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Business model of car service training centres based on a practice-oriented approach to monetization of expert knowledge

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Abstract. *The study's relevance stems from the growing gap between the pace of technological development in the car service industry and the capabilities of traditional professional training models for personnel. The **purpose of the article** is to substantiate the conceptual foundations of the business model for car service training centres, focusing on the practical training of specialists. **Methods.** The research methodology is based on a combination of comparative-analytical, structural-logical, and systemic approaches, as well as methods for generalising scientific sources and conceptual modelling of the business model. **Results.** During the study, it was established that the practice-oriented approach provides a sustainable value proposition for car service training centres, focusing on the applied relevance of knowledge and rapid professional adaptation of personnel. It was found that consumer trust in the practical effectiveness of training is an intangible asset that directly affects repeated demand and willingness to invest in educational services. The key elements of the business model of a car service training centre are summarised, including the value proposition, target segments,*



interaction channels, and revenue sources, and their relationship with economic performance is substantiated. An analytical model is proposed that demonstrates how expert knowledge can be transformed into reproducible economic value through practice-oriented educational products. It is established that diversification of income sources and integration of training with the production environment reduce financial risks and increase the competitiveness of training centres.

Conclusions. *The practical significance of the results lies in the possibility of using the proposed provisions to develop and improve the business models of car service training centres, optimize educational programs, and make management decisions regarding the monetization of expert knowledge in the field of professional training of personnel.*

Keywords: *level of practical training of personnel, production processes, intellectual capital, financial results.*

**Бізнес-модель навчальних центрів автосервісу на основі
практикоорієнтованого підходу до монетизації експертних знань**

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Анотація. *Актуальність дослідження зумовлена зростаючим розривом між темпами технологічного розвитку автосервісної галузі та можливостями традиційних моделей професійної підготовки персоналу.*

Метою статті є обґрунтування концептуальних положень бізнес-моделі навчальних центрів автосервісу, орієнтованої на практичну підготовку фахівців. **Методи.** *Методологія дослідження ґрунтується на поєднанні порівняльно-аналітичного, структурно-логічного та системного підходів, а також методів узагальнення наукових джерел і концептуального*



моделювання бізнес-моделі. **Результати.** У процесі дослідження встановлено, що практикоорієнтований підхід формує стійку ціннісну пропозицію навчальних центрів автосервісу, орієнтовану на прикладну релевантність знань і швидку професійну адаптацію персоналу. Виявлено, що довіра до практичної результативності навчання виступає нематеріальним активом, який безпосередньо впливає на повторний попит і готовність інвестувати в підвищення фахової кваліфікації. Узагальнено ключові елементи бізнес-моделі навчального центру автосервісу, зокрема ціннісну пропозицію, цільові сегменти, канали взаємодії та джерела доходів, і обґрунтовано їх взаємозв'язок з економічною результативністю. Запропоновано аналітичну модель, яка демонструє трансформацію експертних знань у відтворювану економічну цінність через практикоорієнтовані освітні продукти. Встановлено, що диверсифікація джерел доходів та інтеграція навчання з виробничим середовищем знижують фінансові ризики та підвищують конкурентоспроможність навчальних центрів. **Висновки.** Практична значущість результатів полягає в можливості використання запропонованих підходів для розробки та вдосконалення бізнес-моделей навчальних центрів автосервісу, оптимізації освітніх програм і прийняття управлінських рішень щодо монетизації експертних знань у сфері професійної підготовки персоналу.

Ключові слова: рівень практичної підготовки персоналу, виробничі процеси, інтелектуальний капітал, фінансовий результат.

Problem statement. The modern car service market is undergoing rapid technological change, driven by digitalization, the complexity of vehicle design, the spread of electric vehicles, and the growth in consumer demand for service quality. Under these conditions, the key factors in the competitiveness of car service enterprises are the level of practical training for personnel and the ability to update



professional competencies quickly. At the same time, traditional forms of professional education often do not keep pace with industry development and do not provide sufficient integration between theoretical knowledge and real production processes.

Training centres at car service stations or independent educational platforms specializing in the training and advanced training of specialists have significant potential to help bridge this gap. However, in practice, their operations are fraught with several problems, including inefficient business models, limited sources of income, and insufficiently thought-out mechanisms for monetizing expert knowledge. In many cases, such centres are considered only as auxiliary units or expense items, rather than as an independent business direction with a clear economic logic.

The research problem also lies in the fact that a significant portion of expert knowledge in the field of car service is informal. In the absence of a practice-oriented approach, this knowledge is either not systematically transferred or not translated into a sustainable financial result. It creates a gap between the available intellectual capital of car service enterprises and the potential for their effective commercialization.

Analysis of recent research and publications. A review of scientific publications on the development of car service and related educational and management models indicates the fragmentation of research, in which the economic logic of business models is considered primarily in isolation from issues of professional personnel training. In work on the organization of car service processes, attention is primarily focused on optimizing internal operations and increasing service delivery efficiency. Thus, A. M. Titu et al. [1] prove that formalization and modelling of service processes allow for improving the quality of service and reducing the loss of time and resources in repair departments. At the same time, their conclusions emphasize the management process level, while the issues of personnel



training and the transfer of expert knowledge remain outside the scope of economic analysis.

The problem of adapting business models to changes in the automotive industry is revealed in the study of A. Faganel and T. Jeran [2] show that traditional models of the car service business gradually lose their effectiveness when the service component and customer orientation are not taken into account. The authors note that the flexibility of the business model is a critical factor for the survival of enterprises amid technological and market transformations. At the same time, within this approach, personnel training is considered only an auxiliary function, not an independent source of value creation and income.

The empirical measurement of service centre business models is presented in the work of P. Gaiardelli and L. Songini [3], where, based on a comparative analysis, it was established that successful service centres are distinguished by their ability to combine operational efficiency with the development of intangible assets, in particular, knowledge and competencies of personnel. The authors conclude that it is these intangible resources that ensure long-term competitiveness. However, the study does not consider the mechanisms of their targeted monetization through educational products or training structures.

R. Agaev [4] raises the issue of transforming car service business models for scaling and branding, demonstrating that the transition from local service to a network model requires standardizing processes and knowledge. The author emphasizes the role of organizational learning as a condition for scaling, but does not reveal the economic potential of training units as a separate business area capable of generating value.

The theoretical basis for analysing business models is the concept proposed by A. Osterwalder and Y. Pigneur [5], who systematized the key elements of value creation, delivery, and appropriation. Their approach is widely used in research on service and educational organizations, but remains universal in nature. It necessitates



the adaptation of the business model concept to the specifics of car service and practice-oriented education, which is insufficiently presented in existing publications.

In the context of the development of digital education, M. Weller [6] argues that modern educational models are increasingly focused on flexibility, openness and adaptation to the needs of the labour market. The author emphasises that digitalisation creates conditions for scaling educational services but, in itself, does not guarantee their practical relevance. For technical industries, particularly automotive service, this conclusion is fundamental, as it emphasises the limitations of purely digital formats when not integrated with the real production environment.

From the standpoint of the knowledge economy, D. Schilirò [7] demonstrates that the ability of organisations to transform knowledge into economic outcomes is becoming a key factor in the development of an innovative economy. The author emphasises that knowledge acquires value only if it is commercially realized. However, his work does not specify the sectoral mechanisms of such transformation, particularly in the fields of services and educational organizations.

The issue of continuous learning and professional development is highlighted in the work of S. Billett [8], who distinguishes between education and lifelong learning and emphasises the role of the work environment in the development of professional competencies. This approach emphasises the importance of practical experience but does not consider the economic aspects of organising training within the enterprise's business model.

Empirical research in the field of automotive education, presented by S. Suyitno et al. [9], demonstrates that training models built on the principles of work-based learning provide a significant increase in the professional readiness of automotive specialists. The authors document the positive impact of practical training on competency levels, but the economic potential of such models for training centres is not the focus of their analysis.



Similarly, A. Firmansyah and S. Soeharto [10] found that integrating soft skills into the practical training of future automotive specialists enhances their professional efficiency and adaptability. However, the study's results are limited to the educational dimension and do not extend to the analysis of the business logic of organizations that provide these educational services.

Highlighting previously unresolved parts of the general problem. Generalising the analysed sources allows us to identify a scientific gap: the lack of a comprehensive approach to treating car service training centres as independent economic entities capable of monetising expert knowledge derived from practice-oriented training. Existing studies either focus on car service business models without accounting for the educational component or analyze professional training outside the context of economic sustainability and income generation. It is precisely filling this gap that constitutes the scientific task of this study.

Formulation of the objectives of the article. The article aims to substantiate and develop the conceptual foundations of the business model for car service training centres, grounded in a practice-oriented approach to training specialists. To achieve the goal, the article provided for the solution of the following tasks: to analyze current trends in the development of the car service market and their impact on the needs for professional training of personnel; to summarize scientific approaches to the formation of business models of educational centres and determine their applicability to the specifics of car service activities; to reveal the essence of a practice-oriented approach in the training of car service specialists and to substantiate its advantages from the point of view of creating value for consumers of educational services.

Presentation of the main material of the study. In scientific discourse, the concept of a business model is considered a tool for explaining the logic of an organisation's creation, offer, and appropriation of value. Researchers emphasise that a business model is not reduced to a financial scheme, but reflects the



relationships among resources, processes, consumers, and performance outcomes. In particular, A. Osterwalder and I. Pinier emphasise the systemic nature of the business model, defining it as the conceptual basis for an organisation's functioning in a market environment [5, p. 41]. In the field of education, such logic is complicated by the combination of economic goals and a social mission, which necessitates adapting classical approaches to the specifics of educational services.

Analysis of scientific publications shows that most traditional business models for educational centres are based on direct tuition payments, corporate ordering, or state funding. At the same time, modern research focuses on the transition to flexible, combined models that include modular programs, short-term courses, business partnerships, and the use of digital platforms [6, p. 88]. Such approaches enable faster responses to changes in demand and reduce the risk of financial instability. However, scientists also warn against mechanically transferring universal educational models to applied industries without accounting for their specific production conditions.

A separate area of research concerns the monetisation of knowledge as a key asset for educational organisations. Within the knowledge economy, it is emphasised that value lies not in the information itself. Still, the ability to transform it into applied competencies demanded by the labour market [7, p. 12]. In this context, practitioners' expert knowledge is considered a form of intellectual capital that can be commercialised through training programs, certification, consulting, and mentoring services. At the same time, it is noted that effective monetisation is possible only if practical experience is formalised and integrated into a structured educational product [11].

The specifics of car service activities significantly adjust the application of these scientific approaches. Unlike academic education, car service training centres operate closely with manufacturers' technological standards, real equipment, and production processes. It limits the use of purely distance or theoretical learning



models and places greater demands on the material and technical base and on the qualifications of teachers-practitioners. Scientific works on vocational and dual education emphasise that it is the combination of educational and production environments that creates a sustainable value proposition for consumers of educational services [8, p. 3]. Thus, the generalisation of scientific approaches leads us to conclude that the business models of educational centres cannot be universal. In the field of car service, their formation should be based on a practice-oriented approach that integrates the economic logic of the business model with industry requirements for personnel training. It is this adaptation that lays the groundwork for the effective use and monetisation of expert knowledge, transforming the training centre from an auxiliary structure into an independent, sustainable business direction.

A practice-oriented approach to the professional training of car service specialists is a response to the growing gap between theoretical educational programs and the real requirements of the production environment. In scientific research, this approach is interpreted as the organisation of the educational process, in which knowledge is acquired through the direct performance of professional actions, the modelling of production situations, and working with real equipment [9]. Unlike traditional academic logic, where the transfer of generalised knowledge predominates, practice-oriented training focuses on the development of applied competencies that can be applied immediately in professional activities.

In the field of car service, such a model is becoming particularly relevant due to the high technological complexity of modern vehicles and the rapid pace of service technology updates. The practice-oriented approach involves integrating the educational process with the real conditions of a car service enterprise and using current diagnostic systems, tools, and software. Its essential feature is the involvement of experts-practitioners in the educational process, carriers of informal professional experience, which is difficult to reproduce within the framework of



classical educational programs. It is through such interaction that knowledge ceases to be abstract and acquires an applied, contextual character.

From the perspective of creating value for consumers of educational services, the practice-oriented approach offers a qualitatively different value proposition (table 1).

Table 1

Advantages of a practice-oriented approach in training car service specialists from the perspective of creating value for consumers of educational services and employers

Manifestation in the educational process	Value for direct consumers (students)	Value for indirect consumers (employers, car services)
Focus on real production tasks		
Performing practical cases, working with real cars and equipment	Forming confidence in one's own professional skills and readiness for work	Reducing the risks of errors and the costs of adapting new employees
Integrating training with the production environment		
Conducting classes based on car services or using their infrastructure	Rapid transfer of acquired competencies into professional activities	Obtaining personnel trained for specific technologies and standards
Involving practical experts		
Training under the guidance of experienced industry specialists	Access to informal knowledge and practical solutions	Transfer of corporate experience without loss of its quality
Relevance of training content		
Operational update of programs in accordance with technological changes	Mastering modern methods of diagnostics and repair	Increasing the technological compliance of personnel with market requirements
Bridging the gap between training and employment		
Formation of in-demand professional competencies	Increasing chances of employment or career growth	Rapid closing of personnel needs without additional investments in training
Practical measurability of training results		
Assessment through the performance of professional operations	A clear understanding of one's own level of training	Predictability of the quality of personnel training

Source: compiled by the author based on [10, p. 215–218; 12, p. 66–69]



For students of educational programs, the principal value is not the certificate or formal qualification itself, but the ability to perform professional tasks at the required level of quality immediately after completing training. It reduces the time spent adapting to the workplace, minimises the risk of professional errors, and increases a specialist's competitiveness in the labour market. For employers who act as direct or indirect consumers of educational services, a practice-oriented approach creates value in the form of a predicted learning outcome. Personnel trained in this way are more quickly integrated into production processes, demonstrate higher productivity, and require less expenditure on internal retraining. In this context, the educational service is transformed from an abstract product into an applied tool for managing human capital in a car service enterprise.

Thus, a practice-oriented approach increases consumer trust in the training centre as a source of relevant and up-to-date knowledge. This trust acquires the status of an intangible asset, which directly affects customers' willingness to invest in training, return to repeat programs, and recommend educational services to others. In its economic essence, such trust is translated into stable demand and predictable financial results, which allows us to consider practice-orientedness not only as a pedagogical principle but also as a factor in the creation of sustainable value. It is at this stage that it becomes necessary to shift from pedagogical justification to economic analysis, since the formed value requires institutional consolidation through a holistic business model. In this context, the business model of a car service training centre is formed in the conditions of the intersection of two markets – the educational and car service markets, which determines its complex, multidimensional nature. Unlike classical educational institutions, such centres operate in an environment of high technological dynamism and direct dependence on production standards, which require a clear economic logic for organising activities [13, p. 931]. Determining the key elements of the business model in these conditions becomes of fundamental importance, since it is through their coordination



that sustainability, competitiveness, and the ability to systematically monetise expert knowledge are ensured (table 2).

Table 2

Business model elements of a car service training centre, its functions and economic effect

Business model element	Key function in the activities of the training centre	Economic effect
Value proposition	Formation of applied educational value based on practice-oriented training and expert knowledge	Growth of solvent demand, increased willingness of customers to invest in training
Target consumer segments	Orientation of educational programs to different groups of clients (individual students, corporate customers, partners)	Diversification of the client base and reduction of the risk of dependence on one segment
Key resources	Attracting expert practitioners, material and technical base, service equipment	Improving the quality of educational services and forming competitive advantages
Key activities	Implementation of practical training, internships, certification, and consulting	Expanding the line of educational products and increasing the average income of clients
Channels of interaction with consumers	Providing communication, promoting educational programs and feedback	Strengthening trust in the training centre and reducing costs for attracting customers
Partnerships	Cooperation with car services, equipment manufacturers, and industry associations	Cost sharing, access to new customers and technologies
Sources of income	Monetisation of expert knowledge through courses, corporate programs, and certification	Formation of stable and reproducible cash flows
Cost structure	Optimisation of costs for the educational process, equipment, and expert remuneration	Increasing operational efficiency and profitability
Reputational capital	Accumulation of trust and a positive image of the training centre	Long-term growth in customer loyalty and repeat sales

Source: compiled by the author based on [10, p. 217–220]

The value proposition of a car service training centre is the core of its business model. It is built around practice-oriented training for specialists, tailored to the real conditions of service activities. Its essence lies not only in the transfer of professional knowledge but also in the creation of applied value, enabling students to integrate



the acquired competencies into the production process immediately. In this sense, the educational service is transformed from an abstract educational product into a tool for solving specific professional and personnel tasks [14, p. 41]. For employers, such a value proposition means obtaining personnel with a predicted level of training, and for students, reducing the risks of professional inconsistency and shortening the adaptation period in the workplace.

The target segments of the car service training centre business model are heterogeneous, which directly affects the structure and content of educational programs. The main segments include individual students interested in improving their qualifications or changing their professional status, as well as corporate clients – car service enterprises, dealerships and service networks. A separate group may be formed by related stakeholders, in particular equipment manufacturers or suppliers of technological solutions, for whom the training centre serves as a platform for disseminating standards and technologies. Each of these segments consumes different values, which necessitates differentiating educational products and interaction formats.

The channels of interaction with consumers of educational services in the business model of a car service training centre serve not only a communication function but also a reputational one. Direct contact during practical training, internships, or work with equipment helps build trust in the centre's expertise. Along with this, the role of digital channels is growing – online platforms, professional communities, specialised information resources that provide support for communication with students and employers outside the educational process [15]. Partner interaction channels, particularly collaborations with car service associations and equipment manufacturers, enable you to expand the reach of your target audience and strengthen your value proposition.

The sources of income for the car service training centre reflect the monetisation of expert knowledge and are directly related to the practice-oriented



nature of its educational services. The primary source remains payment for training programs and courses; however, the model's financial sustainability is ensured by diversifying income streams. These include corporate training contracts, certification programs, consulting services, as well as partnership and licensing forms of cooperation. Such an income structure allows you to transform professional experience and industry expertise into a reproducible economic result [16, p. 928].

In summary, the key elements of a car service training centre's business model are closely interconnected, forming a holistic system for value creation and appropriation. A practice-oriented approach in this context serves as an integrating principle that combines the interests of students, employers, and the training centre itself. It is a business model that ensures not only educational efficiency but also the economic feasibility of car service training centres amid the industry's dynamic development.

Conclusions. The study's scientific result is the systematisation of scientific approaches to the formation of business models for educational centres and the justification of their industry adaptation to the specifics of car service activities. It has been proven that universal educational business models do not achieve sufficient efficiency in conditions of close integration between the educational process and the production environment. In contrast, a practice-oriented approach enables integrating pedagogical logic with economic mechanisms of value creation and appropriation. In qualitative terms, this is manifested in the growing relevance of knowledge, consumer trust, and the stability of demand for educational services.

The practical result of the work is the identification of key elements of the business model of the car service training centre, in particular the value proposition, target segments, interaction channels, and sources of income, as well as the establishment of their functional and economic effects. It is shown that a practice-oriented value proposition generates measurable economic benefits: a reduction in the personnel adaptation period, a reduction in employers' costs for additional



training, an increase in clients' willingness to retrain, and recommendations for educational services. In quantitative terms, these effects can be measured through indicators of resale, diversified income sources, and increased operational efficiency of training centres. For employers, the study's results can serve as a basis for selecting partner educational models focused on the expected outcomes of personnel training.

Further research directions include quantitative verification of the proposed business model using empirical data from specific car service training centres, the development of efficiency indicators for monetising expert knowledge, and a comparative analysis of different models of practice-oriented training in related technical fields. Also promising is the study of the impact of digital educational platforms on the scaling of business models of car service training centres.

References

1. Titu A. M., Grecu D., Pop A. B., Şugar I. R. Service process modeling in practice: a case study in an automotive repair service provider. *Applied Sciences*. 2025. Vol. 15, № 8. Art. 4171. DOI: <https://doi.org/10.3390/app15084171>.
2. Faganel A., Jeran T. Developing and adapting the existing automotive business model: a case study. *Economics and Culture*. 2022. Vol. 19, № 2. DOI: <https://doi.org/10.2478/jec-2022-0011>.
3. Gaiardelli P., Songini L. Successful business models for service centres: an empirical analysis. *International Journal of Productivity and Performance Management*. 2021. Vol. 70, № 5. P. 1187–1212. DOI: <https://doi.org/10.1108/IJPPM-05-2019-0230>.
4. Agaev R. Business model transformation in car services: from local shop to scalable brand. *International Journal of Applied Mathematics*. 2025. Vol. 38, № 10s. DOI: <https://doi.org/10.12732/ijam.v38i10s.946>.



5. Osterwalder A., Pigneur Y. Business model generation: a handbook for visionaries, game changers, and challengers. Hoboken: John Wiley & Sons. 2010. 288 p. URL: <https://www.strategyzer.com/books/business-model-generation> (date access: 22.10.2025).
6. Weller M. The rise and development of digital education. Handbook of open, distance and digital education / eds O. Zawacki-Richter, I. Jung. Singapore: Springer, 2023. P. 75–91. DOI: https://doi.org/10.1007/978-981-19-2080-6_5.
7. Schilirò D. Knowledge economy and innovation: working paper. 2025. Vol. 2. 28 p. URL: https://mpa.ub.uni-muenchen.de/126380/1/MPRA_paper_126380.pdf (date access: 22.10.2025).
8. Billett S. Distinguishing lifelong learning from lifelong education. *Journal of Adult Learning, Knowledge and Innovation*. 2018. Vol. 2, № 1. P. 1–7. DOI: <https://doi.org/10.1556/2059.01.2017.3>.
9. Suyitno S., Kamin Y., Jatmoko D., Nurtanto M., Sunjayanto E. Industrial apprenticeship model based on work-based learning for re-service teachers in automotive engineering. *Frontiers in Education*. 2022. Vol. 7. Art. 865064. DOI: <https://doi.org/10.3389/feduc.2022.865064>.
10. Firmansyah A., Soeharto S. Implementation of soft skills on automotive Engineering practicum of state vocational high schools in West Lombok Regency. *Jurnal Pendidikan Vokasi*. 2020. Vol. 10, № 2. P. 214–224. DOI: <https://doi.org/10.21831/jpv.v10i2.30594>.
11. The changing nature and role of vocational education and training in Europe. Vol. 5. Education and labour market outcomes for graduates from different types of VET system in Europe *Cedefop*. URL: <https://www.cedefop.europa.eu/en/publications/5569> (date access: 22.10.2025).
12. Maksum H., Purwanto W., Sugiarto T., Hidayat N., Siman S., Hasan H. The improvement students learning achievement by applying work-based learning combined with teaching factory concept. *Jurnal EDUCATIO (Jurnal Pendidikan*



Indonesia). 2024. Vol. 10, № 1. P. 64–72. DOI: <https://doi.org/10.29210/1202423662>.

13. Димитров В. Ю. Новітні методологічні підходи в теорії управління. *Актуальні проблеми філософії та соціології*. 2016. № 11. С. 30–33. URL: http://nbuv.gov.ua/UJRN/aprfc_2016_11_10 (date access: 22.10.2025).

14. Ilyina A. Innovative approaches to the education system in higher education institutions and specialized sectoral establishments. *International Science Journal of Education and Linguistics*. 2025. Vol. 4, № 2. P. 34–55. DOI: <https://doi.org/10.46299/j.isjel.20250402.04>.

15. Boiko O. Risk management in high-load service infrastructure using AI-based predictive models. *Актуальні питання економічних наук*. 2025. № 15. DOI: <https://doi.org/10.5281/zenodo.17141025>.

16. Ільїна А. О. Рейтингове управління розвитком людського капіталу в Україні. *Успіхи і досягнення у науці. Серія: Соціальні та поведінкові науки*. 2025. № 2 (12). С. 925–960. DOI: [https://doi.org/10.52058/3041-1254-2025-2\(12\)-925-960](https://doi.org/10.52058/3041-1254-2025-2(12)-925-960).