

# Chapter 25

## **Portfolio Methods as Tools Supporting the Formulation of Commune Development Strategies**

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### **1. Introduction**

Due to the increasing complexity of processes occurring in the local economy and the turbulent environment, it has become necessary for Polish cities and regions to develop a new approach to communal or regional development. This necessity to implement new management methods in communes is recognized in their new development strategies. Development strategies are developed in order to reduce uncertainty related to decision making, direct and mutually coordinate the activities of particular stakeholders.

Portfolio methods are a set of tools that help to evaluate various options for the organization. They make it possible to present possible options in a two-dimensional form.

The aim of this article is to point out how portfolio methods can be used in formulating development strategies. Additionally, the article will include recommendations for commune authorities.

The study will start with a definition of commune management, and then it will describe selected portfolio methods applied in commune management, which can be used as a diagnostic tool (BCG matrix, McKinsey matrix, ADL matrix). The next part of the paper will focus on empirical analysis. It will include the results of a survey and interviews that were used to evaluate selected communes of the Malopolska province. The results of the study will form the basis for attempts at creating a commune management model. They will also help to formulate recommendations for authorities of the studied communes.

### **2. Commune development management – definition and specific challenges**

Commune is a specific organisation whose mission is to meet the needs of its residents. It has certain statutory functions and tasks, which makes commune management so complex and difficult. The governing bodies of state institutions need to be aware of certain limitations, which do

not occur in companies. Nevertheless, the methods and management techniques that were of use in companies can be transferred to commune management and thus improve their efficiency.

The basic mission of a commune is to satisfy the needs of its residents and it can be treated as a special system. The commune consists of a number of organization units different in terms of the subject and scope of activities as well as functional responsibility. Organisational units of a commune include the council, board and office, whilst interactions include interrelations and interlinks between these units. The interlinks may be organisational, social, economic, legal or technical. A commune has certain statutory functions, which are defined in the act on local self-government. It primarily performs public functions in its own name and for its own account, and its scope of activity comprises all local actions. These include the following: spatial order, environment protection, commune roads, roads, bridges, squares, traffic management, water supply networks, water supply, sewage systems, cleaning services, landfill management, waste disposal, energy supply, local road transportation, healthcare, social help, building, education, culture (including libraries), physical education, markets, market halls, green areas, cemeteries, fire protection, maintenance of public objects, providing pregnant women with social, medical and legal support.

Since communes are complex systems, the management process is also a comprehensive task. Therefore, it has become necessary to use management methods and techniques which have worked in business management and may improve processes occurring in communes.

Managers managing organizations often wonder about their efficiency and effectiveness. This challenge concerns not only companies but all organizations, including communes. The tools that can be used in the diagnosis and formulation of development strategies are portfolio methods.

### 3. Application of selected portfolio methods in commune management

Portfolio methods are typical methods used by organizational consultants. They make it possible to evaluate the competitiveness of particular products/services in an easy and effective way. A company is treated as a set of products present at different markets. What is evaluated is the attractiveness of these products, their competitiveness, possibilities of sales increase and ability to generate profits<sup>1</sup>. Portfolio methods are a universal and very useful tool that helps to analyze development potential of business units. They also serve as a very good basis for strategic planning<sup>2</sup>. That is why it is advisable to use them in formulating commune development strategies.

One of the ways to present a portfolio of company activities is to use a matrix form. The most popular matrix types include the following: BCG matrix, GR (McKinsey) matrix, ADL matrix.

BCG matrix was developed by the consultants of Boston Consulting Group in 1970. It was a very innovative tool which identified the place and role of particular company products against its profits. The method assumes that the organization is able to define a strategy after analyzing the internal and external environment. The matrix is formed by the intersection of two dimensions: market growth rate against relative market share. As a result, the matrix yields four strategies: cash cows, dogs, question marks and stars.

<sup>1</sup> K. Obłój, *Strategia sukcesu firmy*, PWE, Warszawa 1994, p. 112.

<sup>2</sup> G. Gierszewska, M. Romanowska, *Analiza strategiczna przedsiębiorstwa*, PWE, Warszawa 2001, p. 127.

Cash cows are those segments which are growing slow. They are regarded as stable in a mature market. They require little additional investments, but they are able to generate cash continually that can be used to finance assets. These are the high-yield segments which put the organization in a dominating market position. They are characterized by positive financial liquidity whose surplus should be reasonably reinvested.

Dogs are segments with low market growth potential. They require little additional capital, but they do not generate financial liquidity. These units typically hardly break even, especially in the case of organizations which have been incorrectly placed on the experience curve. Those segments are not attractive and may be in the end a threat to the organization.

Question marks are business units which do not generate much cash but grow rapidly. They require large investments (production, commerce, finance) to keep up with market growth. This is particularly important in the case of organizations which want to improve their weak market position and find it difficult to maintain financial liquidity. If a question mark does not succeed in becoming a market leader in its segment, then it will perhaps degrade into a dog.

Stars are units with high market growth rate. They also have a high market share and low development costs. Sustaining the market leadership may require extra cash but it is worthwhile because it can take them to the stage when they will not require any more cash input. Despite that, their financial situation is not fully stable, due to high growth and immaturity of these segments which do not bring the business unit sufficient protection against sudden market share changes<sup>3</sup>. Strategic recommendations based on the analysis above are the following<sup>4</sup>:

1. Improving the profitability of cash cows. An organization that has managed to position itself as an oligopoly in its mature segments, should manage those segments in such a way as to achieve profits and invest them in activities with large potential.
2. Selling off dogs or cutting down investment. If dogs are still profitable, it is necessary to maintain them but additional cash input should be stopped along with the introduction of changes ensuring improvement of liquidity.
3. Maintaining the position of stars and anticipating that after the entry in the maturity stage they could be changed into cash cows.
4. Giving up the dilemmas, doubling spending, or reformulating the existing segmentation. It is necessary to take into account such criteria as, the size of the future market, the amount of extra cash, synergy of the segment with other business unit segments and their internal significance.

Another portfolio method that can be used in commune management is ADL matrix built upon two variables:

- ! "Industry life cycle stage" based on a four-stage product life cycle (embryonic, growth, mature, aging);
- ! Competitive position.

The competitive position is measured by its relative market power, i.e. market power that is compared to competitors, defined by the degree of mastering key success factors. There is a firm link between the competitive position of a business unit and its profitability. A similar link can be found between competitive position and the level of risk. The stronger the competitive position, the lower the risk, and vice versa.

<sup>3</sup> Strategor, Zarządzanie Firmą, PWN, Warszawa 2001, pp. 127-128.

<sup>4</sup> Ibidem, pp. 128-129.

The ADL matrix is a table whose columns represent a life cycle stage and lines refer to the measurable level of competitive position. Recommendations that can be derived from the ADL matrix are very general, contrary to the BCG matrix recommendations. The ADL matrix uses a larger number of strategic positions and sets out strategies of allocating business unit resources depending on sector attractiveness. The strategic recommendations include the following: natural growth, which engages all resources in segments with strong competitive advantage and potential segments, which are in the start-up stage. Selective development is the opposite of natural development and it consists of selective cash investment into mediocre or even weak segments to make them more profitable and possibly to improve their competitive position.<sup>5</sup> Giving up those segments, whose profitability is low or who put the business unit in a weak competitive position<sup>6</sup>.

Similarly to the two matrixes described above, McKinsey matrix also analyzes two variables:

1. Business unit strength
2. Market attractiveness

McKinsey table is a two-dimensional and nine-field table. The columns include segment values and lines " competitive position of the business unit. Each of the two dimensions can take one of three values: high, medium and low. Business unit segments are defined similarly to the previous matrixes. Strategic recommendations of the McKinsey matrix include the division into seven separate configurations of the two variables (business unit strength and market attractiveness). These are aligned with three basic strategies recommended by the ADL matrix<sup>6</sup>:

1. Development of those areas whose value and market position are attractive for the business unit " growth strategy. If a segment does not meet these two conditions, it should either be reinvested or given up for good.
2. Improvement of profitability of mediocre segments either in terms of segment value or competitive position " maintain.
3. Partly or fully give up unattractive segments " leave the market.

#### 4. Diagnosis of selected communes – empirical analysis

The detailed analysis within the scope of this work has been conducted for four selected communes: Myślenice, Michałowice, Pąm and Mogilany. They are all situated in the Małopolska Province.

The commune of Myślenice is located in the central part of the Province, 30 km south of Krakow and it neighbours the commune of Mogilany. It is surrounded by the hills of Wieliczka Foothills, which change into mild slopes falling towards the Raba Valley. From the south, the commune is embraced by the range of the Maków Beskids. The total area of the commune is 153.7 km<sup>2</sup> including the town of Myślenice: 30.1 km<sup>2</sup>.

The commune of Michałowice has a total area of 51 km<sup>2</sup> and it is inhabited by over 8,000 people, living in 19 villages. It is situated between the south-western part of the Miechów Upland and south-eastern part of the Kraków-Częstochowa Upland. It lies 10 km north of Krakow in the wide valley of the Dąbnia River, which is a left tributary of the Vistula. In administrative terms, the commune of Michałowice belongs to the Krakow district. The surrounding communes are:

<sup>5</sup> Strategor, Zarządzanie firmą, PWN, Warszawa 2001, p. 131.

<sup>6</sup> Ibidem, pp. 131-133.

Zielonki (west and south-west), Iwanowice (north), Kocmyrzów-Luborzyca (east), and the urban commune of Krakow (south). A major part of the area is situated within the Dębniak River Landscape Park and the Krakow Valleys Landscape Park<sup>7</sup>.

The commune of Pcim is situated in the south-eastern part of the Małopolskie Beskids, in the district of Myślenice. It consists of three villages: Pcim, Strzelce and Trzebunia, with 10,700 inhabitants all together. It is located along the S7 road leading from Krakow to Zakopane (46 km from Krakow and 61 km from Zakopane). Favourable position makes it easily accessible to tourists.

The commune of Mogilany is situated in the south-eastern part of the Krakow district, along the state road No. 7, which is the most important route leading from Krakow to Chyżne and Zakopane. It is a rural commune, with a total area of 43.55 km<sup>2</sup> located in the central part of the Małopolska Province. It is often regarded as Krakow's dormitory commune.

The research was conducted with the help of interviews and a survey. The answers provided by the respondents were supposed to show whether the analyzed communes apply portfolio methods when formulating their development strategies. It turned out that all of the analyzed communes formulate development strategies, yet none of them uses the BCG, ADL or McKinsey matrixes to diagnose the current status. The research also revealed that recommendations that are created on the basis of the above-mentioned matrixes are new commune authorities. Development strategies are only formulated on the basis of the SWOT analysis.

Portfolio methods are tools for assessing and planning changes in the product range, competitive position or management strategy. They are analytical methods, but they can support both diagnostic research as well as the decision-making process for the selection of product portfolio<sup>8</sup>. The methods are often used by companies; therefore it would be also advisable to use them in other organizations, such as communes.

The basic principle of portfolio methods is formulating a strategy in a coordinate system, whose variables define business situation of the company and its performance. The role of the matrix then is to highlight the results of diagnostic studies and show what changes should be made<sup>9</sup>.

The matrixes for the analyzed communes were created on the basis of a survey, interview and information available on their websites. The first applied matrix was the BCG matrix. Figure 4 presents the matrix for the communes of Mogilany and Pcim, whilst Figure 5 for Myślenice and Michałowice. The BCG matrix is an array of four fields defined by two coordinates: relative market share and market growth rate. It is used to analyze the structure and dynamics of the product portfolio. For communes, products are areas for change that push further development.

Development strategies can be developed with the help of the ADL matrix or McKinsey matrix. The ADL matrix is a table defined by two coordinates: life cycle stage and competitive position. In the light of previous studies<sup>10</sup>, the commune of Michałowice has the strongest competitive position (4.39); it is followed by Mogilany (4.15), Pcim (3.92) and Myślenice (3.17). The ADL matrix for the analyzed communes has been presented in Figure 1.

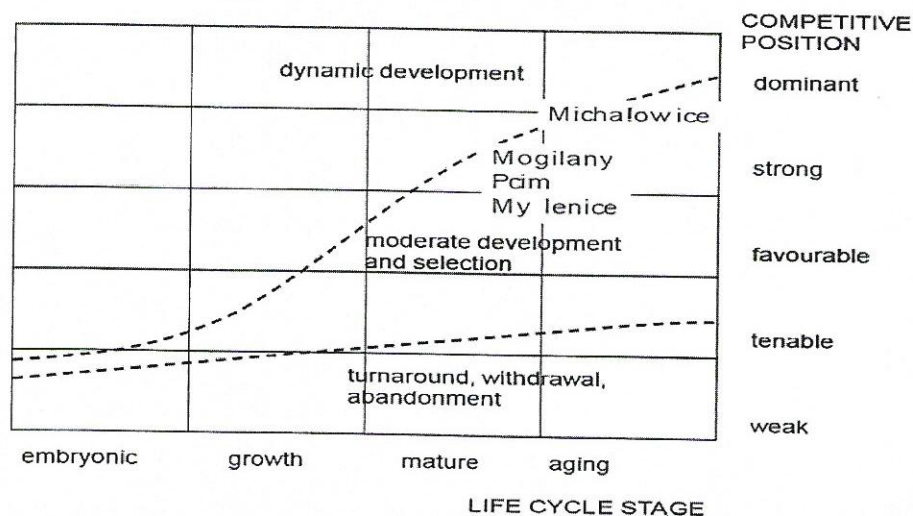
<sup>7</sup> <http://www.michalowice.malopolska.pl/gmina.php?stat=2>.

<sup>8</sup> A. Stabry, *Zarządzanie strategiczne w teorii i praktyce*, PWN, Warszawa 2000, p. 177.

<sup>9</sup> *ibidem*, p. 178.

<sup>10</sup> J. Gorzelany-Plesińska, *Analiza konkurencyjności regionu na przykładzie wybranych gmin powiatu krakowskiego* [in:] *Wyzwania polityki regionalnej i lokalnej*, (eds.) S. Ciok, A. Raczyk, *Rozprawy Naukowe IGiRR, UW*, No. 27, Wrocław 2012.

Figure 1. ADL matrix for the analyzed communes



Source: own work based on A. Stabry a, op. cit., pp. 186-187.

Based on Figure 1, it can be concluded that a strategic recommendation for the commune of Michałowice is moderate development with a growing trend towards rapid development. This is confirmed by proper use of resources in the commune, which is conducive to the overall development. Another conclusion can be that the commune in question has few areas that require change. The next communes under consideration are going to be Mogilany and Pcim.

The ADL matrix diagnosis for those communes points out the strategy of moderate development. It means that the analyzed communes have both areas which are used ineffectively and areas that should be supported by activities enhancing their development. Based on the analysis, it can be concluded the largest number of areas for change has been identified in the commune of Mylenice. This commune exemplifies the strategy of selection, which means that resources are not used properly and it is necessary to decide which areas are the first ones to undergo changes.

The next matrix which was created for the analyzed communes was McKinsey matrix (Fig. 2), which is a two dimensional table combining the parameters of business unit strength and market attractiveness.

Figure 2. McKinsey matrix for the analyzed communes

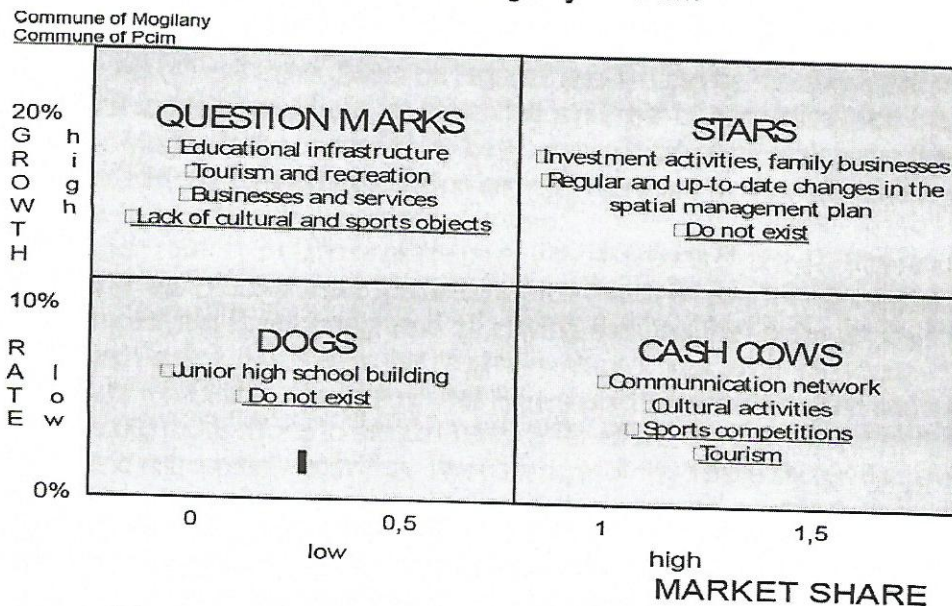
a t t r a c t i v e n e s s	Business unit strength			
		High	Medium	Low
High		INVESTMENT AND DEVELOPMENT Michalowice		
Medium			Mogilany Pcim Mylenice	
Low		SELECTIVE INVESTMENT	HARVESTING AND WITHDRAWAL	

Source: own work based on A. Stabry a, op. cit., p. 184.

Based on Figure 2, it can be concluded that the recommendations for development strategies in the analyzed communities are in line with those presented in the ADL matrix. Thus, the commune of Michalowice is noticeable for its strategy of investment and development, whilst Mogilany, Pcim and Mylenice are investing selectively.

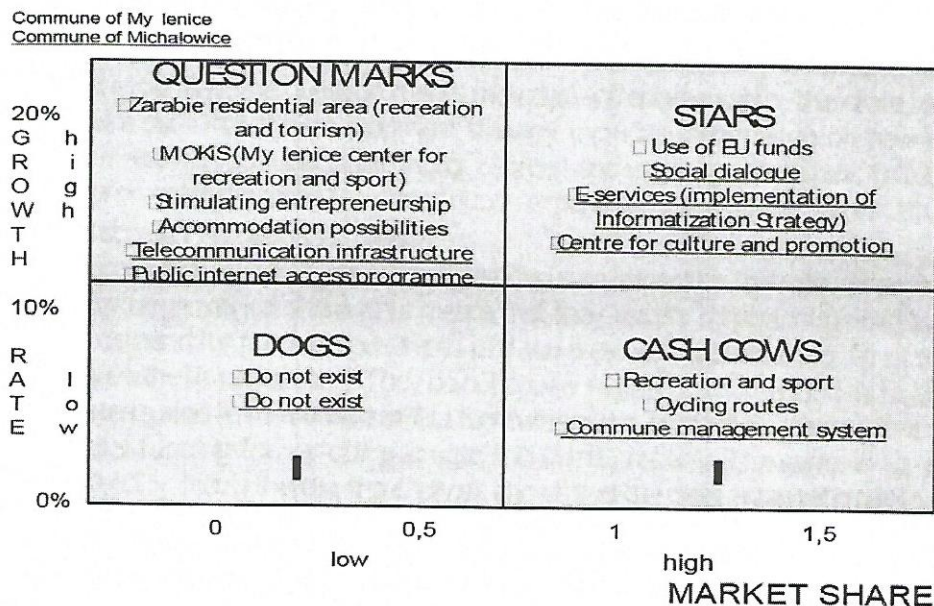
Since all the communities in question have the need to increase their competitive position by proper use of resources, the BCG matrix has been developed for them, because it illustrates best the areas for change. Figure 3 presents the portfolio for the communes of Mogilany and Pcim, whilst Figure 4 for the communes of Mylenice and Michalowice.

Figure 3. BCG matrix for the communes of Mogilany and Pcim



Source: own work based on A. Stabry a, op. cit., p. 183.

Figure 4. BCG matrix for the communes of Mylenice and Michałowice



Source: own work based on A. Stabryła, op. cit., p. 183.

Based on Figures 3 and 4, it can be concluded that the so-called dogs appear only in the case of Mogilany. The object which is the most serious burden to the commune is junior high school. The investment started some years ago, yet due to lack of funding (no subsidies were obtained), it was stopped. At the moment, it is put up for sale, which is not an easy process. The costs of investment were 11 mln PLN and the area of over 2 hectares, close to the Parkowe Wzgórze residential quarter. However, if it were possible to obtain some funding, the commune would gain a beautiful educational and sports facility. The remaining communes do not have any 'dogs'.

Cash cows in communes are those areas of activity that have developed very well and they satisfy the needs of inhabitants. Based on Figure 3 and 4, it can be concluded that for Pciim, this is tourism and sports competitions, as they bring a number of benefits to local inhabitants and authorities. In Mogilany, the cash cow may be the communication network and cultural activities. In Mylenice, this will be sports, recreation and cycling routes. Whilst in Michałowice the definite cash cow is the commune management system.

The question marks for communes are usually those aspects of activity that require financial input. Yet, after the financial input has been provided, such an area may become a cash cow or star, which means that it will bring benefits. Having analyzed the figures above, it can be concluded that each commune has areas that require investment prior to bringing benefits and satisfying the needs of inhabitants. The commune of Pciim should build some cultural and sports objects. Mogilany should make efforts to secure financing for education, tourism and recreation as well as services and entrepreneur activities. The commune of Mylenice should revitalize the Zarabie area, which should become a vibrant part of the commune, visited by a number of tourists. It is also necessary to develop accommodation facilities and stimulate entrepreneurship. Michałowice should aim for developing telecommunications infrastructure and public Internet access points. The interviews conducted with local authority representatives revealed that they



are planning to propose some solutions in that respect. The commune of Myślenice has already obtained some funding to revitalize the Zarabie. There is also a plan on what this area should look like to attract tourists. Nevertheless, there is still a problem of accommodation facilities. For Myślenice and Mogilany, the question marks included entrepreneurship; therefore local authorities should make sure that the development strategy includes information on how to stimulate local businesses and how to support the sector of small and medium enterprises. In turn, the commune of Michałowice is planning for a continuous expansion of the telecommunication networks and improved access to broadband Internet.

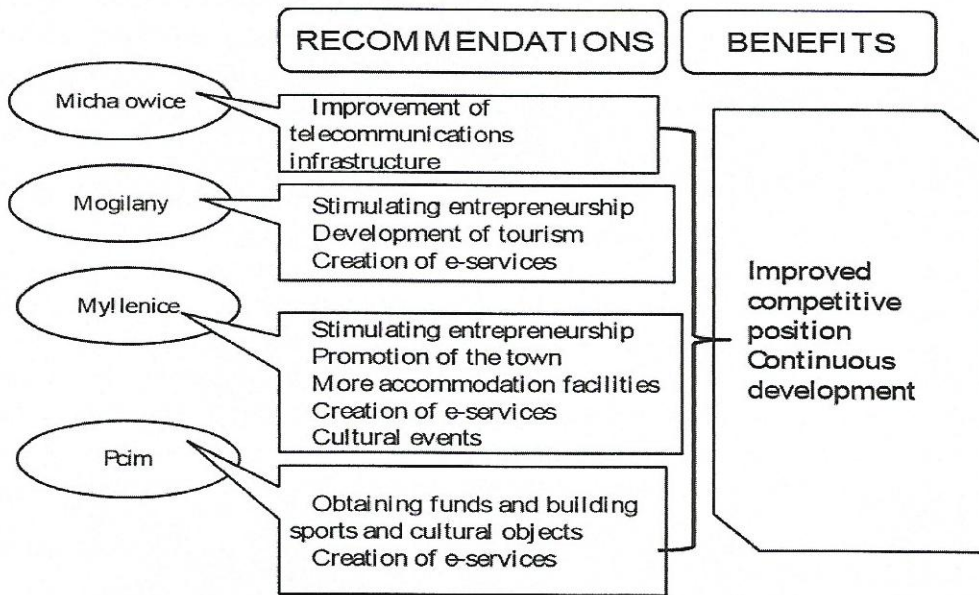
Stars for communes are those areas that exert decisive impact on their development. They are characterized by large market share (this means that they satisfy inhabitants' need to a large extent). Also the demand for products generated in these areas will increase. Not all of the analyzed communities have the so-called stars. They do not appear in the commune of Pcim. In Michałowice we can use the term star in the context of EU fund utilization, since the commune has managed to obtain substantial funding for various purposes and use it properly. The demand for EU funding is increasing steadily. Nevertheless, the analysis shows that the most areas referred to as stars can be found in Michałowice. This is mainly due to well-developed social dialogue, implementation of the Implementation Strategy (e-services and e-office) and the local Centre for Culture and Promotion. For the commune of Mogilany, the essential areas are investment activities and family businesses, regular updating of the local spatial development plan so as to enable the implementation of investment activities.

Based on the above analyses, it should be noted that portfolio methods are very useful tool for the formulation of commune development strategies. They can help local authorities determine competitive position of the commune and point out areas for change. This can be done with the help of the BCG matrix. Summing up, it can be said that the communes of Pcim, Mogilany and Myślenice should take example from the commune of Michałowice when formulating their development strategy and pay more attention to the implementation of Informatization Strategy and creation of e-services. The creation of the local centres for culture and promotion should be also part of the strategies, because of their major significance for the communes. Moreover, the analysis of the selected communes leads to the conclusion that the commune of Mogilany skillfully adjusts to the environment by regular updating of the spatial management plan.

## 5. Recommendations for the analyzed communes

The presented matrixes made it possible to develop conclusions and recommendations for local authorities. Based on the ADL and McKinsey matrix it can be stated that the communes use their internal resources insufficiently. They should therefore aim at improving their competitive position by introducing changes and proper utilization of resources. Areas for change in all communes have been identified with the help of the BCG matrix. The conclusions and recommendations coming from this matrix have been presented in Figure 5.

Figure 5. Recommendations for the analyzed communes



Source: own work based on conducted research.

Based on Figure 5, it can be noted that all analyzed communes have areas for change. The lowest number of such areas has been pointed out in the commune of Michałowice, which requires changes in telecommunications infrastructure. Access to broadband Internet and public Internet access points would help in effective and successful implementation of the Informatization Strategy, which is taking place only in the commune of Michałowice. The communes of Mogilany and Myślenice should plan for stimulating local business by various support programs or investment incentives.

It is also important to highlight here again the usefulness of the above mentioned matrixes in the process of formulating development strategies for communes. That is the main reason why they should be used by commune authorities, yet they are not. As mentioned before, so far the analyzed communes have utilized the SWOT analysis to formulate their development strategies. The application of portfolio methods makes it possible to determine competitive position of the commune as well as clearly point out areas for change. By means of those matrixes, the communes may also define the so-called learning areas. Learning means definition of activities that are being performed better in other communes and adaptation of their solutions locally. For example, the communes of Myślenice, Mogilany, and Pęcim could learn from the commune of Michałowice on how to implement the Informatization Strategy, where to create e-services and how useful it is for commune development to possess a local centre for culture and promotion<sup>11</sup>.

<sup>11</sup> The Centre offers a wide range of courses, such as: music lessons, language lessons: English, Spanish, Russian; chess training; maths; fitness classes; modern dance; folk dance; theatrical classes; vacation activities and trips. The facility also organizes various events, and also cares about the outside image of the commune by activities related to media relations (press, radio, television, internet portals), promotion (e.g. participating in fairs, creation of promotional materials: folders, leaflets, give-aways, posters), public relations (Internet website, newsletters, greeting cards, commune open days, etc.), own publications: *Gazeta Gminy Michałowice*. Moreover, the Centre promotes sports activities in the local community by coordinating the functioning of local sports clubs.

According to the authors, the one in Michałowice significantly contributes to the development of the commune. The other analyzed communes have not created such a strong unit that would stimulate local inhabitants.

## 6. Conclusion

Commune management is a complex and difficult task, which is why it should be performed with the help of management methods and techniques successfully applied in companies. Portfolio methods are very useful tools for assessment and development of product range as well as competitive position. The conclusions drawn on the basis of the ADL, McKinsey and BCG matrix would facilitate the process of formulating development strategies for communes.

The conducted research revealed that the analyzed communes do not use portfolio methods for diagnosing the current state and formulating development strategies. Moreover, the presented matrixes made it possible to develop conclusions and recommendations for local authorities.

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