Abstract: Statistically more than 50% of all mergers do not achieve synergies. In majority of cases the reason is the failure in post-merger integration (PMI). This paper develops further how the Sun Cube framework can be used in capturing synergies during PMI. The SUN Cube is a new stakeholder management system that can be used in M&A and can be defined from four perspectives. One of the main achievements is the quantitative methodology suggesting top management and shareholders how assess readiness and possible effects on synergies in specific figures. The Sun Cube framework helps to focus on KPI of specific stakeholders.

Keywords: stakeholders, M&A, post-merger integration, stakeholder management system

JEL Classification: G34

Introduction

The importance of stakeholder relationship management for successful post-merger integration is not doubted, and although the interest in stakeholders has grown substantially since Freeman (1984) published his work, we find a lack of papers that address stakeholder relationship management in M&A deals. There is especially a great need for a management system that can be used by practitioners.

Usually integration is treated as a project, and metrics are established to evaluate PMI (post-merger integration) performance, but there is a critical need for metrics that can trace the interests of all stakeholders. Donaldson and Preston (1995) notice
that the stakeholder theory establishes a framework for examining the connections, if any, between the practice of stakeholder management and the achievement of various corporate performance goals. Madhavan (2005), in his paper, mentions that “the M&A manager needs to manage seven sets of stakeholder expectations well.” He states that all the stakeholders are equally important, and up to 10% of customers can be lost during the integration period and due to poor stakeholder relationship management.

In our previous paper (Martirosyan and Vashakmadze, 2013) we presented a conceptual framework of a stakeholder management system for M&A deals, called the Sun Cube. The Sun Cube framework helps focus on the KPIs of specific stakeholders. In this paper we want to develop further how the Sun Cube framework can be used to capture synergies during the post-merger integration process.

In this paper we will describe each perspective of the SUN Cube and present an algorithm for stakeholder management in M&A deals.

Mapping Stakeholders

To be able to engage and manage stakeholders using the Sun Cube framework before an M&A deal it is critical to map the stakeholders. Our literature review shows that scholars have proposed many models for mapping stakeholders.

Up to fifteen stakeholder mapping and analysis approaches can be identified, which fall into four categories (Bryson, 2004):
- organizing participation or involvement;
- creating ideas for strategic interventions;
- building a winning coalition;
- implementing, monitoring and evaluating strategic interventions.

Regarding the methods for organizing the involvement or participation of stakeholders in a process or a project, there are five main identification and analysis techniques. A process for choosing stakeholder analysis participants (Eden and Ackermann, 1998; Friend and Hickling, 1997) and the basic stakeholder analysis technique (Bryson, 1995) are multistage decision-making procedures. Power versus interest grids, stakeholder influence diagrams and the participation planning matrix are the visualization tools for the impact and influence of stakeholders (Bryson, 2004).

Mendelow’s matrix (Mendelow, 1991) suggests a method for mapping stakeholders building on the notions of interest and power. Stakeholders’ power refers to their actual ability to affect the firm, while the interest refers to their desire to influence (figure 1).
Figure 1. Power versus interest matrix (Mendelow, 1991)

<table>
<thead>
<tr>
<th>POWER</th>
<th>INTEREST</th>
<th>Keep satisfied</th>
<th>Key players</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>Keep satisfied</td>
<td>Key players</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
<td>Minimal effort</td>
<td>Keep informed</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

One of the suggested modifications of the matrix is the power versus interest grid by Eden and Ackermann (Eden and Ackermann, 1998), which arrays stakeholders on a two-by-two matrix according to four categories: players who have both a direct interest and high power; subjects who have an interest but low power; context setters who have significant power but little interest; and the crowd, which consists of stakeholders with low interest and power.

A theoretical framework dealing with the importance of stakeholders, their influence on a project or a company (Harrison and John, 1996; Grimble and Wellard, 1997; Cleland, 1999) and their potential for collaboration and treatment (Savage et al, 1991) are undergoing further investigation in the economic literature.

To map stakeholders in an M&A deal we propose a modified approach to Mendelow’s power versus interest matrix. We have transformed it in order to identify the stakeholders with a greater influence on an M&A deal; additionally we have added an axis that will show the stakeholders’ attitude to M&A deal (table 1 and figure 2).

Table 1. Power versus interest matrix and the stakeholders’ attitude

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Power of the stakeholder (the influence of the stakeholder on the organization)</th>
<th>Interest of the stakeholder to influence the M&amp;A deal</th>
<th>Influence of the stakeholder on the M&amp;A deal (power*interest)</th>
<th>Attitude of the stakeholder to the M&amp;A deal (positive or negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>…</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder n</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the table above we can create the following matrix, which will help us to assign priorities. The matrix will help us to focus on the “right stakeholders,” who are important for capturing synergy.

Figure 2. Synergy destroyers and creators matrix

<table>
<thead>
<tr>
<th>Attitude of stakeholder towards M&amp;A deal</th>
<th>Comfortable stakeholders</th>
<th>Synergy creators Priority stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Synergy creators Priority stakeholders</td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>Dangerous stakeholders Need to be monitored in order to avoid transformation into synergy destroyers</td>
<td>Synergy destroyers Priority stakeholders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of stakeholder on M&amp;A deal</td>
<td></td>
</tr>
</tbody>
</table>

**Sun Cube Framework**

Much research has been dedicated to strategies for managing stakeholders from the focal organization’s point of view (Savage et al., 1991; Jawahar and McLaughlin, 2001) and to the ways in which stakeholders can affect the decisions of a firm (Frooman, 1999).

The SUN Cube is a new stakeholder management system that can be used in M&A deals and can be defined from four perspectives (figure 3).

Each perspective is assessed from the angle of different levels of stakeholder. The stakeholder levels are:
- First-level stakeholders (SH1) – shareholders, top management and personnel;
- Second-level stakeholders (SH2) – clients, suppliers and banks;
- Third-level stakeholders (SH3) – all other stakeholders.
Figure 3. The SUN Cube model

The SUN Cube scorecard is presented below (table 2). It shows the target and actual values for each perspective, and the perspectives are decomposed into the stakeholder levels. Then the deviation in percentage is calculated, and an action to be taken to improve each perspective is provided. The maximum target value for all the perspectives is 30 and the minimum is 0. We believe that the higher the actual value is, the more controllable and manageable the synergy effects are.

Table 2. SUN Cube scorecard

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Target value</th>
<th>Actual value</th>
<th>%</th>
<th>Comment</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run rate</td>
<td>9</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transparency rate</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiplication rate</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SH3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmission rate</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top managers</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total by perspectives</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The target and the actual values can be visualized for each perspective as shown below (figure 4).

Figure 4. The target and actual values for each perspective of the SUN Cube

Description of the Sun Cube Perspectives

The run rate is the ability of the stakeholder to take part in corporate constructive development and integration processes. This KPI should mainly exist to test stakeholders’ ability and readiness to cooperate constructively in M&A deal execution and integration development. It is well known that the majority of M&A deals suffer from the so-called “corporate allergy,” which occurs when, during the integration processes, two or more business structures cannot successfully merge and generate synergies from united operations due to their failure to meet the interests of stakeholders.

The target and actual values are numbered using the following scale, indicating the degree of stakeholder involvement:

- 0 – Not involved;
- 1 – Stakeholder is informed;
- 2 – Stakeholder is actively involved in the PMI team or consulting PMI team;
- 3 – Decision-making role.

In order to be able to set for each stakeholder a target value for the run rate and to understand the actual value of each stakeholder, Mendelow’s matrix can be used. Following this analytical approach we analyze each stakeholder from two perspectives: interest in the deal and synergy and power (influence) on the organization.

If Mendelow’s matrix suggests partnering with the stakeholder then the target value for the run rate will be 3, in the case of involvement or consulting with the stakeholder the target value will be 2 and if suggesting the engagement of the stakeholder will be just to keep him informed the target value will be 1 (Figure 5).
Figure 5. Modified Mendelow’s matrix

<table>
<thead>
<tr>
<th>Power (influence) on the organization</th>
<th>Involve Target run rate = 2</th>
<th>Partner Target run rate = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Inform Target run rate = 1</td>
<td>Consult Target run rate = 2</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

Interest in the deal and synergy

The **transparency rate** is the possibility to create a future map for each stakeholder after integration. Nevertheless, regardless of the target values set for each stakeholder from the run rate perspective, it is highly important to achieve the maximum target values for each stakeholder from the transparency rate perspective. This is an essential KPI for the CEO to measure and understand the transparency and clarity of the future after the M&A deal for each stakeholder. The reason for mentioning this is that without a clear vision of what will happen with the stakeholder, his position and his controlling stake in the business after the M&A, it is impossible to move on and accomplish successful M&A deals and post-merger integration. Before an M&A deal, it is highly recommended to create a future map for the stakeholder, which indicates the following information:

- Stake size after integration. This is the definition of the stakeholder’s business scale revenue that should be proven after consolidation and integration. When we introduce an M&A deal and choose it as the right opportunity for future business growth, it should be as beneficial for each stakeholder as without the M&A.
- Strategic and operational plan for a period of three to five years with financial and social KPIs.

We recommend two instruments for diagnosing and assessing these KPIs:
- A specially devised questionnaire disclosing the transparency rate. This is a special form devised for the key stakeholders to be completed with a later analysis of their answers showing whether or not they see the future and their role in the business clearly after integration.
- Personal interviews with stakeholder representatives.

The target and actual values are numbered using the following scale for the degree of transparency:

- 0 – not transparent
- 1 – transparent in the short term (up to 6 months)
- 2 – transparent in the medium term (from 6 months up to 1 year)
- 3 – transparent in the long term (more than 1 year)
The multiplication rate is the rate of possible value maximization for the stakeholder in the neighboring industry after an M&A deal in the considered industry. This new specific KPI should help the CEO conducting the M&A activity and integration to measure the stakeholders’ personal capitalization rate in neighboring industries after the deal.

It is true that while working in one industry in which we have core competences, we influence adjacent and neighboring industries that service our business model or invest in us. Therefore, in our case, when carrying out an M&A, we should understand how this deal with future integration will increase the value of our stakeholders in neighboring markets by giving them extra benefits. This can be pre-look and out-of-the-box thinking. When increasing the value of our stakeholders, we need to be concerned about their value increase in related and neighboring businesses, in which they can also benefit. The existence of multiplication effects can be helpful in developing a communication strategy.

The target and actual values are numbered using the following scale for the multiplication effect:

- 0 – no or negligible multiplication effect;
- 1 – existence of a multiplication effect.

Figure 6. Stakeholders’ network
While interacting and working on the basis of interdependence, the stakeholders of a particular business form a network that is a unique multi-organizational structure. Within the network approach to stakeholder analysis (Burt, 1992; Uzzi, 1997) there is always room for multiplication effects for stakeholders to some extent. However, the volume and direction of multiplication effects vary depending on the stakeholder and network characteristics, such as the centrality (Freeman, 1979; Best et al, 2007) and information richness of a particular stakeholder and the density and fragmentation of the network.

Assuming that the overall level of connectedness among the stakeholders in the network is appropriate, i.e. the network is not fragmented, does not have any significant restrictions and in general enables multiplication effects, in order to describe the potential for multiplication effects of each stakeholder the following matrix can be considered (Figure 7). The degrees of centralization and multiplexity reflect the number of direct links and sustainable connections maintained by stakeholders. Information diversity (Koka and Prescott, 2002) is a measure of the variety and quantity of information flows that stakeholders can access through their relationships.

Figure 7. Multiplication rate matrix

<table>
<thead>
<tr>
<th>Degree of Centralization and Multiplexity</th>
<th>Information Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of Peripheral Position</td>
<td>Close to Centrality</td>
</tr>
<tr>
<td>“Close to Centrality (Multiplex Ties)”</td>
<td>“Gatekeeper” Position lies between the positions of other stakeholders Actual multiplication rate $= 1$</td>
</tr>
<tr>
<td>“Off the Road” Least likely to create a multiplication effect Actual multiplication rate $= 0$</td>
<td>“Long Path” Long path connecting a stakeholder to all the other stakeholders in the network Actual multiplication rate $= 0$</td>
</tr>
<tr>
<td>Min.</td>
<td>Max.</td>
</tr>
</tbody>
</table>

As far as multiplication effects imply the creation of value for stakeholders within and across networks, the target value for all the stakeholders would be 1.

The transmission rate. This is a rate that fixes the stakeholder’s ability to pass to the new development stage in corporate business development. By understanding the evolution of business values, we can propose four stages of corporate management philosophy (Figure 8).
The last stage (focusing on environmental, social and governance, ESG) requires a completely different managerial philosophy of business development. By providing this specific KPI for CEOs, we help them to understand the type of stakeholder and the main drivers that bring motivation to possible M&A deals. For the success of future integration, stakeholders should be at the same or a similar stage in terms of business development approaches, which are essential to creating common value and a communication base. This indicator enables a CEO to understand the total stakeholder approach to business and avoid problems in integration. This rate should be measured using the 360C method of analysis, by which we can determine the main stakeholder’s focus at the present moment. This KPI can present an M&A deal for reconsideration. The more the stakeholders are at the same level of business focus and development stage, the better the possibility for future successful integration. It is difficult to carry out successful integration if one stakeholder is at the ESG level of development and another is at the first – cash flow. Common understanding and a philosophical approach to developing business facilitate successful results for integration.

The transmission rate is the only perspective that is analyzed only for first-level stakeholders.

The target and actual values are numbered using the following scale for the transmission effect:

0 – Positive cash-flow orientation
1 – EBITDA orientation
2 – Market capitalization orientation
3 – ESG orientation (shareholder wealth maximization through stakeholder wealth maximization).

We suppose that shareholders and the majority of top managers focus on shareholder value creation or ESG, i.e. benefiting all the groups of stakeholders. The reasoning is the following. As far as mergers and acquisitions are used as a value creating tool, an acquirer must have already been aiming at value maximization. As a result, the target value for the transmission rate is always 2 or 3. Thus, the target transmission rate for all the levels of stakeholders is based on the maximum actual figure for each stakeholder. In other words, if the shareholders of an acquirer focus on maximizing the value of the company, then for all the stakeholders, of both the acquirer and the acquired company, the target value for the transmission rate should be at level 2.

An actual figure for the transmission rate can be estimated not only on the basis of interviews, but also on the basis of the following express diagnostics:
- Is the strategy of a target company focused on generating profits or on value creation?
- Are the financial statements of a target company prepared under IFRS or GAAP?
- Are the strategy and strategic goals communicated to the personnel of the acquirer and the target company?
- Is an incentive and bonus system developed for the top management and personnel in a target company?

Algorithm for Stakeholder Management in M&A Deals

Below is a ten-step guide to using the above-described methodology:
1. List the stakeholders, both internal and external, who could have an influence on synergy effects;
2. Identify areas for potential synergy using the ertsgamma framework;
3. Define the stakeholders who have a direct impact on each of the 12 factors from the ertsgamma framework;
4. Map the stakeholders to identify the “destroyers” and “creators” of synergy effects that are the priority for the deal;
5. Define the “destroyers” and “creators” of synergy effects for each level of stakeholders;
6. Estimate the target and actual values for the run rate (stakeholder involvement) for the stakeholders by levels;
7. Estimate the target and actual values for the transparency rate (certainty perspective) for the stakeholders by levels;
8. Estimate the target and actual values for the multiplication rate for stakeholders by levels;
9. Estimate the target and actual values for the transmission rate (evolution of business values) for stakeholders by levels;
10. Develop a stakeholder relationship strategy on the basis of an analysis of the target and actual values.

Conclusion

In this paper we have developed further how the SUN Cube framework can be used to capture synergies during the post-merger integration process. We propose a ten-step algorithm for the proposed methodology. One of the main achievements is the quantitative methodology proposition regarding how the top management and shareholders can assess the readiness and possible effects on synergies in specific figures. For our next piece of research we will introduce the case-based method, with which we will prove the working mechanism and practice orientation of all the proposed instruments using real cases.

NOTES

1 Ertsgamma is a visual representation of 12 factorial ROE decomposition of the acquirer and target companies. It helps to identify the areas in which synergy can be reached and to perform a synergy valuation for the combined company (Vshakmadze, 2012).

REFERENCES


