

## Approach to change management to achieve a stronger level of competitiveness of wine companies in Bulgaria

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### Abstract

Borisov, P. & Popova, I. (2021). Approach to change management to achieve a stronger level of competitiveness of wine companies in Bulgaria. *Bulg. J. Agric. Sci.*, 27 (Suppl. 1), 3–9

The effectiveness of strategic management also depends on the skillful management of the changes that occur in the business organization when changing the conditions of the business environment. Change management is an important component in the overall approach to managing the competitiveness of the company. Without initiating and managing change, an organization cannot be effectively adaptable to changes in the business environment. The purpose of the current article is to construct, validate and test in real conditions an approach for change management to achieve a stronger level of competitiveness of companies (based on case of Bulgarian wineries). The approach includes the following elements: (1) identification of the phases of change with a view to studying and managing the change in the wine company and (2) tools for initiating and managing the change, with the help of which to carry out diagnostics of the competitiveness of the wine company and on the basis of it to take steps for realization of organizational change. Once the stages of determination of the wine companies for changes as well as the diagnostic tools have been identified, it is easy to analyze the determinants of change, with a view to effectively managing change and suppressing resistance by staff. The proposed model for diagnosing the determinants below is based on the idea that change is an internal factor that managers can control and use depending on the mode of proactivity to the environment is the wine company.

*Keywords:* change management; wine companies; competitiveness; business environment

### Introduction

The effectiveness of strategic management also depends on the skillful management of the changes that occur in the business organization when changing the conditions of the business environment. Change management is an important component in the overall approach to managing the competitiveness of the company (Henricks et al., 2020). Without initiating and managing change, an organization cannot be effectively adaptable to changes in the business environment (Shikha et al., 2020). Adaptability is one of the most obvious immanent characteristics of the competitiveness of the company, i.e. maintaining this adaptability ensures the development of company competitiveness (Borisov et al., 2014). Adaptability can be achieved through different types of behavior of the

business organization, based on the basic principles that the company's management follows (Nikolov et al., 2013).

The choice of type of behavior is determined by the vision of management to manage the company on the way to its corporate competitiveness (Borisov & Behluli, 2020; Nikolov et al., 2020). It is important to mark the opportunities and threats that arise from the business environment, as well as to determine the inflation (bifurcation zone), which marks the change in the mode of proactivity of the company. In all modes of proactivity, management is required to effectively manage change in the internal environment. The effectiveness of this management depends on how many positives are extracted from the selected proactivity mode.

The presented approach to change management in the wine company offers a system of tools that managers can use

in making decisions for change in order to achieve a stronger level of company competitiveness. The approach includes the following elements: (1) identification of the phases of change with a view to studying and managing the change in the wine company and (2) tools for initiating and managing the change, with the help of which to carry out diagnostics of the competitiveness of the wine company and on the basis of it to take steps for realization of organizational change.

## Matherial and Methods

The purpose of the current article is to construct, validate and test in real conditions an approach for change management to achieve a stronger level of competitiveness of companies (based on case of Bulgarian wineries).

**Defining the phases of change.** The strategic activity necessary to ensure the sustainable development of the competitiveness of the wine company is carried out with a certain determination of its condition (of the company). The specificity of this determinism is directly dependent on the state of the factors that make up the business environment. In this regard, the determinism of the systems is determined by the so-called “long-wave factor – trend” (Rumyantseva, 2001). This trend factor is the content of a time series, which corresponds to a quantitative and qualitative series of changes in one or another indicator or relationship, with its inherent property of reversibility or irreversibility over time. The analysis and evaluation of the changes in the trends of the business environment are reversible,

The “stock” indicators are related to the analysis and evaluation of the so-called technological indicators (raw materials, financial, information, etc.), while in the second group, the “process” indicators are related to the dynamics of ongoing management processes in the company. Among them is the frequency of changes, the value of monetary units, the price-cost ratio of the benefits of change. By ap-

plying these two groups of indicators it is possible to determine the reversible processes and trends in the business environment, as the phases of long waves are determined by the dynamics in the clustering of basic changes, and technical and economic indicators only confirm the periodization of managerial flows.

Considered in many ways and in many respects, this periodization of processes depends on the “property of the factors of the business environment and their properties” (Avramov, 1991) to preserve the basic characteristics of movement and condition until external forces interrupt them. And this dependence of the factors of the business environment is determined by their property of inertia, expressed directly in the context of their determinism, to achieve their overall stability and variability.

Modern business organizations in the wine sector are increasingly unresponsive to change in a way reflected in the current understanding of competitiveness theory (Borisov et al., 2019). They simply increase the maximum revenue from wine sales regardless of costs, minimizing profits, ie. they do not aim for maximum profit and disturb the “maximum profit/maximum sales” balance (Borisov & Radev, 2012) Often indicators related to the analysis of investment processes in case of changes in values for staff, systems and procedures for achieving a balance between company and consumer goals are not focused on risk assessments and the necessary changes in strategic resources to maintain this balance (Borisov & Marinov, 2013).

We distinguish the following three strategic conditions of cyclical development of wine companies in changes corresponding to the three types of order of resilience, namely: first order – pre-buffering phase or phase of partial chaos; second order – postbifurcation phase or resultant phase; a third order of change called the intervention phase (causing partial chaos in the long run). The indicators and their change for the different phases are shown in Table 1.

**Table 1. Strategic conditions determining the phases of change in wine companies**

| Strategic conditions characterizing the determinism of wine companies for change  |   |   |
|---|---|---|
| <i>Prebifurcation phase<br/>(partial chaos)</i>   | <i>Bifurcation phase<br/>(phase of determination for change)</i>  | <i>Intervention phase<br/>(post-bifurcation phase)</i>  |
| Increase: the complexity of management; the risks; demobilization for team work; conflicts and rumors; scarcity of resources; opportunism, etc.<br>Include: the motivation of the teams for work, the job satisfaction; information access; compliance with group norms of behavior, etc. | Increase: staff redundancies; redundancies in the staff incentive system; overhead savings; mergers and shrinkage of production capacity; indebtedness, management crises, tensions and staff stress;<br>Include: labor productivity; sales revenue; gross profit; the profitability of the business and the return on the resources invested in the production, etc. | Increase: the need for change; resistance to changes; investment in new alternative development solutions (innovations); motivation to work; labor productivity; solvency, liquidity and profitability of the activity<br>Include: tension and stress among staff; the number of conflicts; management crises, etc. |

Source: own interpretation

Using the neoclassical approach to determine the determinism of wine companies to implement changes to achieve sustainable competitiveness in market conditions, we seek to identify criteria for the presence of determinism. These criteria are named in the “regime, order and direction” change management approach. In choosing and clarifying their nature, we are based on the following immanent characteristics, namely:

The first criteria “regime” of adoptions, we determine on the basis of the degree of changes occurring in the strategic factors of competitiveness of wine companies.

The order of sustainability is the second criterion in determining the indicators for assessing the determinism of wine companies for change. It can be used to study and evaluate the relationships of the factors that make up the company (employee motivation, leadership style, conflicts, goals, group dynamics, etc.).

#### ***Defining tools for identifying the needs for change.***

Once the phases of change have been defined, the next step is to use a reliable tool to measure the condition of the wine company in view of when managers need to initiate a change in its business development. The proposed tools for analysis and identification of the needs for change in the business development of the wine company is based on the concept of change management depending on the product life cycle. In other words, the effectiveness of the wine company’s product strategy is defined as a marker of change. By measuring the achieved effects of its application, managers can identify and follow various solutions to initiate a change in the course of market development of the company.

- In conditions of market surplus and strong price competition on the world wine market, the main means of maintaining the market power of the company is the objectively developed and pursued product strategy. The final process of developing and following a product strategy is the result of successive steps and cannot be performed if the previous one is missing;
- In the internal market, wine companies strive to apply flexible pricing as a leading factor in their business strategy. This is determined by the fact that consumers have low incomes and when choosing, the leading factor is the “price-quality” ratio. On the other hand, there are some major problems in the value chain such as the small size of vineyards, which are the main producers of raw materials; deterioration of the age structure of the vineyards; low share of typically Bulgarian grape varieties in the varietal structure; large share of the informal sector and low integration of industries.

In these conditions, the ability of the product strategy to ensure a market share that leads to a stronger return on investment is a really real indicator of effective thinking in change management. Managers need to increase the return on investment to meet the requirements of investors, but on the other hand it is necessary to take into account market requirements and the constraints of the business situation when developing an adaptive product strategy. Product strategy is one of the main factors determining market share. One of the strategies to achieve greater market share is to maintain a diversified product line, which complicates the management of the company as a whole. Another strategy is to achieve a strong degree of specialization and standardization of large-scale production, factors that allow achieving price leadership (Armstrong, 1996). In the conditions of large production capacity, wine companies can gain a larger market share, taking advantage of all the advantages of large-scale production.

Another very common product strategy used by wine companies is the production of a limited range of products that are of strong quality and traded in stronger price segments. The aim of this strategy is to achieve differentiation of the offered product. Before following each of these product strategies, various restrictions arise that hinder the development and maintenance of the company’s competitiveness. With a stronger specialization of the product range, the company has greater inertia of changes in market conditions. On the other hand, maintaining a wide variety of available products, which ensures more sales, and thus achieving a larger market share, complicates the overall management of the company.

***Identification of drivers and markers of change in wine companies.*** Two variables are important in planning the product strategy as a driver of change in the development of the wine company – one is the level of specialization (width of the product range), and the second is the scale of production (depth of the product range). The table shows the matrix built on the basis of the specified criteria – scale of production and level of specialization. The matrix shows four different types of product strategies that wine companies most often use to develop their business model (Table 2).

Table 2 lists the types of product strategies and objectives pursued. According to the surveyed managers of the wine companies, a small-scale product line is defined as one with a capacity of up to 50 000 bottles per year, and a large-scale line has a capacity to produce up to 500 000 bottles per year. Specialized vineyards are those that produce only one product line, and diversified vineyards are those that produce more than two product lines.

**Table 2. Types of product strategies as drivers of change**

| Degree of specialization / depth of the product range |                                       | Production scale / width of the product range |   |
|---|---------------------------------------|---|---|
|   |                                       | Small / less than 50 000 bottles in a line    | Large / more than 500 000 bottles in a line |
|   | Specialized/only one product line     | (1) Small-scale specialized strategy          | (2) Large-scale specialized strategy        |
|   | Diversified/two or more product lines | (3) Small-scale diversified strategy          | (4) Large-scale diversified strategy        |

Source: own survey, 2018

Table 3 shows the markers and drivers of change in the wine company. As drivers of change are used the types of product strategies defined above, and as markers of change are used – market share, return on sales, return on equity, return on assets and competitiveness ratio, measuring the effects of the application of the selected product. strategy.

**Testing and identification of reference values of markers of change in wine companies.** Once the drivers and change markers have been defined, the next step is to test the validity of these tools for suitability in performing analysis and diagnostics. For this purpose, each type of product strategy receives a quantitative assessment. The next step is through the application of regression analysis to test the relationships between the selected type of product strategy (driver of change) and the markers of change – market share, return on sales, equity, assets and competitiveness. The following 5 correlations are set in the regression model for testing the relationship between driver and change markers:

- Correlation between the number of produced product units and the market share;
- Correlation between the number of produced product units and the return on sales;
- Correlation between the number of produced product units and the return on equity;
- Correlation between the number of produced product units and the return on assets;
- Correlation between the number of produced product units and the coefficient of competitiveness.

## Results

The data included in the regression model were collected from 131 wine companies. The data obtained from these companies are divided into 4 groups according to the driver for change “type of product strategy”. The first group includes data from companies that follow a small-

**Table 3. Comparative analysis of product strategies in wine companies as drivers of change and the effects achieved by the application of product strategies as markers of change**

| Driver encoding | Type of product strategy (as driver change) | Characteristic  | Purpose   | Performance indicators from the implementation of the product strategy(as change markers)                    |
|-----------------|---|---|---|--|
| 1               | Small-scale specialization                  | The wine company specializes in the production of one product line with limited capacity / less than 50,000 bottles /               | A bigger price;<br>Quality product;<br>Exclusivity                                  | Market share;<br>Return on sales<br>Return on equity;<br>Return on assets;<br>Coefficient of competitiveness |
| 2               | Wholesale – large-scale specialization      | The wine-growing company specializes in the production of one product line with a large capacity / over 500,000 bottles /           | Standardization;<br>Economies of scale;<br>Price leadership;<br>The lowest price    | Market share;<br>Return on sales<br>Return on equity;<br>Return on assets;<br>Coefficient of competitiveness |
| 3               | Small-scale diversification                 | The wine company specializes in the production of two or more product lines with limited capacity / up to 50,000 bottles for each / | A bigger price;<br>Quality product;<br>Exclusivity;<br>Greater choice for consumers | Market share;<br>Return on sales<br>Return on equity;<br>Return on assets;<br>Coefficient of competitiveness |
| 4               | Large-scale diversification                 | The wine company specializes in the production of two or more product lines with a large capacity / over 500,000 bottles for each / | Greater coverage of consumer preferences;<br>Greater market share;                  | Market share;<br>Return on sales<br>Return on equity;<br>Return on assets;<br>Coefficient of competitiveness |

Source: own interpretation

**Table 4. Results of testing the correlation between the driver “small-scale specialization” and the markers “return on sales”; “return on equity”; “return on assets” and “competitiveness ratio”**

| Driver – “number of manufactured product units” | Markers of change |                 |                  |                  |                                |
|---|-------------------|-----------------|------------------|------------------|--------------------------------|
|   | Market share      | Return on sales | Return on equity | Return on assets | Coefficient of competitiveness |
| Correlation coefficient                         | 0.9523            | 0.8593          | 0.7822           | 0.7141           | 0.6551                         |
| Adjusted correlation coefficient                | 0.907             | 0.738           | 0.612            | 0.51             | 0.43                           |
| Degree of dependence                            | very strong       | strong          | strong           | strong           | moderate                       |
| Type of dependence                              | positive          | positive        | positive         | positive         | positive                       |
| Minimum /maximum value                          | 3.77 / 5.22       | 105.26 / 157.9  | 47.62 / 95.24    | 11.04 / 22.08    | 2.66 / 7.97                    |
| Coefficient of variation                        | 0.345             | 0.285           | 0.315            | 0.453            | 0.753                          |

Source: data from the balance sheets of 35 wine companies, 2018

scale specialized product strategy, the second group includes data from companies that follow a large-scale specialized product strategy, the third group includes data from companies that follow a small-scale diversified product strategy and in the fourth group are data from companies that follow a large-scale diversified product strategy.

Tables 4, 5, 6 and 7 show the results of the performed regression analyzes. The correlation between the driver “small-scale specialization” and the markers “return on sales; return on equity; return on assets and competitiveness ratio”.

In the first group of wine companies (applying small-scale specialization) the studied interrelations have direct dependence (results of data collected from 35 wine companies) (Table 4).

The degree of dependence is very strong between the driver “number of products produced” and the marker “market share” – the adjusted correlation coefficient is 0.907. Three correlations show that the degree of dependence studied is strong, that of the correlations between the driver “number of products produced” and the markers “return on sales”, “return on equity” and “return on assets”. In the last correlation “number of product units produced” – “competitiveness coefficient” the degree of the studied dependence is moderate.

itiveness coefficient” the degree of the studied dependence is moderate.

Table 5 shows the results of the regression analyzes between the driver “number of products produced” and the markers “return on sales”, “return on equity”, “return on assets” and “competitiveness ratio” in the group of companies implementing a large-scale specialization (31 wine companies). The obtained results show that the dependence between the studied variables is positive. The degree of significance varies from very strong to moderate.

In the group of wine companies (32 in number) that apply a strategy of small-scale diversification, there is also a direct relationship between the driver “number of products produced” and the markers “return on sales”, “return on equity”, “return on assets” and “competitiveness ratio”. The degree of dependence of the studied correlations varies from very strong to strong (Table 6).

In the group of wine companies (33 in number) implementing a strategy of large-scale diversification, there is also a direct relationship between the driver “number of products produced” and the markers “return on sales”, “return on equity”, “return on profitability”, of assets” and “competitiveness ratio”.

**Table 5. Results of testing the correlation between the driver “large-scale specialization” and the markers “return on sales”; “return on equity”; “return on assets” and “competitiveness ratio”**

| Driver- “number of manufactured product units” | Markers of change    |                      |                  |                       |                                |
|--|----------------------|----------------------|------------------|-----------------------|--------------------------------|
|  | Market share         | Return on sales      | Return on equity | Return on assets      | Coefficient of competitiveness |
| Correlation coefficient                        | 0.9343               | 0.8691               | 0.7811           | 0.7871 th most common | 0.6576                         |
| Adjusted correlation coefficient               | 0.873 th most common | 0.755 th most common | 0.610            | 0.620                 | 0.432                          |
| Degree of dependence                           | very strong          | strong               | strong           | strong                | moderate                       |
| Type of dependence                             | positive             | positive             | positive         | positive              | positive                       |
| Minimum /maximum value                         | 2.72 / 3.63          | 80.48 / 120.72       | 75.76 / 151.52   | 31.35 / 47.02         | 6.47 / 16.10                   |
| Coefficient of variation                       | 0.551                | 0.497                | 0.264            | 0.319                 | 0.319                          |

Source: data from the balance sheets of 31 wine companies, 2018

ness ratio”. The degree of dependence of the studied correlations varies from very strong to moderate (Table 7).

The results of the performed regression analyzes confirm the statistical reliability of the selected drivers and markers of change, ie. these tools are reliable in the analysis and diagnosis of wine companies. The next step in the implementation of the change management approach is to determine the reference values of the markers, through which the deviations will be measured and intervening decisions will be taken by the managers of the wine companies.

The reference values of the markers for change in the wine-growing company are determined using the following three statistical values in the studied 4 groups of wine-growing companies: – (1) minimum value of the marker; (2) maximum value of the marker and (3) coefficient of variation of the marker in the studied population (data group). The minimum and maximum value of the change marker are determined for each group of companies. For each group of wine companies, the coefficient of variation of the change marker is calculated. The refer-

**Table 6. Results of testing the correlation between the driver “small-scale diversification” and the markers “return on sales”; “return on equity”; “return on assets” and “competitiveness ratio“**

| Driver – “number of manufactured product units” | Markers of change |                 |                    |                  |                                |
|---|-------------------|-----------------|--------------------|------------------|--------------------------------|
|   | Market share      | Return on sales | Return on equity   | Return on assets | Coefficient of competitiveness |
| Correlation coefficient                         | 0.9011            | 0.8651          | 0.9143             | 0.7651           | 0.7761                         |
| Adjusted correlation coefficient                | 0.812             | 0.748           | 0.836              | 0.585            | 0.602                          |
| Degree of dependence                            | very strong       | strong          | strong             | strong           | strong                         |
| Type of dependence                              | positive          | positive        | positive           | positive         | positive                       |
| Minimum /maximum value                          | 3.14 / 4.04       | 43.99 / 73.31   | 36.06 / 10<br>8.17 | 15.11 / 22.66    | 7.24 / 14.47                   |
| Coefficient of variation                        | 0.446             | 0.682           | 0.416              | 0.662            | 0.691                          |

Source: data from the balance sheets of 32 wine companies, 2018

**Table 7. Results of testing the correlation between the driver “large-scale diversification” and the markers „return on sales”; “return on equity”; “return on assets” and “competitiveness ratio“**

| Driver – “number of manufactured product units” | Markers of change |                 |                  |                  |                                |
|---|-------------------|-----------------|------------------|------------------|--------------------------------|
|   | Market share      | Return on sales | Return on equity | Return on assets | Coefficient of competitiveness |
| Correlation coefficient                         | 0.9443            | 0.9142          | 0.6945           | 0.7612           | 0.6919                         |
| Adjusted correlation coefficient                | 0.892             | 0.836           | 0.482            | 0.58             | 0.48                           |
| Degree of dependence                            | very strong       | very strong     | moderate         | strong           | moderate                       |
| Type of dependence                              | positive          | positive        | positive         | positive         | positive                       |
| Minimum / maximum value                         | 2.45 / 12.25      | 108.7 / 217.39  | 62.85 / 83.8     | 18.45 / 36.9     | 13.4 / 20.11                   |
| Coefficient of variation                        | 0.816             | 0.552           | 0.716            | 0.813            | 0.746                          |

Source: data from the balance sheets of 33 wine companies, 2018

**Table 8. Reference values of the markers for change in the wine companies**

| Drivers of change                                     | Reference values of change markers |                         |                        |                        |  |
|---|------------------------------------|-------------------------|------------------------|------------------------|--|
|   | Market share, %                    | Return on sales, %      | Return on equity, %    | Return on assets, %    | Coefficient of competitiveness (in absolute value) |
| Small-scale specialization (applied by 35 companies)  | from 1.3 up to 1.8                 | from 30.00 up to 45.00  | from 15.00 up to 30.00 | from 5.00 up to 10.00  | from 2.00 up to 6.00                               |
| Large-scale specialization (applied by 31 companies)  | from 1.5 up to 2.00                | from 40.00 up to 60.00  | from 20.00 up to 40.00 | from 10.00 up to 15.00 | from 4.00 up to 10.00                              |
| Small-scale diversification (applied by 32 companies) | from 1.4 up to 1.8                 | from 30.00 up to 50.00  | from 15.00 up to 45.00 | from 10.00 up to 15.00 | from 5.00 up to 10.00                              |
| Large-scale diversification (applied by 33 companies) | from 2.00 up to 10.00              | from 60.00 up to 120.00 | from 45.00 up to 60.00 | From 15.00 up to 30.00 | from 10.00 up to 15.00                             |

Source: data collected from 131 wine companies, 2018

ence values of the change markers are determined by the following formula:

For the lower limit of the value interval, multiplying the minimum value of the marker by the coefficient of variation;

For the upper limit of the value interval, multiplying the maximum value of the marker by the coefficient of variation.

The results obtained regarding the reference values of the change markers are given by groups of companies in Table 8.

Wine companies whose markers have stronger or lower values than the indicated reference values fall into the so-called bifurcation phase (phase of determination for change), i.e. managers need to initiate and manage change.

## Conclusion

Once the stages of determination of the wine companies for changes as well as the diagnostic tools have been identified, it is easy to analyze the determinants of change, with a view to effectively managing change and suppressing resistance by staff. The proposed model for diagnosing the determinants below is based on the idea that change is an internal factor that managers can control and use depending on the mode of proactivity to the environment is the wine company.

## References

- Avramov, R.** (1991). Changes in the economic system – first results. *Sociological Problems* 5, 45-56
- Borisov, P. & Behluli, A.** (2020). Strategic orientation of business

organization – step by step. *Journal of Bio-Based Marketing*, 2, 5-20.

- Borisov, P. & Marinov, P.** (2013). Evaluation of competitive advantages of wine cluster. Scientific Works of the Agricultural University – Plovdiv, *LVII*, 151-158 (Bg).

- Borisov, P. & Radev, T.** (2012). Analysis of some factors determining the market power of wine companies in Southern Bulgaria. *Economics and Management of Agriculture*, 1, 30 – 36 (Bg).

- Borisov, P., Radev, T. & Dimitrova, D.** (2014). Comparative advantages of EU member states in trade with wine. *Economics and Management of Agriculture*, 59 (4), 71-76 (Bg).

- Borisov, P., Radev, T. & Nikolov, D.** (2019). Young farmers and new entrants in Bulgarian agriculture – profiling their challenges and needs. *Economics and Management of Agriculture*, 2, 60-71 (Bg).

- Henricks, M., Young, M. & James Kehoe, E.** (2020). Attitudes toward change and transformational leadership: A longitudinal study. *Journal of Change Management*, 20 (3), 202-219.

- Nikolov, D., Boevski, I., Borisov, P. & Radev, T.** (2020). Opportunities for joint bio-based marketing of farmers from the region of Smolyan. *Bulgarian Journal of Agricultural Economics and Management*, (1),70-77 (Bg).

- Nikolov, D., Radev, T. & Borisov, P.** (2013). Landscape as a driver for competitiveness of Pazarjik district in Bulgaria. 2nd AIEAA Conference – Between Crisis and Development: which Role for the Bio-Economy Parma, 6-7 June 2013, 150 – 161. DOI: 10.22004/ag.econ.150238

- Rumyantseva, S.** (2001). Dynamics of innovation and the long wave phase. *Economics*, 1, 33-48 (Ru).

- Singh, S., Misra S. Ch. & Chan, F. T. S.** (2020). Establishment of critical success factors for implementation of product lifecycle management systems. *International Journal of Production Research* 58 (4), 997-1016.

*Received:* May, 19, 2021; *Accepted:* June, 25, 2021; *Published:* September, 2021