

Introduction to “Digital Transformations of Business Operations” Minitrack

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This year “Digital Transformations of Business Operations” minitrack at HICSS has accepted twelve papers that explore the increasingly complex roles that advanced information technologies play in healthcare, education, business operations, and consumer decisions and activities. These papers are as follows:

- *Corporate Default Prediction Through Text Mining: Integrating Event, Sentiment, and Network Analyses*: This paper applied text mining techniques to the public news on US-listed oil companies between 2014 and 2016 to predict corporate default. It identified such default predictors as credit sentiment, network degree and transitivity. Moreover, exposure to media, regardless of being positive or negative, may increase the likelihood of both default and other corporate exits.

- *Design AI-Generated Summaries for Online Video Platforms: Evidence from a Field Experiment*: This paper tests two AI summarization strategies—Informational-Extractive (IAIGS) and Suspense-Inducing (SAIGS)—on a major Chinese video platform. Using a large-scale field experiment, it shows IAIGS reduce engagement by satisfying users’ information needs too early, while SAIGS boost engagement in affective content (e.g., History) by sparking curiosity, but hinder it in instrumental content (e.g., Science). The study advocates for context-aware, intent-driven designs to improve engagement, content discovery, and retention.

- *AI-Empowered Procurement and Supplier Management: Case Studies and Insights*: This paper develops. This paper explores how AI transforms procurement and supplier management, identifying four key application areas: robotic process automation, machine learning, cognitive AI, and strategic decision augmentation. Through in-depth case studies, it illustrates how AI enhances spend analysis, supplier discovery, risk prediction, and autonomous bidding. The study calls for cross-functional collaboration, new digital skills, and governance frameworks to realize AI’s full potential in next-gen procurement.

- *The Evaluator Age: Generative AI and the Future of Knowledge Work: A Natural Experiment*: This conceptual paper introduces the Evaluator Age, a new

phase of knowledge work shaped by generative AI. Unlike past eras—the Preserver Age (knowledge retention) and the Producer Age (knowledge creation)—this age prioritizes humans’ role in critiquing, refining, and ethically overseeing AI-generated content. The paper contributes a novel framework that positions future knowledge workers as evaluators, not just creators, and highlights how education and industry must adapt to ensure AI serves society responsibly.

- *Using RFID Data to Improve the Identification of Abandonment Behavior in an Emergency Department: Clinical Policy Implications*: This study enhances emergency department (ED) predictions of patients likely to leave without being seen (LWBS) by integrating real-time RFID data into time-dependent machine learning models. Using over 150,000 patient records, the authors compare static and dynamic risk models and find that the time-dependent model significantly reduces missed LWBS cases. The study underscores the clinical value of dynamic data integration in reducing patient abandonment and enabling timely interventions.

- *Does Enforcement of Drug Regimen Reviews Improve Medication Safety and Management in Nursing Homes? An Analysis of the CMS Drug Regimen Review Policy*: This paper examines the impact of the CMS-mandated Drug Regimen Review (DRR) policy on medication safety in U.S. nursing homes. Using interrupted time series analysis across 2017–2024 data, it finds that DRR enforcement significantly reduced pharmacy-related deficiency citations—both overall and among high-risk facilities. This study offers robust empirical evidence that real-time policy enforcement can enhance medication safety in long-term care, especially in facilities with persistent quality issues.

- *Does Free Consultation Promotion Affect Paid Consultations? An Empirical Investigation of Online Medical Consultations*: This paper investigates whether promoting free consultations on online healthcare platforms boosts or cannibalizes paid consultations. Using a staggered difference-in-differences approach with real-world data from one of

China's largest platforms, the authors find a positive spillover effect: physicians who offered free consultations experienced significant increases in subsequent paid consultations. The study offers the first causal evidence supporting free consultation promotions as a sustainable strategy for platform growth and guiding healthcare platforms in strategic campaign design.

- *Information Technologies and the Search for Top Talent in Competitive Job Markets*: This paper examines how new IT has transformed professional hiring. Online job platforms and LLM-based tools have made job applications easier and cheaper, overwhelming recruiters with large volumes of submissions. Focusing on the U.S. National Resident Matching Program (NRMP), the study analyzes how organizations adjust interview volume, screening accuracy, and cutoffs in both symmetric (similar programs) and asymmetric (differently ranked) markets. Interestingly, it finds that greater effort by one program can sometimes improve overall match efficiency rather than harm competitors.

- *How Does Authenticity Observed from Service Provider-Consumer Interactions Affect Consumer Engagement and Firm Performance? Evidence from a Field Experiment in a Restaurant Chain*: This paper studies how third-party observers perceive authenticity in online service interactions and how it impacts future consumer engagement and firm performance. Using both panel data and a field experiment with a restaurant chain's AI-generated review responses, the authors show that authenticity boosts engagement, orders, and sales, especially when customers witness authentic responses to firm-responsible service failures. This research offers actionable insights for service providers to enhance trust and performance through authentic, publicly visible interactions.

- *Implementing Cooperative IoT Systems - A Product Development Method*: This paper presents a development method for implementing cooperative IoT systems based on a 41-month longitudinal study. The method identifies three phases that design, build, and evolve the IoT system. This method provides a practical guide for research and implementation of IoT systems.

- *Media Platforms and Technology Disruption: Pricing in the Digital Age*: This research analyzes competition between streaming media platforms (CP) employing different revenue models: ad-supported versus personalized, ad-free subscriptions. It reveals that high ad revenue per user (ARPU) drives CPs to prioritize ad-supported services, potentially marginalizing premium offerings. Conversely, strong

consumer loyalty to content preferences enables CPs to raise prices for ad-free services.

- *How Work Performance Shapes Giving in Digital Labor Markets*: This paper examines the question whether the way wages are earned shapes the way they are donated through two approaches: it first analytically shows that work effort yields disposable income and identity feedback, both of which lead to generosity. The two routes were tested with longitudinal, individual-level data from Gitcoin. The results show that positive work feedback leads to earlier subsequent donations, though it does not necessarily increase donation amounts. Furthermore, a higher balance in the work income account raises donation amounts but does not always lead to earlier donations.