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**Measurement of Key Industrial
Engineering Indicators
in the Context of Change**

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INTRODUCTION

The economic and political changes at the beginning of the new millennium, and especially Slovakia's accession to the EU, have made trading conditions much more turbulent and challenging. These are changing significantly, with an emphasis on the growth of acquisitions and takeovers of companies by other firms, as well as increasing competition from European, Japanese, American and multinational firms. There is constant change, rapid development and advancing competition encourages organisations to constantly innovate, be more agile and flexible with their customers.

Organizations strive to manage and optimize inputs and outputs as efficiently as possible in order to maximize profit at the lowest possible cost. At the forefront are new information technologies that provide rapid transmission, processing, evaluation and archiving of data and information important to managers in the decision-making process.

So change is the only thing that remains constant in any organisation. It occurs very often nowadays and there is no organisation that it has not touched. It happens that when change affects us in our working life, whether we try to introduce it or are victims of it, we find it very difficult to cope with it. Some employees, however, welcome change as a new challenge and an escape from their stereotyped way of life, but the vast majority of employees more or less resist it. Because change can be disruptive, threatening and unpleasantly unpredictable. It can create instability and ambiguity and turn order and predictability into disorder and unexpected surprises. Poor change management can reduce employee morale, motivation and commitment and create conflict conditions within the organization [3, 4, 28, 104].

As the desire is for change in an organisation to lead to positive outcomes it is imperative that change becomes an important part of management work. Managers need to sense the need for change early, put it into practice as quickly as possible, and eliminate possible resistance to change, which is a natural phenomenon.

The current situation in Slovakia is characterised by rapid changes in various sectors of socio-economic life. Businesses, if they

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want to survive, have to adapt quickly to these changes, they have to be flexible. In addition, today they have to cope with the unusually strong competition that operates on the market. The importance of enterprises in the national economy lies in their role as the driving force behind the most advanced technologies, the creation of jobs and as the main initiator of growth in the standard of living of the population. Enterprises form a significant part of the Slovak economy, accounting for approximately sixty per cent of gross domestic product or value added.

Organisations can successfully face competition if they have a good understanding of their options, can anticipate their activities, future developments, reactions to different strategies, strengths and weaknesses, and their competitive advantages. Competitive analysis allows us to obtain this information.

Labour productivity is the result of the activities of the company's employees at all levels, but especially the activities of the company's management, because the latter sets the long-term and short-term goals of the company, their resource provision, their implementation and the motivation of the company's employees to achieve them. In an enterprise, productivity should be approached in a systemic way. It is necessary to examine the company's processes and, in this connection, to look for ways of making them more efficient, in each of these processes and in their interrelationships.

With today's globalisation, businesses are facing global competition. Businesses that fail to innovate continuously, or at least to offer significant improvements in products and services, that fail to learn more efficiently and more quickly than the competition, are punished immediately. Sooner or later, every business will find itself faced with new challenges and ever greater demands, whether it wants to or not. The winner is the enterprise that can produce a product or service more easily, better, faster and cheaper in the face of competition. In order to be able to do this, it must scrutinise all business processes and look for ways to make them more efficient. As a result, this should create a need for change in the company and a

related area of need for a change management solution, which should kick-start a range of measures needed to improve existing processes.

Global changes in the whole of Europe and also the market mechanism system mean a huge intervention in the Slovak engineering industry. The development of the engineering industry is primarily connected with the development of the material and technical base, its technological and technical modernisation adaptation and with the real growth of labour productivity in all sectors of the economy. The development of the mechanical engineering sector is characterised by the restructuring of the industry, where the production and assembly of cars and car accessories is dominant.

If the Slovak Republic wants to strengthen the competitiveness of the engineering industry in the European Union markets, it requires, in addition to quality business plans and well-developed marketing studies, a capable management that will be dedicated to technical development.

The requirements for profitability and economic efficiency of production processes are an essential part of decision-making and management. While achieving the necessary production effect is the ultimate goal of any production process, the issue of finance, financial assurance and the overall assessment of the economic efficiency of these processes should be in the background of all projects, an integral part of decision-making and also part of their modelling.

With today's globalisation, businesses are facing global competition. Productivity as one of the determining factors and its growth plays a key role in international competitiveness. Businesses that fail to innovate continuously, or at least to offer significant improvements in products and services, that fail to learn more efficiently and more quickly than the competition, are punished immediately. Sooner or later, every business will find itself faced with new challenges and ever greater demands, whether it wants to or not. The winner is the enterprise that can produce a product or service more easily, better, faster and cheaper in the face of competition.

The efficiency of production is conditioned not only by the production process itself, but also by the pre-production stages of production, which determine the technologies used in production, determine the technological conditions under which the product is

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realized, determine the time and space utilization of machinery and auxiliary equipment. The pre-production stages are very important because of the great influence on production costs. It is therefore important to pay maximum attention to them. The success of the whole product often depends on their precision. Increasing the productivity of production does not only mean increasing various production indicators, but represents an enterprise-wide movement to reduce relative costs while increasing the production of parts, better use of time utilization of machinery and auxiliary equipment, and elimination of bottlenecks in production. Management must reflect on the efficiency of the production process on a daily basis. This is due to the desire (more like a necessity) to produce more, cheaper, better quality and at the right time.

Increasing the efficiency of business operations is the goal of every business entity. This can be achieved by various approaches or routes, but above all by applying the principle of economy. The principle of economy ensures the achievement of the maximum volume of performance with the minimum consumption of resources and labour, which in fact represents the achievement of the lowest possible cost per unit of performance.