СЕКЦІЯ 8
ЕКОНОМІЧНІ ТА СОЦІАЛЬНІ АСПЕКТИ НОВИХ ТЕХНОЛОГІЙ

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BEYOND THE KEY CARD: HOW TECHNOLOGY IS TRANSFORMING THE GUEST EXPERIENCE

The hospitality industry is experiencing a significant technological transformation due to innovations in technology [2]. The integration of innovative technologies is altering the ways in which hotels function, communicate with guests, and provide services. Innovations are no longer merely a trend but have become a critical necessity for the survival and growth of businesses today [1, 4].

Artificial Intelligence (AI) and Machine Learning (ML) are significantly reshaping the modern hospitality sector. Their application extends far beyond basic conversational interfaces like customer service chatbots. AI and ML are playing a crucial role in core business functions. Modern applications of AI are now centered on predictive analytics for enhanced demand forecasting and the creation of hyper-personalized guest experiences [2].

By automating repetitive tasks and managing common guest inquiries, AI tools improve operational efficiency. This enables personnel to redirect their efforts toward delivering bespoke, high-touch service, thereby elevating overall guest contentment [6]. As the integration of AI continues to deepen across the sector, experts anticipate that even small-scale hospitality enterprises will be empowered to offer highly effective, tailored services and targeted marketing campaigns [2].

The Internet of Things (IoT) is converting conventional hotel rooms into smart spaces. Using their personal electronic devices such as mobile phones, tablets or laptops, guests can easily control room features like lighting, temperature, entertainment, and even curtains. The application of the IoT further extends to voice-activated assistants and digital key cards. Such automation not only promotes a highly customized and interactive guest stay but also enables management to track and optimize room systems with greater efficiency [6].

The hotel sector is increasingly adopting contactless experiences, relying on technology to virtually remove face-to-face interactions between visitors and employees. Innovations previously considered improbable have now become standard practice: mobile devices now allow guests to manage almost every aspect of their stay – from booking and paying for rooms to scheduling spa appointments. The advantages of contactless solutions include enhanced operational efficiency, minimization of waste (e.g., plastic and paper), reduced energy consumption, and instant service access [3].

Virtual Reality (VR) tours and Augmented Reality (AR) experiences are essential marketing instruments within the hospitality sector, enabling guests to gain an immersive pre-arrival experience [2]. VR technology allows potential customers to take virtual tours of the hotel facilities remotely. The hotel's immersive tour is a key factor in the decision-making process of potential customers to book, as it highlights the hotel's services and improves the overall perception of the hotel through more appealing and interactive marketing.

Conversely, AR facilitates access to interactive information layers regarding hotel amenities directly through personal mobile devices, thereby enhancing the guest experience. Not only does this technology upgrade the customer's stay by being informative and

entertaining, but it also equips hotels with an alternative method to communicate effectively and secure customer loyalty [5].

Data analytics is fundamentally reshaping the hospitality industry allowing businesses to collect, analyze, and use a wealth of data to streamline operations (such as booking systems) and ultimately boost growth and profitability. Data are gathered from diverse services, which typically include reservation systems, point-of-sale systems, and customer feedback platforms. The collected data are subsequently processed and interpreted, typically through advanced accounting software or by the finance accountant.

In the hospitality industry, data analysis tools are used to assess performance and make decisions. The goal is threefold: boosting income, lowering expenses, and enhancing guest satisfaction. The application of analytics is crucial for hospitality businesses due to three key strategic advantages:

- Personalization: By analyzing guest data, including past preferences, purchase history, and behavioral patterns, businesses can proactively tailor service offerings, amenities, and communications. This precise targeting improves the perceived quality of the guest experience.
- Cost control: The comprehension of operational data facilitates the optimization of costs, including energy use, labor, and supplies.
- Forecasting. Reliable predictive analytics enable businesses to anticipate demand, optimize staffing levels and implement highly effective, real-time pricing and revenue strategies [7].

The hospitality industry can gain major advantages by adopting technologies that promote sustainability. With tools that track resource use, analyze data, and involve guests, hotels can reduce both their environmental footprint and operational costs. The introduction of such technologies also meets the expectations of eco-conscious travelers, thereby helping to strengthen their trust. Therefore, applying sustainable practices is vital for improving efficiency, conserving resources, and fostering enduring guest loyalty [4].

Technological innovations in the hospitality industry are pioneering new opportunities, leading to enhanced service quality, improved operational efficiency, and significant cost optimization. Contemporary global trends – including automation, AI, the IoT, VR/AR, mobile solutions, and sustainability projects – empower businesses to rapidly adjust to market shifts, meet the sophisticated demands of modern clients, and sustain international competitiveness [1, 6]. The implementation of transformational technologies [2] today is crucial for ensuring business success in 2025 and beyond.

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FRANCUSKA TEORIA WYDAJNOŚCI

Abstarkt:
Artykuł prezentuje wyniki badań ewolucji francuskiej refleksji nad wydajnością i produktywnością – od fizjokratycznej koncepcji nadwyżki rolniczej, przez analizy A. Aftaliona, aż po ujęcie J. Fourastiégo, dla którego produktywność staje się miarą postępu cywilizacyjnego. Przedstawiono, w jaki sposób kolejne ujęcia – globalnej wydajności systemu, fizycznej produktywności marginalnej oraz produktywności w wartości – łączą techniczno-ekonomiczne rozumienie wydajności z teorią podziału dochodu i analizą poziomu życia. Zaproponowano robocze rozróżnienie terminów „wydajność" i „produktywność" w terminologii, wskazujące na ich odmienny zakres i zastosowanie w badaniach nad rozwojem gospodarczym. Artykuł prowadzi do wniosku metodologicznego, że produktywność może pełnić rolę rzetelnego wskaźnika postępu jedynie przy zachowaniu pomiaru i możliwości porównań międzyokresowych.
Słowa kluczowe: *wydajność; produktywność; francuska myśl ekonomiczna; Aftalion; Fourastié*

1. Historyczne i doktrynalne tło pojęcia wydajności

1.1. Fizjokraci a „produktywne" sektory gospodarki

W refleksji nad wydajnością jako miarą postępu cywilizacyjnego kluczową rolę odgrywa myśl fizjokratów, a zwłaszcza osoba François Quesnay, który jako pierwszy systematycznie określił, co w gospodarce jest rzeczywiście „produktywne". Dla fizjokratów jedynym źródłem realnego przyrostu bogactwa był produkt natury, rozumiany jako nadwyżka, jaką gleba dostarcza po odjęciu kosztów jej uprawy. Quesnay podkreślał, że tylko produkt naturalny jest odnowieniem bogactwa, podczas gdy produkt pracy ludzkiej – „produkt sztuki" – jedynie przetwarza już istniejące dobra i nie zwiększa ich zasobu. Stąd stwierdzenie: *„il n'y a que le produit de la Nature qui soit revenu ou renouvellement de richesse*" [1] „Tylko produkt Natury stanowi dochód lub odnowienie bogactwa." W tym ujęciu źródłem bogactwa i miernikiem rozwoju jest produkt netto, czyli czysta nadwyżka z rolnictwa, która określa ilość pracy, jaką społeczeństwo może skierować na działalności ponadpodstawowe. Quesnay explicite wskazuje: to właśnie produkt netto[2] **„***Ce que mesure le produit net, c'est la quantité maxima de travail humain qu'une société peut affecter à la production des "richesses" au sens étroit***"** „Produkt netto mierzy maksymalną ilość ludzkiej pracy, jaką społeczeństwo może przeznaczyć na wytwarzanie bogactw w sensie ścisłym." Takie rozumienie bogactwa prowadzi fizjokratów do kluczowego rozróżnienia sektorów gospodarki. W tej perspektywie:

– sektor „produktywny" to przede wszystkim rolnictwo, ponieważ tylko ono wytwarza realną nadwyżkę ponad poniesione nakłady dzięki płodności ziemi;

[1] R. Grandamy, *La Physiocratie. Théorie générale du développement économique*, Mouton, Paris–La Haye 1973, str. 90
[2] *Ibidem*, str. 90.