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## Management, Quality, State of the Art

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Management is in itself a school of rigour and programs such as MBA, for Master Business of Administration, contain already all their cocktail of mathematics and finance content. But the idea of what is done and human aspects remain predominant factors: the role of mathematics and of any "expert" tool will not inform enough about the success of a project. In what, much delusion could be found in for example so-called scaling mathematical objects or comprehensive study of nilpotent spaces. Would that help us to find our way? Some binary sort of data processing algorithm will hardly inform us either. Without making prospect model, does one have to rely on chance, or randomly? Heavy of the most dubious and complex future we are advancing, and this is both a topic of quality and management, which must anticipate by prospecting.

Competitive semiconductor manufacturing is a requirement of achievement in industrial productions especially in micro-electronics, which must be as a matter of course competitive but this is also for education a comprehensive systems, which exist for the education of employees in so called "fab". This is necessary to go quicker, to do better and sell cheaper than known competitors, while buying at low prices raw materials and reselling finished products with some benefits. Here is

shown a traditional layout in the world of manufacturing. However, this is also the question of creation in a production line of what engages us in time and space by effective management. This is about integration in this industry, what one must do with what one believes and one's personality is. What can be the humanistic moral and quality ethic in such a production cycle? It could be astonishing as who would believe employees can work efficiently in an environment they disapprove? Communications of peer groups in transverse management, aim at a multiple cultural, social and economic cohesion. Quality in industry is a vector of progress, proof in advanced development, it stands for general-purpose management, transverse peer group one, and associates technical problems in the production cycle with case studies.

Such a policy starts from one statement: to overcome without danger, one triumphs without glory but also without profit: one becomes gradually aware of unexpected stakes which in return will support successes. One of the goals of business management is to learn the rebirth of companies from their preceding failures. It needs a solid model to be apprehended more easily from a deductive approach. It is even as if difficulties were producing benefits, paradoxical can it is, but a work comes from a quantity of problems "to be solved" corresponding to known "economic needs". Customers want to buy especially products proved to be reliable, which is a global insinuation for: "which are matured". The company and the individual share the same destiny towards this environment of failures which is dissimulated, thinking that successes will come to us at the shelter of dangers or errors are delusion.

In any future prospective, one must advance towards "not cleared"

places. Formulas  $1^2 = -1$  or  $E = mc^2$  indicate entities in Science which were not apparent: Einstein understood this. From the philosophy of Talmud: do things others are not doing (1). There is thus a whole world where the road of discoveries starts from what has not yet been considered, said, thought, or undertaken, and next create a practice i.e. going to the creation of a specific culture, which was for example the way of Toyota company with its JIT Just in Time, the delivery in assigned times of its products also called *kanban*. To obtain with only a few changes a result is a qualitative objective, which Toyota remains a supreme model in Japan (2). The leadership in this country anticipates the needs from that perspective, which is of a cultural aspect, but also logical: tools are used as PDCA (plan-do-check-action) and observations are recurrent. The inspiration generally occupies 1% and perspicacity 99% in the development of industrial projects: this report/ratio can be noted. Why why why (why 5), is a thorough analysis associated with the analysis of any failure in production (3). There are other lots of methods of much effectiveness, such as 5S, kaizen, and DMAIC (4). These techniques, which ambition is to transform failures into successes, are learned by initially isolating the trouble, which will be the engine of a following success by means of a Data Base. When the history of a certain company is scrutinized, the failures were so much numerous before designing a new product than this information is often deliberately hidden. Admittedly this is not bad but undoubtedly always a little alarming of not publishing the shelves to show only the good results. Especially, when one finally managed to produce competitive, good and "smooth" results which are obvious, available information would have been handled in such a way. This is not astonishing then one needs to do quality inspection seeking for under rock of so many good results. In order to be able to solve a definite issue, it is necessary to benefit from good error counting tools, needing to be thorough by including sufficient details to be representative. From there the creation of subsequent Data Bases, which accounts for the current state of knowledge "of errors to avoid errors" (5).

Business management is specific to the company as same as Data Bases. A large company can struggle to find as many as problems as possible by considering them legitimate to be addressed or not. It depends on quality control or quality assurance policies (6). Unless is made unbearable "not yet resolved problems", can be generated an atmosphere of crisis by the management, which can be artificial, to feed internal progress. For example, such way is to consider something is impossible, by that feature is sought for the employee what can defy him in order to realize a sort of "true-false challenge" and develop his potential. In the company, problems are generally thought from economic needs, researches of specific requests for products by customers, and redirected towards real potentialities, signs and creation. Quality is finally in the management of a production cycle a reasoned optimism: if there are troubles, one can find an exit, if one "played" with constant effort, knowledge will naturally come out. A discovery can be accidental but will occur in conditions of preparation already defined that one is able to seize at the right time. If it is more pleasant, work will become more enlightened or more vigorous, which is of the interest of employee as for the company. Lastly, a leadership will find important to let prefer things by the actors themselves.

« Start by doing what is necessary,

And then, what is possible,

And suddenly, you are doing the impossible»

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