

EDITORIAL

Bounded automation: A new analytical look at artificial intelligence

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Artificial intelligence (AI) has been examined in many fields of knowledge, including economics (Alaimo & Kallinikos, 2021), sociology (Park et al., 2022), psychology (Demetis & Lee, 2018), and our area of administration (Alaimo, 2022). Essentially, studies argue that many jobs will vanish due to automation, and the emergence of enough new roles to replace them seems unlikely (Killoran & Park, 2024). Therefore, optimistic and pessimistic tech enthusiasts have debated whether a future without jobs is a desirable development or a concerning issue (Varma et al., 2023).

Organizational studies have argued that the development of AI will not lead to full automation but rather to bounded automation, because organizational dynamics shape and restrict the application of technology in the world of work. Against this backdrop, work tends not to disappear completely. On the contrary, it is possible to see an expansion of precarious and poorly paid jobs, which worsen social inequalities and deepen income disparities both within and across countries.

But to what extent can the expanding use of AI reshape e-commerce? The claim that traditional e-commerce is declining might, at first glance, seem hyperbolic. However, it indicates a quiet yet significant transformation: the gradual replacement of a human-centric consumer approach by systems driven by algorithms. The turning point is not the end of online commerce but rather the redefinition of its core mechanisms.

Thus, this does not mean that online shopping will disappear but rather that its structures and operational logic are being reconfigured. The current model, which relies on human consumers interacting with digital platforms, browsing virtual catalogs, and making deliberative decisions, is quietly being replaced by consumption systems mediated by algorithmic agents.

In this new context, AI systems are gaining prominence as mediators of purchasing decisions. Interfaces based on natural language, such as chatbots in messaging applications (e.g., WhatsApp), voice devices (e.g., Alexa, Google Assistant), and agents like ChatGPT with its Operator feature, already enable commercial transactions through voice or text commands. For example, the Operator connects to partner stores, automatically fills in payment and delivery details, and completes orders in seconds (OpenAI, 2024).

These systems go beyond the role of simple assistants, operating as digital representatives of human desires. Thus, the locus of the consumption decision shifts from the individual to the algorithm. Traditional online shopping practices are becoming outdated, and a new paradigm called “algorithmic consumption” is emerging. It is a silent but potentially irreversible change.

Emerging technologies such as blockchain, smart contracts, and decentralized digital identity strengthen this scenario by enabling autonomous agents to perform auditable and secure transactions, automatically enforce contractual clauses, and reduce fraud risks (Tapscott & Tapscott, 2016). This sets new standards for reliability in digital commerce.

Large companies such as Amazon (Alexa Shopping) and startups like Instacart are developing solutions based on predictive consumption patterns. Additionally, financial institutions like Visa and Mastercard are launching initiatives that enable end-to-end transactions through AI: Visa, with its Visa Intelligent Commerce program, allows agents such as ChatGPT and Anthropic to make purchases within user-defined parameters (Azevedo, 2025); Mastercard Agent Pay, in turn, integrates AI-generated recommendations directly into the checkout process.

These transformations profoundly challenge traditional e-commerce infrastructures, which have been built on principles of user experience (UX), interface optimization, and retention strategies. Elements such as sales funnels, lead generation, and qualification become obsolete, since AI agents operate on the basis of transactional efficiency rather than aesthetic stimuli or brand narratives (Brynjolfsson & McAfee, 2017).

In light of this, platforms such as Shopify and Salesforce are investing in the development of application programming interfaces (APIs) that enable integration with autonomous agents, anticipating the need for machine-friendly commerce environments (Salesforce, 2024). The battle for human attention, which has sustained the digital advertising economy, is being undermined by systems that operate according to a purely utilitarian logic.

The consolidation of this automation requires that agents not only recommend products but also make payments autonomously and securely. OpenAI has already integrated its system with processors such as Stripe and PayPal, enabling transactions via natural language commands (OpenAI, 2024). Anthropic is following a similar path, establishing partnerships with platforms such as Plaid and Finicity. Meanwhile, Google and Amazon are expanding their financial ecosystems, incorporating digital wallets, bank accounts, and authentication technologies such as OAuth 2.0, FIDO2, and card tokenization (FIDO Alliance, 2023).

This zero-friction consumption model removes intermediate steps, significantly cutting down the time to conversion and challenging both traditional business models and the conventional legal view of the consumer.

The impact on consumer behavior is significant. The traditional cycle – searching for information, evaluating options, making decisions, and post-purchase experience – becomes automated. This reduces the consumer's cognitive effort, situational awareness, and emotional engagement with the consumption experience. As Belk (2013) notes, technological mediation disrupts the development of the consumer's extended self, weakening their emotional bond with brands and products.

Additionally, the risk of an algorithmic confinement effect becomes relevant: future choices are increasingly shaped by previous decisions, encouraging behavioral homogenization (Zuboff, 2019). Trust shifts from brands to AI systems, leading to pragmatic, efficient, yet unpredictable consumption patterns. While the traditional hedonic pleasure of consumption might decrease, new opportunities emerge for highly personalized and on-demand experiences.

In this new role, the consumer becomes a curator of preferences, requiring skills related to parameterization and supervision of agents. This raises important ethical concerns, such as algorithmic biases, the explainability of decisions, and accountability. The governance of AI systems must therefore provide for independent auditing and transparency mechanisms.

From an economic perspective, algorithmic consumption can increase market dominance by large platforms while also encouraging the development of new business models and value networks. On the other hand, countries lacking strong digital infrastructure face systemic obstacles, highlighting the importance of digital sovereignty strategies (UNCTAD, 2021).

From a regulatory standpoint, the debate is progressing. The European Union has introduced the AI Act, while Brazil is working on Bill 2,338/2023, both aiming to create regulatory frameworks for the ethical and responsible development of AI. However, significant gaps still exist, especially concerning accountability for autonomous decisions (Câmara dos Deputados, 2023).

The impact on work in the retail sector is also significant. Traditional roles such as salespeople, cashiers, and digital marketing specialists are likely to be displaced. On the other hand, new occupations are emerging, including the development of autonomous agents, data curation, supervision of algorithmic ethics, and prompt engineering.

Finally, the growing dependence on closed ecosystems of digital agents raises the risk of algorithmic sovereignty, which could limit consumer freedom of choice. The future of consumption might either head toward full automation or move toward selective resistance and rehumanization.

The “death” of traditional e-commerce should not be seen as a collapse but as an inevitable evolution. The real challenge is to ensure this transition occurs within strong ethical, regulatory, and technological frameworks that keep AI under human control. E-commerce, as we know it, is outdated. Long live algorithmic consumption, as long as society learns to set boundaries and keeps humans at the center.

The idea of bounded automation helps us challenge the belief in technological determinism that influences much of the narrative around AI. The thesis that AI will fully replace human labor ignores the fact that its application unfolds in organizational settings shaped by power dynamics, economic rationalities, and specific political interests (Barrett et al., 2012; Alaimo, 2022).

Automation, therefore, is not a neutral or inevitable process but one conditioned by institutional structures that define where, how, and for what purposes the technology will be implemented. Thus, what we observe is not the extinction of work but its reconfiguration into precarious, fragmented forms that often lack social protections, a phenomenon that tends to intensify with the incorporation of algorithmic agents into e-commerce and, by extension, commercial relations.

This reconfiguration of consumption, known as algorithmic consumption, applies the concept of bounded automation to the commercial sphere. The consumer, once central to marketing strategies and digital experiences, is increasingly replaced by artificial agents calibrated for transactional efficiency. However, this perceived optimization masks a quiet shift of agency, decision-making, and hedonic pleasure in favor of an automated, technocratic rationality. Replacing the shopping experience with AI-mediated conversational flows not only changes engagement formats but also fundamentally alters how consumers become subjects, who no longer truly “choose” but simply “authorize” decisions pre-set by algorithms (Zuboff, 2019; Belk, 2013).

What emerges, therefore, is a field of tensions between the discourse of technological modernization and the regressive social effects of this transformation. Bounded automation in the workplace and algorithmic consumption in market practices are complementary aspects of the same process: the consolidation of a digital capitalism centered on data extraction and the rationalization of human decisions.

For critical theory, this trend demands epistemological and political vigilance, as it legitimizes the concentration of power in hegemonic platforms, reduces transparency in consumer relations, and weakens democratic mechanisms of choice and accountability.

Instead of celebrating the supposed efficiency of AI in retail, it is imperative to critically examine how such technologies operate to reinforce social inequalities, undermine consumer autonomy, and destabilize democratic mechanisms. Bounded automation, in this sense, is not merely a technological trend but a political-economic vector in the reorganization of digital capitalism, whose epicenter lies in the rationalization of human decision-making and the expropriation of data as a source of value. For critical organizational studies, this scenario demands both epistemic vigilance and institutional resistance.

These reflections aim to encourage our readers to delve into this issue of *Cadernos EBAPE.BR*, which begins with the article **“Media narrative on benefits and impacts of green hydrogen production: exploring environmental and social issues”** by Felipe Moura Oliveira, Thiago Costa Holanda, Luís Matheus Tavares Silva, and Mônica Cavalcanti Sá de Abreu. This article examines the Brazilian media narrative surrounding green hydrogen production in news outlets. The authors used text mining methodology on Google News, focusing on the term “green hydrogen,” and analyzed the publications with Voyant Tools software. The findings show Brazil’s potential for green hydrogen production and highlight investments in establishing the Green Hydrogen Hub in the state of Ceará. However, the media did not inform society about the possible environmental and social impacts of green hydrogen production.

Next, in **“Transition to the circular economy in the metallurgical sector: an implementation framework,”** Tais Provensi, Maiara Lais Marcon, Simone Sehnem, and Nelson Santos Machado propose a theoretical framework for implementing circular economy in the metallurgy industry, highlighting the required processes.

João Paulo Moreira Silva, Liliane de Oliveira Guimarães, Edmundo Inácio Júnior, and Rodrigo Baroni de Carvalho use the entrepreneurial ecosystem (EE) approach to present their qualitative research **“Unveiling the role of identity-based and calculative networks to foster an entrepreneurial ecosystem in an emerging economy.”** Their study revealed that identity networks and calculative networks, formed after interaction with relevant EE actors, are important for the development of companies and also of the ecosystem.

The fourth article, **“The body as commodity: A study in Belo Horizonte’s low-end prostitution zone,”** presents the results of an empirical study aimed at identifying and analyzing the relations of exchange and trade of the body and its symbolic transformation in a red-light district of the city of Belo Horizonte. In this work, Jefferson Rodrigues Pereira, Kely César Martins de Paiva, and Caissa Veloso e Sousa advance the discussion on social precariousness and productive efficiency.

Aiming to assess the level of knowledge waste in higher education institutions (HEIs), Leander Luiz Klein, Desirée Prati Ribeiro, Kelmara Mendes Vieira, and Taiane Keila Matheis invite us to reflect through their article **“Knowledge waste at the center of discussions in higher education institutions: a quantitative analysis.”**

“Forgone identities: a study on the long tenure of women leaders in companies with no upward mobility prospects” is the title of the article written by Patrícia Maria Figueredo and Flávia Cavazotte. This research analyzes the forgone professional identity of women who hold leadership roles in practice, addressing factors that support their permanence in a company where they have no prospects for hierarchical advancement. Additionally, the study looks into the psychological effects caused by the repeated institutional denial of their identities.

Next, in **“Meaningful work in startup organizations: reflections on emerging paradoxes”**, Ana Raquel Silva Rocha Sudério, Ana Cristina Batista dos Santos, and Lia Rodrigues Lessa de Lima study the emerging meanings of work in the labor context of startups.

Roberto Guanabara Calasans and Eduardo Paes Barreto Davel conduct a literature review on strategy as a practice in the creative industries in their article **“Strategy as practice in creative industries: The past and future of academic production.”**

Ana Eliza Ferreira Alvim da Silva, Eliza Pinto Narciso Saltarelli, Valderí de Castro Alcântara, and Mozar José de Brito present a theoretical essay entitled **“Contributions of sociomateriality to organizational studies based on the theory of communicative action: Possibilities for dialogues between Jürgen Habermas and Karen Barad”** The article identifies the potential contributions of a theoretical perspective grounded in sociomateriality to organizational studies informed by Habermasian concepts.

In this issue, we also present three case and teaching studies. The first, called **“DuLocal: The challenges of a startup with a positive social impact,”** was written by Raissa Helena Paiva Apolinario, Samara de Carvalho Pedro, Ed de Almeida Carlos, and Edson Sadao Iizuka. **“The issue runs deeper: A matter of decision and socioenvironmental responsibility”** was written by Renata Luiza de Castilho Rossoni, André Luis Rossoni, Manolita Correia Lima, and Erica Berte. The final case, entitled **“What does respect look like? Diversity management practices in the experience of a *travesti* patient in the public health system”**, was developed by Adriana Kirley Santiago Monteiro, Rafael Fernandes de Mesquita, Maurício Donavan Rodrigues Panizam and Juuara Juareza Barbosa dos Santos.

We wish you a pleasant read.

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