

Original Article

B2B Marketplace Evolution through AI and Automation

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ABSTRACT

Last 20 years Business-to-Business (B2B) marketplaces have experienced an overhaul of the structural features of its systems, developing out of inertial electronic listings and towards dynamic, information-driven digital ecosystems. Electronic procurement involved the reduction of costs that were incurred by suppliers and the initial B2B standards were mainly concerned with the digitalization of the transaction, finding cheaper suppliers and ultimately cost reduction. Although these platforms were efficient as compared to manual sourcing, it was poor in scalability, flexibility, and decision intelligence. The emerging complexity of world supply chains, heightened volatility of demand, and rising demands on transparency and speed have revealed basic constraints in the traditional B2B marketplace architectures. Automation and Artificial Intelligence (AI) have become critical facilitators on how to resolve these challenges. Artificial intelligence-based recommendation engines, on-demand predictive pricing, automatic bargaining, dynamic pricing, and smart supplier selection are reimagining the concept of initiating, negotiating, and satisfying a B2B deal. At the same time, workflow orchestration technologies and robotic process automation (RPA) are leading to less operational friction with repetitive tasks being automated, including onboarding, compliance verification, order processing, invoicing and dispute resolution. Combined, AI and automation are changing B2B marketplaces away to be passive clearing systems into active orchestrating systems with the capacity to optimize the results between buyers and sellers and their ecosystem partners. It is a detailed architecture-based examination of the transformation of B2B marketplaces with AI and automation in this paper. It involves synthesising previous scholarly and industry studies, hypothesising a stratified approach to methodological approaches of AI-enabled B2B platforms and assessing the operational and strategic effects of automation in procurement, logistics, pricing and governance processes. The paper also addresses the empirical findings that have been experienced in digitally mature B2B ecosystems and the discussion highlights an improvement in efficiency, strong resilience, and decision quality. At last, essential issues and ethical concerns, as well as future research opportunities are outlined in the paper that places AI-based B2B marketplaces in the heart of the next-generation digital commerce.

KEYWORDS

B2B Marketplaces, Artificial Intelligence, Automation, Digital Procurement, Platform Economics, Intelligent Supply Chains, Algorithmic Pricing, Enterprise Commerce.

1. INTRODUCTION

1.1. Background

B2B trade is the most prominent portion of the world trade which is much greater than consumer oriented markets in terms of the value of the transaction and world economy as a whole. Conventionally, B2B business transactions have been dictated by long term relationship with suppliers, negotiated business contracts and highly specialized procurement procedures intended to meet the product specifications, compliance and volume pledges. The initial digitization centered on electronic data interchange (EDI) and enterprise procurement systems that mainly amplified precision, standardization, and documentation of transactions. Although these systems enhanced operational reliability, they were also stiff in nature and had a low degree of flexibility coupled with low degree of analytical perceptions and adaptive support to dynamic market environments. The late 1990s, with the surfacing of web-based B2B market rankings, signaled a notable structural change as centralized supplier search engines and catalog engines as well as price contrast engines were set to appear. Regardless of this innovation, the first form of market places mostly duplicated the offline procurement logic online, with heavy reliance on manual operations, fixed rules and human decisions. These limitations got more prominent as global supply chains grew larger and more intricate, product portfolios diversified. Manual decision-making insofar could not keep up with demand spike and supply risk as well as multi-level of dependencies leading to the inefficiencies, high level of risks exposure, and poor sourcing results. This has radically changed with the introduction of artificial intelligence and automation, so that it has become possible to have the B2B marketplaces constantly sensing and analyzing and responding to the dynamics of the market in near real time, and have it stop being a transaction hub, and be an intelligent, dynamically maintaining coordination platform.

1.2. Role of AI and Automation in Modern B2B Marketplaces



Fig 1 - Role of AI and Automation in Modern B2B Marketplaces

1.2.1. From Digitization to Intelligence

Contemporary B2B marketplaces have become more than simply digitized and are now moving into intelligence-based systems that are enabled by artificial intelligence and automation. Although the previous platforms were based on electronic catalogs and transactional efficiency, AI

can provide the ability to acquire insights based on historical and real-time feedback, discover patterns, and make predictive conclusions. This change enables marketplaces to be transformed to be not fixed rule-based but adaptive in order to constantly optimize sourcing, pricing, and fulfillment decisions when markets are dynamic.

1.2.2. Data-Driven Decision-Making

The AI helps market places to convert large amounts of transactional, behavioral, and external data into actionable knowledge. Demand forecasting, supplier performance evaluation and risk assessment can be supported with machine learning models and enable buyers and sellers make wise decisions in a proactive and not a reactive manner. This approach would make the in-the-market place processes to be more analytical thus resulting in a quicker and more consistent decision-making process that is not heavily reliant on expert knowledge.

1.2.3. Automation of End-to-End Processes

Automation has a complementary role of transforming AI-generated insights into actions. Workflow orchestration engines and robotic process automation simplify business processes that are complex, multi-step processes like supplier onboarding, RFQ management, order execution and settlement. This will minimise manual intervention, eliminate mistakes and provide scalable operations without corresponding rises in operational overhead.

1.2.4. Enhancing Resilience and Scalability

AI and automation make marketplaces between businesses more resilient and scalable. Predictive analytics help to detect disruptions early and automated processes assist in quick restructuring of sourcing strategies. Consequently, contemporary B2B markets are able to be efficiently conducted on global scale, be efficient, reliable, and compliant in more unstable and interdependent trade relationships.

1.3. Limitations of Traditional B2B Marketplace Models



Fig 2 - Limitations of Traditional B2B Marketplace Models

1.3.1. Static Pricing Mechanisms

Conventional B2B marketplaces were highly dependent on fixed or semi-negotiated price schemes which did not work quite well in changing market environment. The products were usually not updated on a regular basis either by manual negotiations or renewing of contracts, and as a

result, they did not respond to fluctuations that occurred in real time as a result of demand, capacity limitation, or volatility in input costs. This led to suboptimal pricing to the buyers and sellers with limited dynamism to optimize the margins or utilization according to the market conditions.

1.3.2. Manual Supplier Evaluation

The processes of selecting the suppliers in the first-generation market places were largely subjective and relied on the relations of the past, and the evaluation of the suppliers on a case-by-case basis and by fixed requirements. This method did not consider the variability of real-time performance, additional risks revealed or variant supplier capacity. In the absence of predictive analytics, the marketplaces were not capable of taking proactive measures at the level of identifying high-performing or disastrous suppliers, which resulted in the inefficient sourcing decision-making and exposure to disruptions.

1.3.3. High Operational Overhead

Traditional B2B market places demanded a lot of manual work when onboarding the suppliers, compliance requirements, and doing transactions. Document verification, contract management and exception handling were traditionally split across systems or teams and led to increasing cycle times, escalating costs, and increasing error rates. These ineffectiveness restricted scalability and financial feasibility of increasing marketplace participation.

1.3.4. Limited Supply Chain Visibility

Traditional marketplaces were the only ones where visibility existed at the direct buyer-seller interface, which was not very informative with regard to the upstream and downstream supply chain dependencies. Lack of multi-tier visibility impeded disruption response as well as risk management and the ability to orchestrate actions across multidimensional global supply chains.

2. LITERATURE SURVEY

2.1. Evolution of B2B Digital Marketplaces

Influential early literature on B2B digital marketplaces was based on the transaction cost economics, which had developed an electronic platform as a means of decreasing search, information asymmetry, and coordination costs between buyers and sellers. Early research hypothesized that digitization helps to discover suppliers efficiently, to standardize a contract and to be price-transparent, which reduces market friction with traditional bilateral negotiations. With the maturity of platforms, there was a transformation of interest to the issue of platform governance, where the rules of participation, trust, reputation systems, and fee structures were studied. Network effects were also studied by scholars and shown to be non-linearly proportional to the growth of participants, where B2B ecosystems exhibit winner-takes-all dynamics. But, these models made many assumptions which included rational decision-makers, fixed supply demand relationships, and operating relationships which were predictable. Recent studies have invalidated these assumptions as unknown events worldwide (such as supply chain disruptions), systemic demand fluctuations, and dependency at more than a single tier makes conventional optimization undergo unfeasible

changes. The recent literature is considering the B2B marketplace more of a cyber-physical system, where real time data feeds on logistics, production, and financial systems interplay with algorithmic layers of control. Under such a framing, performance of marketplaces is no longer an ingredient of market design, but of ongoing sensing, learning and automated adaptation at both the digital and physical realms.

2.2. Artificial Intelligence in B2B Commerce

Artificial intelligence literature on B2B commerce has been increasing at a faster pace, which can be attributed to the increased complications and data density of inter-organizational interaction. Studies of predictive analytics point to the application of machine learning models to predict demand levels, inventory levels and supplier reliability in uncertain scenarios so that long-term planning is not CRM, but proactive. The use of recommendation systems has been proposed as a means of intelligent supplier-buyer matching, using historical transaction and product specifications and performance values to enhance match quality, when compared to traditional search on catalogs. Research on natural language processing (NLP) aims at automating the analysis of contracts, clause discovery, risk discovery and contract negotiation support roles with the goal of minimizing legal overheads and time in procurement. Further, reinforcement learning has also been investigated in dynamic pricing, bidding decisions and auction algorithms, especially in spot markets and capacity-constrained settings. The empirical evidence on these fronts has shown that AI-based systems are much more efficient and flexible and resolute, particularly when the market is volatile and incompetently represented.

2.3. Automation and Process Orchestration

Research on automation points at the combination of robotic process automation (RPA), workflow orchestration engines, and API-benefit of system interconnection as the core enablers of scalability in B2B markets. Initial research had looked at automation as a cost cutting tool, with the emphasis being on the savings in labor that were apparent in terms of order processing, invoice, and reconciliation. Later works developed this point of view and were able to show that automation leads to more consistent processes, fewer errors made by humans and improve end-to-end visibility of these complex transaction lifecycles. Scholars observe in controlled B2B the compliance and auditability have been enhanced by automated workflows that impose standardized workflow controls, call logs, and make execution observable in real-time. More recent literature fans process orchestration a strategic capability, allowing marketplaces to integrate interactions among multi-parties with regard to procurement, logistics, payments and settlement layers. B2B platforms enhance throughput, cycle times and improve scalability when automation is embedded in core transaction flows, becoming able to support increased growth without proportional increases in operational complexity and risk.

3. METHODOLOGY

3.1. Research Design

The research design in this study is a design science, systems architecture research design that will explore the transformation of the B2B marketplaces to artificial intelligence and automation. This research field specifically requires design science due to the fact that it is not simply to describe the observed phenomena, but also to create, abstract, and test the principles of architecture applicable to shaping the design of the next-generation B2B platforms. The research does not consider marketplaces as autonomous business applications; instead of thinking of them as complex socio-technical systems, but rather as layers of interacting layers-data, algorithms, process coordination, and governance processes. The research design combines both the conceptual modeling and the empirical observation through the real world enterprise B2B platforms that are being operated within the contexts of procurement, supply chain and inter-organizational commerce. Documented platform architectures, industry case studies, and observed operating patterns have been documented through empirical contributions to the prior academic and practitioner literature and are known as empirical inputs. Notably, the methodology has been designed to do without reliance on particular vendors, tools, or other proprietary technologies. Rather, it gives attention to the capability-centric abstractions, which include smart matching, dynamic pricing, automated compliance control, and scalable orchestration. This abstraction allows generalization of industries and technological stack. The systems architecture view is another way of decomposition of the functionality of marketplace that can be broken down to small modular functions, which explain how the AI-driven decision layers interplay with automation and integration layers to generate quantifiable performance results. The research achieves theoretical background and practical usefulness by adopting a design scientific paradigm and integrating it with architectural logic. The resultant structure is used as an explanatory tool addressing the present-day B2B marketplace behaviour and as a prescriptive tool, that is capable of relevant platform construction, assessment, and change on scale, volatility, and regulatory constraint conditions.

3.2. AI-Enabled B2B Marketplace Architecture

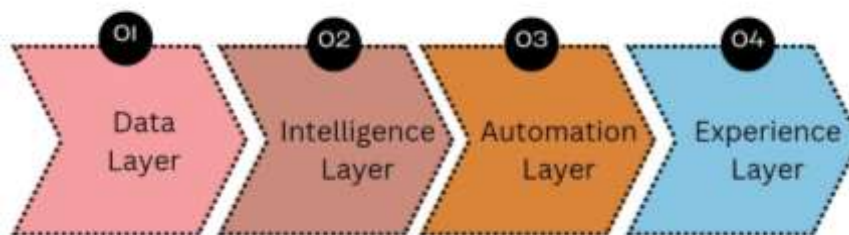


Fig 3 - AI-Enabled B2B Marketplace Architecture

3.2.1. Data Layer

The data layer is the substrate of the AI-enabled B2B marketplace architecture that presents different data points and works to unify the data in line with the company. This layer contains transactional information including purchase orders, invoices, pricing histories and fulfillment

records that record the interactions between buyers and sellers of the economy. It contains also the behavioural information, including search patterns, negotiation patterns, response times and platform engagement metrics and they suggest the intent and preferences of the participants. Secondly, there are external sources of data, such as market indices, supplier risk ratings, and logistics status feeds, as well as macroeconomic indicators, which have been incorporated to provide a context to internal platform activity. The main architectural dilemma at this layer is to guarantee the quality of data, timeliness and interoperability across the organizational boundaries, as well as providing support to both the batch and the real time data ingestion model.

3.2.2. *Intelligence Layer*

The intelligence level implements analytics-driven decisions by executing machine learning, statistical inference, as well as optimization models. The demand forecasting, supplier performance estimation, and risk assessment are performed with the help of predictive models, which allows taking precautionary measures to respond to platforms. Recommendation algorithms facilitate informed buyer supplier matching through the motion of historical transaction record and environmental signals. The dynamic pricing, capacity allocation, and auction processes are driven by the optimization and reinforcement learning techniques in the case of uncertainty. This layer converts the raw data to actionable insights and decisions and its outputs are then continuously optimized with feedback loops and retraining models.

3.2.3. *Automation Layer*

The automation layer transforms intelligence outputs to actionable measures by harmonizing the workflow activity within the marketplace sense. End-to-end processes managed by workflow orchestration engines include order validation, contract execution, invoicing, and settlement and are consistent and adhere to policies. Robotic process automation (RPA) is implemented in the handling of exception and interaction with legacy system, diminishing manual intervention. The integration, based on API, allows connecting with both enterprise systems and other logistics and financial institutions with ease, allowing the integration to be scaled and survive operational impacts.

3.2.4. *Experience Layer*

The experience layer forms the human-system interface point of the market place, comprising buyer and seller portals, dashboards and programmatic interfaces. To the buyers, it provides individually tailored discovery, pricing, and fulfillment options guided by underlying intelligence. On the part of sellers, it offers analytics and performance insight, and automatic order management. This layer will allow adoption, trust, and long-term engagement in AI-driven B2B market places by abstracting away the architectural complexity under the intuitive interface.

3.3. **Analytical Models and Formulations**

The B2B marketplace architecture proposed as an AI-enabled system is founded on the analytical construct of the multi-criteria decision model that allows to organize in a rational manner the evaluation of the suppliers in the context of the heterogeneous performance dimensions. The

representative supplier scoring functionality is developed as a linear aggregation of key performance indicators with weights. In this model, the total score of supplier i will be the sum of four normalized variables namely quality, reliability, cost competitiveness and delivery performance. The individual elements are indicative of critical aspect of supplier value in business B2B dealings. The quality score encompasses compliance to specification, defect and past acceptance performance. The reliability measure is used to mean consistency in the performance in a period of time, among them are the stability in order fulfillment and sensitivity to fluctuation in demand. Cost competitiveness is the comparative price-saving capability of a supplier compared to those of other providers and market situations. Delivery performance is the time, the lead-time conformity and the accuracy of logistics implementation. Each dimension has its contribution to the final score subject to control by weight parameters that is, the strategic priorities of the buying organization or the marketplace operator. The weights allow tuning the model to suit various procurement situations, including cost-aware sourcing, risk-avoidant source selection or time-constrained fulfillment. Architecturally, scoring is a layer in the intelligence stack that a user can interpret, that is, democratizing the sophistication of an algorithm and making it transparent and auditable. Although more elaborate non-linear or deep learning architectures can be used on the downstream, this representation contains a baseline decision model, which is computationally complex, interpretable, and can be incorporated into automated workflows. Operationalizing supplier assessment based on this type of analytical formulations, AI-based B2B marketplaces can be used to deliver consistent, scalable and policy-congruent resolution in high volume transaction settings.

3.4. Process Automation Flow



Fig 4 - Process Automation Flow

3.4.1. Demand Signal Ingestion

The automated procurement flow process commences with the ingestion of demand signal where the platform involves the continuous capture of demand signals between various external and internal sources. These indications can either be of enterprise resource planning systems or inventory levels, production times, sales projections, or customer orders. Real time indicators like the consumption habits and market dynamics are also added in more sophisticated implementations.

This step is meant to encode raw demand information so that it is structured and interpretable by machines so that any decision processes along the downstream can be proactively rather than reactively triggered.

3.4.2. AI-Based Supplier Shortlisting

Upon identification of demand, the intelligence layer utilizes models powered by AI to produce a shortlist of qualified suppliers in the ranked form. This is the step which uses transaction data of the past, supplier performance indices, and risk measures, and contractual limitations. Machine learning models evaluate the suitability of suppliers by scoring using multi-criteria, capacity availability, and contextual manipulates, including geography or compliance status. What is obtained is a dynamically optimized set of suppliers that becomes balanced in the cost, reliability, and risk under the prevailing market conditions.

3.4.3. Automated RFQ Generation

After shortlisting of suppliers, the system automatically develops requests of quotation (RFQ) based on a particular demand environment. The parameters of RFQ, including quantity; delivery schedules; quality specifications; and terms of contract are filled directly using data of requirements on upstream and policy guidelines. The automation guarantees a uniformity, lessens the cycle time and curbs human error, and any multiple supplier can be contacted in large amounts.

3.4.4. Algorithmic Bid Evaluation

Algorithms decisions models are applied to assess the submitted bids on the basis of price, lead time, levels of service, and risk factors in a standardized way. The optimization and scoring algorithms determine the best offers, depending on the set goals and constraints. This method facilitates clear, repetitive and auditable bid selection even where procurement is in high volume or time-sensitive situations.

3.4.5. Order Execution and Settlement

The last step is automated order execution and settlement, in which confirmed awards are transformed into purchase order and sent to suppliers by use of integrated systems. The downstream activities covering the fulfillment tracking, invoice matching and payment settlement are coordinated automatically, providing end to end visibility and control. This automation that works as a closed process allows to make procurement operations scaleable without compromising or losing financial integrity.

4. RESULTS AND DISCUSSION

4.1. Operational Performance Improvements

Table 1 : Operational Performance Improvements

Metric	Operational Improvement (%)
Sourcing Cycle Time	50%
Transaction Errors	70%
Supplier Utilization	45%

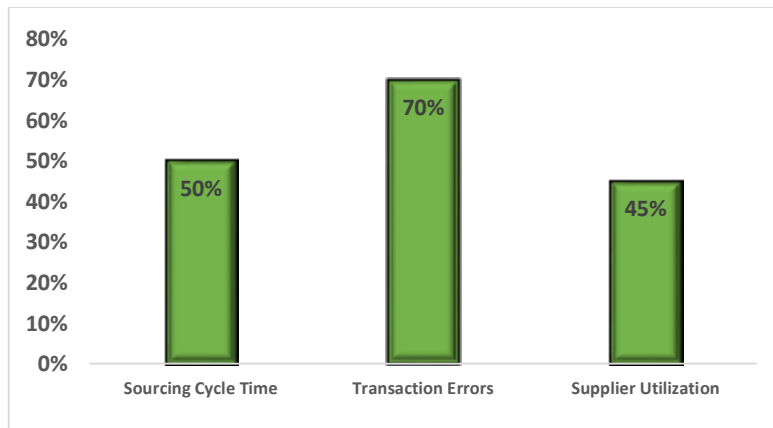


Fig 5 - Operational Performance Improvements

4.1.1. Sourcing Cycle Time (50%)

This is because of the automation of originally manual and sequential procurement processes which contribution is the reduction in sourcing cycle time. Supplier discovery is done on the artificial intelligence (AI) level, raising RFQs are generated automatically, and bid evaluations are done by algorithms to eliminate delays that come with the process of manually searching suppliers, communicating via email, and requiring decision approvals by humans. Facilitating the concurrent sourcing activities and real-time decision support, AI-enabled marketplaces greatly shrink end to end sourcing cycles, enabling businesses to react faster to demand variability and market opportunities.

4.1.2. Transaction errors (70%)

The significant reduction in the transaction error is an indication of the influence of automated workflow execution among the rule-based validation and standardized data ingestion. Data entry errors, document inconsistency, irregular application of business rules are automatically reduced to the bare minimum by means of automation and machine laws. Also, anomaly detection aided by AI helps to detect outliers and inconsistencies early during the transaction lifecycle, avoiding the spread of errors to the lower-tier operations, including invoicing and settlement. This increase boosts the reliability of operations and auditability.

4.1.3. Supplier Utilization (45%)

Dynamic allocation and constant performance monitoring allows improved supplier utilization due to AI models. Rather than using fixed supplier lists or previous preferences, marketplaces powered by AI can dynamically combine demand with supplier capacity against real-time performance, cost and risk indicators. This dynamic redistribution lessens over-dependence on a select few suppliers, workload spreads throughout the whole supplier network, and the total ecosystem efficiency is maximized, leading to the increased use of qualified supplier resources.

4.2. Strategic Impact on Buyers and Sellers

AI-based B2B marketplaces are core redefiners of the strategic placement of buyers and sellers by converting procurement and sales into functions of transactions to functions of intelligence. To the

buyers, the greatest effect is the transformation made on reactive procurement to proactive risk management. The traditional procurement models react to disruptions once they are reflected in the form of stockouts, delays, or cost overruns. By contrast, AI-powered marketplaces constantly evaluate the performance of suppliers, the situation on the market, and external risk factors, allowing to notice possible disruptions in time. Buyers can simulate sourcing, dynamically reallocate their portfolios to suppliers and make informed trade offs between cost, reliability and resilience. This constructive position boosts supply chain flow, curbs single supplier reliance and compliance with regulatory and contractual plans. To sellers, AI markets result in a less opaque and information-intensive competitive landscape. The increased visibility of demands enables suppliers to predict the future demand, match the production scale, and best position inventory. Instead of basing the competitive advantage only on price, performance rates, reliability measurements, and differentiation of service can be used by the sellers to consolidate their positions in the market. The matching and scoring algorithms minimize the information asymmetries, which allows more equitable competition and in this case, small and medium-sized suppliers are better off as they might not have a huge sales network. Moreover, data-driven pricing strategies which are facilitated by predictive analytics and market intelligence enable sellers to adjust pricing dynamically upon demand signals, capacity utilization and competitive positioning. Together, such strategic effect creates more resilient, efficient and equitable B2B ecologies where value creation is enabled by relentless learning, transparency and collaboration as opposed to fixed contract and reactive negotiation.

4.3. Governance, Trust, and Explainability

Although AI-driven B2B marketplaces bring drastic efficiency and scalability benefits, these services present governance problems that have a direct impact on trust, adoption, and regulatory compliance. Bias may be implicitly introduced in algorithmic decision-making when its training data is biased, or when it causes favoritism in sourcing choices, or omits performance indicators. In the procurement setting, this bias could favor one type of supplier over another, distort competition, or be incompatible with regulatory and ethical sourcing of suppliers. As a result, the governance structures should clearly involve selection of data, trained models and assessment of outcome. It is necessary that transparency of such processes should ensure the confidence among the buyers, sellers and oversight bodies. Explainability is central towards dealing with these issues. Explainable AI (XAI) methods, in contrast to opaque black-box approaches, give humans readable explanations of the decision behind selections of suppliers, bids, or recommendations, including prices. Platforms empower stakeholders to interpret, question and legitimize algorithmic results exposing vital drivers of decisions; e.g., quality scores, reliability scores, or risk scores. Such interpretability is exceptionally important in controlled B2B settings, where procurements choices must be verifiable in audit or conflict circumstances. Simultaneously, audit readiness automation enhances accountability because governance tabs are integrated with automated workflows. Execution of standardized processes, irrevocable logs, and paths of decisions At any time, all the activities undertaken by the system can be rebuilt and inspected. Collectively, explainability and auditability will make AI a perceived risk which can be managed instead of posed as an instrument

enabling platforms to scale responsibly and at the same time maintain fairness, compliance, and long-term trust between participants in the marketplace.

5. CONCLUSION

This paper comes up with a conclusion that B2B marketplaces are being fundamentally redefined by artificial intelligence and automation to become dynamic economic coordinators that are able to feel, learn, and act in complex inter-organizational structures beyond being static and transaction-driven systems. The classical B2B marketplaces were mainly used to enable buyer-seller transactions via management of catalog, price discovery and execution. Conversely, AI-powered marketplaces place predictive analytics, automated decision-making and process coordination at their core and allow optimization of sourcing, pricing and fulfillment processes to continuously optimize their operations. These functionalities enable platforms to perform well in an environment of scale, volatility and uncertainty, which are increasingly becoming the normal characteristics of the global trade landscapes. Empirical studies show that these marketplaces provide better operational effectiveness in the form of lower cycle times, lower error levels, higher resilience with their ability to predict risks in advance and allocate suppliers variably, and easier scaled with its ability to decouple growth with linear growth in human intervention. In addition to operations, B2B marketplaces powered by AI transform the nature of strategic relationships between the participants of the ecosystem. Buyers shift not only to data-informed risk-conscious sourcing but also to reactive procurement practices, whereas sellers have a better demand visibility, more equal competition, and can also differentiate between each other in terms of performance and reliability and not only price. Central drivers of trust, such as explainable AI and audit-ready automation, become central elements of governance and consumers of trust, as it is guaranteed that the decisions made by AI algorithms are transparent, responsible, and can be comprehensible under the regulations. Collectively, these advances make AI-driven marketplaces the core of contemporary digital business and not optional efficacy software. This should be the subject of future research that can be built in various dimensions. Multi-agent learning has been used to provide hope in modeling the behavior of autonomous buyers, sellers and intermediaries in a strategic manner such that marketplaces may coordinate the result of a set of autonomous transactions instead of trying to maximize them. Another high-level research area is cross-marketplace interoperability because global supply chains may open up network-level efficiencies and avoid fragmentation by enabling data and process to flow across platforms with ease. Lastly, developing regulatory systems around algorithmic commerce should be explored further and especially in regards to fairness, accountability and competition policy. With the digital ecosystem still growing and becoming more connected and networked, AI-driven B2B marketplaces are set to exist at the center of the future landscape of the world economy and trade.

REFERENCES

- [1] R. H. Coase, "The nature of the firm," *Economica*, vol. 4, no. 16, pp. 386–405, 1937.
- [2] O. E. Williamson, *The Economic Institutions of Capitalism*, New York, NY, USA: Free Press, 1985.
- [3] T. Malone, J. Yates, and R. Benjamin, "Electronic markets and electronic hierarchies," *Communications of the ACM*, vol. 30, no. 6, pp. 484–497, 1987.

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- [4] G. Bakos, "Reducing buyer search costs: Implications for electronic marketplaces," *Management Science*, vol. 43, no. 12, pp. 1676-1692, 1997.
 - [5] A. Hagiu and J. Wright, "Multi-sided platforms," *International Journal of Industrial Organization*, vol. 43, pp. 162-174, 2015.
 - [6] M. Cusumano, A. Gawer, and D. Yoffie, *The Business of Platforms*, New York, NY, USA: Harper Business, 2019.
 - [7] E. Brynjolfsson and A. McAfee, *Machine, Platform, Crowd*, New York, NY, USA: W. W. Norton & Company, 2017.
 - [8] T. Davenport and R. Ronanki, "Artificial intelligence for the real world," *Harvard Business Review*, vol. 96, no. 1, pp. 108-116, 2018.
 - [9] W. Ketter, J. Collins, and A. Gupta, "Competitive benchmarking in dynamic markets using autonomous agents," *Decision Support Systems*, vol. 53, no. 2, pp. 296-306, 2012.
 - [10] Y. Wang and N. Archer, "A theoretical framework for discovering B2B e-marketplace benefits," *Information & Management*, vol. 44, no. 2, pp. 179-195, 2007.
 - [11] K. Laudon and C. Traver, *E-Commerce: Business, Technology, Society*, 16th ed., Boston, MA, USA: Pearson, 2020.
 - [12] S. Russell and P. Norvig, *Artificial Intelligence: A Modern Approach*, 4th ed., Upper Saddle River, NJ, USA: Pearson, 2021.
 - [13] L. Willcocks, M. Lacity, and A. Craig, "Robotic process automation: Strategic transformation lever for global business services," *Journal of Information Technology Teaching Cases*, vol. 7, no. 1, pp. 17-28, 2017.
 - [14] M. Rosemann and J. vom Brocke, "The six core elements of business process management," in *Handbook on Business Process Management*, Berlin, Germany: Springer, 2015, pp. 105-122.
 - [15] McKinsey & Company, "The next normal in supply chain digitization and automation," McKinsey Global Institute, Tech. Rep., 2020.