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RISK ANALYSIS OF IT COMPANIES ON THE EXAMPLE OF EPAM

*N.A. Cheshun, E.V. Baskakov, students10507117 group FMME BNTU,
scientific director – lecturer V. N. Sachkovsky*

Resume – this article contains a description of the activities of EPAM, SWOT- analysis. Risk analysis is given in the risk matrix.

Introduction. Any company faces risks. Risk analysis, or risk assessment, is the first step in the risk management process. During risk analysis, identifies risks and the level of consequences, such as potential losses to the business, if an incident happens [1].

Main part. EPAM is one of four technology companies to appear on Forbes 25 Fastest-Growing Public Tech Companies list every year of publication since 2013 (just a year after it's IPO). The Company mainly provides complex software product engineering for leading global software and technology vendors, as well as development, testing, maintenance, and support of mission critical business applications and vertically oriented IT-consulting services.

Headquartered in the US (Newtown, Pennsylvania), EPAM has offices in more than 35 countries over the world. EPAM's customers are mainly from North America and Europe (Fig. 2). In Q4 2020, EPAM's headcount amounted to 41,168 employees, with over 12% growth compared to 2019.

Risk analysis is based on the basis of official reports that is provided annually by EPAM. During analysis, risks were divided into several categories.

Market Risks.

M 1: Risks Related to COVID-19. The COVID-19 pandemic has created significant volatility on the stock market. EPAM's share prices were also affected. Furthermore, the pandemic brought uncertainty in customer demand on

EPAM's solutions and widespread economic disruption. The extent to which the coronavirus pandemic will further impact EPAM's business, operations and financial results will depend on numerous factors that are frequently changing or unknown. Nevertheless, vaccine rollout is likely to speed up the economic recovery while some vaccines have demonstrated high efficacy (over 95%).

Business and Operational Risks.

BOP 1: Significant customer concentration. EPAM's revenue highly depends on sales to its key clients. Circa 22% of revenue come from five key customers. Losing one of these five customers would have a material impact on EPAM's earnings. EPAM realizes this problem and scheduled measures to diversify its client portfolio.

BOP 2: Increased personal income tax in Belarus from 9 to 13% in 2021. Potential growth in salary costs due to an increase in personal income tax rate for employees of HTP (Hi Tech Park) residents to 13% (Belarus). Since January 2021, the tax benefit has been canceled. Some employees may disagree to receive reduced remuneration and may ask for additional compensation. In order to prevent staff turnover EPAM may agree on increased operating expenses.

BOP 3: Instability in some countries where EPAM has significant operations. It could have a material adverse effect on the business, customers, service delivery, and earnings. These countries demonstrate fluctuating and inconsistent tax, investment and property rights legislation. In addition, these countries are experiencing or may continue to experience civil and political unrest (in Belarus, Ukraine and Russia, prolonged political and civil instability in the U.S). EPAM commented on it that business processes had not been suffered much during the interruptions in infrastructure. With the intention to minimize the this kind of risk, EPAM developed and implemented relocation plans and added new locations.

BOP 4: Risk of increasing competition. EPAM's management admits that the group faces highly competitive market conditions. The main competitors (Fig. 9) take advantage from lower labour costs and locate some of their functions in China, India or Eastern Europe, so does EPAM. Key strength of EPAM to beat other solution providers include industry knowledge, integrated and comprehensive services to its customers and effective employee recruiting and their retention.

BOP 5: Key staff. To retain key technology professionals is crucial for EPAM's ongoing activity and business development. Increased turnover of skilled personnel may deteriorate sales and client satisfaction. Skilled personnel is retained by means of increased wages comparing with average payroll in a particular country. Key personnel is motivated by granting equity-based awards. EPAM admitted high importance of stock-based compensation.

BOP 6: Acquired companies. If EPAM fail to integrate or manage acquired companies efficiently, or if acquisitions do not perform to expectations, than overall profitability and growth plans could be materially adversely affected. However, we believe that EPAM has a considerable experience of integrating acquired companies into the group in the previous years. Previous acquisitions al-

lowed EPAM to gain strategic and synergetic opportunities (e.g. Continuum, Think and test IO).

Financial Risks.

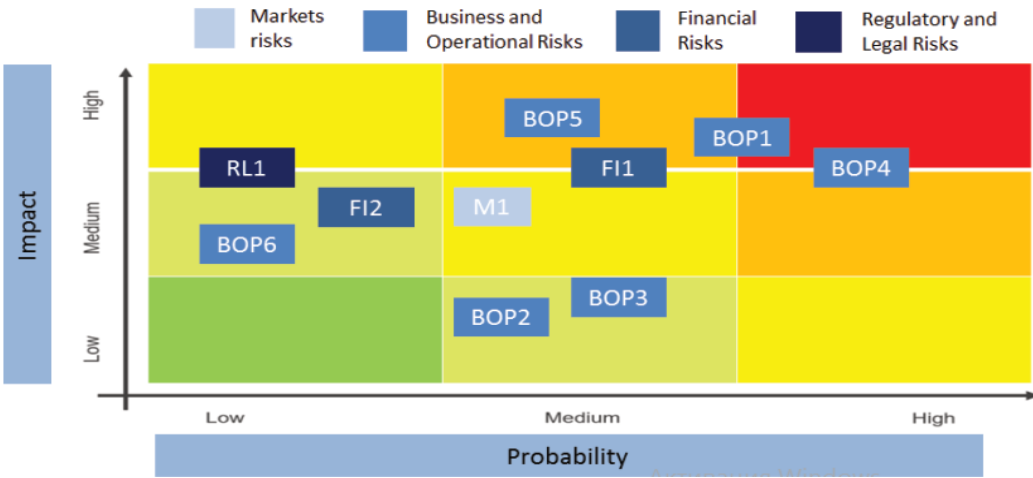
FI 1: Credit risks. The company has cash in banks in Belarus, Russia, Ukraine, Kazakhstan, Armenia, Georgia and Uzbekistan, where the banking sector remains prone to periodic instability. Banking and other financial systems generally do not meet the banking standards of more developed markets, and corporate bank deposits are not insured. To mitigate the risk EPAM regularly reviews cash balances that exceed operating requirements of local entities and in case of any excess cash transfers it into countries with secure banking systems.

FI 2: Operations in emerging markets. Operations in emerging markets (Belarus, Russia, Ukraine, Kazakhstan, Georgia, Armenia and Uzbekistan) expose EPAM to greater economic, financial, and banking risks. Operations in these markets are vulnerable and economic volatility is considerable compared to developed markets. This brings about foreign exchange risks, interest rate fluctuations, foreign currency restrictions. To reduce the effect of the risk, EPAM revised its business processes and implemented contingency plans as well as minimized its finance-related operations in developing countries to activities required to perform day-to-day operations.

Regulatory & Legal risks.

RL 1: A wide variety of legal requirements in the jurisdictions where EPAM operate. World-wide operations require complying with a great variety of foreign laws and regulations, trade or foreign exchange restrictions or sanctions. It can create risks to EPAM’s operations, including liquidation of the subsidiaries that operate EPAM’s major delivery centers. We believe that EPAM copes with this risk because it attracts skilled specialists including team of legal and tax professionals all over the world. EPAM also has a longlisting experience of global trading and dealing regulatory risks.

Analysis of all risks is displayed in the risk matrix (Picture 1).



Picture 1 - Risk matrix

Source: author development based on [2].

Risks, opportunities, threats in EPAM are reflected in the SWOT analysis (Table 1).

Table 1 - SWOT analysis of EPAM

| Strengths | Weaknesses |
|--|--|
| <ul style="list-style-type: none"> - Successful track record of integrating complimentary firms through mergers & acquisition. - Highly skilled workforce - High level of customer satisfaction - Superb Performance in New Markets - Low Cost Structure - Strong Financial Position - Return on Capital Expenditure - High level of interaction with customers on social networks - EPAM owns a number of trademarks and patents - EPAM has been in the market for years - Strategic partnerships are established by EPAM with its suppliers, dealers, retailers | <ul style="list-style-type: none"> - High attrition rate in work force - Organization structure is only compatible with present business model thus limiting expansion in adjacent product segments - A few products have a high market share, while most of the products have a low market share - Qualified employees have been leaving the organisation in recent years |
| Opportunities | Threats |
| <ul style="list-style-type: none"> - Organization's core competencies can be a success in similar other products field - Stable free cash flow provides opportunities to invest in adjacent product segments - The market development will lead to dilution of competitor's advantage and enable EPAM to increase its competitiveness | <ul style="list-style-type: none"> - Substitute products available are increasing, which is threat collectively for the whole industry as consumption of current products decrease. - The exchange rate keeps fluctuating and this affects a company like EPAM Systems Inc that has sales internationally, while its suppliers are local. - Political uncertainties in the countries prove to be a barrier in business, hindering performance at times and making the business incur unnecessary costs. - Constant technological developments require the workforce to be trained accordingly as the inability to keep up with these changes can lead to loss of business for EPAM |

Source: author development based on [2].

Conclusion. Risk analysis enabled to know which risks are top priority for EPAM. By continuously reviewing the key areas, EPAM can determine which threats post the highest risk to EPAM's IT ecosystem and adjust the necessary controls to improve security and compliance. Besides now EPAM takes a number of measures to mitigate the risks mentioned above.

LITERATURE

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РОЛЬ ПРОИЗВОДИТЕЛЕЙ ЭЛЕКТРОННОГО ОБОРУДОВАНИЯ КИТАЯ В ЦЕПОЧКАХ СОЗДАНИЯ ДОБАВЛЕННОЙ СТОИМОСТИ

*Чжао Сэнь, аспирант ФММП БНТУ,
научный руководитель – д.э.н, профессор А.В. Данильченко, старший
преподаватель Зубрицкая И.А.*

Резюме – в результате исследования динамики экономических показателей, характеризующих степень внедрения производителей электронного оборудования Китая в цепочки добавленной стоимости, выявлена тенденция опережающего роста объемов потребления электронного оборудования в промежуточном и конечном использовании. Полученный результат позволяет проводить межстрановое сопоставление степени интеграции производителей электронной продукции в глобальные цепочки создания стоимости, прогнозировать развитие отрасли на международном рынке.

Summary – as a result of the study of the dynamics of economic indicators characterizing the degree of introduction of Chinese manufacturers of electronic equipment into the value chain, a trend was revealed of an outstripping growth in the volume of consumption of electronic equipment in intermediate and final use. The obtained result allows conducting cross-country comparison of the degree of integration of manufacturers of electronic products into global value chains, predicting the development of the industry in the international market.

Введение. Актуальность научной проблемы оценки степени интеграции производителей промышленности в цепочки создания добавленной стоимости подтверждена публикациями, содержащими исследования о составе и классификации цепочек создания добавленной стоимости [1], торговле добавленной стоимостью белорусского происхождения в экспорте [2] и др. Для осуществления стратегического планирования на национальном и отраслевом уровне необходимо проводить экономическую оценку вклада отдельных отраслей в создание добавленной стоимости [3].

Основная часть. Отрасль компьютеры и электронное оборудование в основном основана на производстве конечной продукции. На протяжении многих лет выручка подотрасли электронного оборудования составляла более 60% от всей отрасли. Так, в 2020 году доля электронного оборудования составила 64%, соответственно, возрастает доля использованного электронного оборудования Китая в конечном потреблении других видов экономической деятельности, т.е. наблюдается его рост в цепочках созда-