

THE INTELLECTUAL CAPITAL AND MATRIX-SHAPED STRUCTURE

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Abstract:

This paper wish to show how important is to have flexible structure in organizations, defined as matrix organizations. To obtain such structure and to make it functionally it is important to have intellectual capital.

To avoid crisis there are solution done by intellectual capital that manage matrix-shaped structure.

Key words: *budget, intellectual capital, matrix-shaped structure, crisis*

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Human capital and the budget. Human Capital Management, also known as Talent Management, is an ongoing process that organisations use to attract appropriately skilled and motivated employees (“talent”); integrate them into their organisations, assess and develop their competences and retain their commitment. The term human capital is recognition that people are important and essential asset who contribute to development and growth, in a similar way as physical assets such as machines and money. The collective attitudes, skills and abilities of people contribute to organisational performance and productivity. Any expenditure in training, development, health and support is an investment, not just an expense. Human capital plays an important role in the process of economic growth and individuals' labour market outcomes are linked to their educational attainment. Although an organisation or business is a separate legal entity, its ceases to exist if it has no people - leaders, directors, members, employees - are required to maintain an organisation's existence. Human capital averages about two-thirds of the total value of the capital of most economies, which includes land, machinery, and other physical assets as well as the skills and talents of people.

Employee-related costs an average up to 60% of a company's expenditure, and in a developing market these costs can quickly spiral out of control, impacting bottom-line results. The costs for human resources (also known as personnel or human capital) represent the largest single share of organisation's budgets. Reducing human resources costs must be a part of the strategy. There are a lot of option to cut human resources costs, including hiring freezes, pay freezes or reductions, reduced work hours with a corresponding loss of pay, lay-offs, use of volunteers, and incentives for early retirement. It is important to integrate these options the state's law, human resources policy, and collective bargaining contracts if they exist.

It should be management objective to reduce costs and improve productivity. Many HR departments are preoccupied to find themselves doing more with fewer resources. Dealing with the crisis, pressures on the HR department are even greater. Sometimes, businesses are shrinking their overall workforces at the same time that specific departments are actively recruiting and hiring new talent to maintain a competitive edge.

One of the solution to reduce the budget is to freeze the hiring process. It could be a way to create temporary salary savings and/or permanent savings by delaying the

filling of positions or eliminating the need to fill a position. Most of organisations first institute hiring freezes to deal with budget reductions. Savings result from not filling vacant positions and the attrition as employees leave. The high level management considers that hiring freezes are relatively easy to implement and no employees are forced to leave their jobs. That's why they are popular. For all positions or with specific exceptions hiring freezes can be implemented. It is important to explain to the employees the reasons for the exceptions based on achieving the organization's mission and maintaining services, if some positions are accepted.

But it exist a great risk Organization could lose employees critical to its mission, not replacing them can lead to problems in providing essential services. To achieve their targets many organisation's functions requires employees with specific licenses or certifications to perform duties. If such employees leave, the organisation's could not do the products or the services on high level quality, or maybe, not even to comply with the contract terms. Therefore, hiring freezes need to be instituted with careful consideration of what exceptions are necessary.

Another solution is pay freezes that helps save money until the budget situation changes. Pay freezes are easily implemented and generally are perceived as fair by employees. With this method, employers face the possibility that their highly talented or special skilled employees will be recruited by other employers necessitating a process for considering and making exceptions.

Solutions for Human Capital to avoid the effect of crisis. Crisis suppose difficult times and difficult times requires difficult decisions. Some companies, in an attempt to ride the economic downturn have resorted to asking staff to take a pay cut. Some organisations use pay reductions to meet budget cuts. For pay reductions to work, they need to affect all employees to avoid morale problems.

Another strategy for reducing payroll costs is to reduce the number of hours employees work with a corresponding smaller paycheck. Some companies have already moved to a shortened workweek following the recession. Others use the four day work week saving associated costs such as on energy for maintaining lighting, heating, and air conditioning of buildings for one fewer day a week. Lay-offs provide yet another strategy for saving money on human resources. As with hiring freezes, it is important for the organisations to plan the lay-offs care fully to maintain the mission of the jurisdiction. To protect morale, it is important to explain the lay-off policy and the rationale for it.

It could be one of organization policy that employees occupy vacant positions if these positions are not frozen. It should think about benefit costs. Some benefits must be continued for various periods of time after lay-off and employees may be eligible for unemployment compensation which leads to some cost for the employer. One of the benefits is that strategic employers sometimes use budget cuts to reinvent or reengineer their organizations. By focusing on how they can better accomplish their missions, they can reorganize or eliminate units and positions.

Navigating the Fiscal Crisis by retirement. Many organizations offer the possibility to their employees to retire earlier. Most of those employees who are eligible for retirement usually are the most senior and typically among the higher paid. Organisation can offer incentives for retirement and save money in the long run.

We can talk about a short term benefit. That is that the employee is no longer on the payroll as retirement income comes from a separate fund that already has been paid into on the employee's behalf. In such cases new, lower paid employees can be hired in the retiree's place thus saving money.

If we speak about the long term benefits we can say that cost savings may accrue from redesigning the position or reorganizing the work and unit. Organisation should hire employees for seasonal jobs or in areas where the need for employees is elastic.

When the need for them rises, organisation can quickly hire contract employees. The organisation is not committed to long term employees with the attendant benefit costs that often add as much as 35% beyond the direct salary or wage. With whatever strategy is used to reduce human resources costs, the process must be developed with care based on criteria that support the organisation's ability to achieve its mission. The employer must also clearly explain the decision, the process, and the rationale for the policy. Transparency is essential to maintaining positive morale among the employees. Finally, the policy and process must be free of discriminatory impact.

We can make a link between two relatively modern concepts like **intellectual capital (IC)** and **matrix organization** might sound like an ideal partnership. This paper looks at the tensions and benefits within that partnership, and some ways of capitalizing on them. In knowledge-based industries, innovation– the creation of new knowledge – is essential for survival and growth. Facilitating innovation and managing the intellectual capital engendered along the way is a challenge, but when placed in the context of differing organizational structures, cultures and technological and economic trends, it may seem hard to know where to start.

Matrix shaped organizations are more flexible. In a matrix-shaped organization spread around the globe addresses several layers of complexity and illustrates the points with examples from the company itself. Matrix structure offers the possibility to employees to occupy different positions in organizations. The discussion moves from issues associated with the matrix structure, through the impact made by organizational strategy and how that strategy is communicated, to human factors and issues of organizational culture, before looking finally at the skills sets required by managers working within such organizations and attempting to meet strategic demands for greater facilitation of intellectual capital.

Intellectual Capital means more than human resources. It's a matter of investment. It means also to explore intelligence, skills and abilities. The intellectual capital theory states a link exists between investing in human resources and measurable improvements in the organization's bottom line. Stakeholder relationships, internal and external, benefit from well-tended IC and a positive correlation can be found between improved productivity and organizational financial success and IC satisfaction. The focus on intellectual capital demonstrates the shift to a knowledge economy, information management, and the employment of people for their creativity, connectivity, and knowledge (Mouritsen, 2002; Senge, 1999). This change constitutes a paradigm shift in organizational thinking with regard to the utilization and valuation of their IC assets as reflected in the evolution of organizations from earlier eras to the present time.

We have to define Intellectual capital in dynamic way. The definition of intellectual capital is a moving target. For the purpose of this study intellectual capital is defined as a critical human resource depicting the organization's knowledge, connectivity, and corporate awareness

The information is one of the most important key of an organization. To be the first one on the market with a new product, to have the newest technology is that that makes the difference. Human Capital is the organization's 'know-how', Structural Capital may be considered as the organizations systems or work processes, and Customer Capital as its relationship with its customers.

The **matrix organization** is an attempt to combine the advantages of the pure functional structure and the product organizational structure. This form is identically suited for companies, such as construction, that are "project-driven". The figure below shows a typical Matrix organization.

In a matrix organization, each **project manager** reports directly to the vice president and the general manager. Since each project represents a potential profit centre, the power and authority used by the project manager come directly from the general manager.

Information sharing is mandatory in such an organization, and several people may be required for the same piece of work. However, in general, the project manager has the total responsibility and accountability for the success of the project. The functional departments, on the other hand, have functional responsibility to maintain technical excellence on the project. Each functional unit is headed by a department manager whose prime responsibility is to ensure that a unified technical base is maintained and that all available information can be exchanged for each project.

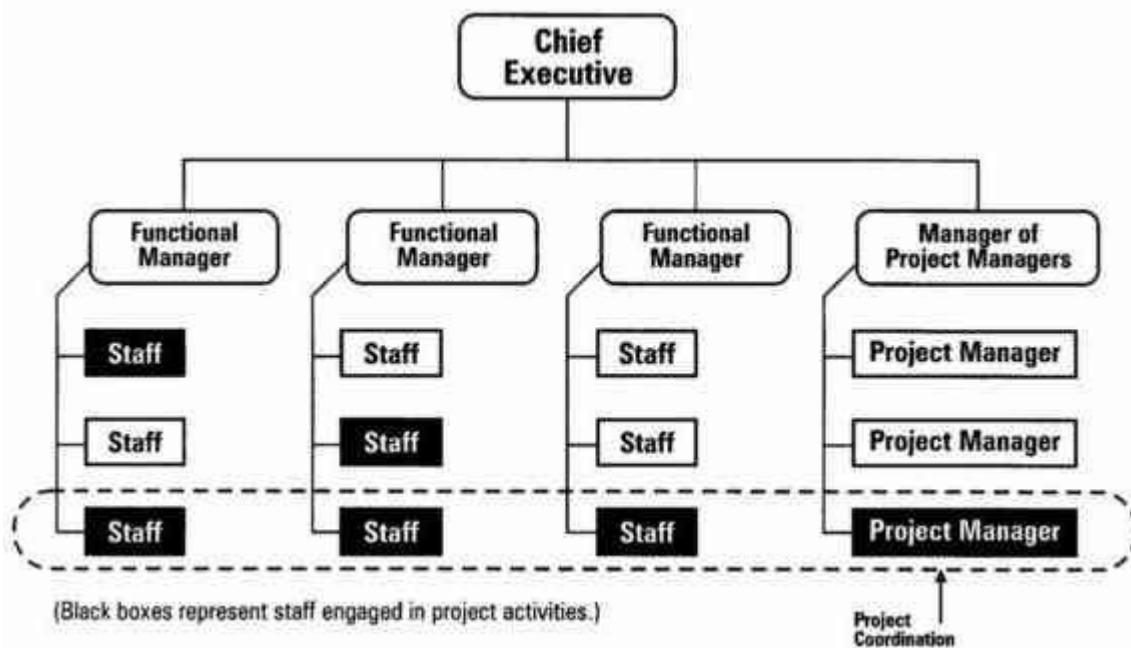


Fig. 1. Matrix structure

The basis for the **matrix organization** is an endeavor to create synergism through shared responsibility between project and functional management. Other advantages of a pure matrix organizational form, to project management, include:

- Because key people can be shared, the project cost is minimized
- Conflicts are minimal, and those requiring hierarchical referrals are more easily resolved
- There is a better balance between time, cost and performance
- Authority and responsibility are shared
- Stress is distributed among the team

Intellectual capital, meaning skills and experience is the force that make function such a structure.

Traditional hierarchical structures do not offer to the employees enough flexibility, and for the human resources with special skills is not the way to proof their capacity. To discuss these entrenched interests and specific dynamics in a matrix organization, it is worthwhile to briefly examine the more traditional hierarchical structures often found in many organizations, for comparison purposes. In a hierarchical or 'family tree' model, there is a danger that prejudiced opinion, however well intended,

will stifle innovative ideas or individuals who may be thinking differently from the chief or simply outside conventional solutions.

Matrix organization structure permits to accommodate innovation. It is unlikely that many organizations, apart perhaps from those engaged primarily in research and development activity. In many organizations, the emergence of a new idea immediately overloads someone, often the subject matter expert, with an additional and unwelcome task in reviewing it. Intellectual capital is the force that make organization to be more efficient because the innovative process.

The most important target of a structure is to be able to create the possibility to produce or to make services that satisfies customers. Within contracting organizations the two-way flow may have to extend beyond the company, to include the customer. This happens when the development of IC may include proprietary issues involving the customer, such as might occur when the service company and customer are working in some form of partnering or alliance arrangement, and sharing the costs and benefits of an innovation.

The matrix structure involves a lot of bureaucracy. Only in the open culture of the matrix model, communication working across parts of the organization is more likely to be normal.

Such matrix structures are geographical spread. So, this structure can represent a multinational organization scattered on different part of the world. A multinational organization has diversity not only in terms of people and cultures, but also in inter-person trust levels, arguably made more complex because of the very diversity that can bring such value to the business in many other ways. These differences can be seen as a threat or an opportunity, and yet one of the features of multinational organizations is the value of those different perspectives on sharing and validating intellectual capital.

If we compare classical structure with matrix shaped structure we can observe different leadership dynamics. The behavior of managers is one of the important factors in the context of setting a supportive climate within which innovation may thrive.

The managers of matrix organization have to have a strategic vision in using intellectual capital.

Using a good strategic management, leaders informs employees about which business activity areas are likely to require new ideas; where intellectual capital management will be needed to satisfy the aims of the organization, and it guides employees on what sort of innovation is likely to be taken up for development by the organization.

Because the target of each organization is to maximize the profit, managers should be transparently aligned with the overall business intent.

Managers must also manage any disruptive events. Such events despite need not be bad ones; history suggests disruption often leads businesses on to innovate in response.

Not only high level management, but at most middle management have to encourage innovation process, to support new ideas..

What, therefore can organizations do to improve the cultural climate? Drawing from this work provides some guidance on the desirable attributes an organization should, in terms of innovation. We can define following ten factors: challenge, freedom, idea support, trust/openness, dynamism/ liveliness, playfulness/ humor, debates, conflicts, risk taking, and idea time. It is worthy of note that many of these attributes are very similar to those which are also conducive to successful collaboration and knowledge transfer, such as:

- *Challenge*- Studies have shown that in the oil and gas industry, having a working environment which provides a challenge is very much a main motivator.

- *Freedom*-Allowing a relatively high level of independence over working methods, activities and thought processes, was also noted as being important in motivational process.
- *Idea Support*-Unsurprisingly, where the organization's climate is one in which a new idea is more likely to be met with 'no' than 'yes', or even 'maybe', innovation is poor and collaboration weak. Parallels can be drawn with knowledge transfer and collaboration environments, where there are few or no signs of the necessary reciprocity
- *Trust and Openness*- Many studies have shown that high trust levels are a very important factor in sharing knowledge and by extension that will apply to the transfer of knowledge of a new idea.

Getting the Process Right The revised process changes were tested within the pilot scheme, which provided a number of learning points. The basic process had a straightforward flow and was fundamentally sound, but a number of issues became clear that showed a significant prize in terms of innovative ideas was within reach, given the right circumstances. The right circumstances required the following four main changes.

Skill sets For Mangers Whilst it is true that innovation comes from those within organizations, any organization which mismanages its people and processes will not benefit significantly from the intellectual capital held within the heads of its personnel.

Good management of both people and innovation processes is required. So what are the required skill sets for managers charged with sustaining a strategy supportive of innovation?

In this context managers have to adapt new methods of working to nurture intellectual capital.

CONCLUSIONS

The matrix multinational organization is clearly more beneficial than traditional hierarchical structures when facilitating intellectual capital. This structure is more flexible and uses intellectual capital much better. This structure is customer oriented. However, aspects of culture and business environment, and how these are managed within the organizational structure, remain vital issues in the support of intellectual property development. Considerations that have to be taken into account include the management of people and processes to improve innovation. Alignment with the organization's strategy is important, as is the need to embrace new technologies as they emerge, for they offer opportunities.

In the period of crisis innovation is one of the most important way to achieve excellence. In the modern knowledge intensive business environment, most organizations stand to gain a substantial prize in terms of innovative ideas, but these need to be coaxed out to win that prize. Part of that coaxing is likely to include an imperative of innovation as an ongoing activity to gain competitive position, and in turn managers will need to heed the foregoing points on organization.

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