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**IX INTERNATIONAL SCIENTIFIC
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«Scientific Problems and Options
for Their Solution»**

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CONTENTS

SECTION: ACCOUNTING AND TAXATION

Demchenko T., Kolisnyk S.

ACCOUNTING FOR FIXED ASSETS AND THEIR EFFECTIVE
USE IN THE ENTERPRISE..... 14

Іванишина О., Царьов О.

МІЖНАРОДНИЙ ОБМІН ПОДАТКОВОЮ ІНФОРМАЦІЄЮ ЯК
ЕФЕКТИВНИЙ ІНСТРУМЕНТ КОНТРОЛЮ В МІЖНАРОДНОМУ
ОПОДАТКУВАННІ..... 17

SECTION: AGRICULTURAL SCIENCES

Авдєєв С.В., Авдєєва О.Ю., Анічкіна О.В., Басюк В.О.

ОСОБЛИВОСТІ ВИВЧЕННЯ АГРОХІМІЇ ЯК ГАЛУЗІ
СІЛЬСЬКОГОСПОДАРСЬКОЇ НАУКИ..... 21

Мамчур В.В.

АДАПТАЦІЯ РОСЛИН РЕГЕНЕРАНТІВ AILANTHUS
ALTISSIMA ДО УМОВ *ex vitro*..... 24

SECTION: ARCHITECTURE AND CONSTRUCTION

Павлюченко М.В.

ЕКСПЕРИМЕНТАЛЬНІ ВИЗНАЧЕННЯ ЗУСИЛЛЯ ВИРИВУ
(ВИСМИКУВАННЯ) АНКЕРУ ДЛЯ КРІПЛЕННЯ КОНСТРУКЦІЙ
ІЗ ОСНОВИ З БЛОКУ КЕРАМІЧНОГО..... 28

Прус А.В., Роговий С.І.

ОЦІНКА МОЖЛИВОСТІ ВИКОРИСТАННЯ СТАЛЕВИХ
ГОФРОВАНИХ ЕЛЕМЕНТІВ В ЯКОСТІ НЕСУЧИХ ЕЛЕМЕНТІВ
У КАРКАСНИХ БУДІВЛЯХ..... 30

Доброхлоп М.І.

ПЕРСПЕКТИВИ ВИКОРИСТАННЯ КОМПОЗИЦІЙНИХ
МАТЕРІАЛІВ НА ОСНОВІ ГРУБОГО БАЗАЛЬТОВОГО ВОЛОКНА
У БУДІВЛЯХ І СПОРУДАХ СПЕЦІАЛЬНОГО ПРИЗНАЧЕННЯ..... 32

Скорук О.

ФІБРОБЕТОН В КОНСТРУКЦІЯХ ФУНДАМЕНТІВ..... 36

SECTION: TECHNICAL SCIENCES

Борисенко А.М., Ільчакова Я.М.

ОЦІНКА ПАРАМЕТРІВ ЗМІННИХ У ЧАСІ ІНФОРМАЙНИХ СИГНАЛІВ ПРИ ДІАГНОСТУВАННІ ТА АВТОМАТИЧНОМУ КЕРУВАННІ СИЛОВИХ АГРЕГАТІВ НА БАЗІ ДВИГУНІВ ВНУТРІШНЬОГО ЗГОРЯННЯ..... 274

Грушецький С.М.

ФАКТОРИ, ЩО ОБМЕЖУЮТЬ ЗАСТОСУВАННЯ МЕХАНІЗОВАНОГО ЗБИРАННЯ КАРТОПЛІ В УКРАЇНІ І КРАЇНАХ ЄВРОПИ..... 276

Гурін А., Пімченко А.

ЗАСТОСУВАННЯ ЗАДАЧІ ПРО МАТЕМАТИЧНИЙ СЕЙФ В РОЗПОДІЛЕНІЙ WEB СИСТЕМІ НА ОСНОВІ МЕТОДА ВІЖЕНЕРА..... 280

Корчак М.М.

МЕТОДИКА МАТЕМАТИЧНОГО МЕТОДУ ПЛАНУВАННЯ ЕКСПЕРИМЕНТУ ПОДРІБНЮВАЧА ГРУБОСТЕБЛОВИХ ЗАЛИШКІВ..... 282

Черненко Н.

ВПЛИВ ГІРНИЧОВИДОБУВНИХ ПІДПРИЄМСТВ НА ЕКОСИСТЕМИ РЕГІОНІВ..... 287

Шатун О.А., Туркін І.Б.

ІМІТАЦІЙНЕ МОДЕЛЮВАННЯ АЛГОРИТМІВ ВИЗНАЧЕННЯ ДОВІРИ ТА РЕПУТАЦІЇ ВУЗЛІВ В БЕЗДРОТОВИХ СЕНСОРНИХ МЕРЕЖАХ..... 291

SECTION: TOURISM AND HOTEL AND RESTAURANT BUSINESS

Тумчук S.V.

ASSESSING THE INFLUENCE OF INNOVATIVE TECHNOLOGIES ON THE PROFITABILITY OF THE RESTAURANT INDUSTRY..... 295

Єпик Л.І.

ГАСТРОНОМІЧНИЙ ТУРИЗМ ЯК ЧИННИК ЗБЕРЕЖЕННЯ КУЛЬТУРНОЇ СПАДЩИНИ..... 298

**SECTION: TOURISM AND HOTEL
AND RESTAURANT BUSINESS**

**ASSESSING THE INFLUENCE OF INNOVATIVE
TECHNOLOGIES ON THE PROFITABILITY OF THE
RESTAURANT INDUSTRY**

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Restaurant services are one of the most important sectors in the economies of many countries worldwide. They provide a significant portion of employment, generate revenue for the state, and contribute to the development of culture and tourism. In modern times, the restaurant business faces several challenges, including increased competition, changing consumer needs, and demands for service quality. Successfully overcoming these challenges requires restaurants to continually implement innovations.

The presence of innovative solutions in the restaurant business opens up new opportunities for optimizing operational processes, improving customer service quality, and reducing overall business expenses. Properly chosen and effectively implemented innovative solutions not only enhance the efficiency of restaurant operations but also create a favorable environment for attracting new customers and retaining the existing audience.

However, despite the potential benefits of innovative technologies for the restaurant business, it is important to conduct a detailed analysis of their impact on the financial performance of the enterprise. In this context, this article aims to study and assess the impact of innovative technologies on the profitability of the restaurant business, particularly on profitability and cost optimization. An important task is to analyze the positive and negative aspects of implementing innovations and develop recommendations for maximizing the economic efficiency of the restaurant business through the rational use of innovative technologies.

The restaurant business actively adopts innovative technologies to optimize operations and improve customer service. Key innovative technologies used in this sector include Point of Sale (POS) systems, reservation management systems, mobile apps and online ordering, self-service kiosks, facial recognition and biometrics, and Internet of Things (IoT) for kitchen and equipment.

POS systems automate the sales tracking process, inventory management, demand monitoring, and report generation. They simplify payment processing, order

management, and enhance customer service. Reservation management systems allow customers to make table reservations online, contributing to optimizing seat usage and staff scheduling. Additionally, restaurants offer customers the option to order food online through mobile apps, websites, or dedicated platforms. This streamlines the ordering process and ensures more convenient service [1].

Currently, restaurants are implementing self-service systems where customers can independently select and order food using terminals or mobile apps. Some restaurants utilize facial recognition technologies to identify customers and staff, which contributes to personalized service and security.

The implementation of IoT allows for monitoring and control of kitchen equipment, temperature, and energy consumption, promoting optimization of cooking processes and resource savings. These technological solutions help restaurants provide faster and more efficient service, enhancing economic efficiency and customer satisfaction.

The adoption of innovative technologies has a significant impact on optimizing processes and improving the efficiency of restaurants in many aspects, including process automation, enhanced customer service, efficient inventory management, staff performance monitoring, data analytics and management, as well as ensuring security and control [2].

Innovative technologies enable the automation of many operations, such as order processing, inventory management, financial calculations, and personnel record keeping. This results in significant time savings and reduces errors associated with manual execution of these tasks. The use of innovative technologies, such as POS systems and mobile ordering apps, increases the speed of service and order accuracy. Customers can order food online, choose a table, and even preview the menu in advance.

Technologies allow for the automation of inventory management and the prediction of product demand. This enables restaurants to avoid excess inventory, reduce storage costs, and optimize procurement. Some innovative systems allow for monitoring the productivity and efficiency of staff, contributing to schedule optimization, task allocation, and increased work productivity.

The implementation of analytical platforms allows for the analysis of a large amount of data related to production processes and consumers. This analytics enhances a better understanding of the market, demand, and consumer trends, enabling better management decisions to be made [3]. Additional technologies being introduced in the realm of security, such as surveillance systems and access control systems, contribute to improving the safety of employees and customers while also preventing theft and incidents.

One pivotal aspect is the amalgamation of data analytics and management into the operational framework of restaurants. Advanced analytics tools, coupled with the data generated by POS systems and other technological interventions, empower restaurant owners to glean valuable insights into customer preferences, market trends, and operational efficiency. The strategic utilization of such data fosters informed decision-

making, thereby enhancing the overall performance and profitability of the establishment.

Moreover, the influence of innovative technologies extends beyond the conventional realms of customer service and inventory management. The utilization of artificial intelligence (AI) and machine learning algorithms, for instance, can facilitate dynamic pricing strategies based on real-time demand fluctuations and customer behavior analysis. This adaptive pricing model not only optimizes revenue streams but also ensures a competitive edge in the dynamic restaurant landscape.

As a researcher attuned to the nuances of the industry, it is crucial to underscore the transformative potential of these technologies in addressing contemporary challenges. Cybersecurity, for instance, emerges as a paramount concern with the increasing reliance on interconnected systems. Assessing the robustness of security measures embedded in these technologies becomes integral to safeguarding sensitive customer data and ensuring uninterrupted business operations.

The implementation of innovations in the restaurant business has a positive impact on profitability and efficiency within this industry. Innovations enable restaurants to automate processes, enhance customer service, optimize inventory management, and control financial metrics. This leads to increased staff productivity, cost reduction, and improved service quality.

Innovations in the restaurant business are one of the most significant factors affecting profitability and efficiency for enterprises in this sector. Innovations are aimed at automating core processes, improving customer service, and optimizing resource management. This results in increased staff productivity, cost reduction, and improved service quality.

The implementation of innovations in the restaurant business comes with several challenges that need to be taken into consideration. These challenges include high implementation costs, the need for staff training, and potential cybersecurity risks. When selecting and implementing technologies, it's essential to carefully evaluate these factors to ensure the effectiveness and security of their use. This thorough evaluation can help mitigate potential issues and ensure a successful integration of innovative technologies into the restaurant business.

Список використаних джерел

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