А среднесписочная численность за исследуемый период служащих может быть представлена в виде аддитивной модели, включающей факторы: среднесписочная численность за исследуемый период руководителей, среднесписочная численность за исследуемый период специалистов и среднесписочная численность за исследуемый период прочих служащих. Использование предлагаемых как показателя «уровень доходов предприятия, приходящийся на единицу трудовых ресурсов», так и его факторной модели позволит заинтересованному руководству предприятия получить более четкое представление о реальном уровне эффективности использования трудовых ресурсов организации.

Список использованных источников

- 1. Солодкий, Д. Т. «1С Аналитика» как основа формирования академических профессиональных компетенций выпускаемых специалистов / Д. Т. Солодкий // Новые информационные технологии в образовании: сборник научных трудов 21-й Междунар. науч.-практ. конф. «Новые информационные технологии в образовании» (Технологии 1С в цифровой трансформации экономики и социальной сферы) 2-3 февраля 2021 года. В 2 т. Т. 1 / ООО «1С-Паблишинг»; редкол.: Д. В. Чистов [и др.]. Москва, 2021. С. 257–259.
- 2. Солодкий, Д. Т. Развитие анализа показателей рентабельности / Д.Т. Солодкий // Бухгалтерский учет и анализ. 2020. № 5. C.22–24.

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FINANCIAL ANALYSIS OF BMW FOR 2021–2022

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Working capital management is the prerogative of the personnel in an organization that manages working capital and is responsible for the financial performance of the company. Working capital refers to the assets of a company that are used to pay for day-to-day expenses and any other short-term liabilities. Managing cash flows, accounts receivable, inventory, and accounts payable is critical to improving the efficiency of a business's working capital. An analysis of a company's working capital management helps to know its ability to pay its debts and its liquidity. The analysis of BMW's financial performance for 2021–2022 showed that the values of some indicators improved over the analyzed period, while others worsened or remained unchanged (Table 1).

This means that BMW management has a lot of work to do to ensure that the results of operations remain at least stable and improve in the future. BMW is one of the best car manufacturers in the world. The company is a highly profitable and fast-growing organization. The company's ability to meet its short-term obligations is stable and its profitability is in line with the industry average. Organizations have investors who are ready to invest in them with great confidence, and their financial opportunities in the market are outstanding. Thus, the BMW Group can expand its business, as the company's financial condition is satisfactory, and the expected market value of the group's assets is higher than their book value, which creates good conditions for growth and development.

Table 1 - Financial ratios of BMW

Ratio / Year	2022	2021
Current Ratio	1.335	1.432
Liquidity ratio	1.110	1.200
Cash ratio	0.186	0.281
Asset-liability	0.462	0.486

Source: Yahoo finance

References

Financial statements of BMW AG. Financial year 2022 [Electronic resource]. – Mode of access: https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com/ir/downloads/en/2023/bericht/BMW-AG-Financial-Statements-2022-en.pdf. – Date of access: 19.10.2022.

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ISSUES OF USING BIG DATA IN THE ECONOMY

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Big data is a series of approaches and methods for processing a large volume and a significant variety of data that are difficult to process in conventional ways. The purpose of big data processing is to obtain new information.

In order to show the possibility of using big data in the economy let us look at the example of typical business tasks in marketing.

Information about a complete understanding of your company and business, including in terms of statistics and numbers, as well as detailed data on competitors, plus new and detailed information about your customers – all this will allow you to succeed in attracting new customers.

Besides it will led to significant increase in the level of provided service to current customers, and will help you for better understanding the market and your competitors, which means getting ahead by dominating them.

Considering the above results that big data can achieve, it explains the desire of companies trying to conquer the market to invest in these modern data processing methods today in order to get increased sales and reduced costs in the nearest future.

More specifically, the use of big data leads to an increase in additional sales and cross sales due to a better understanding of customer preferences.

In addition, it allows you to search for popular products and reasons why they are to be bought or vice versa. Besides it contribute to the improvement of the service or product provided; it also contribute to improving the quality of customer service; it promote loyalty and customer focus; well, and also warn about possible fraud (which is more relevant for the banking sector). Finally, it reduce unnecessary costs.

One of the most illustrative and popular examples today, you can find in many places to read about on the Internet, is associated with Apple Co., which stores data about its customers and