

Tools to Increase the Effectiveness of the Company in the Field of Digital Economy Skills

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Abstract: The article suggests a mechanism for increasing the effectiveness of online education in modern conditions to increase digital economy skills. The purpose of this study is to identify performance indicators of online education and offer recommendations for the development of online educational business. To achieve this goal, the article provides an overview of trends in online education. The role of modern tools for managing and implementing the online educational process is noted. The types of efficiency levers in business are considered. The limit of the effectiveness of levers in online education is determined. The algorithm for managing the effectiveness of online education is based on efficiency levers. Data on the effectiveness of levers of online education efficiency are provided. The possibilities of using various efficiency levers to increase the company's competitiveness in online education are discussed.

Keywords: Online training, educational service, leverage, efficiency limit, sales growth, digital economy skills.

INTRODUCTION

Introduce the Problem

The current state of educational services is determined by the need to move from traditional formats of learning and perception to creative and interactive formats. According to Russian researchers, the key to the competitiveness of specialists in the market is the acquisition of competencies in the field of digital economy - skills in the information environment, knowledge of information technologies and educational programs adapted to the requirements of the digital market (Tereliansky *et al.* 2018). According to the state program "Digital economy of the Russian Federation" (2017), the number of graduates of professional educational institutions who possess skills in the field of the digital economy should reach at least 300 thousand people per year by 2020, and more than 800 thousand people per year by 2024. At the same time, the Russian economy remains dependent on foreign economies for technical, technological and personnel reasons. Not all Russian educational institutions are ready to transfer their educational programs to the digital vector. According to scientists, several trends contribute to the transition to the digitalization of education:

- Development of digital infrastructure, which depends on the technical support of education at the expense of the state and private capital,

- Training of digital type personnel who need to master modern information technology training,
- Training in relevant specialties, which is associated with the rapid development of the market and the short life cycle of most modern professions,
- Setting up a flexible learning process, which should adapt to the dynamic development of the market environment, lifelong learning that will remain competitive with the rapid obsolescence of information,
- Introduction of artificial intelligence in education, which will allow in the future increasing the effectiveness of education with minimal human participation.

The modern environment dictates new requirements for educational institutions and enterprises. Failure to restructure the learning process towards informatization and digital technologies may lead to the decline of the educational service and the rejection of it by customers.

The online education market in Russia is currently growing. According to experts, the volume of online educational services exceeds the growth rate in 2019 compared to previous years. Thus, analysts indicate that sales of educational services in the B2C segment reached \$ 39.5 billion compared with 2016 (\$ 20.7 billion). Over the period 2017-2019, more than \$ 80 million was invested in educational services - according to 45 public transactions with large investors, including Sever group, Mail.ru, Baring Vostok, and Skolkovo

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Table 1: Market Size of Additional Adult Education Services in Russia

Segment	Market volume, billion rubles	
	2019	2020 (forecast)
All markets	310-315	325-330
Digital market (EdTech)	45-50	55-60

Source: Interfax Academy based on HolonIQ data (Tadviser, 2019).

Digital Fund. Tadviser analysts, as trends in the development of the online education market, note the growing presence of Russian companies in international markets, the development of the “hobby education” segment, the development of new types of service structures and projects in education (for example, producer courses) (Tadviser 2019).

According to Interfax Academy (2019), the Russian online education market reaches 45-50 billion rubles, while Russia occupies only 1% of the global digital education market (the volume of the global market is about 47 billion dollars). It is worth noting that recently in Russia there has been an increase in additional educational services for adults. At the same time, the level of online educational services provision reaches 15% of the total size of the educational services market. Forecast data on the market of additional education services in Russia are presented in Table 1.

According to Yandex services, Kassa and Netology, the most popular areas for additional education in Russia are foreign language learning (69%), personal development (10%) and vocational training (6%). At the same time, experts note that among users of additional education, 44% indicate a lack of professional skills after graduation. 13% of the surveyed users feel a lack of knowledge in the main educational process (Tadviser 2019).

Small businesses that provide online education services need to find low-budget ways to promote digital products. According to researchers in the field of entrepreneurship, about 41% of companies in the framework of social entrepreneurship are engaged in education. From the point of view of promoting social business in this area, the authors recommend using SMM tools to ensure interactivity of interaction with users, obtain statistics on user activity, and monitor communications with users during interaction (Shafigullina and Palyakin 2016). From the point of view of online education, SMM technologies become a tool for attracting new users to online education platforms and open up opportunities for organizing interaction with users outside the educational process.

The problem of the development of online learning lies in two main aspects. *Firstly*, the educational tools of basic education are faced with the formation of digital competencies of future specialists. This problem is often associated with insufficient qualifications of teachers, poor technical and material support of educational institutions, traditional methods in the educational process, and a lack of platforms for implementing digital skills.

Secondly, when implementing online learning from the point of view of the business process, there are problems of feedback and attracting potential users of digital educational resources. This range of problems is related to the search for channels for the effectiveness of online education, ensuring the flow of users by promoting educational services online, the mechanism for processing feedback through systems for collecting data about users of educational services, and the ability of company managers to manage digital educational projects.

Further consideration of the effectiveness of online education requires searching for sources of growth, identifying efficiency levers and their impact on improving the company's competitiveness.

LITERATURE REVIEW

Consideration of the Concept of “Leverage of Efficiency”

One of the tools to maintain the company's competitiveness in the educational sphere is the lever of efficiency. Thus, according to experts in the field of financial management, the lever of efficiency (growth) is the potential to determine those indicators with which rapid growth is possible and more likely.

Online education can improve student performance and also overcome student interest in learning during the COVID-19 pandemic COVID-19, (Caraka *et al.*, 2020) and Disaster (Caraka *et al.*, 2021; Dhawan, 2020). Yuldasheva (2004) offers the following definition of the efficiency lever. Levers are devices by which

factors and potential opportunities are introduced in order to increase production efficiency. Bodie and Merton defined financial leverage as the use of borrowed funds in the company's operations, with which its management solves the problems of financing production activities. Blank (2002) characterizes the financial (leverage) lever as the use of borrowed funds by an enterprise, which affects the change in the return on assets ratio (Laskina 2012).

In physics, using a lever allows to lift a large weight with less effort. A similar principle of operation in the economy for financial leverage, which allows increasing the amount of profit with less effort (Zhdanov and Zhdanov 2014).

The concept of operating leverage is closely related to the company's cost structure. Operating leverage or production leverage is a company's revenue management system that is based on matching fixed and variable costs (Alfdanalyse 2015).

Thus, in the literature, different types of levers are identified and there is a commonality between them. Leverage is a tool that a company can use to increase its competitive advantage. And the lever has marginal utility.

Every company has such a tool that will give growth precisely when it is implemented in the present moment. Based on the results of the analysis of the company's activities in the sphere of educational services we have identified the following growth levers:

- Increase the promotion budget to attract more leads;
- Start working with scripts for employees and this will allow increasing sales conversion rate;
- Call the customer base using the call -center and offer a bonus offer to increase the number of active students;
- Attract a manager to process new requests, or hire a second Manager to avoid merging leads due to a high load.

For a better understanding of the efficiency lever, it can be compared to a "wet towel". Imagine a situation where you wet a towel and water runs off it. The first time you put a little effort to squeeze the water out of this towel and a lot of water flows out of it-almost liters. Next, you put more effort, but not so much water is

squeezed out. Finally, you squeeze the towel as hard as you can and can even involve a friend in the process – and there are almost no drops left. This is the concept of leverage. The lever is pressure.

Types of Efficiency Levers and how they Affect the Company's Performance

The most popular tool for improving the company's efficiency is financial efficiency levers.

Modern researchers in the field of internet business pay attention to the levers formation of companies' efficiency (Popova, 2019).

Marketers distinguish the following types of efficiency levers:

- i. Profitability of your own business.
 - ii. Financial leverage.
 - iii. Current liquidity ratio.
 - iv. Resource output.
 - v. Coefficient of autonomy.
- (i) In simple words, the profitability of your own business reflects the amount of money that the company receives in excess of the invested funds. Return on equity (ROE) is calculated as the ratio of a company's net profit to its net worth. It is important that the ROE value exceeds the bank deposit rate by the same amount otherwise the company's capital does not bring business efficiency.
 - (ii) With the help of borrowed funds, the company is able to increase the profitability of its own assets. Borrowing in assessing the impact of financial leverage is compared with the amount of equity. At the same time, it takes into account how much the return on assets of the company covers the amount of bank credit.
 - (iii) The current liquidity ratio takes into account the company's ability to pay off its debts for the current period of time. It is measured as the ratio of the organization's current assets to the number of short-term liabilities. If this coefficient is greater than one, the company can successfully settle with creditors and investors during the current period.

- (iv) Resource allocation is responsible for the efficient use of the company's assets. This indicator is defined as the ratio of the company's revenue to the value of the company's assets. It is important to track this indicator over several periods in order to understand how effective the company's assets are in dynamics.
- (v) The autonomy coefficient is used to determine the company's dependence on borrowed funds. The autonomy coefficient can be determined by dividing the amount of equity by the number of all the company's assets. The recommended value of this coefficient is 0.5. With this value, we can say that the company independently owns half of the assets that it uses in its activities.

Each company can have different growth levers. The choice of growth lever depends on the competence of the Manager, a team availability of professionals, and the company's resources.

To understand what levers it could be used in an online education company, consider the following types of levers:

1. Quantitative lever-shows the value, size, and volume of the measured indicators (revenue, profit, number of requests, number of arrivals for the first classes, number of calls to leads per day, number of leads per day).
2. Quality lever-reflects the ratio between something, the difference in indicators (conversion of arrival to the first classes, the average receipt, and the profitability of the company, the life cycle of the client, the index for determining consumer commitment to a product or company, the conversion of the company's website for online education).

The Impact of Leverage on Business Performance

According to experts in the field of financial management, the effect of financial leverage (EFR) is based on the fundamental theory of financial management about the structure of capital (Modigliani-Miller theory) and depends on the average calculated interest rate (SRSP), which is not equal to Bank interest. The effect of leveraging funds can be either positive or negative. When providing funds to the client, the banker pays attention to the structure of sources of economic funds, and first of all to the amount of borrowed capital.

The effect of financial leverage allows to determine the possibility of borrowing to increase the profitability of own funds, and the associated financial risk (for an entrepreneur and banker). The effect of production leverage is observed both with an increase in the volume of production of the company, and with its decrease (Akulov 2002).

The impact of production leverage is greater; the closer production is to the threshold of profitability, and vice versa. This means that there is a certain limit to exceeding the profitability threshold, which must inevitably be followed by a jump in fixed costs (new means of labor, new premises and increased costs for managing the enterprise).

The positive effect of financial leverage is based on the fact that the Bank rate in a normal economic environment is lower than the return on investment. A negative effect (or the reverse side of financial leverage) occurs when the return on assets falls below the loan rate, which leads to accelerated loss formation.

In terms of the effectiveness of online education as a learning process, a useful tool is the Kirkpatrick-Phillips model, which combines financial instruments for return on investment, business results, and learning outcomes (Figure 1).

Within the framework of the presented model, to implement the effectiveness of online education, it is necessary to measure the results of training sessions, collect feedback from users of the educational program, evaluate changes in user behavior, pay attention to changes in the company's business indicators before and after training, and determine the return on investment in training.

According to the manager of e-LearningPRO company eTutorium, when implementing the educational efficiency model, it is necessary to determine the differences in the number of students before and after the implementation of the educational program, analyze the topics covered and user reviews during the training process, take into account the number of training materials and instructions, and monitor training courses that need updating (Litvinova 2018).

The question arises: how much will the company spend on finding new clients in online education justify itself?

The answer to this question is the immortal phrase of Archimedes: "Give me a foothold and I will turn the Earth over." You can always offer a lever that will help improve your company's business.

In a certain period, the efficiency lever reaches its maximum limit. Accordingly, when you reach the limit of effectiveness, even if you put more effort, the result may even worsen.

This situations observed in any business

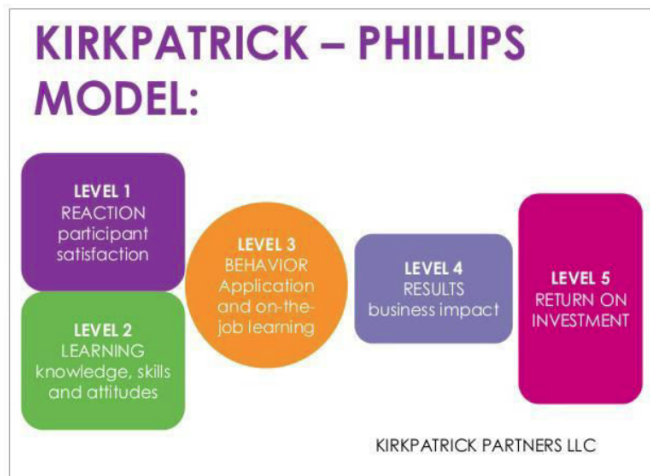


Figure 1: The Kirkpatrick-Phillips Model for evaluating business performance.

Source: Platform tutorial Webinar (2018).

Let's consider the efficiency limit for an example of an online school. You want to quickly increase the number of new students and to do this, increase your marketing budget (for example, promotion in Instagram) to increase the number of target users (leads) twice. Your budget is 50 thousand rubles and the number of leads is 100 people per month. When you double your budget (100 thousand rubles), the number of leads increases to 200 people. And if you plan to increase the number of clients even more, you can increase your budget to 150 thousand rubles. In this case, the number of your leads will increase by only 20 people. This means that in this situation, increasing the budget to 150 thousand rubles or more is not practical - the number of leads will not increase in proportion to the increase in the promotion budget.

You can continue to increase the amount of budgets, but the result will remain unchanged or will be so insignificant that the investment will be useless. So, it's time to look for a new lever, or your efficiency levers.

Contextual advertising and SMM promotion can be considered as such levers. You can launch an offline promotion or think about how to reconfigure your business model so that the efficiency limit is higher. This can include searching for new SMM specialists, launching new creative ideas, and setting up ads for new audiences.

RESEARCH QUESTION

Based on the Results of a Theoretical Review of the Literature, the following Questions can be Formulated

What steps should be taken to improve the effectiveness of online education?

What actions for online education activities are not necessary to take?

How can you develop a business in online education using the lever of efficiency or, as it is also called, the lever of growth?

How do I determine the indicators that are most likely to help a company's profitability grow rapidly?

RESEARCH METHODOLOGY

"Algorithm for applying the growth lever" which should be considered is as following:

1. Identify an important lever for your business.
2. Use your efficiency levers to the maximum. This indicator should be applied until its effectiveness begins to decline.
3. Fix the dynamics of the selected lever at the system level. The resulting performance indicators should be monitored regularly, not on a case-by-case basis.
4. When you reach the maximum efficiency of the selected lever, find new levers.

Use this Algorithm constantly, loop this process: found a lever-reached the maximum – created a system of its operation-went to look for a new lever.

To understand how to determine the correct lever, evaluate your hypotheses using the following model:

Analysis of the probability of obtaining a positive effect from the lever implementation.

Table 2: The Effectiveness of the Levers of Growth in the Promotion Online Schools (Hypothesis)

Efficiency leverage hypothesis	Probability	Predicting a result, new students	Evaluation of investments
to increase the budget on Instagram	50%	40	80000
add contextual advertising	30%	20	40000
add a promotion in "Vkontakte"	25%	10	30000
give a discount to old leads	50%	50	50000

Source: authors.

Quantitative Delta forecast: what the indicator will be after its implementation.

Preliminary cost estimation: effort, time, and money, especially money.

So, write down all your hypotheses in one table. Put these 3 indicators in the columns above, weigh them, and select 1 or 2 levers that you will launch soon.

When implementing hypotheses, use the "hit to point" principle

What is this principle? Distribute your time and effort in such a way that you can concentrate as much as possible on the chosen task. Do not approach its implementation on a residual basis: Here, I will now close all my urgent cases and immediately begin to implement my plans. It should be considered that, is there usually enough time and effort for the task after solving all the current issues? In most cases, the main task of the hand does not reach.

It should be highlighted here that a manager is needed in order to be able to grow significantly by entering this position. In this case, it is necessary to devote maximum effort to the task of searching for this person;

1. Post a job on HH.ru, Avito.
2. Place a post in your personal accounts Instagram (+ story), Vkonakte, Facebook or even classmates that you need such a person.
3. Send to all chats in mobile and telegrams.
4. Tell your friends and acquaintances about it.
5. Search for resumes of suitable candidates.
6. Post an ad in your center.
7. Inform employees about the vacancy and maybe even set a fee.

8. Look for the right person in your notebook.

9. And you can pick up about 10 options as you can find a manager, and even for free.

Make this task a priority and focus as much attention as possible on it. Only in this case, you will see a quick result.

RESULTS & DISCUSSION

Table 2 shows the types of levers that were implemented with the following results. Thus, when switching to an online format, each company has the opportunity to scale and attract more leads across Russia and the CIS countries. When increasing the budget for promotion through social networks, the company was faced with the situation that a single lead manager cannot process more than 20 new leads per day with the execution of previously set tasks. The management decided to attract a second lead manager and increase the marketing budget by 30 percent. And this lever helped attract 43 new students per month. Then in the next 2 months, the budget will be the same and it is projected to attract 1000 new leads, so that the result will be at least 100 contracts per month.

The use of modern tools allows the company to attract more leads than previously known tools. One of these tools is the development of a marathon. A funnel is created where leads pass through stages and their loyalty is formed. This increases the number of contact points and increases the conversion rate from application to trial session entry by 4 percent. In quantitative results, this is attracting 20 new students. 20 students were identified by comparing standard and new recruitment tools.

Opportunities to Implement Efficiency Levers for Online Education

Let's consider the implementation of efficiency principles using the main levers:

Table 3: Indicators of the Impact of Growth Levers on Online School Activities

Lever (leverage)	result, number of students	evaluation of invested funds
Engaging the second lead manager to handle a greater number of leads	43 students	28,000 rubles manager's salary, advertising budget per month additional 20,000 rubles total investment 48,000 rubles
Introduction of modern tools for attracting leads	20 students	10000 rubles

Source: Authors.

1) Quantitative lever;

Leads: this indicator can be increased if you use different channels of attraction and you have effective lead generation.

Trial lessons: a trial to conduct daily lessons.

Calls: your Manager should make the maximum number of calls per day. For example, a Manager is on the line for 60 to 200 minutes a day and can still complete a plan to record up to 30 leads per shift for trial lessons that are held during the week.

2) Quality lever

Average receipt: The range of services should be optimized. It is not necessary to offer a lot of directions, it is better to leave the ones that have the greatest demand from your customers. That is, do not spray. You can also increase prices for more popular destinations.

Customer lifecycle: It can increase by using a loyalty program and maintaining the value of the product.

Index for determining consumer commitment to a product or company: monitor the quality of your employees' work, provide feedback to customers from coaches, survey to improve the quality of your company's work, call customers who did not buy and ask them for reasons. That is, constantly working with the customer base to keep your finger on the pulse and adjust your strategy.

Conversion of arrival to trial lessons: conduct daily trial lessons, work on scripts for the lead Manager, confirm the arrival of the lead on the day of the trial lesson with a call or SMS message, and rewrite it for another day.

Influence of Levers on Improving the Effectiveness of Online Education

Agree that every company has levers that you can put pressure on and increase business efficiency. You

only need to identify them correctly and focus on bringing it to implementation.

When determining the effectiveness lever, you should pay attention to the application of such a rule as Pareto efficiency: 20% of effort gives 80% of the result, and Vice versa, 80% of effort brings only 20% of the result.

This is necessary to perform those tasks that are most likely to lead to results. It is not needed to try to bring all your customers to the point of buying; it is needed to lead those customers who will definitely buy your product.

So those leads that cannot be reached after 3 attempts should be left.

For example, if you sell very well, you have a 60% conversion rate, but very few people come to the trial lessons, then there is no point in "finishing" sales during the trial session. You can add 3-4 more contracts in this way, but it is much more effective to direct the effort to bring more people to the trial classes. To make more contracts for the same conversion to sale, if 30 people come to you, you make 15 sales. You can add sales and make 18 sales instead of 15. Cool? What if you bring not 30 people, but 150, and with the same conversion rate of 50% or even 40%, sell 60 contracts already.

Compare the results of 18 and 60 new students. Which is better?

In this case, the efficiency lever is working with recording and showing up for trial classes. Important clarification: we have chosen a quantitative lever in this case.

Let's look at another example.

You have an idea to open another branch in order to increase your turnover. But imagine how much more you can increase turnover if you just increase the conversion rate of purchases, provided that you have a

lot of leads and few purchases. In this case, we will focus on a high-quality lever-conversion to purchase.

CONCLUSIONS, AND RECOMMENDATION

In modern conditions, every company in the online environment has the opportunity to choose tools to improve the efficiency of its activities. One of the notable cases is the analysis of trends in the development of education in the online environment. This situation is caused by a number of factors. And the planned trend contributes to attracting tools to improve the efficiency of companies in the field of education in the online environment.

It seems that one of the most effective tools for improving the company's performance is the growth lever.

It is proposed to distribute the tools into two components, such as quantitative and qualitative growth levers. The article examines in detail the types of levers proposed by different authors. The authors of the article propose an algorithm for applying the growth lever, which consists of successive stages.

When determining the efficiency lever, we believe that it is appropriate to apply the Pareto efficiency rule: 20% of effort gives 80% of the result, and Vice versa, 80% of effort brings only 20% of the result.

It is considerable that the rational principle for improving the company's efficiency is the principle of "Hitting the mark". That is, to distribute your time and effort in such a way that you can concentrate as much as possible on the chosen task.

It is needed to perform those tasks that are most likely to lead to results. To understand how to determine the correct lever, we suggest evaluating hypotheses. Analyze the probability of getting a positive effect from the implementation of the lever, determine what indicator will be after its implementation, and conduct a preliminary assessment of costs (effort, time and money, primarily monetary).

Using the example of an online school, we reviewed examples of growth levers and suggested options that have practice-oriented results, which can be helpful for future studies

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