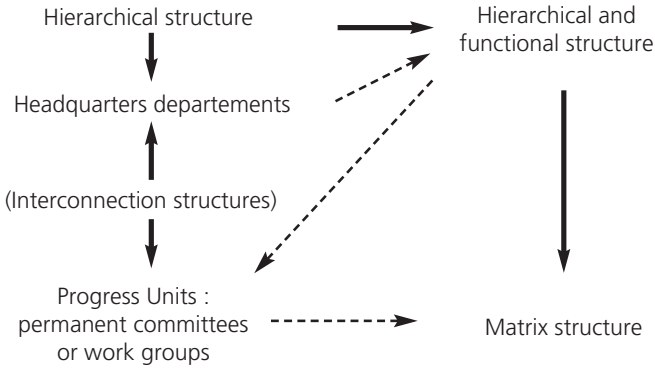


## Chapter 4 TOWARD A MATRIX STRUCTURE

The old structure of our Group was an organisational reflection of its external growth, essentially relying on the companies and their respective hierarchies. It is true that in an effort to stimulate inter-company contacts and collaboration we had already created cross-functional services, a type of functional department closer to what is theoretically regarded as a hierarchical and functional structure. Yet we were forced to admit that this attempt at creating an additional liaison structure was not entirely satisfactory to the Group.

By creating the progress units, as permanent committees or project groups, we hoped to facilitate linking mechanisms. But these units would not have had the power to change our behaviour in our original organisational configuration. This is why, after much consideration, we decided to turn to what Henry Mintzberg refers to, in his famous framework of the evolutionary process of group structure, as the final co-ordinating mechanism: the matrix structure.

The matrix structure implies the choice of at least two bases for grouping: one on the horizontal plane – usually products – and the other on the vertical plane – the country (or regional block) in most multinationals, and functions (production, sales, finance etc.) for less internationalised companies.



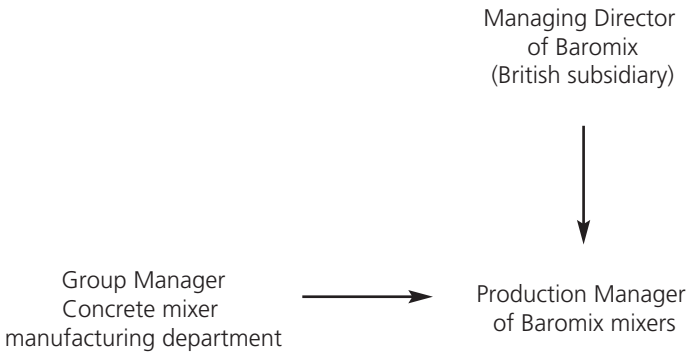
(after Galbraith, Laurence and Lorsch, Thompson, Mintzberg)

Whatever the basis for grouping, the matrix structure is, according to Igor Ansoff, “an adaptable shape”, and thus well suited to companies needing strategic, structural and operational flexibility.

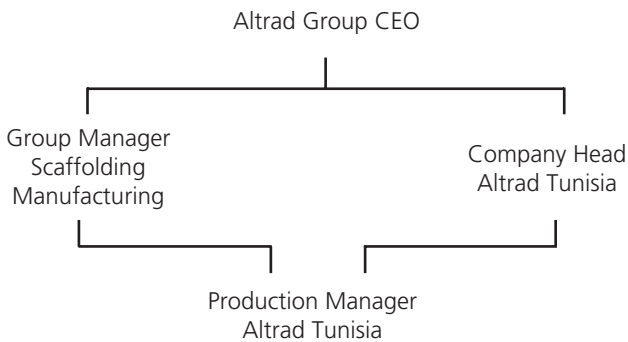
In view of the history of the Altrad Group, our growth strategy both internally and externally, and our desire to develop projects, we have adopted a more original base pair for grouping. On one hand, the company, and on the other, the activity in Porter’s sense of the term, including both permanent activities (purchasing, production, sales etc.) and provisional activities (project, one-off problem to resolve, etc.). So rather than opting for a single, permanent matrix structure, with stable interdependencies, units and individuals, we have introduced the genes of change, innovation and progress into the structure of the Group itself.

To indicate their hierarchical importance, the heads of the permanent progress units are given the rank of (Group) Manager – for Quality, Logistics, R&D Scaffolding, etc.

Like any matrix structure, the one we have forged renounces the principle of unity of command, but subdivides the hierarchical structure into two branches:



The Production Manager for Baromix concrete mixers has, in a sense, two immediate superiors: the Managing Director of Baromix and the (Group) Manager in charge of the progress unit working on concrete mixer production. Both have the same degree of importance and authority (as do those in charge of provisional progress units). At the apex of the structure, the managing directors and (Group) managers have a single immediate superior, i.e. the President of the Group.



This does not mean each member of staff has to systematically answer to two parallel hierarchical lines – his own company

and inter-company management. Indeed, the matrix structure “boxes” are not all operational, not every division in the Group is a stakeholder in all the activities of one progress unit or another. So the members of staff whose work is not concerned by a progress unit will only answer to the traditional hierarchical line of the company.

As such, our matrix structure shifts away from the classic model toward one of its variants, studied by Mintzberg and Sire under the name of the innovative adhocracy. Because this original structure is more flexible than a theoretical matrix structure we have been able to adapt it to our real needs. Above all, in the context of discussions in the progress units, it allows a network organisation to be set up, with a better distribution of value chain activities among the different companies in the Group. It is also adaptable, evolving and integrative: if a progress unit disappears having fulfilled its purpose, or another (permanent or provisional) PU seems necessary, deleting or adding a “progress unit” line to the configuration of the Group will not disrupt the coherence of the matrix structure. Likewise, if the Group takes over a new company or decides to merge two of its subsidiaries, a “company” column will simply be added or deleted from the matrix structure. In other words the management of the new company, depending on its activities, will join the existing progress units.

Finally, if the Altrad Group decided to develop its activities in several regional areas with a strong specificity, it could always envisage, like the Dow Corning group for example, developing its current two-dimensional structure toward a three-dimensional one (by company, by progress unit and by regional block) with its triple hierarchy (Managing Director, (Group) Manager and regional head). But for the moment this is merely a hypothesis of the way the organisation might evolve in the future.

In this matrix structure which harmoniously reconciles functional specialisation and incorporating companies into the

Altrad Group, the (Group) Managers (as well as the heads of the provisional PU and project groups) and the company managers share responsibility for reaching the objectives set by the whole Group. The company manager is responsible for his company through his actions and results, just as the director of a PU is responsible for the advances arising from interconnections, synergies, company coordination and integrating newcomers. He is judged according to the economies of scale, apprenticeship and experience benefiting the individual companies and the Group as a whole. He and the members of the PU will thus benefit from a system of compensation.

As for the risk of conflicts arising between people – often presented as the limitation of this type of configuration – this is actually reduced rather than increased due to the existence of the PU. They provide opportunities for creativity, exchange and dialogue, which can anticipate or settle any conflicts through negotiation. Moreover, these inter-company bodies bring together the Managing Directors or their representatives and the (Group) Directors.

There is a close analogy to be found in scaffolding: anchored along its length and breadth to the very foundation of the Group (through its companies and through its range of activities), joined at the apex through global responsibility to the Group (incarnated by General Management), the whole structure is braced together by the fact that its lines of responsibility pass through the same people in their double capacity as company heads and members or directors of progress units. This also favours network organisation, and the benefits this brings to a Group. A Manager, having worked in the framework of a progress unit he coordinates, can change the distribution of elements in the value chain concerned, among countries, zones and of course companies.

Finally, as Galbraith points out, “there is nothing strange about the concept of double authority; almost everyone was raised in a family structure, which is a double authority!”

The question of the future of the existing cross-functional services in the Altrad Group – Purchasing, IT, Research and innovation, Communication, Human Resources, as well as Industrial management, (Group) Marketing management, Accounting management, Financial management – came up quite naturally in the framework of this structural evolution.

To answer this, we made a careful inventory of their missions and tasks, before proposing any changes. This inventory revealed that some of the services closely overlapped one or a number of the group-managements being set up. For example, the role of (Group) Marketing Management matched that of the future progress unit on marketing, directed by (Group) Marketing Management. That of Industrial Marketing matched the activity that will now be handled by the four progress units of R & D (scaffolding, concrete mixers, local authority products, wheelbarrows).

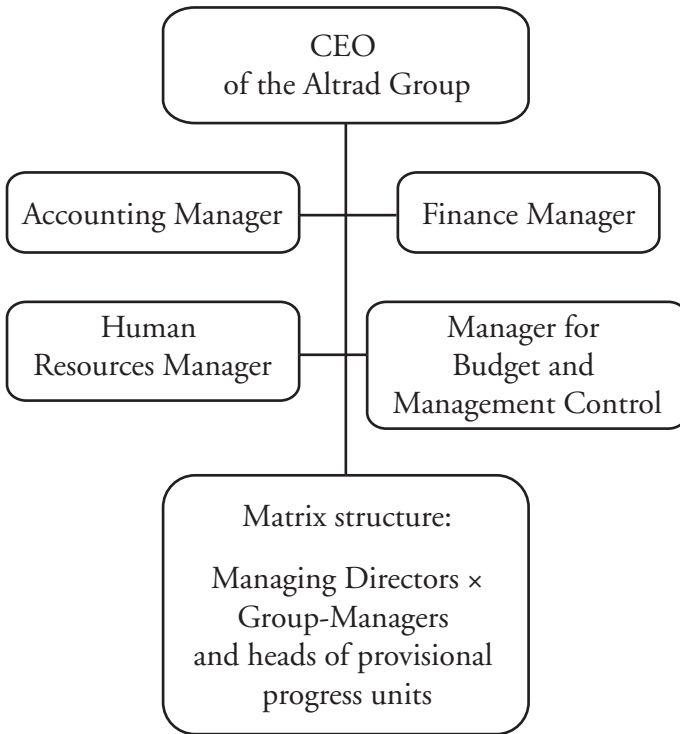
In the interests of optimising our competences and know-how, we had no intention of releasing our specialists who had fulfilled the role of integrative staff (to use Mintzberg's terminology) without the formal power to do so. It was important to place them in the new configuration in such a way that this senior staff would gain authority, possibly at the same level as a company head nominated as a group-manager. Thus the subordinates in the present cross-functional services were placed under the command of a group-manager. He thus becomes progress unit co-ordinator, immediate co-superior (with the Managing Director) of the company staff concerned by the activity and hierarchical superior of the staff in his group management, i.e. those who were previously in the cross-functional service (or, if the activities are subdivided, a part of this staff). This staff redistribution into new group-managements (usually with a narrower field of action compared to the old cross-functional services) was the easiest way to ensure the clarity of the new structure. It was the least disruptive for the staff, whose tasks were essentially the same, and more coherent to increase

the authority of group-management, their weight in applying the decisions of group-managers and their possibilities of control.

The matrix structure does not prohibit these adaptations – in fact, as we have seen, this is one of its major advantages. In fact most of the companies or groups that have adopted this configuration have partly modified or added to it according to their needs. They have borrowed from other configurations such as the functional structure or departmentalisation by client (Michel Kalika). In our own case, on the basis of the theoretical shape, we have adopted a mixed structure by company and by activity, which is better suited to our specific needs.

When you compare structure charts you find that certain value chain activities are usually joined to General Management. These notably include the items Porter grouped under infrastructure, i.e. accounting, finance, management control, etc. and those he added as interconnections between several units in an organisation: legal department and human resources management. We could have extended the matrix structure to all the functions of the organisation, by creating progress units in accounting, management control, human resources, etc. But according to several organisation specialists, the matrix structure requires external advisory and control bodies that are independent of the Managing Director/ (Group) Manager pairs.

This prompted us to set up four functional management units, directly attached to the Group's CEO: Accounting management, Finance management, Budget and Management control and Human resources management. In the event of a conflict between a company Managing Director and a group-manager that cannot be settled within the progress unit (the first body of dialogue intended to anticipate and settle conflicts), one or a number of the four functional management units will examine the case and propose mediation and measures acceptable to all, before calling on the CEO to take a decision.



This then is the outline of our structure chart from now on, having set up the progress units and (Group) Management units. Even if the structure chart does not entirely reflect the real organisation of a firm and *a fortiori* of a group, several research studies (Kalika) suggest that it is a favourable element for development. Formalising the structure encourages managers to think in organisational terms and gain a clearer definition of the missions and responsibilities within the structure.