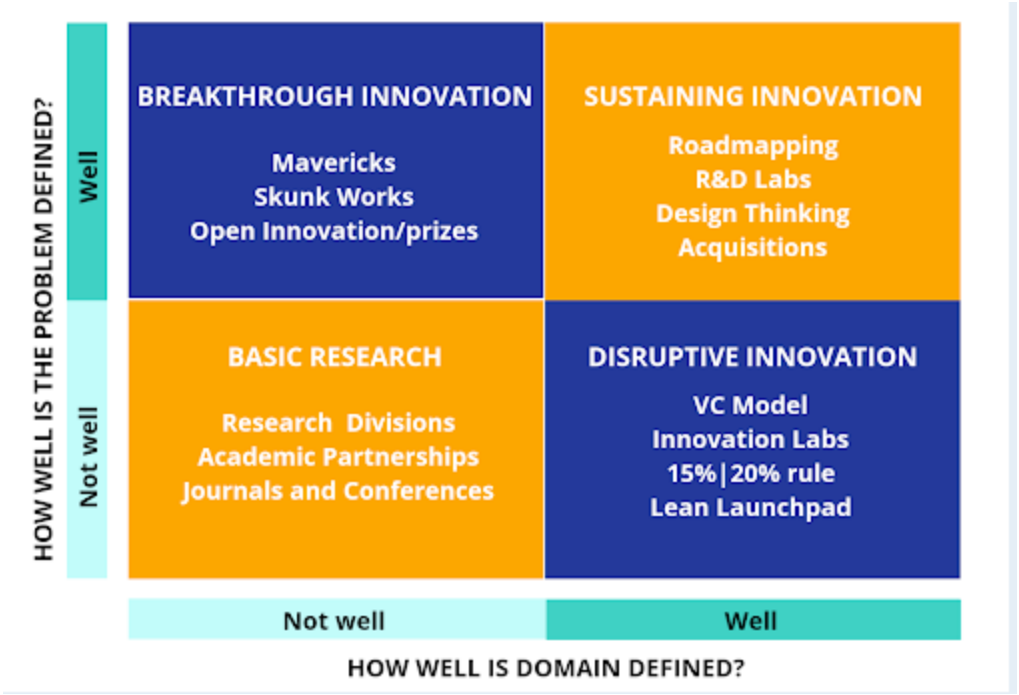
The Innovation Dimension.

1. **The Concept of Innovation .**
   The idea is grounded in departure from current practice. This idea must provide gains in terms of the manner in which things get done. There should be change in quantity and / quality of output. It connotes moving to a better space than we are in now. We could be providing a service in better fashion than hitherto, or improve in our product portfolio. It could mean cutting input costs for the same output as now or increasing output from same input levels. Sometimes new products are designed to serve our customers more congenially, or delivery of service is heightened. The domain of innovation should confer to the mind the rearrangement or reconfiguration of processes and outputs. There should be implications of transformation of the organization through reengineering of input through ergonomics in order to optimize people skills and competencies in the organization. The idea should be so implemented in ways that result in a delighted customer whose patronage we should enslave ahead of our competitors.
2. **Research and Innovation Interface.**
   Sometimes societal problems and organizational setbacks arise. For instance the granting of mining rights to foreigners cannot be properly defined as a political or a business problem. Similarly, the use of thermal power for electricity and refining minerals from their ore status is both a business and health problem.
   When a problem is not well defined and its domain is not well defined too, there is requirement that it be researched. The diagram below illustrates the parameters needing basic research.
   However , different innovation paradigms kick in when one parameter or both are well defined . Innovation is a function of the clarity of the problem and domain definition. Innovation rides on the back of possessed skills, competencies and assumed knowledge. But since these concepts are acquired on the go by societies and organizations, it is logical to perceive innovation as an ongoing fluid concept. Research however, proceeds on stop- start time frame depending on the budgets and urgency with which solutions are required for the hazy problems alluded to earlier.
   Innovation scale can vary, as when Pizza Inn delights their clients by delivering pizza locally using a bike. In contrast, Airbus designs its passenger carrying capability to 800 from 500. Research output is predetermined by affordable sampling whether its once off or longitudinal. Innovation allows for more adaptability when aha experiences are met due to human ingenuity as work gets done and research appears more like a preplanned activity whose output indeed be ploughed back as sources of innovative activities in organizations.
   Both research and innovation seek better ends for organizations in that they both foster growth and /or development of the same.
   Research output can be the framework upon which innovations may be tethered, and huge innovative manoeuvres may require that they be researched upon to peep into possible yield outcomes in order to evaluate the risk profiles attendant to any new innovative ventures.



3. **Innovation Strategy.**

There are three contexts that need consideration. The consumer context, the competitive context, and the collaborative context.

The consumer context surmises that all organization's efforts are meant to satisfy consumer service requirements. Whatever activities that get done should in all cases meet consumer demand. The organization strives to increase demand for its services as that becomes the survival strategy that informs sustainability. Thus the greater the number of customers for our product or service the more assured we are of continuity in society.

The competitive context refers to the assessment of the industry we are in to gauge how we fare as compared to other industry players. Typically, all industry players strive to be leaders who are able to supply the service at least cost so that theirs becomes the product of choice based on customer perception. The innovation thrust would be sustain a least cost provision regime for industry standard products or provide heightened quality output at competitive prices.

The collaborative context is steeped in communication both internally at firm level and externally, at stakeholder level. Internally implies workforce buy in of the organization's vision so that all employees are imbued with a common organizational culture. Training and team work furthers such ends. Externally focus shifts to suppliers of raw materials who need to also buy in to our firm's vision. It can allow equipment maintenance and parts replacement crews to be outsourced. With time, relations may warm up and bonds can be built that permit us to backward integrate with such organizations. The building up of such portfolio acquisitions portend increased outputs and lower costs which may well result in industry leadership alluded to earlier.

There are four pillars of innovation upon which innovation strategy should be tethered. These are people, culture, structures and leadership. The people aspect emphasizes the necessity for adequate skills and competencies to do tasks that deliver the service and products needed in society. This is achieved through sound recruitment practices that select workers with the requisite attributes for the tasks that need to get done. There is need to optimize the interface between s employees and the equipment they use. [Ergonomics] Should the organization decide to re-tool, then it should also re-train to achieve ergonomical parity.

The next innovation pillar is an organization's culture. The culture of an entity is simply defined as its way of life. In an organization, the culture is the answer to the two questions "Who are we?" and "What is the purpose for our existence?" Who we are is steeped into our vision as an organization and the path we wish to beat to establish an identifiable trail that says where we are going. The end game of all our activities as it were. A kind of destination analyses. The purpose for our existence describes our mission. This states the benefits we confer to society to justify why we are here. It galvanizes us into a team with players that possess distinct roles each which is crucial for the furtherance of our mission. It is this allocation of tasks that we collectively know, which gives us the uniqueness that permits us to declare "The way we do things here." Indeed, the culture of our organization. We become a breed of people who seek to justify their raisson detre as it were.

Our culture also sustains the interactive ethos that we hold in our company. Whether we believe in a hierarchical mode where subordinates typically recognize their superordinates at all times or if a camaraderie pervades the whole organization and we appreciate every contribution as critical to our success. Where all workers are important regardless of their rank.

Structure, the third innovation pillar, refers to the processes and activities that organizations undertake to deliver their product and service to the consumer. The physical structure can refer to buildings, warehouses, machinery and equipment that the organization possesses. This might typically mean the dispersion of the infrastructure too. If it is under one roof, in one town, country or region. The operational structure are the systems put in place to activate the physical structure into the conversion of inputs into outputs to satisfy demand requirements. For example, in a cheese making factory, systems are configured to take in the milk needed, convert it to cheese and the storage facilities from where distribution must happen. Structures can be complex depending on their dispersion, the product mix we are pursuing and the efficacy by which the people can adapt to deliver services across the board. Typically, in large entities structures are important to streamline in order to contain costs. Structure must be regarded as a dynamic concept where it might sometimes be necessary to assume a certain level of rigidity as when we want to maintain output at current levels. Or flexible when we want to change output. Changes in output can result from altering the product mix, or from company acquisitions if we elect to either forward integrate or backward integrate.

Leadership is the last innovation pillar. It comprises the onerous top management task of creating the vision and purpose of the organization, selling that vision to the followership so that both believe in it to a degree where the vision subsists as a culture of the company. Leadership stresses that the success or failure of the organization rests with the leadership. Leadership should assume responsibility for the organization's survival even through thick and

thin. Leader actions or omissions determine whether the organization will sink or swim. The tool that leaders have to see this through is their wits with which they should ensure all and sundry are motivated enough to perceive the value that the organization espouses. While there is a vast array of motivation tactics leaders may choose from, and a plethora of approaches that they summon to structure and restructure the organization, the bottom line is ensuring stakeholder buy in to the cause of the organization. Customers must want, demand and obtain the service they require at competitive prices. Customers must also be happy with the quality of the product and feel reassured of its availability at all times that they make their demand.

Workers must be happy with the quality of their offer and be proud of their input in creating the offering. Workers should also be happy with the remuneration given for the work they do. A sustainable relationship must take root with input suppliers so there wont be product shortages when they are demanded. The long and the short of it is that top management must keep their finger on the pulse of the organization and develop strategies that allow diversity and room to adapt to prevailing climate. The organization should be a dynamic entity that sometimes takes new ideas on board and reject non beneficial practices to the dustbin. There will be times to acquire new companies through integration and times to sell other units to streamline operations.

4. **Innovation impact measurement.**

The key performance indicators [KPI] for innovation are measures that organizations should undertake to assess the effectiveness of their innovation programs. Objective measures provide the real metrics upon which decisions get made to map the way forward for the organization. Three metrics stand out large as the KPI which organizations should focus on. These are the financial metrics, the new product/service metrics and the training and culture modification metrics.

The financial metrics refer to the whole financial outlay associated with the innovation program. From the selection of projects to undertake, their budget projections, the expenses envisaged, the revenue streams and the profitability expected. Comparisons need to be made with financials of previous ventures if available to try and ameliorate pitfalls that could have been met earlier. Lessons learnt from history must inform our present navigation skills. Comparisons need to be done also between budget outcomes against actual outcomes. This assists in obtaining variances which variances will inform the efficacy with which we will undertake future programs. We could also subject our financials to a sensitivity analyses of sorts, in order to determine critical sales volumes and values that ensure when we break even so that our revenues match our costs.

New product /service metrics demand that we fully understand our product mix and our current and potential customers so as to devise ways whether to lengthen/ shorten our mix or to widen and deepen it. New products in particular require such market launches as will garner customer support to meet the costs of development and launch, and also the sustained advertising costs that need to be met to give the product a solid standing in the buyer' s mind. The selection of a product or service into the mix connotes the deselection of other ideas which meant brain storming sessions whose time use could have been used elsewhere. Again, revenue flows by new product needs monitoring, not only to compare with budget costs, but also to provide momentum

if its performance is suspect and might fail to pass the profitability test. Seasonal products like maize seed have other complex considerations that need to be taken on board before a go/ don't go decision is undertaken. The decision to shorten the mix should result in a situation where the expenses saved are greater than revenues that would have been earned by the product. Of course product withdrawals and additions have attendant consequences like worker redeployment, new ergonomics or at worst retrenchments.

Training and culture modification presupposes organizations are so dynamic that at any given time skills and competencies need more coverage among the work force. In merging for instance, certain posts become redundant and skills might need to be cross fertilized in the workforce of the merging entities. Increased loads and volumes might compel organizations to train in the use of unfamiliar equipment, or as in I T, in the use of better sophisticated machinery. The mix of two firms in the merger demands that a new culture should evolve to accommodate both breeds of employees. The culture that so evolves is a difficult metric to measure and teamwork and group dynamics may define the destination of the mix. The top management task in an innovative environment is to encourage everyone to feel free to share whatever ideas they may have and forward them for consideration by other workforce compatriots. The obtaining culture in the organization must at best be regarded as transient, ebbing along gracefully and getting replaced over time by the dictates of new organizational needs.

Other measurement metrics typically refer to numerical ratios of input/ output, number of actionable ideas that get implemented in some time window, market success rate of a given product etc. These are generally meant to augment the basic metrics to assist in fine tuning the innovative thrust that the organization wishes to project.