A MODEL ECUATION OF FLEXIBILITY AND KNOWLEDGE PRODUCT

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Environmental wastes can be a symptom of a suboptimal system. can help the company to reduce waste and improve environmental performance leading to increased system productivity. Every major industry was once a growth industry. But some that are now riding a wave of growth enthusiasm are very much in the shadow of decline. Other which are thought of as seasoned growth industries have stopped growing. In every case the reason growth is threatened, slowed, or stopped is not because the market is saturated. It is because there has been a failure of management.
Keywords: quality management, environmental management, change management, flexibility equation, product knowledge
JEL : M11

Introduction

Every major industry was once a growth industry. But some that are now riding a wave of growth enthusiasm are very much in the shadow of decline.
Other which are thought of as seasoned growth industries have stopped growing. In every case the reason growth is threatened, slowed, or stopped is not because the market is saturated. It is because there has been a failure of management.

Method of research

A Equation of flexibility and Knowledge product

The equation of flexibility and knowledge product can be written in function of following variables for our improvement product matrix were: Q_p represent quality perception, Qa= quality action, Qd= quality decision, $P_{q,}$-quality perception , P_a,-action perception, P_{p-} precision perception, T-technology, M-man, manufacture power, A-affect variable..

$$\mathbf{EKP = f(Q_p, Qa, Qd, P_q, P_a, P_d, T, M, A)} \quad [1]$$

Once apart of data is selected the relationships represent the dependencies of all the selected data.
A model for knowledge product process it is presented in the following scheme which identify the way and the variables observed or affected which disturb the product process [15].
Knowledge it's part of every stage of life cycle product from the design stage, business information, organization work harmonize with the new environmental changes and finished with the new model of knowledge product (Figure 1).
The new trend of friendly product and friendly environment influence the enter activity of knowledge product because of the perception and the action of disturbance variables: noise, vibration, failures, damages, pollution.
The new provocation for designer will be to establish the connection and choose the best solutions and suitable programs for product, taking in consideration the matrix and learn from the each evolution of the cycle design [Klepper 1996]

It is clear that stand alone solutions will not serve the designers needs, if he wants to have access to all relevant information for a sound product development, further research work has to prove this.

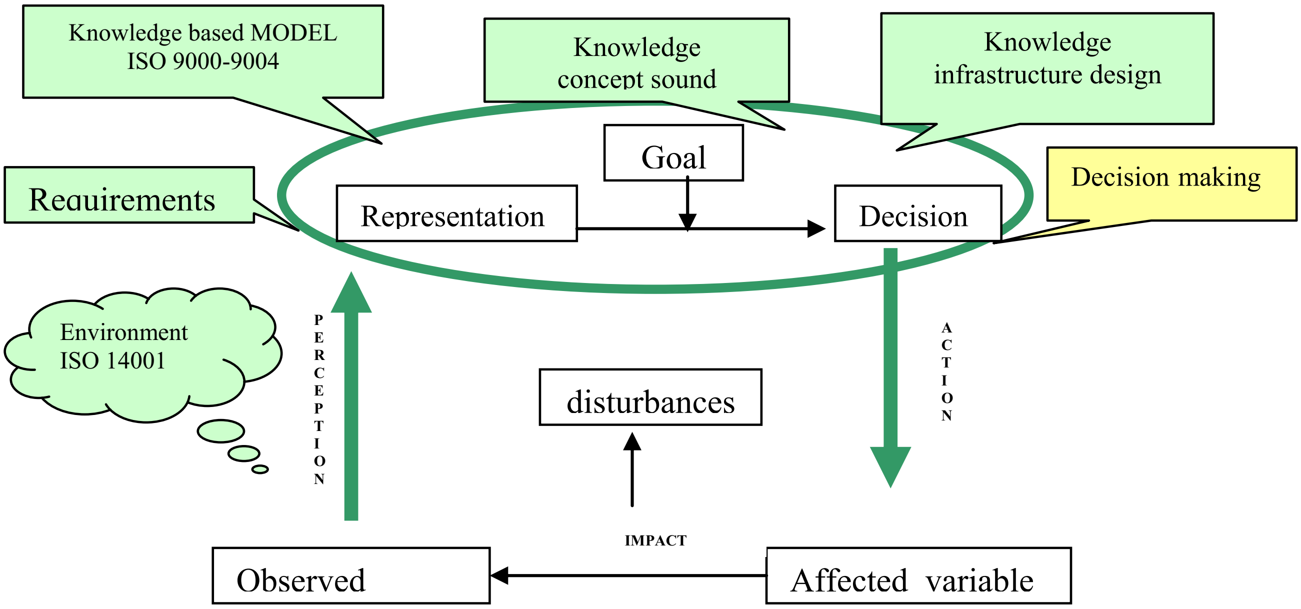

Fig.1. Modelling of Knowledge Product Process

On this platform information of various characters are located and shifted around for the purpose of being accessed from any point during the design process [Hubka 1996].

One approach is to have an integrated product data model and to create views upon this model. Each view represents a specific selection window which gathers all necessary information for a certain need of access [Cesaroni 2010].

However, for many this stage will prove to be the critical one; many wait until this period before acting, and it is the only stage where some sort of action is critical.

Theoretically the product life-cycle is a smooth and elegant curve; in reality there are constant short-term fluctuations due to external factors [Arvind Rangaswamy (1996)].

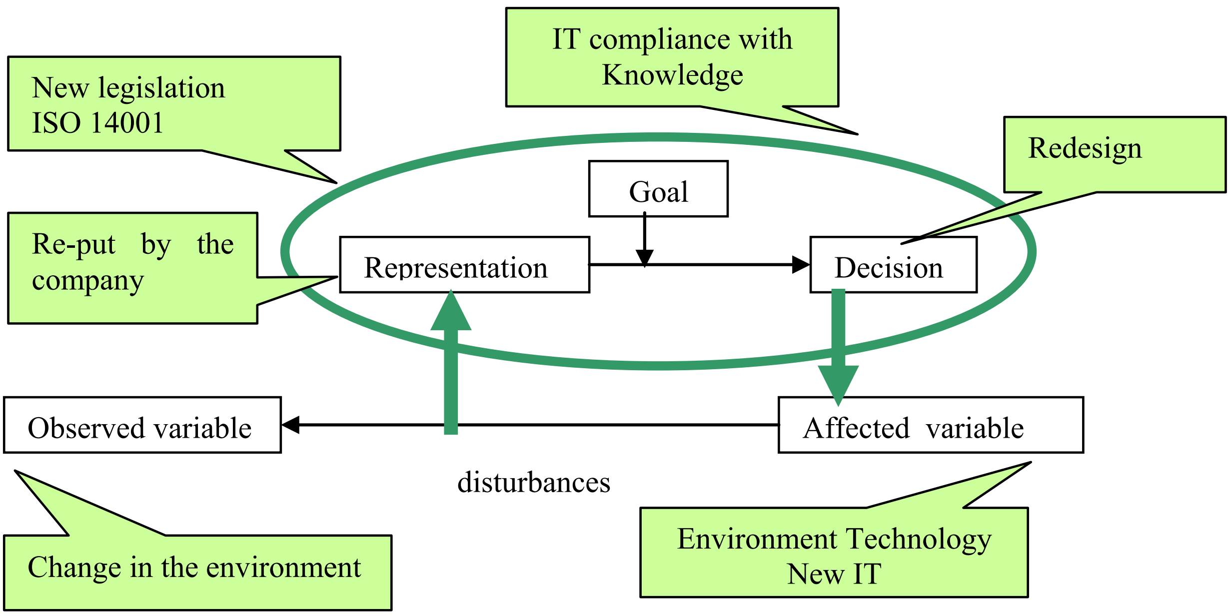

Fig.2. A Model concept for Product Improvement

Knowledge it's part of every stage of life cycle product from the design stage, business information, organization work harmonize with the new environmental changes and finished with the new model of knowledge product (Figure 2).
The first common mistake is to assume that any reduction in sales signals the onset of the decline phase. We state, that the set of requirements of a product is a feasible and suitable set of relationships to hold all the data pieces together and that this (most unsettled) set can serve as an integration platform for a design support system [Allemby (1995)], [Ungureanu 2001, 2002].

Results
To the end of the article I preset the results that prove that it is possible to translate product life cycle PLC knowledge into the improvement product matrix like in Figure 3 a Model of the Life Cycle Product from theoretical trend - sales - manufacturing design.

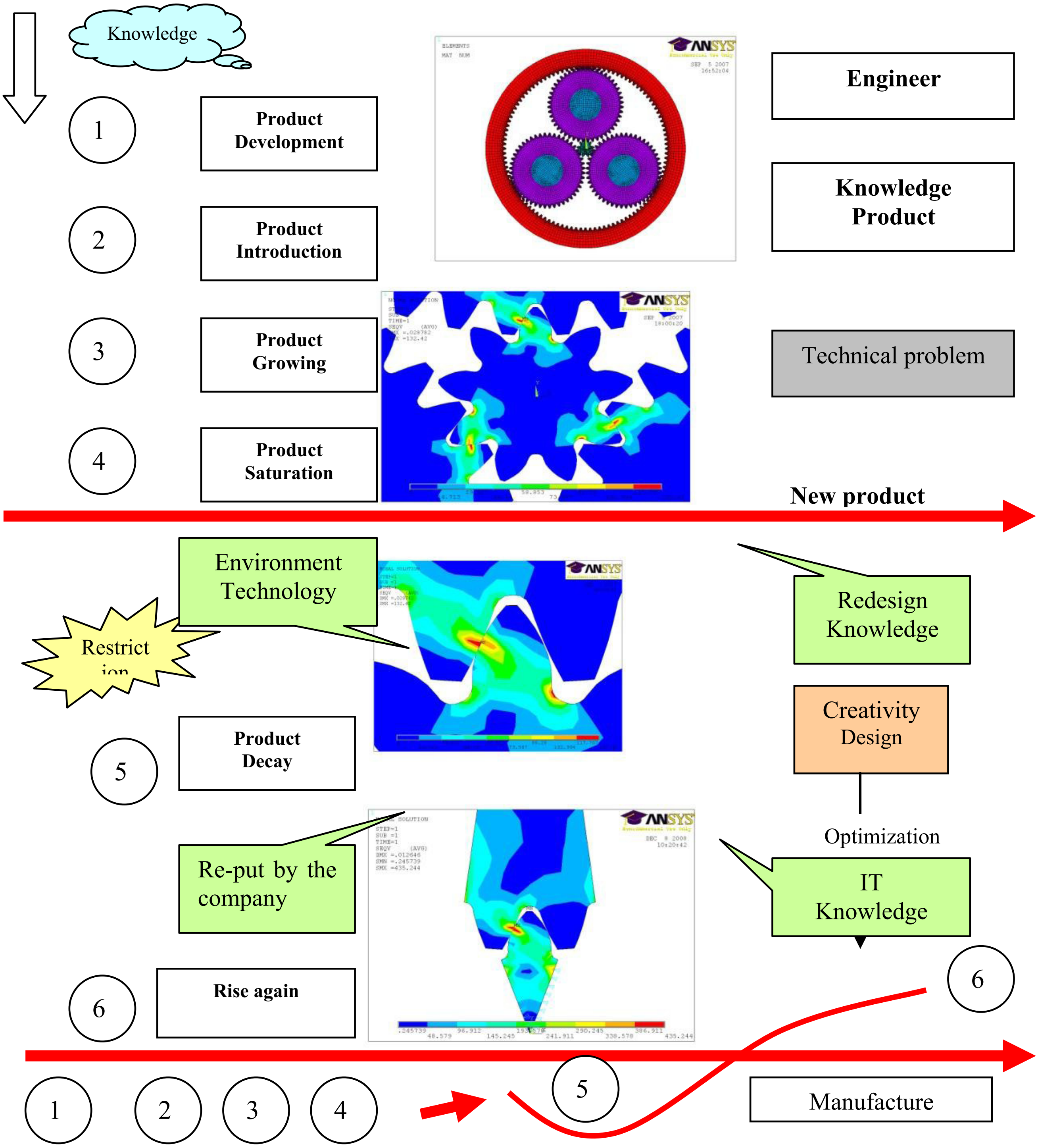

Fig.3. Life Cycle Product Model from theoretical trend -sales - manufacturing design

Conclusion

Moreover, a new design support system shall at least have those capabilities which the previous one had, it should as well of course provide more or better functionality.

It shall behave in the same manner as the previous one and be used in the same way. According to the research paper, the paper defines some models to relative environmental profiles of

- new material choices or packaging options.
- to reduce environmental impact at its source in the design phase.
- to serve as a communication tool between companies and consumers
- to establish from the design stage the re use of some materials,
- to identify which are the recycle materials [Dankwort 1996],
- to compare existing products with planned alternatives [Monolaisir 1999]
- to compare existing company products with products of competitors
- realize an internal information and training
- new strategies in marketing, advertising policies
- joining eco-criteria
- environmental cost allocation
- assess the gap from eco-label criteria
- radical changes in product life cycle [Klepper 1993]

From economical point of view the target costing methodology represents a totally different approach to classic cost management. In either case, a successful product supplier must focus more attention on managing product cost.

Orients especially on drive product cost in preproduction phase of product life cycle and try to achieve lowest future product costs [Barbuta Misu 2009],

Target cost calculation can be characterized either as activity whose aim is to check up all possibilities of cost reduction in product planning phase.

Result those activities should be product design, which meet all consumers requirements and expectation and whose cost and price which will provide to company required profit.

From cost-plus pricing to market based pricing a view (Figure 3) describes the way to look a product and his properties during the product life cycle.

In this way we can describe mainly the content of information concerning the product and the usage of system functionality with regard to each stage of design/ development [Nishiguchi 1996].

Using the equation of flexibility in knowledge process we can define and provide some common basis for life cycle product knowledge (Table 1).

In compliance with the various approaches it seems that the matrix representation considering product properties and life cycle is quite suitable to represent engineering knowledge handled in the systems and complete the circle of influence for the new model of knowledge product process.

Table 1. Life cycle costs

Recurring production cost =	Production labor + direct materials + process costs + overhead + outside processing
Non-recurring costs =	development costs + tooling
Product costs =	Recurring production costs + allocated non-recurring costs
Product price or acquisition costs =	Product costs + selling, general & administrative + warranty costs + profit
Life cycle costs =	Acquisition costs + other related capital costs + training costs + operating costs + support costs + disposal costs

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