation process. It has also been established that the negotiation process by Meituan delivery service workers involved the application of the principled negotiation theory, which encourages the invention of options for mutual gain such that negotiators are more likely to adopt the first agreement reached. Using the case study of the Meituan delivery service workers' strike in China, it has been found that algorithmic management favors the employer who has more control over the workers and related rights. Moreover, the presence of data asymmetry during the relationship makes it difficult to negotiate based on the game theory network. The asymmetry in the negotiations between the workers and the platform has necessitated the principled negotiation approach to ensure that workers can also gain from the company based on multiple options on the table. This is supported by collective bargaining of their interests and needs within the delivery service platform.

The consequence of the above findings is that improving digital literacy and data awareness can enhance the engagement of workers so that they can negotiate from an informed point of view for correct decision-making in the negotiations. Parties could also embrace flexible and innovative union models to engage with one another without the need for physical contact. Additionally, it has been reiterated that negotiations can rely on virtual unions to agitate for service workers' rights. Finally, the paper identifies collaborative models that involve third-party platforms as a way of bringing negotiators together to pursue the interests of delivery service workers on a given platform.

The significance of the above approaches in negotiations during the AI era is that workers become aware of their positioning as they are disadvantaged by data asymmetry. Therefore, they can approach the negotiations with the objective of asserting their rights against the employer while also making significant gains whenever possible. Future research should investigate how to address information asymmetry between employers or platforms on the one hand and employees or service workers on the other hand. This would facilitate dialogue and collective bargaining between them during negotiation. Further, negotiators are encouraged to leverage AI to identify how it could support or facilitate negotiations between workers and their employers or platforms.

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