

# ‘Complexity Management’ Major Challenge for Global Business.

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## **Abstract**

The Business World today is troubled by the inertia in the system which is due to the complexity that each business has itself created over the previous few years or decades. In view of the market opportunities and the corresponding threats to business survival, since the time the globalization of business, every major player has undertaken to expand its business through new product launches and through inorganic business acquisitions (M&As) and entering into hitherto untouchable, unknown market segments both in domestic & global markets.

This has necessitated multi product, multi locations, and multi market segments, multi cultural integrations, multiple management practices resulting in a highly dense cobweb of business complexity. This severe complexity has been restricting creativity and innovation based progress since all the major resources of the organization are busy & preoccupied in resolving issues arising due to organizational complexity management.

It is a matter of fact that major global organizations are now busy clearing the ‘complexity-mess’ they themselves have created in the recent past- through establishing cross functional teams to meticulously unwind the complexity cob web. Unless this complexity management (reducing complexity) is done on top most priority the business houses will face their being left out of the volatile global markets.

This paper attempts to explain various areas of the business which are saddled in the complexity conundrum and while developing a cause- effect correlations between actions taken by the business and the resulting complexity. Also an honest attempt is being made to recommend certain quick- fix recommendations for alleviating the ‘drag’ due to business complexity. The case studies & examples included in this paper are based on the author’s personal experience during his near 40 years of industry experience in India and abroad and the narration is based on the situations which existed during these years. However, wherever possible due care has been given to the changing business strategies adopted during the past decade by the industries in general to compete in the globalised market scenario.

The scope of the paper is restricted to business organizations in the public domain and therefore issues of complexity in the general environments such as economic upheavals due to national & global economic policies are kept outside the purview of this paper.

The observations made in this paper are author's personal views and are intended for the purpose of narration of main theme and therefore there is no implicit or explicit intention to criticize any individual or an organization.

## **Business Complexity- (B-Complex)**

### **The Nature and Type.**

Business complexity is considered as an issue if there is a loss of rhythm in the business processes, causing undue delays in delivery commitments, in making business decisions, loss of efficiency at crucial phases in project management, unobservable mix ups in materials management & logistics and resulting in noncompliance to product specific modifications due to regulatory norms etc

Normally in a single product & few clients situations the decisions are expeditious and commitments to cost, quality & time are manageable. But when the business enters in to multi product, multi market segments, with product mix and market mix issues needing appropriate planning and scheduling techniques, there is a tendency to provide for commonization/standardization of raw materials, processes, logistics, product/process costing & pricing, including clubbing of functional responsibilities .In this process there appears a tendency towards lack of alertness in avoiding the very genesis of complexity which later hits back as challenges/hurdles in the smooth flow of major business processes.

There are different types of business complexities depending on the nature of & the size of the business expanse. This of course has to include all the stake holders and their interests in the main business. The understanding and analysis of business complexity calls for a very detailed review of the business processes including the very purpose of the business when it started its operations and the subsequent iterations carried out consciously or unconsciously over a period of time. The ever dynamic business environmental factors and awareness or the lack of these changes in relation to the path followed by or decisions taken by the business leaders at different times will be of major help in understanding, the beginning and the current status, of business complexity. The more the continuity of the stake holders in a particular business the more easier it will be to find out the root causes of the business complexities.

On a very broader scale we can classify the types of business complexities as:

1. **Business economics** related.
2. **Technological changes /interventions** (both in products& processes)
3. **Social needs related** (The influencers on the business environment both inside/outside)
4. **Regulatory& Corporate Governance&CSR obligations**

(Environmental controls, trade and tariff barriers Corporate Governance & CSR interventions etc.)

## **5. stakeholders' interests/demands.**

We may now decide to study each of the above aspects w.r.t 'Complexity Management.'. However we have to keep in mind the overlapping effect between the above facets of business complexities to avoid confusion in the appropriation of each one as 'causative'.

### **1. Business Economics Complexity (Financial)- (F):**

This includes all the aspects of the business which aim at maximizing its ROI right from launch of the business enterprise to every phase of the 'Life cycle' of the business entity, and the strategic decisions made and implemented towards sustenance of business and its economic interests.

In the normal terminology by business economics we mean the way in which a business manages its economic needs and results, It includes management of capital costs, margins and its investment requirements in the economic terms.

In the initial stages of a business venture, the conversion process of a business idea into a commercially beneficial project and arranging for all the capital requirements in this process take priority over other long term perceptions. Preparations of truthful viability projections and sincerity of purpose in the implementation of the business proposal to a great extent help avoiding 'slippages' on the way to project implementation.

However the entrepreneurial anxiety, and the fear psychosis of likely delays affecting the project tend to force the businesses to bend backwards and cut corners on many aspects from product design to customer relations. This is obviously the point from where onwards the strategic drift and the seeds of business complexity are sown into the organization. In the embryonic stage itself the congenital deformities start appearing in the otherwise healthy entrepreneurial venture. In order to get rid of or to avoid the red tape the sacrifice of 'Values' becomes a prerequisite.

As the organizational life cycle status shifts from the embryonic stage to the 'toddler' situation, the urge to excel or grow after the gestation period the business is tempted to explore ways to grow its financial muscles by investing further in areas which are in conflict with the competitive forces. (Michel Porters 5-forces Model of competition). The demand on the economic feasibility are very severe at this stage any wrong habit inculcated at this stage in the financial management of the operations of the enterprise may lead to catastrophic consequences for its long term survival.

The closures of many businesses at this 'pickup' stage is seen so obviously around in any Industrial estate, anywhere in the world as a consequence of adopting incorrect ways of handling the economics of these ventures. The near graveyard situation of SMEs closing shops at most of

the MIDCs is an indication of failures of the concerned entrepreneurs in managing business economics complexities confronting the businesses.

As the industry grows to the stage of stability (Incase it is successful in negotiating the hurdles of business complexity at the growth stage), there are major responsibilities towards 'Business Sustenance' amidst management of growth through both organic and inorganic means. This is where the realistic 'Competitive Capabilities' of the business are put to acid tests. This where factors such as 'catch up fast' 'Make Hay when the Sun shines' start working seriously on the minds of business leaders.

Aspects such as maximizing market share, business growth thro' acquisitions in both related and unrelated areas, diversifications & expansions, conglomerate integrations etc are at the top of the agenda for the strategic planners of the business enterprise. While this hectic is understandable at the growth stage of the enterprises, hasty and uncalculated risk factors, including over or underestimation of the business 'Drivers and its Critical Success Factors' lead to serious regrets and business complexities at later stages of implementation of these growth strategies. There will be serious drain/strain on the economies of the business due to unmanageable borrowings, and difficult to manage market forces. The ever increasing rates of failures of business mergers and acquisitions (The success rates of M&As, across the globe are around 20-25%max) are indicators of unsound business decisions, unforeseen complexities in manageability of the merged entity.

The not so distanced examples of the economic meltdown and catastrophic scandals and 'lost sight situation' in globalised market economics, such as the famous sub prime lending, The Lehman Bros. the sinking Euro Countries economics. The rising state level debts, due to bailout supports, are again reminders of 'Things Gone Wrong'(TGW) basically due to lack of clarity and foresight in to the complex nature of global business.(the B-complex Effect )

## **2. Technological Changes-Complexity-(T)**

Now let us look into the unfathomable nature of Business complexity due to Compulsory and voluntary aspects of technological changes brought about in the Product and Processes of business paradigms including the regulatory requirements of environmental protection, and other social and neo political reasons asking for Technological Changes in the Product & Processes in Business situations

.There are basically two types in the Technological Changes

1. The Induced Change (The normal/natural Change)
2. The Compelling Change (The forced change to ensure survival against competition/consumerism)

The changes in the technologies of products and services due basically to increased awareness of natural resources, and improvement due to scientific researches innovations and discoveries in all aspects of life on the planet Earth can be classified as Induced technological changes. The changes leading to improvements in the longevity of life and better processing of the natural resources, leading to better quality of life and the related changes in the understanding level of the surrounding habitat and similar could be grouped as Induced changes.

So far as these efforts lead to meeting the basic needs of food clothing and shelter and even to some extent of the social, hierarchical & self actualization needs, the changes are within the Induced change category. Each of these induced changes could be graded as Ethnic-Traditional – Conventional –Contemporary types of changes. The transition from one stage to the next level of changes, besides the absolute necessities, certain changes which were purely linked to social status & competitive advantages may have induced complexities, leading to detrimental or side effects which call for rethinking and redressal of original performance parameters and ingredients of the products & services. The fat free food, emission controls on automobiles, restriction on certain medicinal formulations etc, are indicators of such alterations leading to complexities in the purpose of business and steps taken which may not necessarily avoid the detrimental effects of such products and services.

The compelling Type of Technological Changes have in majority focused on areas of personal consumptions and social status needs . The advents in fast foods, cosmetics & fashions, the personal ward robes, the ‘buy /avoid me if you can’ type of temptuous products & services, the various social media related communication techs, have created compelling needs for products & services which even though create convenience/comfort feelings in life, are likely to create conflicts & confusions between the natural instincts & compulsive instincts of need satisfaction. Today the permissive & promiscus ways of life in so called super advanced societies are also the promoters of crime, violence and terroristic tendencies all across the globe. These compelling technological overtures have also lead to newer diseases, & epidemics, and created competition between the obviously detrimental V/S the life supportive products & services, While in many instances it is the the first to market & basic survival necessities for business ventures to innovate new products & services, it is this greed or fear which is the originator of many complexities in managing businesses drifting far away from their original business purposes & the honest generic strategies.

The above two types of technological changes are very broadly seen as perpetrators of to days’ agonies and ecstasies in our societies around the world. And the speed & spread of these maladies is facilitated by advent of faster modes of communication & commutation .May be we have lost track of the very purpose of life on this planet , and find ourselves busy in being a proud member of the other wise ‘man eats man’ kind of complex business purposes and priorities, drifting endlessly in self supportive visions of progress and prosperity

We may for the sake of our discussions name these technological changes as TC.

### **3. Changes In Social Order-Complexity:**

These types of variations in our social strata are basically due to 1.Demographic changes(Demographic dividends) .2. Cross cultural Infusions in search of newer and newer market segments for products and services.3.Exploitations of natural & man made resources for ego(under the garb of social emancipation) satisfaction based on greed and need satisfaction.

The aspects of demographic changes over the centuries has been basically due to commercialization of geographically strategic vantage points(demographic dividends). This of course has been the main reason for the disguised sense of open market approaches of several focal locations. Even though this initially appeared like a great opportunity for cross cultural interactions has resulted ultimately in grossly compromised and constrained social order .People who migrated for the sake of opportunities for higher education and brighter careers to so called developed countries, invariably experience and strongly feel the absence of social support in these countries to which they migrated basically in search of happiness &are never accepted as original but second class citizens of the host countries. These same people disillusioned for the sheer lack of sense of true belongingness are trying to correct their steps too late in time by wanting to return to their ancestral societies, but face greater difficulties since their allegiance to alien cultures and patholized social behaviors compelled by the forces asking for compliance to foreign and definitely not so homely social environments. Today in almost all nooks and corners of the globe we see hundreds and thousands of people having lost their originality and fellow feeling. They feel absolutely insecure due to lack of ownership and welcome by their own ancestral social groups. There are millions of parents who feel the absence of their sons and daughters who stay far away in alien societies, feel like orphans at the later stages of their life .Every thing in their interactions with such long distanced relations looks artificial and full of doubts and pretensions.

Now the cross cultural Interactions or Integrations as much spoken about & lectured as signs of social progress are manifestations of false assurances of well being, purely motivated by commercial & business considerations .Howsoever any one can try to claim optimizations of cross cultural interactions it is a matter of fact situation that all aspects of measurements of such an integration are attempts to brow beat the mere under currents of situational adjustments and not in any sense cross cultural integrations. At the core every one feels alienated from his free will behavior sense of loss of touch with his/her origins. This is a reality and such societies are brimming with sense of discontent which the social psychologists for their business needs attempt to superimpose with lectures & research papers claiming that all is well, with societies where in heterogeneous cultures are conditioned by circumstances to stay and work together. The ever escalating fights for rights to free will behaviors and demands for equanimity in social order& social strata, culminating in terrorism. Naxalism ,Fundamentalism are few examples of disturbance and complexity in the societies all across the globe today.

The aspects of Creativity & Innovations leading to discovery of newer products & services when driven purely by business & commercial considerations without much attentions ultimately to improved self esteem and feeling of real progress by the societies. lead again ( Exceptions could be Innovations in the field Medicine & Health Sciences) to promotion of consumerism, false sense of social status, and further alienate the haves from the have-nots. The bitter wars on the business fore fronts in the fields of social media& net working are examples which will make the common man run crazy & bewildered, due to complete break down in human relations and cultural fits. Today due to compulsive marketing forces enabled by higher compensation levels nearly 80% of the energies of the societies are focused on looking good rather than feeling good .And the balance 20% of the energies are spent in regaining the lost balance and peace of mind due to wanting to be socially acceptable ( The elite complexity).

#### **4.Regulatory,Cg&Csr Obligations People\_Processes-Complexity(P)**

As an after effect of the atrocities happening due to quest for business survival, we tend to deplete the intrinsic supportive and protective aspects for life on the universe. Over the previous several decades in our quest to speed up social & business contacts and communication, with thorough disregard to the environmental limitations, have rendered life on this planet vulnerable to extreme climatic changes& un predictive catastrophes all across the globe. Perhaps there has always been a short sighted commercial approach to all the product & process Innovations, in all walks of life. Today we are frequently confronted with situations which could have been avoided incase a real long term impact on our lives and the planet was factored in the Innovations& their implementations.

We see near chaos all around us for environmental degradation, fear of unmanageable dangers of nuclear energy ,the escalating fuel & food scarcities ,near extinctions of useful flora & fauna, uncontrolled consumerism leading to debt crisis putting countries and nations at the risk of loosing their sovereignty and existence. plagued by indiscrete terroristic strikes and kidnaps, the drug mafia, collapsing social values etc.

There is therefore an extraordinary effort in bringing about regulations and restrictions by the global economic super powers to contain the damage and resurrect certain orderliness all around. These regulatory controls lead to self protective behavior which work as obstacles in smoother implementations of the regulatory norms prescribed.

An escapist route against such norms leads to corrupt practices to counter the regulations. Non compliance to financial norms lead to sudden collapse of fiscal discipline( The Lehman bros & The subprime lending fiasco). Non compliance to environmental control norms have lead to the erratic climate Changes and the danger of the green house effect which may lead to serious health problems to life on the planet earth. The loss or extinction of various life species is a clear indication of erosion of life supporting environment for these species on earth. This has lead to complexity in the basic life cycle & survival of all forms of life. The fight for territorial controls

to secure ones own interests has manifested into civil wars in many countries basically triggered by interested powers to retain or gain control on scarce resources such as crude oil, navigational nodes etc. The web of monopolistic controls is being spun around such commercially strategic locations around the planet by the super powers for selfish needs.

### **5. Altered Stakeholder Interests& Demands- Complexity**

This one of the main aspects or factors leading to the Creation. Nursing, and supporting the 'Complexity' over periods of false evolutionary aspirations of the vested business interests. Whether consciously or unconsciously, organizations have created complex situations in all their efforts to maximize stakeholder interests. Of course the role play is not that easy for any business, attempting to survive in business mainly by ensuring stake holder satisfaction. It is akin to the role played by the Ring Master in a circus surrounded by hungry lions and tigers in the form of stakeholders, and to make them behave less violently and maintain semblance of order is always a difficult task for any entrepreneur.

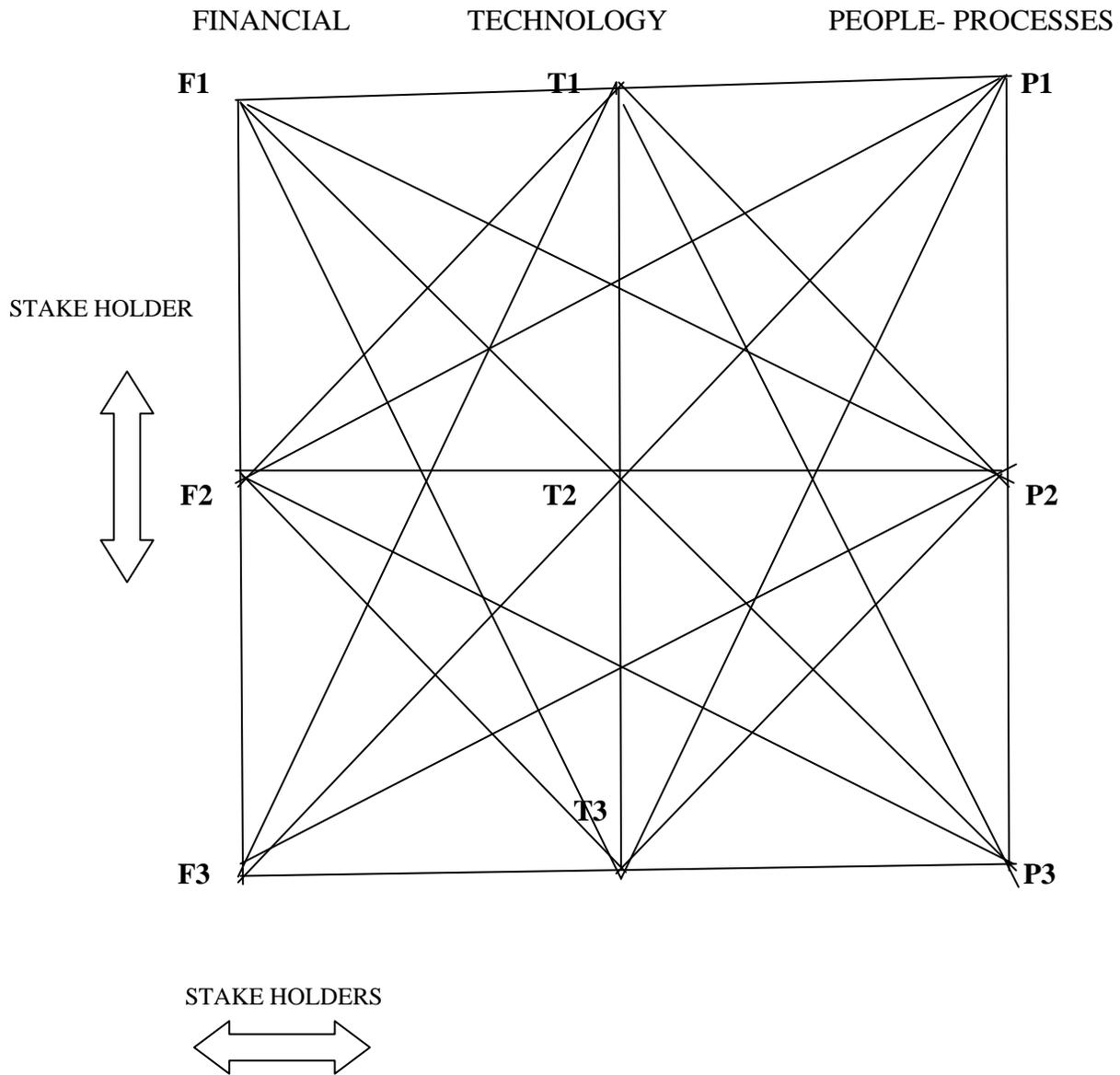
Businesses are compelled by the constant threats in the environment, to find out short cuts, which even though in the long run are ruinous , and complex to mitigate consequences are essentials to ensure stability however short term it could be. The products & processes adopted to meet customer needs both in performance and affordability terms have given way to disastrous complexities of environmental degradations, health hazards, malpractices such as hiding the risks of usage etc, corrupt approaches to subdue impacts of scandalous practices in financial & quality of services, have left every stake holder severely abused and bruised with unseen prospects of comfort feels.

Every stake holder wants at any cost his pound of flesh in the booty of business efforts starting from the promoters, to the shareholders ,the financiers, the vendors, the employees, the customers, the competitors, the society , and the governments constantly weave the web of complexity in the management of business. At times it becomes difficult to assess/trace the founding ethos of businesses which today are sunk deep in to the rut of unethical ways of business conducts.

### **6. Business Complexity Matrix:**

In the following diagram an attempt has been made to represent a complexity matrix based on **Three Points Scale** of severity & on **three major aspects** which influence business complexity both at domestic and international business .On a severity scale of 3 the matrix tends to explain the nature of business complexity on an interactive process of aspects of Business Economics, Technological Changes, and Regulatory and Corporate Governance interventions. There could be many related/unrelated aspects such as political & economical policy frame works which also influence business complexity. However in order to avoid conflicts in understanding the matrix and resultant confusions the author has decided to consider only these three aspects within the scope of this paper. As one could see the matrix allows the readers to observe the important

Nodal Points in the Matrix which help identifying crucial stages in the business at which the complexity dimensions can be measured and evaluated for steps for the reduction of business complexity, which pose as risks and threats for sustenance & growth.



**Note:** It is necessary to conduct a detailed & relevant business environmental analysis before approaching the above matrix type of evaluation for specific business complexity. ©This is basically to avoid assigning higher weight ages to issues which are situational and subject to the dynamics of issues of political & economical policy related aspects of both domestic & global happenings.

## 7. Severity Rating of Business Complexity

Business Economics Related Complexity-(FINANCIAL COMPLEXITY) ‘ F’

**F1** – Highly Severe : Severe pressure on current Ratios of Business, Multi Creditors, Multi Debtors, Multi Types & sizes of Investments, Inventories, Non Performing Assets, Non value Adding assets & operations, complex Market forces, Complexity due to JVs, M&As, Complex Corporate Governance requirements.

**F2** – Moderately severe Complexity

**F3** – Manageable& Short term complexity

Technology Related Complexity- ‘T’

**T 1-** Highly severe technological complexity – Product , Process, Operational, Marketing Severity of competition on technical aspects of performance & quality ( Highly Differentiated Terms of product acceptance, Technology obsolescence speed & nature.

**T2** – Moderately Severe- Needing further Investments in R&D etc

**T3** - Manageable Severity- Conditions on time scale manageable with some additional efforts.

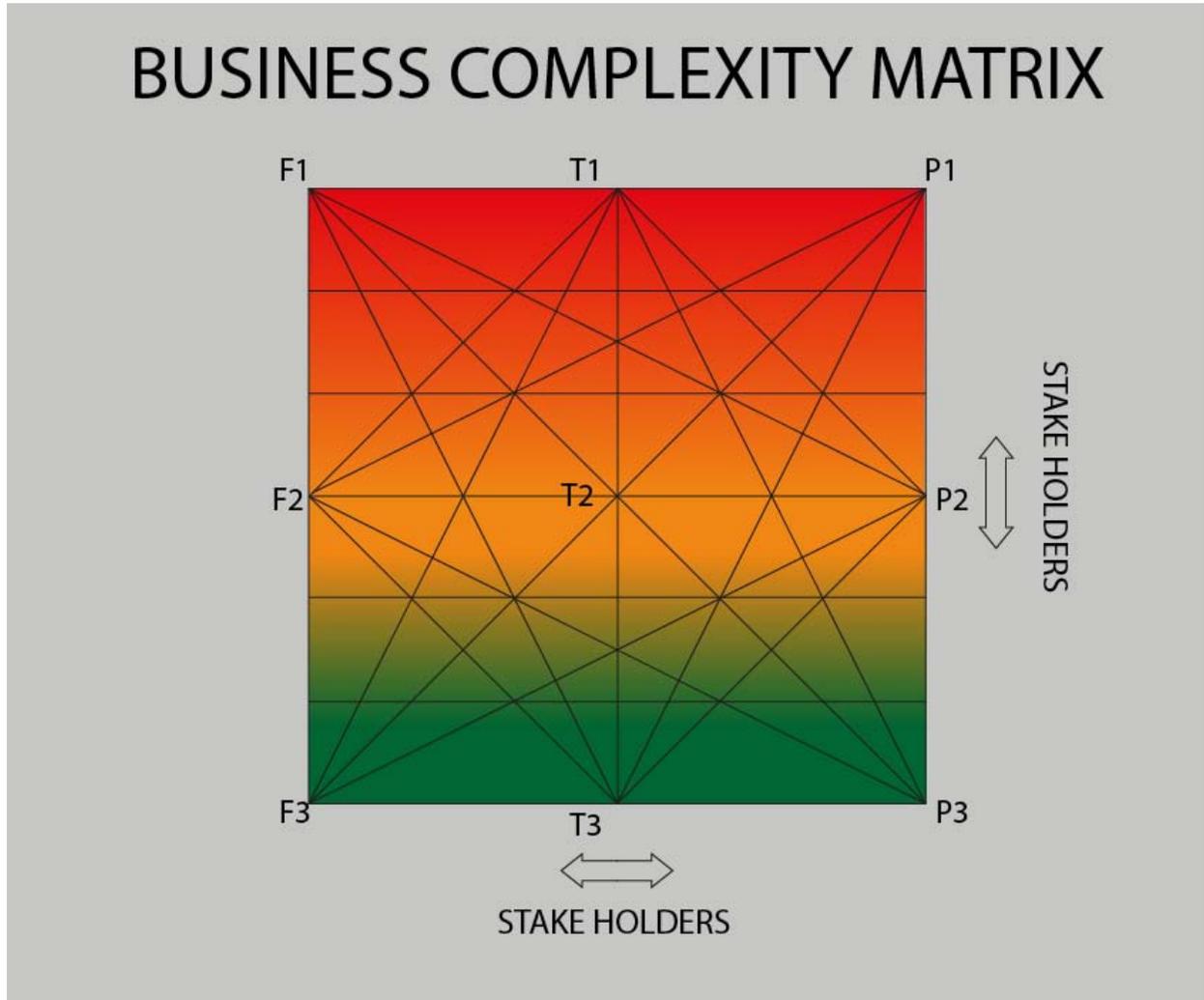
Regulatory/social/Corporate Governance Related Complexity- people& Business-process related—‘P’

**P1-**Extremely severe regulatory requirements arising out of Environmental Control obligations, Situations creating social uproar against business continuity /expansion, stricter Conditions due to Corporate Governance Norms and business regulations restricting Mergers & Acquisitions, Investments in Foreign Countries due to economical sanctions & regulations.

**P2-** Moderate Complexities of regulatory and similar restrictions which can be resolved by persuasions & plead.

**P3-** Time bound conditions & restrictions due to economic/social reasons

## 8. Wealth (F)- Health (P)- Capability(T)



Red: Severe complexity Orange: Moderate Complexity, Green: Normal Complexity

### Conclusions

The above matrix can be used to conduct a port Folio analysis of Products ,Businesses, Critical Success Factors,& Business Drivers in a Competitive Global Business Scenario, to analyze and arrive at appropriate strategies to address business complexity issues.

Implementation and usage of Business Complexity Matrix as a tool for Strategy formulation & strategy Implementation will be of immense use to avoid businesses getting trapped in the web of Business complexity ( Both Strategic& Operational Controls)

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