

## Mechanics and materials engineering Mechanika ir medžiagų inžinerija

### KEY PERFORMANCE INDICATORS FOR START-UPS IN FURNITURE INDUSTRY


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**Abstract.** It is not uncommon to see start-ups suddenly fail. Often, startups try to follow the example of other, successful companies, but they don't always succeed, so this article looks at KPIs for startups in the furniture industry. The furniture industry in the Baltic States is reviewed and their development at different stages of the company's growth is analyzed. The product factors and interrelationships of a successful furniture company have been identified. The article presents the results of the surveyed companies engaged in the development of products for the furniture industry. The reasons and the main factors influencing the success of the company are given. Based on the results of the study, a model for the development of KPIs for start-ups in the furniture industry is presented and conclusions and suggestions are presented. The model consisted of 10 different spheres (success factors, fail factors, inbound logistics, outbound logistics, marketing & sales, procurement, operation, service, HRM, technology development, sustainability) for 5 different companies size (1–9 employees, 10–49 employees, 50–99 employees, 100–249 employees and 250 and more employees). In the model were overwride main KPIs blocks and suggested considerate of companies size.

**Keywords:** KPI, furniture industry, start-ups, manufacture, success indicators.

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## 1. Introduction

The furniture industry is a labor-intensive and dynamic sector dominated by small and medium-sized enterprises and micro firms. Thanks to their innovative potential for new ideas and responsiveness to new demand, EU furniture manufacturers have a strong reputation and position worldwide. The industry is able to combine new technologies and innovation with cultural heritage and style and provides jobs for highly skilled workers (European Commission, 2020).

These days, it is noticeable that the furniture industry sector is growing. The need for furniture production is visible due to the increased number of customers who choose new furniture rather than used ones. Seeing that the current giants of the furniture industry do not manage to supply the entire market – there are many start-ups who try to establish themselves, but not everyone succeeds. Based on the view that management mistakes these days would be avoided by fundamentally opposite behaviors and decisions compared to those made before an organization, department, or team fails, researchers and business consultants offer guidance in the belief that they will be the key to effective organizational management. There is a great advantage for start-ups to learn from the mistakes

of strangers and to avoid major problems before hand, at least until they are established in the market.

The main problem is as following – what are the main key performance indicators for start-ups in furniture industry.

## 2. Key performance indicators, theoretical framework

During theoretical part and scientific literature analysis, in the information found it can be seen that almost all authors understand key performance indicators (KPIs) definitions a bit differently. According to D. Parmenter, KPIs are those indicators that focus on the aspects of organizational performance that are the most critical for the current and future success of the organization (Parmenter, 2015). Those indicators are numbers designed to succinctly convey as much information as possible. Good KPIs are well defined, well presented, create expectations and drive actions (Peterson, 2005).

KPIs are the vital navigations instruments used by managers to understand whether their business is on a successful voyage or whether it is very off the prosperous path. The right set of indicators will shine light on

performance and highlight areas that need attentions (Marr, 2011). KPIs are rarely new to the organization. Either they have not been recognized or they were gathering dust somewhere unknown to the current management team (Parmenter, 2015). Often, not understanding key metrics can cause anxiety to management team and can hold people back. The problem is that most managers are struggling to understand and identify the vital few managements metrics and instead collect and report a vast amount of everything that is easy to measure. As a consequence, they end up drowning in data while thirsting for information. Effective managers and decision makers understand the performance of all key dimensions of their business by distilling them down into the critical KPIs which allow them to measure, keep track and achieve the desire effect (Marr, 2011).

Concentrating to the furniture industry, group of scientists mention that this industry contains numerous types of equipment and processes that are a challenge to control and maintain in order to achieve highest performance and profit results for the plant. In these situations, KPIs are fundamental in measuring the performance and its progress. KPIs can provide information about the performance in different areas such as energy, raw-material, control & operation, maintenance, planning & scheduling, product quality, inventory, safety, etc. (Lindberg et al., 2015) which would allow to successfully manage plant's operations and processes.

The top four key performance indicators that a furniture retailer should focus on are sales, inventory, growth, and customer satisfaction. These critical metrics will tell you if you are meeting your goals and objectives and help determine how you make strategic decisions for your business.

### 2.1. Key performance indicator types

KPIs can be divided by different types based on the companies' business profile and type, the perspective of the interest group it matters and represents or companies' processes (Peterson, 2005).

Peterson divided KPIs by business types:

- KPI for Online Retailers;
- KPI for Content Sites;
- KPI for Marketing Sites;
- KPI for Customer Support Sites (Peterson, 2005).

He mainly focuses on businesses that operate all or some of their business processes online as e-shops, e-commercials or customers support sites. As online businesses and internet innovations are booming in the 21st century, these KPIs become quite important for all companies in different industries as some of their operations or at least information, communication and marketing actions will probably be provided to their customers through online solutions or sites.

Talking about perspective of the interest group, Bernard Marr (2011) says that there are six main groups, which describes KPI:

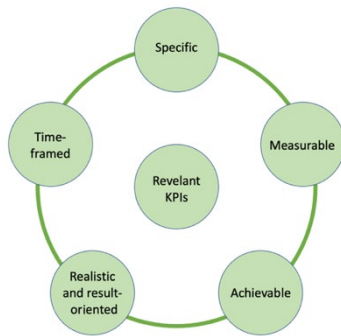
- Financial perspective (Net profit, Gross profit margin, Earnings before interest, taxes, depreciation, and amortization (EBITDA), Revenue growth rate and etc.);
- Customer perspective (Net promoter score (NPS), Customer retention rate, Customer satisfaction index and etc.);
- Marketing and sales perspective (market growth rate, Relative market share, Conversion rate and etc.);
- Operation processes and supply chain perspective (six Sigma level, Process waste level and etc.);
- Employee perspective (Employee satisfaction index, Employee engagement level and etc.);
- Corporate social responsibility perspective (carbon footprint, water footprint, supply chain miles and etc.).

In total there are 72 KPIs which author divided into those six groups. As it is indicated those groups represent different views of different interest groups that are important for the company. It allows to measure and follow all organization activities and processes. Off course, to follow all 72 indicators can be challenging to a smaller business and also not all indicators can be applied to all companies. Each of them should self-assess the criteria, their availability to gather necessary data and decide if all the groups are suitable for them and what exact KPIs from that group the management team should evaluate and measure in their daily activities.

### 2.2. Key performance indicator creation

Key performance indicators can be defined by different characteristics. After all analysis and discussions, Parmenter (2015) has been able to define what seven characteristics of KPIs are:

- Financial and non-financial (not expressed in dollars, Euros, Pounds and etc.). When a currency sign is added to a KPI it converts it mainly into a profit or income result indicator, but not always this is what is wanted to be measured. KPIs can measure the number of new customers, meetings, marketing post or etc., which implemented and reached can also lead and effect the positive financial results of the company.
- Timely (24/7, daily, or weekly). KPI should be monitored constantly based by the organizations set time schedule. Also, they cannot be measure only once or few times per year, because it will not provide necessary insights at the necessary time when management actions can still be taken.
- Chief executive officer (CEO) focus (acted upon by the CEO and senior management team). All KPIs make a difference; they have the CEO's or senior management team constant attention due to daily calls to the relevant staff to review the progress.
- Simple (KPIs should tell you what action need to be taken).
- Individual or team based (responsibility can be tied down to a position, to a team or a cluster of the teams who work closely together).



**Figure 1.** SMART criteria (source: prepared by author, based on Maylor, 2010)

- Significant impact (major impact on the organization). A KPI will affect one or more of the critical success factors of the company. It should align to a company's strategy and vision for the future and help to reach it.
- Limited dark side (they encourage appropriate action). Before becoming a KPI, a performance measure needs to be tested to ensure that it creates the desired behavioral outcome and have limited or no negative result.

These characteristics review the main aspects and ideology of indicators structure and its management. To add, there are additional recommendations which provide insights into how to form a KPI. It is recommended for each company goal to define at least one KPI that would allow to monitor and measure success. According to Maylor (2010), SMART (Figure 1) criteria can not only be applied to setting goals and targets, but also can be considered and used to create measurable indicators in order to reach those goals and targets. SMART is defined as:

- Specific and written down. It has to be clear what action the KPI is asking and what has to be done.
- Measurable. How it will be measured and decided whether it is achieved/maintained or failed/unreached.
- Achievable. Must be physically possible.
- Realistic and result-oriented. Asking for some sort of result or outcome that would be realistic but also create expectations for improvement.
- Time-framed. Is there a defined deadline, time frame in which it is measured or it is constant (has to be this way always).

### 2.3. Start-up, success and fail indicators

The creation of new businesses not only makes a strong contribution to job creation (Decker et al., 2014), but is important for the country's economic growth (Gries & Naudé, 2009). A large number of companies make little or no contribution to this growth. However, the greatest economic benefits are possible expect only from companies that rely on established-breaking innovations because they open new markets or creates new business models (Robles, 2015). Such changes in the economy are usually

compared to the concept of a start-up – a start-up venture (Salamzadeh & Kesim, 2017).

The number of ground-breaking startups is growing year by year, and their major part in the evolving of modern society is conditioned by, first, growing pace of technological development in all scientific spheres, second, the advantage of small companies-startups in comparison with huge corporations in implementing new ideas because of their flexibility and ability to respond faster to market changes. According to the statistics, only one of ten startups becomes successful in the end. It depends on:

- Idea. Idea is what any startup begins from. Ideas, having best competitive advantage, are usually the result of scientific discoveries, but ones that have practical application.
- Funding. It is very unlikely that any startup can budge without investing in it some funds, and sometimes it is very significant funds.
- Team. By the time of the putting product into production it is better have a close-knit team of people with whom you launch your design to market.
- Ground of development. The successful development of startup requires a certain "fertile ground". Startup can be grown on the basis of business incubator (Verbovskii et al., 2012).

Continuing V. A. Verbovskii idea that only one in ten startups is successful (Verbovskii et al., 2012), it is important to find out what causes their failure. High-growth startup companies may fail because the business model that was the basis of their strategy does not materialize. They may also fail because the market does not "open up" in the way and time anticipated. High risk taking, often with radical innovations, is more often rewarded with failure than success. However, startups often fail or do not achieve their full potential because they get stuck in this entrepreneurial crisis.

There are common challenges which effect startups, only the extent to which they affect them differs (Salamzadeh & Kesim, 2015). The first problem is the allure of a good plan, a solid strategy, and thorough market research. In earlier eras, these things were indicators of likely success. The overwhelming temptation is to apply them to startups too, but this doesn't work, because startups operate with too much uncertainty (Ries, 2011). The second challenge – finance. Finance is an integral part of the startup process. Any startup would face financial issues and problems for several reasons and in different stages (Salamzadeh & Kesim, 2015). The third problem is that after seeing traditional management fail to solve problem (Ries, 2011).

### 3. Research methodology

The aim of the empirical research was to determine the success indicators of existing and potential furniture industry companies, which allowed or would allow for a stable establishment in the market.

The target group was managers of companies located in Baltic countries as Lithuania, Latvia, and Estonia. The start-up company should not last more than 2 years independently how much employees it has or what an annual turnover of the company is. The selection framework was familiar to researcher – managers from start-up companies located in all Baltic countries. This selection frame was chosen because the respondents are familiar to the researcher through work or can be approached through different contacts. The sample size was determined by gathering data until either no new meanings were identified, or the sample was as large as was manageable and reachable (Saunders et al., 2003).

As the chosen data collection method was a standardized, semi-structured questionnaire, a block of questions was prepared for a group of respondents (representative of the start-ups). The structure and questions of the interview were developed by the researcher taking into account the theoretical aspects and situation analysis results.

The questions were conducted in English. To prepare and execute the questionnaire google forms were used. As it was indicated information about the company, companies position into the market and KPI using had to be reached. These elements aimed to identify respondents thinking and KPI positioning. The survey consisted of 12 question blocks related to demographics, success and fail factors, inbound and outbound logistics, operations, marketing & sales, services, human resource management (HRM), technology development, procurement and sustainability questionnaire. Every answer had this own code: 1 – very unlikely, 2 – unlikely, 3 – undecided, 4 – likely, 5 – very likely.

After this empirical research, conclusions and findings were used to develop a new model.

The next section will present the empirical part which was made according to this methodology.

#### 4. Analysis of empirical research

The sampling size was 13 respondents. The respondents were from the Baltic countries: 10 executives were from Lithuania (76.9%), 2 executives were from Estonia (15.4%) and 1 executive was from Latvia (7.7%). The size of the companies where the respondents are working also differed: there were 4 respondents who worked in companies which have 1–9 employees (30.8%), 5 executives were from companies which have 10–49 employees (38.5%), 1 respondent works in a company which has 50–99 employees (7.7%), 2 executives were from companies which have 100–249 employees (15.4%) and 1 respondent works in a company with more than 250 employees (7.7%).

Mostly companies produce non-standard furniture (53.8%). This was the answer of 7 respondents. 5 executives work in companies which produce standard furniture (38.5%). 2 respondents work in companies which produce hull furniture (15.4%) and only 1 executive works with soft furniture (7.7%).

Also, it was clarified for which sectors the furniture is produced. From the answers we can see that we reached various companies in Baltic country: 7 respondents answer, that their company produces office furniture (53.8%), 4 executives sell and produce retail furniture (30.8%). 4 respondents work in companies which produce kitchen furniture (30.8%), 3 executives work with hotel furniture (23.1%). 3 companies produce bath furniture (23.1%), and only 1 company produces home furniture (7.7%) and pet furniture (7.7%). It is important to mention, that from the answer we can see, that one company can produce not only one sector furniture, but few of them. So in this survey we can see, that mostly companies produce furniture for offices and something else (retail furniture, bath furniture, kitchens or hotel furniture).

According to respondents, the biggest scope of the productions stays into Baltic countries: Lithuania (61.5%), Latvia (61.5%) and Estonia (38.5%).

Respondents were asked to identify which criteria of the startup factors are most important (Figure 2). They were able to choose between: idea, funding, team and ground of development.

We are able to make an assumption, that regarding all answers most important success criteria is team. It is important what people and specialists work in the company. They are able to create a good final product independently of what was the funding size or what was the primary business idea.

Regarding company fail, additional insight was noticed. There may be more than one reason for failure. It depends on many components, the company's performance and attitude, the relationship with the customer or the product offered. Finances and problem solving may be only part of the cause of failure, but one cause does not figure, they must be the whole.

Inbound and outbound logistics is more key result indicator (KRIs) than KPI. Outbound logistics focuses on the demand side of the supply-demand equation. The process involves storing and moving goods to the customer or end user (Figure 3).

In the first place is quality of goods. It is better to have good quality and took longer production time, than produce furniture on time with some damages or

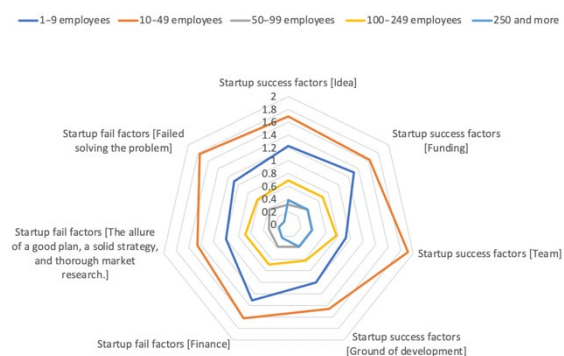
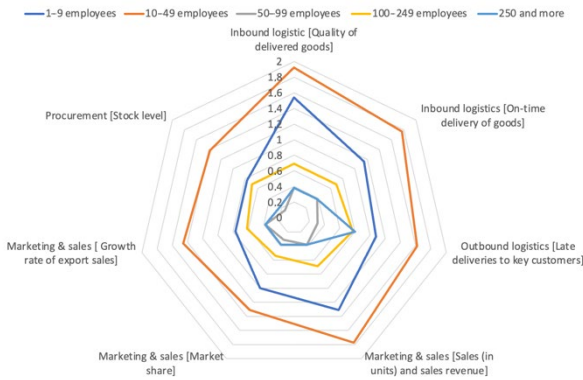
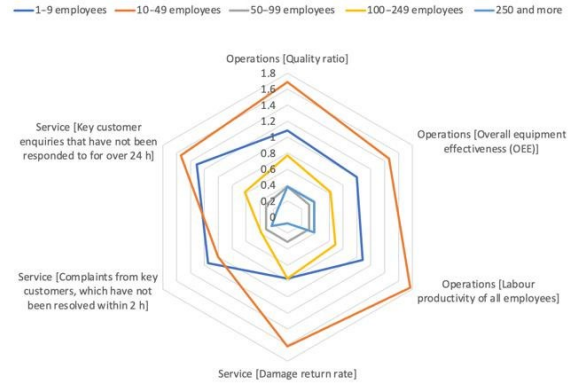


Figure 2. Startup success and fail factors results (source: prepared by author)



**Figure 3.** Inbound and outbound logistics, marketing & sales and procurement results (source: prepared by author)



**Figure 4.** Operations and service results (source: prepared by author)

misunderstanding. It is better to explain customer about few days or week delay, that delivery furniture with reject.

Marketing and sales are two business functions within an organization – they both impact lead generation and revenue. Without marketing there will not be any good results (Figure 3).

Regarding sales (in units) and sales revenue, almost all respondents identify, that sales make huge impact for companies' behavior. However, we can see different opinion about market share question. Regarding chart, we can see, that companies do not take a big impact to take a huge part of market share. All companies have their own client and reach the with their production. As companies said, they are not trying to force their production and do not trying to sale what they are not producing. Growth rate of export sales indicator shows how quickly a company can establish itself not only in its own country. But also, be widely known to foreign consumers. According to the answers, companies which have more than 10 employees agreed, that it is important for those companies to have sales abroad. Such answers may suggest that these companies are interested in the foreign market and that the growth in sales affects the company's operations.

Procurement is the process of finding and agreeing to terms, and acquiring goods, services, or works from an external source, often via a tendering or competitive bidding process. Companies who have 1–9, 50–99 and more then 250 workers agreed, than they are not holding materials on stock. Reason can be various: smaller companies do not have enough money and space to keep it in the warehouse, they are not sure if they will need exactly this material. Biggest companies think that it is better to not store any materials and by everything by the project. However, there are possibility that needed material is out of stock for a while.

After research, we can assume that from operation block as the most important KPIs respondents named quality ration. Talking about service block, here we can see that dominated key customer enquiries that have not been responded to for over 24h. All employees need to give an answer as soon as possible for the client and try not to lose them, because they did not respond at the time (Figure 4).

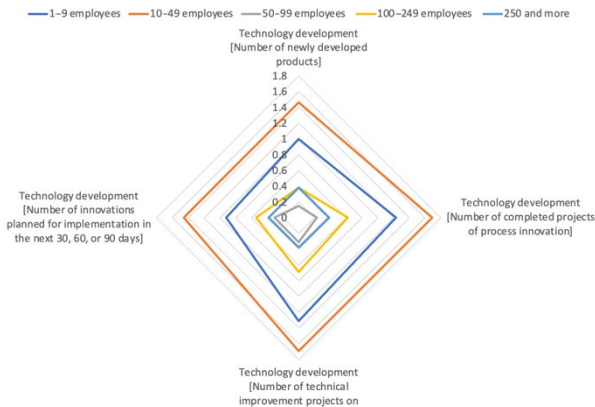


**Figure 5.** HRM results (source: prepared by author)

Human resource management (HRM or HR) is the strategic approach to the effective and efficient management of people in a company or organization such that they help their business gain a competitive advantage. It is designed to maximize employee performance in service of an employer's strategic objectives (Figure 5).

Companies where work 1–9 employees identify that most important criterions for them are staff in vital positions who have handed in their notices in the last hour. This is because every employee in a small company performs a large part of functions, and his / her sudden exit can ruin a large part or even the whole process. The goal of small businesses is to retain employees and try to avoid sudden retirements. Another sudden deviation is seen regarding number of vacant places at an important in-house course. For a small company to have a vacancy for a long time is painful enough. This means that other workers have to cover vacancies and the workload of existing workers increases very sharply. Also, with a small number of employees, the employer is not assured that the vacancy can be covered by existing employees due to their competence. Also, an employer may have trouble quickly finding a competent employee who would accept a high workload and a sufficiently low salary to work as a start-up. The other reason, why other question is not so important for such a small company is because they do not have such a huge number of employees. As a result,





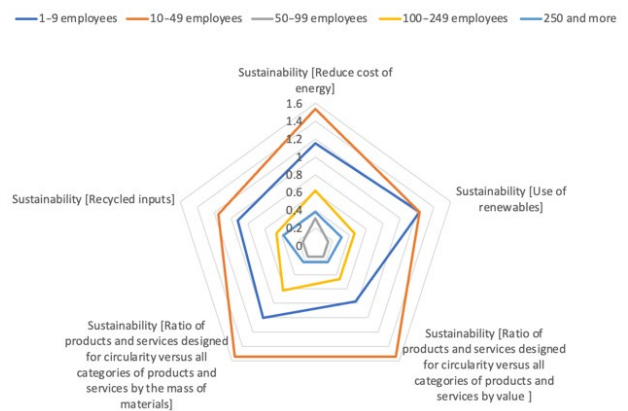
**Figure 6.** Technology development results (source: prepared by author)

all other decisions are made much faster because of the need for consultation and decision-making with a smaller group of people.

Technological development is the overall process of invention, innovation and diffusion of technology or processes. In short, technological change is based on both better and more technology. This question block was made from number of newly developed products, number of completed projects of process innovation, number of technical improvement projects or learning and growth in process and number of innovations planned for implementation in the next 30, 60 or 90 days' question (Figure 6).

What we can see from the chart, that small companies (1–9 and 10–49 employees) are more interesting into newly developed products, that medium or big. Probably because small companies do not already have a huge variation between products and trying to find as much as possible ways to find their customer. Regarding number of completed projects of process innovation. This indicator shows how well a company has adapted to innovate and adapt quickly. The chart shows that no matter what size of the company are it is important how company are able to complete projects of process innovation. Every new established innovation needs somehow to help for the process. The chart shows that number of technical improvement projects is important for companies of all sizes. The answers suggest that the company invests heavily in technology and employee expertise. Good results can increase and speed up a company's work. This number of innovations are planned to be implemented in the next 30, 60 or 90 days can show how flexible a company is in innovation. We are seeing a lot of interest in this KPI from companies with fewer employees as they try to compensate people with new technologies that will help them grow faster.

More and more people are thinking about sustainability and eco-friendly company. The main aim of this question was to take a view and understand if it can help for company became successful. This question has 5 blocks: reduce cost of energy, use of renewables, ration of products and services designed for circularity versus all categories



**Figure 7.** Sustainability results (source: prepared by author)

ries of products and services by value, ratio of products and services designed for circularity versus all categories of products and services by the mass materials, recycled inputs (Figure 7).

Looking at the chart, we can see that all companies have a similar view: to reduce energy costs. As a result, the company becomes more environmentally friendly and can reach an even larger customer audience. Also, with low energy costs, higher financial costs remain, and that money can be invested in new equipment, marketing, or other necessary processes for the company. Not all companies have access to renewable energy sources. However, only managers of smaller companies can help a company be more successful and superior to other companies. This could be due to the fact that they serve only a small part of the market, and the production volumes allow the use of renewable energy sources without any difficulty. Third question part was regarding ration of products and services designed for circularity versus all categories of products and services by value. As we can see from the results, opinions differed. The smallest companies with only 1–9 employees say they do not have much opportunity and capacity to spend a lot of money and time on this indicator. However, companies with more than 10 employees take the view that this KPI is important and that they are trying to use as many products and services as possible for circular consumption. Next block part was about ratio of products and services designed for circularity versus all categories of products and services by the mass materials. In this regard, we see that the views of the companies coincided. Mass use of one material facilitates production, no difference in material processing technology, reduced resources. However, if all companies start using one and the same material, it will simply no longer be possible to find the material and its price will increase inadequately and the customer will overpay for simple products. Last block question was regarding recycled inputs. This may have been due to the fact that recycled raw materials are not yet as in demand as expected. Demand for these raw materials is not growing due to inadequate prices.

## 5. Model for key performance indicators for start-ups in furniture industry

Based on the survey data and the results obtained, it is noticeable that a start-up with a different number of employees takes into account different indicators. From this, we can assume that KPIs can be affected by the number of employees and the size of the firm.

A model based on the results of the survey based on the number of employees in the company (Appendix A) is created and presented. The model is arranged in order of priority. KPIs need to be addressed at each stage of a startup's growth.

Companies with 1–9 employees should pay close attention to the idea and funding. Without these two criteria, a good start-up is not very possible. To avoid failure in the primary stages, the most important criteria should be money and proton their distribution. In terms of inbound logistic, great attention must be paid to the quality of the goods delivered. Priority must be given to product quality to avoid negative comments and feedback. In the field of marketing & sales, priority should be given to sales (in units) and sales revenue and market share. Operation KPIs must concentrate on labor productivity of all employees, as the number of employees is not high and there can be no downtime. Also, great attention must be paid to the quality ratio. For service KPIs, priority should be given to key customer inquiries that have not been answered for over 24h and complaints for key customers that have not been resolved within 2h. In order to have a successful business, great attention must be paid to the customer. In terms of internal company and HRM, priority should be given to staff in vital positions who have handed in their notices in the last hour and number of vacant places at an important in-house course. Also, it is important to keep in mind technology development. At this stage, the focus must be on the number of technical improvement projects on learning and growth in the process and the number of completed projects on the process of innovation. The last block of KPI that is important for the company is sustainability. In this area, priority should be given to the use of renewables and reduce the cost of energy.

As a company grows, so do KPIs, and companies with 10–49 employees should pay close attention to the team as well. As the number of employees increases, employees should be recruited responsibly. To avoid setbacks in the primary stages, the most important criterion should be problem solving and finance. In terms of inbound logistic, great attention must be paid to the quality of delivered goods and on-time delivery of goods. In the area of marketing & sales, priority should be given to sales (in units) and sales revenue and market share. In the growth stage of a company from a small to a medium-sized company, one of the KPIs should be the stock level. Operation KPIs must prioritize labor productivity of all employees and quality ratio. For service KPIs, priority should be given to damage return rates and key customer inquiries that have not been answered for over 24h. If we are talking about

in-house and HRM, prioritize the number of abandonments to be actioned in the next 30, 60, or 90 days and the number of vacant places at an important in-house course. Also, in technology development, the focus must be on the number of technical improvement projects on learning and growth in the process and the number of completed projects on the process of innovation. The last block of KPI that is important for the company is sustainability. In this area, priority should be given to reducing the cost of energy and the ratio of products, services designed for circularity versus all categories of products and services by value and the ratio of products and services designed for circularity versus all categories of products and services by mass material.

A medium-sized start-up with 50–99 employees should pay close attention to the team and the ground of development. The development of the company is also important for a company that already has a large number of employees. To avoid setbacks in the primary stages, the most important criterion should be problem solving and also finance. In terms of inbound logistic, great attention must be paid to the quality of delivered goods and on-time delivery of goods. In the field of marketing & sales, the growth rate of export sales should be a priority and sales (in units) and sales revenue. The company should start looking for opportunities to expand in the foreign market. Priority must be given to overall equipment effectiveness (OEE), labor productivity of all employees and quality ratio. For service KPIs, priority should be given to key customer inquiries that have not been answered for over 24h, complaints from key customers, which have not been resolved within 2h and damage return rate. If we are talking about in-house and HRM, prioritize the number of abandonments to be actioned in the next 30, 60, or 90 days and the number of vacant places at an important in-house course. Also, it is important to keep in mind technology development. At this stage of the company, the focus should be on the number of technical improvement projects on learning and growth in the process and the number of innovations planned for implementation in the next 30, 60 or 90 days. The last block of KPI that is important for the company is sustainability. In this area, priority should be given to reducing the cost of energy.

As a company grows from a medium to a large company, the focus should be on the team and the ground of development. To avoid setbacks in the primary stages, the most important criteria should be the allure of a good plan, a solid strategy, and thorough market research and also finance. In terms of inbound logistic, great attention must be paid to the quality of delivered goods and on-time delivery of goods. Also, the company is already large enough to have a relevant and outbound logistic KPI for late deliveries to key customers. In the area of marketing & sales, priority should be given to the growth rate of export sales and sales (in units) and sales revenue. At this stage of the company, the focus should again be on the stock level. Priority for Operation KPIs must be given to quality ratio, labor productivity of all employees and

overall equipment effectiveness (OEE). For service KPIs, priority should be given to damage return rates and key customer inquiries that have not been answered for over 24h. If we talk about the company's internal and HRM, the number of abandonments should be prioritized in the next 30, 60, or 90 days, the number of vacant places at an important in-house course, key position job offers issued to candidate, which are outstanding for more than three days and number of initiatives implemented after the staff-satisfaction survey. Also, it is important to keep in mind technology development. At this stage of the company, the focus must be on the number of technical improvement projects on learning and growth in the process and the number of completed projects on the process of innovation. The last block of KPI that is important for the company is sustainability. In this area, priority should be given to reducing the cost of energy and the ratio of products and services designed for circularity versus all categories of products and services by mass of material.

As a giant startup, the company should not abandon any of the KPIs previously examined and implemented. To avoid unexpected setbacks, the focus remains on the allure of a good plan, a solid strategy, and thorough market research and also finance. In terms of inbound logistic, great attention must be paid to the quality of delivered goods and on-time delivery of goods. Also, ongoing work and an outbound logistic KPI indicator of late deliveries to key customers continue. In the field of marketing & sales, the growth rate of export sales and market share should be a priority. Priority should be given to the same indicators as in enterprises with 100–249 employees. For service KPIs, priority should be given to complaints from key customers, which have not been resolved within 2h. If we talk about the company's internal and HRM prioritization should continue to be the same criteria except for the key position job offers issued to candidate, which are outstanding for more than three days. Also, it is important to keep in mind technology development. At this stage of the company, the focus should be on the number of newly developed products, the number of completed projects of process innovation, the number of technical improvement projects on learning and growth in process and the number of innovations planned for implementation in the next 30, 60 and 90 days. The last block of KPIs is sustainability. In this area, priority should be given to recycled inputs and reduce the cost of energy.

## 6. Conclusions and recommendations

As mentioned in the beginning, the aim of this research was to determine the success indicators of existing and potential furniture industry companies, which allowed or would allow for a stable establishment in the market.

It was indicated, that KPI stands for key performance indicator, a quantifiable measure of performance over time for a specific objective. KPIs provide targets for teams to shoot for, milestones to gauge progress, and insights that

help people across the organization make better decisions. From finance and HR to marketing and sales, key performance indicators help every area of the business move forward at the strategic level. The sampling size for this research was 13 respondents. The respondents were from the Baltic countries. The results obtained provided insights on how different size start-ups concentrate on different aspects in different topics, so based on that, a model of key performance indicators was made by the number of employees and the size of the firm.

To conclude, in order for start-ups to succeed they have to follow and prioritize different KPIs in all spheres in different companies' growth stages. It is important to mention, that as the company grows and new KPIs are introduced and prioritized, new procedures are being created and implemented in the company in order to follow up with those KPIs and necessary processes, previously prioritized KPIs still have to be measured, checked and maintained on a daily basis. This way, moving through different stages of the start-up and growing it, companies' management team will cover all the most important aspects in different business spheres and will manage to do the establishment in the market effectively, constantly and sustainably in the long run.

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## BALDŲ PRAMONĖS STARTUOLIŲ PAGRINDINIAI SĖKMĖS RODIKLIAI

G. Kirjazovaitė

Santrauka

Neretai pastebima, kad naujos įmonės staiga žlunga. Dažnai startuoliai bando sekti kitų, sėkmingų įmonių pavyzdžiu, tačiau ne visada pavyksta, todėl šiame straipsnyje apžvelgiami baldų pramonės startuolių KPI. Apžvelgiama baldų pramonė Baltijos šalyse ir analizuojama jų raida skirtinguose įmonės augimo etapuose. Nustatyti sėkmingos baldų įmonės gaminių veiksniai ir tarpusavio ryšiai. Straipsnyje pateikiami apklaustų įmonių, užsiimančių gaminių baldų pramonei kūrimu, rezultatai. Pateikiamos prielaidos ir pagrindiniai veiksniai, darantys įtaką įmonės sėkmei. Remiantis tyrimo rezultatais, pateikiamas baldų pramonės startuolių KPI kūrimo modelis ir pateikiamos išvados bei pasiūlymai.

**Reikšminiai žodžiai:** KPI, baldų pramonė, startuolis, gamyba, sėkmės rodikliai.

## APPENDIX A

### KPIs FOR START-UPS IN FURNITURE INDUSTRY

STAGES	1-9 employees	10-49 employees	50-99 employees	100-249 employees	250 and more employees
Success factors	1) Idea; 2) Funding.	1) Team; 2) Idea; 3) Funding.	1) Team; 2) Ground of development; 3) Idea; 4) Funding.	1) Team; 2) Ground of development; 3) Idea; 4) Funding.	1) Idea; 2) Team; 3) Funding; 4) Ground of development.
Fail factors	1) Finance.	1) Failed solving the problems; 2) Finance.	1) Failed solving the problems; 2) Finance.	1) The allure of a good plan, a solid strategy, and thorough market research; 2) Finance.	1) The allure of a good plan, a solid strategy, and thorough market research; 2) Finance.
Inbound logistics	1) Quality of delivered goods.	1) Quality of delivered goods; 2) On-time delivery of goods.	1) Quality of delivered goods; 2) On-time delivery of goods.	1) Quality of delivered goods; 2) On-time delivery of goods.	1) Quality of delivered goods; 2) On-time delivery of goods.
Outbound logistics	—————	—————	—————	1) Late deliveries to key customers.	1) Late deliveries to key customers.
Marketing & sales	1) Sales (in units) and sales revenue; 2) Market share.	1) Sales (in units) and sales revenue; 2) Market share.	1) Growth rate of export sales; 2) Sales (in units) and sales revenue.	1) Growth rate of export sales; 2) Sales (in units) and sales revenue.	1) Growth rate of export sales; 2) Market share.
Procurement	—————	1) Stock level.	—————	1) Stock level.	—————
Operation	1) Labour productivity of all employees; 2) Quality ratio.	1) Labour productivity of all employees; 2) Quality ratio.	1) Overall equipment effectiveness (OEE); 2) Labour productivity of all employees; 3) Quality ratio.	1) Quality ratio; 2) Labour productivity of all employees; 3) Overall equipment effectiveness (OEE); 3) Quality ratio.	1) Labour productivity of all employees; 2) Overall equipment effectiveness (OEE); 3) Quality ratio.
Service	1) Key customer inquiries that have not been responded to for over 24h; 2) Complaints from key customers, which have not been resolved within 2h.	1) Damage return rate; 2) Key customer inquiries that have not been responded to for over 24h.	1) Key customer inquiries that have not been responded to for over 24h; 2) Complaints from key customers, which have not been resolved within 2h; 3) Damage return rate.	1) Damage return rate; 2) Key customer inquiries that have not been responded to for over 24h.	1) Complaints from key customers, which have not been resolved within 2h.
HRM	1) Staff in vital positions who have handed in their notices in the last hour; 2) Number of vacant places at an important in-house course.	1) Number of abandonments to be actioned in the next 30, 60, or 90 days; 2) Number of vacant places at an important in-house course.	1) Number of abandonments to be actioned in the next 30, 60, or 90 days; 2) Number of vacant places at an important in-house course.	1) Number of abandonments to be actioned in the next 30, 60, or 90 days; 2) Number of vacant places at an important in-house course; 3) Key position job offers issued to candidates, which are outstanding for more than three days; 4) Number of initiatives implemented after the staff-satisfaction survey.	1) Number of initiatives implemented after the staff satisfaction survey; 2) Number of vacant places at an important in-house course; 3) Number of abandonments to be actioned in the next 30, 60, or 90 days.
Technology development	1) Number of technical improvement projects on learning and growth in process; 2) Number of completed projects of process innovation.	1) Number of technical improvement projects on learning and growth in process; 2) Number of completed projects of process innovation.	1) Number of technical improvement projects on learning and growth in process; 2) Number of innovations planned for implementation in the next 30, 60, or 90 days.	1) Number of technical improvement projects on learning and growth in process; 2) Number of completed projects of process innovation.	1) Number of newly developed products; 2) Number of completed projects of process innovation; 3) Number of technical improvement projects on learning and growth in process; 4) Number of innovations planned for implementation in the next 30, 60, or 90 days.
Sustainability	1) Use of renewables; 2) Reduce cost of energy.	1) Reduce cost of energy; 2) Ratio of products and services designed for circularity versus all categories of products and services by value; 3) Ratio of products and services designed for circularity versus all categories of products and services by mass of material.	1) Reduce cost of energy.	1) Reduce cost of energy; 2) Ratio of products and services designed for circularity versus all categories of products and services by mass of material.	1) Recycled inputs; 2) Reduce cost of energy.