

Cooperation between Economically Independent Companies that form a Business Concern

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Abstract: During the examination of a Hungarian manufacturing company operational defects had been detected, which mainly originated from the incorrect structure of the corporation. This article deals with the analysis of the relations between divisions; its aim is to define the benefits and the drawbacks of structural features to achieve an optimal cooperation model. A special sub-type of division cooperation, problem and solution is demonstrated through the waste material handling processes of a Hungarian manufacturing company. In the article a cooperation regulation is also described, which is how the process protocol should operate between divisions. The formation of a business cooperation between independent companies belonging to a business concern is the result of the fact that not all of these separate companies can fulfil customer orders 100%, because of the lack of resources, technology or know-how. In such cases these companies have to work in cooperation to provide such circumstances that their production can run with full capacity. Constant production with maximum capacity is the essential interest of each company. If these elementary principles are not present the company divisions obstruct each other. To detect the exact problems, and the solutions first the features of the basic structure types are demonstrated.

Keywords: Cooperation companies, business concern

1. Structure of business concerns

Business concerns can have a standard and holding structure. The former means that the divisions of the business concern don't make independent economic decisions (functional organizational structure). In the case of the latter divisions are connected only by the owner, they function as independent legal entities, making independent economic decisions (divisional organizational structure). (Table 1.)

Table 1. Types of Organizations – legal structure

<i>Type of Organization – legal structure</i>	<i>Explanation</i>
<i>Functional organizational structure</i>	<i>Divisions of the business concern are not economically independent; decisions are exclusively made by an economic company.</i>
<i>Divisional organizational structure</i>	<i>Divisions have independent business, legal and economic separateness, while they have the same owner</i>

The centralized structure supports the ambitions of the business concern to achieve economical optimum. This type of structure needs a lot of organizational work and cooperative activity between divisions. The divisions don't produce goods independently; they don't have any final products that enter the market.

Table 2: Features and terms of application of the organizational models

	Model of the organizational structure	
	Functional	Divisional
Terms of application	<ul style="list-style-type: none"> - Homogeneous basic activity - Stable, not complex environment 	<ul style="list-style-type: none"> - Diverse activity - Dynamic, complex environment.
Features of organizational model	<ul style="list-style-type: none"> - The basic activity is done by functional sub-systems - Strategic and operative decisions are made by the central management - The operation (tasks and competences) of the organization is regulated also at the lower levels - The structure of the specialized sub-systems can differ from each other. 	<ul style="list-style-type: none"> - The basic activity is specified by product, customer or regional principles. - The central management makes the strategic decisions, the leaders of the divisions make the operative decisions. - The operation of the divisions is regulated. - The inner structure of the divisions can differ from each other, they are functionally specialized.

In the case where the business concern forms a holding structure, where low organizational work and cooperative activity is needed, and the divisions manufacture their own final products, the problem is that the members of the business concern aim to optimize their own operation, which probably doesn't result in a global optimum.

The features of the types of organizations are illustrated in table 2.

2. Examination of the organizational structure of a Specific Business Concern

During the research the manufacturing activity of a business concern was examined in detail. This company was built up in a holding-like, mixed structure (figure 1). In a mixed structure the divisions operate independently from each other, trying to reach a local optimum, but there are still some functions of the business concern, that are provided by one division, such as finance, controlling, logistics or informatics.

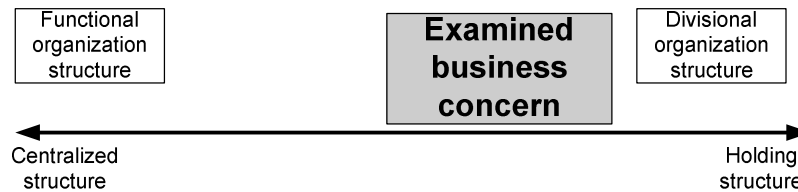


Figure 1. Position of the mixed structure

In the case of this business concern the cooperation procedures between divisions are strictly regulated, which conflicts with the holding-like organizational structure, since these regulations obstruct the separateness of certain divisions.

Research has been made at this company to find out how to change the regulated cooperation obligations to be advantageous. To achieve this, two possibilities exist; either we change the company structure and abolish profit centres or we can modify cooperation regulations, so that it would fit to outer market mechanisms.

2.1. Problems with present cooperation protocol

The cooperative regulations effect the divisions unequally, since the regulations are not based on the principles of the market, so in many cases only one of the parties get the advantage. The demands of the other party can only be fulfilled if all cooperation parameters are present.

The two parameters of the cooperation are quality and cost; within quality product and service quality can be distinguished. Product quality depends on the place of origin, specifically which division produced it. Service quality ensures the delivery deadlines and the terms of delivery. These parameters are determined by the availability of the human resources and machinery capacity.

The machine hour of manufacturing equipment is not as flexible as the labour hour since only human resources can be transferred between divisions – this is true in the case of this specific examined company, where resources mean heavy and extensive machinery, not hand tools.

If capacity is not available at one particular division, the cooperative skill is low. If there isn't any available machinery, the division has an opportunity to rent machinery from the other division and have its own operators use it. This flexibility can be

achieved only with internal cooperation. In the examined company the lack of machinery capacity is the result of technical failure, or the aftermath of the fact that manufacturing equipment has been sold in the outer market.

When one division is obliged to cooperate under such circumstances, this compulsory cooperation may conflict with the business strategy of the partner division.

2.2. Optimal cooperative structure

During the research a new cooperative regulation for the examined company was determined. Since the holding structure seems to operate sufficiently, only the cooperative regulation should be modified, so that the outer competitive effects could influence decisions, besides the inner cooperation would have the priority. The protocol of the suggested cooperation process modification is illustrated in figure 3.

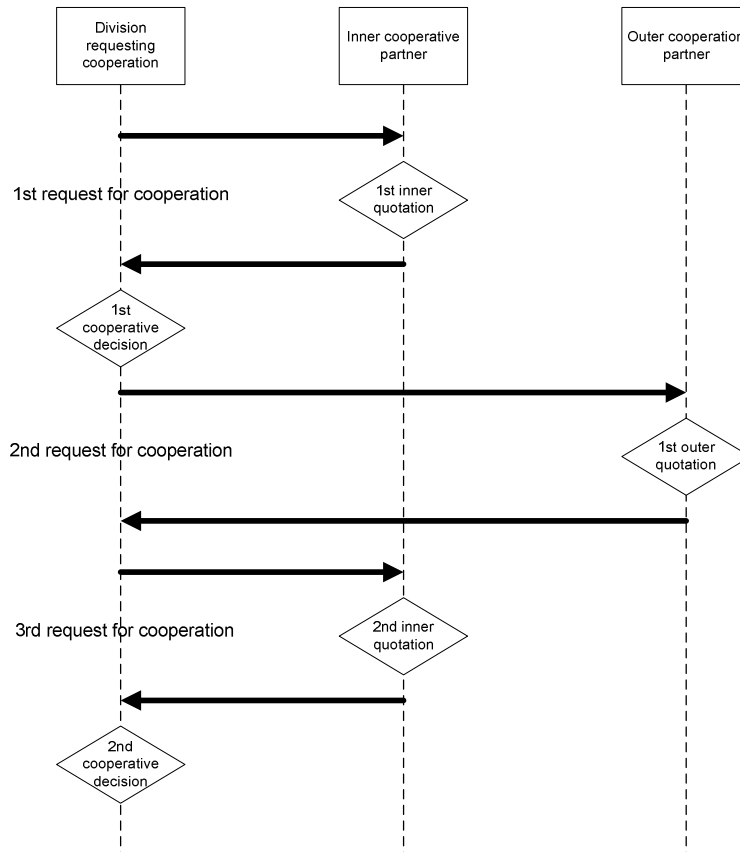


Figure 2. Cooperative protocol

The new cooperation regulation provides a priority for inner cooperation under competitive circumstances. The regulation consists of three steps:

1. Compulsory quotation request from the partner division, if capacity cannot fulfil customer needs.
2. If any point of the inner cooperation quotation is not adequate, the division has to request for an outer quotation.
3. The division has to inform the partner division about the received outer quotation, so that it can modify its previous quotation. The division chooses from the outer and the modified inner quotation.

The cooperative process is described in figure 3.

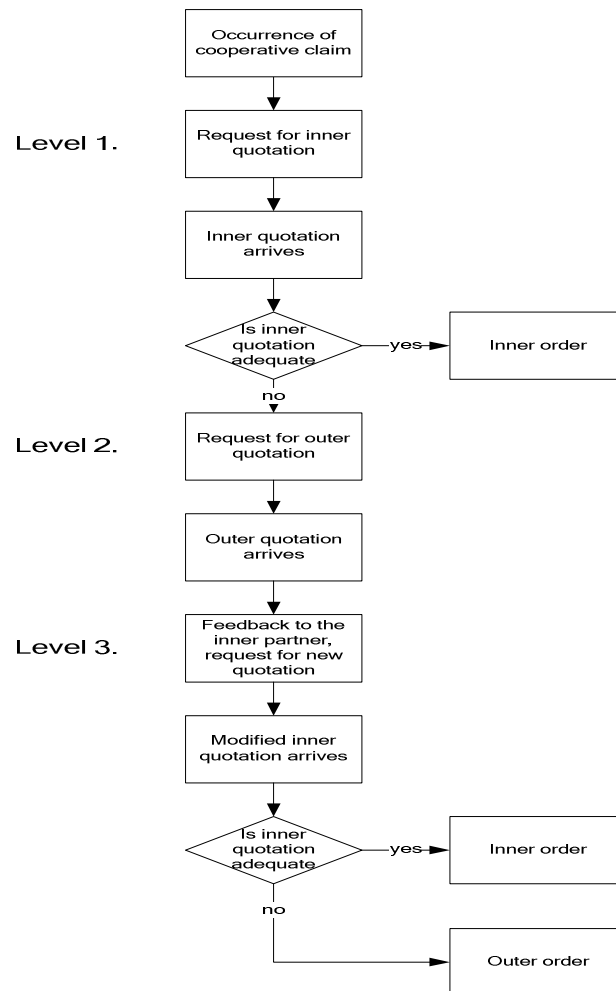


Figure 3. Modified cooperative procedure

With the modified cooperative regulation, the business processes become more traceable, they follow the principles of the outer market, and the benchmarking function appears. The regulation provides advantages for the inner partner, as the cooperation is not obligatory, the partner division does not have to allocate usable resources for less profitable inner cooperation.

3. Waste material handling

During the course of the examination of cooperative problems in this specific industrial corporation, a special element of the cooperation protocol emerged, the problem of waste material. In this case waste material has the same quality as raw material, but it is smaller than standard size raw material - it is produced during the cutting of raw material plates. Because of the features of this technology the production time of waste material reuse process is longer.

At many industrial corporations waste material may be used up during latter phases of production. The examined company applied strict regulations on how to handle waste material in cooperation, as indicated in figure 4.

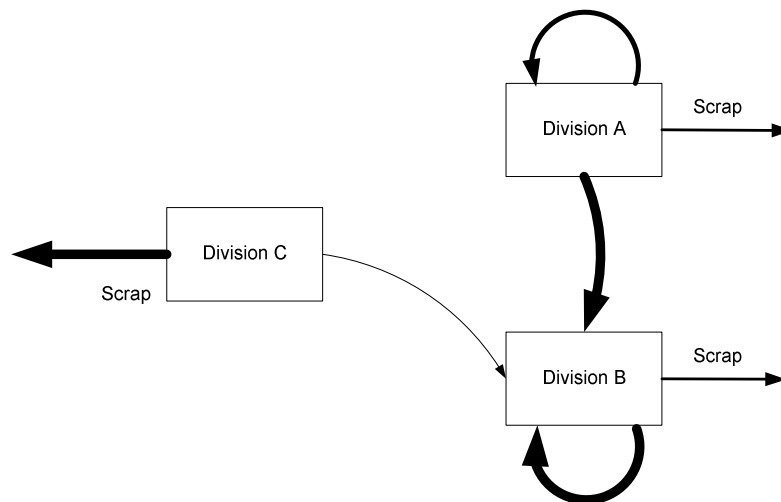


Figure 4. Waste material flow between divisions

Division C is a commercial division, which is suppose to keep contact with the outer market. Division A and Division B are manufacturing divisions, but Division A produces only with automatic machinery. The width of arrows symbolizes the intensity of the waste material flow.

The problem of waste material is a remarkably adequate example to examine the effects of company structure. The waste material flow in this holding like company structure is relatively low, because in the case of this company the divisions are not interested in the reuse of waste material. That is because of the technical features, namely reuse needs more labour hours than normal production, since automatic machines are calibrated to handle standard-size raw material. Regulation has to be applied to make the company's global interests prevail. The benefits of reuse would be global because waste material doesn't mean extra cost for the company, since its cost price has been calculated as a loss during production, and has been added to the purchase price of the final goods.

At the company the waste material is registered at a defined price, which is in proportional size to the raw material, and not at a discount price. This way the partner divisions, and also the outer market are not interested in the reuse of waste material, unless it's registered less than the raw material cost price and reduced by an extra production/handling cost.

To solve the conflict, the company should introduce a strict regulation of cooperation between the divisions, so that the waste material would be available for partner divisions at a reduced price. Besides financial regulation, the priority of markets was determined, so that the waste material is reused in the most cost effective way. The priority of waste material markets is shown in figure 5.

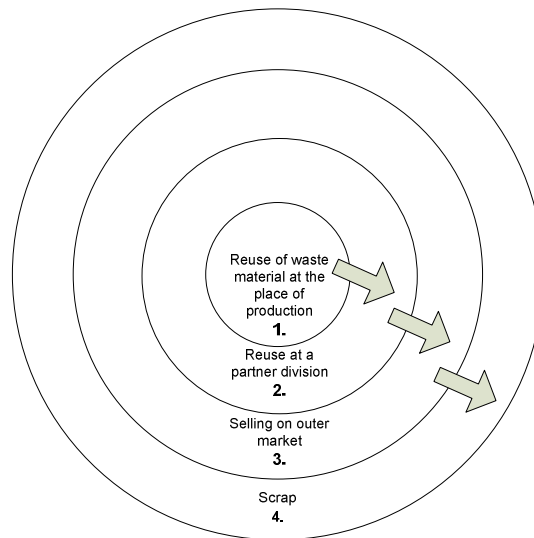


Figure 5. Priority of waste material markets

The waste material flow between divisions would change if the company ensured the priority principles described above. The connection between divisions would be tighter and only one market would need to sell to the outer market (figure 6.).

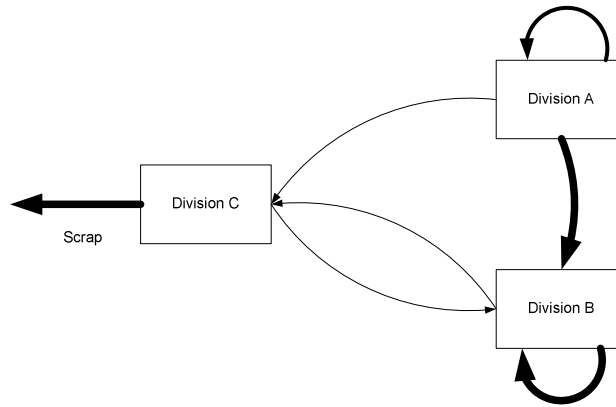


Figure 6. Optimal material flow between divisions

The divisions should be categorized into two categories: commercial and production divisions. The commercial divisions have to purchase the waste material that is not reusable for the production divisions, and sell it on the outer market, so that the business strategy of the concern is not disturbed. If the waste material is not marketable, it should be depreciated. The handling protocol of the waste material is described in figure 7.

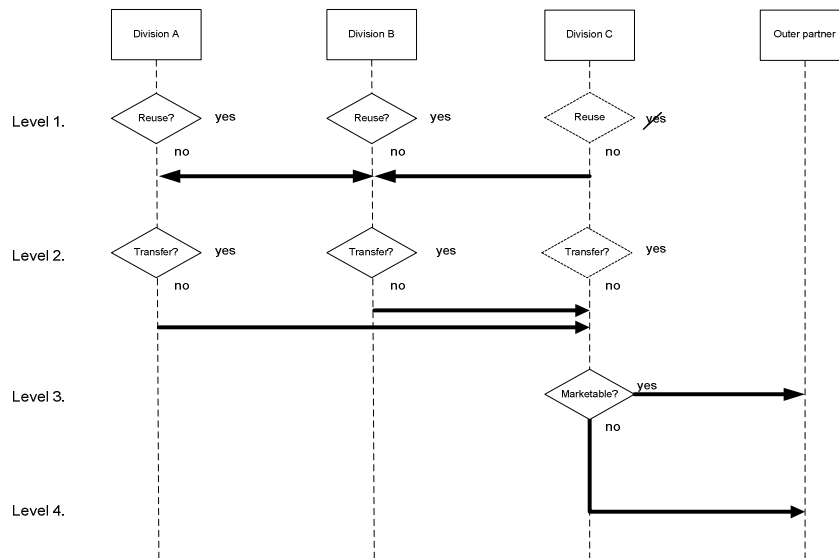


Figure 7. Handling protocol of waste material

Level 1: Waste material is reused in the division, which is significant in the production divisions. If reuse is not beneficial, the division has to offer it to the other production divisions.

Level 2: Waste material is transferred between production divisions. Those that are not reused by production divisions are transferred to the commercial divisions.

Level 3: Waste material is sold by the commercial division on the outer market.

Level 4: Waste material is depreciated as scrap; if this level is reached there is no profit for the corporation.

The upper protocol would provide maximum profit from waste material.

4. Steps of implementation of cooperation regulation

The modified cooperative regulation can only be competitive if it handles incoming customer claims within a reasonable time. To provide short processing time the IT system has to be improved. A web page should be created, where a division can register its cooperative claim for the partner division online. The partner division would have to answer the quotation request in a predefined response time. The request for the quotation should be forwarded to the outer partners using suitable telematics equipment. It also would be easy to get the overall picture of the current market situation, by using the reporting tools of the system.

The structure of the system is indicated in figure 8.

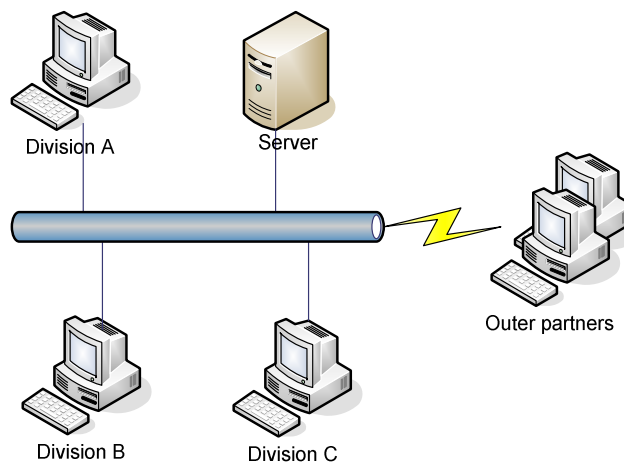


Figure 8. Telematics support of the cooperative process

Because of the structure of the examined company the information contact with the outer market should be the task of one specific commercial division. To provide the

dynamism of the system, the waste material flow has to be transported between levels at an adequate pace. In this case the logistics costs can be minimized since the waste material is transported from its place of origin, just before it can be reused at the next level.

During the planning and the development of the structure of the business concerns, the future basic processes are influenced. Waste material handling and flow is only one process, which is basically determined by the cooperative structure of the company. Each structure has its own benefit, but in many cases- as in the example above- a hybrid solution is needed to achieve optimal operation and maximum profit.

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