



INNOVATION AS CHANGE STRATEGY AND THE DIVERSIFICATION OF MANUFACTURING FIRMS IN NORTH CENTRAL NIGERIA

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ABSTRACT: *The study sought to determine the impact of innovation as change strategy and diversification of manufacturing firms in North Central, Nigeria. The imperativeness of innovation in the manufacturing sector has made the strategy impeccable for any organization to do without. The specific objectives of the study were : (i) To a large extent technological innovation effect the quality of goods produced by manufacturing firms in North Central, Nigeria; (ii) Determine the extent to which process innovation techniques enhances competitive advantages of manufacturing firms in North Central, Nigeria; (iii) To what extent does marketing innovation enhances large market shares of manufacturing firms in North Central, Nigeria. The study adopted the survey design, were the researcher selected a total of 18 manufacturing firms with a population of 60 respondents made up of CEO and management staff of the manufacturing firms in North Central, Nigeria; as the study population as well as the sample size. Primary data was used for the study and collected through the use of structured five-point likert scale questionnaire and interview method. The hypotheses were tested using simple linear regression for hypothesis one and two; meanwhile hypothesis three was tested using Pearson product moment correlation technique. The findings revealed that: to a large extent there is significant positive effect of technological innovation on the quality of goods produced by manufacturing firms in North Central, Nigeria ($r = .724, p < 0.05$). To a large extent process innovation techniques enhances competitive advantages of manufacturing firms in North Central, Nigeria ($r = .738, p < 0.05$). Marketing innovation enhances large market shares of manufacturing firms in North central, Nigeria ($r = .741, p < 0.05$). Based on the findings of the study, it was recommended that innovation strategy should be enhanced by manufacturing firms as a means for their survival and diversification. More so, the proponent strategy should be embed as it tends to enhance efficiency of systems, goods produced and service delivery in a coherent and tactical manner. More importantly managers should embark on innovation training of their employees as this tends to ensure optimization of resource allocation, by prioritizing the areas that have the most significant impact on their target market that would bring about diversification of manufacturing process.*

KEYWORDS: Innovation, diversification, manufacturing firms.



INTRODUCTION

Organizations around the world today have been experiencing increasingly rapid innovational change for much of the second half of the 20th century. The need for innovative change is becoming increasingly important due to globalization of the market, stiff competition, high quality product expectation by customers, worldwide telecommunication services, etc. thereby, requiring the need for change to meet up with the expectation. It is worth mentioning again that today human priorities and aspirations are changing at a rapid pace as a result of the pervasive influence of innovation as change. This places many demands on managers, especially the need to effectively manage organization members in terms of accepting change or innovation as the means to an end, some of the change, which are meant to enhance the achievement of the desired goals.

To Cole (1994), innovation generally implies change, in the basic sense of introducing something new into an environment. This includes the rearrangement of jobs, roles and structures. It also includes rearranging systems, ideas and processes, since the process of change itself is an innovation. Indeed, it is this aspect of innovation and change which has attracted the most attention from researchers. The basic sense of innovation refers to the introduction of new ideas, new technological input or methods quite different from the existing one. Some organizations change largely in response to external circumstances; this is often called “reactive change”. Others change principally because they have decided to introduce change – this is usually as “proactive change”. Some organizations are conservative in outlook, seeking little by way of change; others are entrepreneurial in outlook, always on the outlook for new opportunities and challenges. This work tends to be anchored on this third aspect of change, “entrepreneurial opportunities change”.

Other changes or innovation, however, will be introduced (proactively) because they are seen to be useful in their own right and not because they have been dictated as a result of external pressures. Beyond these basic changes an organization can choose to adopt a more or less conservative entrepreneurial view of its strategic directions, depending on its culture and managerial style.

An enquiry into the management of innovation as change identified what is termed “mechanistic and organic system of organization”. The mechanistic management system is considered appropriate to stable conditions, while the organic form is suitable to changing conditions, (Burns & Stalker, 1961). These two systems have their characteristics which differentiate them from others. However, the two systems are at opposite ends of a continuum along which other forms could exist. Organizations can move from one system to another and two systems can co-exist in different parts of the same organizations, most especially in manufacturing firms in North-Central Nigeria.

The resultant consequences of firms not adopting innovation as change in the manufacturing processes are: low productivity, low market shares and poor financial muscles, production of sub-standard quality goods. Innovation therefore becomes inevitable, most traditional organizations have accepted in theory at least that they must change, successful companies have a culture that thrives on change, which ensures their continuous growth and developments.

Despite the imperativeness of innovation as change, many organizations leaders and managers are reluctant in adopting change, due to the challenges of complexity, uncertainty, anxiety and



risk involved. Organizations on the pathway of change take great interest in analyzing and understanding change; creating a culture of discipline to accommodate change as well as encouraging and supporting commitment to creativity and human ingenuity.

The need for change arose from three driving forces – customers, competition and globalization (technological process, economic condition, etc). Customers today have become much more sophisticated and demanding, have a much greater range of alternatives, are much more knowledgeable about their needs, wants and are exerting greater pressures on their suppliers now than ever before. Competition which used to be locally and relatively gentle within the same business environment has become a global phenomenon and aggressive too. Globalization, which entails the technological inclination of the world, a harmonious trade and business relationship, has made what was unthinkable yesterday a routine thing today. In a world of rapid change like ours today, organizations must change their priorities from the traditional focus on planning, control and management of growth to speedy service delivery, quality products and cost effectiveness.

Against these backdrop, this research work intends to examine the various innovation strategy embarked upon by some successful manufacturing firms in North Central Nigeria, and how these strategies was managed successfully to facilitate ease of operations as well as ensure diversification of the firms through quality production of goods, in order to enhance the achievement of the desired goals of the organization in today's dynamic business environment.

Statement of the Problem

The poor performance and eventual collapse of most organizations today could be as a result of their inability to clearly recognize the need for innovation as change or as a result of corruption, mismanagement, and waste of resources or poor financial strength of the organization. Most government owned parastatals or private organizations have become epileptic with over bloated staff strength, coupled with poor work methods and defective strategic goals and vision as a result of their inability to identify and adopt innovation in the industry or business environment as a whole.

Most organizations are finding it very difficult to embrace innovation due to leaders or management pre-empting that the new ideas, or new structure the organization is looking forward to adopting might displace them of their present position and responsibility, as such they do not see innovation as paramount to organizational profitability.

It is worth mentioning here that the poor performance and eventual collapse of most organizations these days could be attributed to either corruption (misappropriation of funds, mismanagement, poor implementation of policies and programmes), waste of resources resulting in poor profitability.

Most government-owned and private organizations have become epileptic as a result of poor work methods and defective strategic goals and vision as a result of the management inability to clearly identify, and adapt to changes in the industry or the business environment as a whole. It is against this background that this work intends to examine whether innovation as change strategy is actually inevitable in these days globally competitive business environments, as well as examine the role played by change agents and the dividend inherent in the change process, if successfully planned and implemented accordingly.



Objectives of the Study

The main aim of this study is to examine innovation as a change strategy and the diversification of manufacturing firms in North Central, Nigeria. The specific objectives of the study are to:

- i. Determine the extent to which technological innovation affects the quality of goods produced by manufacturing firms in North Central, Nigeria.
- ii. Determine the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria.
- iii. To what extent does marketing innovation enhance large market shares of manufacturing firms in North Central, Nigeria.

Research Questions

For the achievement of the set objectives, the research questions are presented thus:

- i. How does technological innovation affect the quality of goods produced by manufacturing firms in North Central, Nigeria?
- ii. What is the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria?
- iii. What is the extent to which marketing innovation enhances large market shares of manufacturing firms in North Central, Nigeria?

Research Hypotheses

From the highlighted objectives and research questions, the hypotheses are formulated thus:

- i. To a large extent technological innovation affects the quality of goods produced by manufacturing firms in North Central, Nigeria.
- ii. Determine the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria.
- iii. To what extent does marketing innovation enhance large market shares of manufacturing firms in North Central, Nigeria.

Significance of the Study

This study will be very useful to all sectors of business organization, most especially the manufacturing sectors. Researchers and students of business management who want theoretical and empirical data on the topic will find this work helpful and a good compendium.

More importantly, this study will attempt to fill the gap in literature and will contribute to add knowledge in the field of business management. It will also add to the existing academic work and stimulate further research in management.



LITERATURE/THEORETICAL UNDERPINNING

Concept of Change as Innovation

To Stoner et al. (2006:412), the concept “planned change”, is “the deliberate design and implementation of a structural change, a new policy or goal, or change in operating philosophy, climate or style”. They added that an organization can be changed by altering its structure, technology and people.

To these authorities, change programs are necessary today precisely because of the shift in time and relationships that we have seen throughout the organizational world.

To Schermerhorn (1999:379), innovation – “is the process of creating new ideas and putting them into practice”. It is the act of converting new ideas into usable applications. In organizations these applications occur in two forms – process innovation, which result in better ways of doing things.

He went further to say that the management of both process and product innovations includes supporting invention, the act of discovery and application, the act of use that managers need to be concerned about building a new work environment that stimulates creativity and an ongoing stream of new ideas. They must also make sure that the commercial potential of ideas for new products or services is fully realized. He went further to assert that “change is an essential part of the processes of organizational creativity and innovation , especially today, many people say that change is inevitable and a way of life.” From his assertion, innovation and change mean the same things and have been used interchangeably to refer to moving from old ideas and ways of doing something to new ideas and improved processes or products.

Change, which is used here in the context of organizational change according to Aldag (1987:387), means “any alteration of activity in an organization”. He added that the alteration could be the result of many things; changes in the structure of the organization, modification of work tasks, introduction of new products or change in the attitude among members.

By way of assertion, Ivancevich et al (1994:526), described organizational change in a statement thus, “organizations often make minor or major alterations in reaction to influences in its direct action and indirect-action environment. This adjustment otherwise known as change can be planned or emergent aimed at keeping pace with trends in order to survive and grow in today’s fast changing and globally competitive business environment.

From the various definitions above, it is obvious that organizations change either by altering its structure (in terms of redefining the flow of authority, responsibilities and task assignments), or change its technology (by way of introducing new work processes, altering the existing work processes either by reducing or enlarging the content, automating manual processes, and/or introducing entirely new technology requiring new skills), or above all changing its people (by altering their attitudes, behavior, skills and perception), or change organizational mission and goals (by altering the strategy), or organization culture (including the sub-culture/alternative culture).

Change is a continuous process of organizational development. It is pervasive and its extent is often underestimated until it actually occurs.



Approaches to Innovation as Change

Kanter (1984), cited in Cole, (1994:138), identified two quite different ways in which organizations approached change or innovation. One approach which she called the “integrative approach”, described firms who were observed to deal holistically with problems, were willing to try out new ideas prepared to push the organization to its limits and generally saw change as an opportunity rather than a threat.

The other approach by contrast, “compartmentalized problem-solving”, saw the organization as a collection of segments rather than as an organic whole, dealt with change within segments/compartments and was unwilling to alter the balance of the overall structure. This approach she referred to as the “segmentalist” approach.

The author went further to say change or innovation, the introduction not just of new products and new technology, but also of new ideas and practices – was much better handled by integrative companies than by segmentalists. She went further to opine that the most important motive for change in a business enterprise is to improve the organization’s ability to meet and satisfy customers’ needs. For companies to become integrative they need to develop three new sets of skills in their managers.

1. **Power Skills:** Skills in persuading others to invest time and resources in new (and perhaps risky) initiatives.
2. **Skills in managing problems:** Problems arising from team-work and employee participation
3. **An understanding:** How change is designed and constructed in an organization. These skills will help facilitate the integrative change process in an organization.

Organizational Creativity and Innovation

As individuals differ in their ability to translate their creativity talent into results, likewise, organizations differ in their ability to translate the talents of their members into new products, processes or technological know-how. To enable organizations to use creativity most effectively, managers need to be aware of this process of innovation in organizations and take steps to encourage this process.

To Stoner et al. (2006:426), “the creative process involves three steps: idea generation, problem-solving or idea development, and implementation.”

➤ **Generation of Ideas:** The generation of ideas in an organization depends, first and foremost on the flow of people and information between the firm and the environment. For instance, the vast majority of technological innovations have been made in response to conditions in the marketplace. If organization managers are unaware that there is potential demand for a new product or that there is dissatisfaction with already existing products, they are not likely to seek innovations. Consultants and experts are important sources of information for managers, because they are frequently aware of new products, processes or technological developments in the field. Ideas can also be generated by new employees, who may have knowledge of alternative approaches or technologies used by suppliers and competitors. Also they are “technological gatekeepers, these are people who are exposed to information outside



their immediate work setting environment. In essence idea generation is stimulated by external contacts.

➤ **Idea Development of Problem-solving:** This is dependent on the organizational culture and processes within the organization, organizational characteristics, values and process can support or inhibit the development and use of creative ideas. This is commitment to the rational problem-solving approaches, which increases the likelihood of high-quality, creative ideas and full development.

➤ **Implementation:** This implementation stage of the creative process in organizations consists of those steps that bring a solution or invention to the marketplace. These steps include engineering, tooling, manufacturing, test marketing and promotion. High rate of innovation is crucial for long term growth and profitability. All these steps help in putting in place or translating the organizational member's talent into new products, processes and services for the achievement of organizational objectives and to withstand the competition from other similar organizations.

Types of Change

To Armstrong (2006:344), there are two types of change:

- Strategic Change
- Operational Change

Strategic Change: This is concerned with broad, long term and organizational wide issues. It is all about moving into the future stage, which has been defined generally in terms of strategic vision and scope. It will cover the purpose and mission of the organization, its corporate philosophy on such matters as growth, quality, innovation and values concerning people, the customers' needs served, and the technologies employed, which most of the manufacturing firms under investigation have adopted in recent years to boost their production capacity. Strategic change takes place within the context of the external competitive, economic and social environment and the organization's internal resources, capabilities, culture, structure and systems. Its successful implementation requires thorough analysis and understanding of these factors in the formation and planning stages.

Operational Change: This relates to new systems, procedures, structures or technology, which will have an immediate effect on working arrangements within a part of the organization; but their impact on people can be more significant than broader strategic change and they have to be handled carefully.

To Schermerhorn (1999:394), he identified the types of change, to include:

⇒ Planned Change

⇒ Unplanned Change

Planned Change: Planned change occurs as a result of the specific efforts of a change agent, planned change is a direct response to a person's perception of a performance gap, or a discrepancy between the desired and actual state of affairs. Performance gaps may represent



problems to be resolved or opportunities to be explored. In each case, managers as change agents should be alert to performance gaps and take action to initiate planned changes to deal with them.

Unplanned Change: They occur spontaneously or randomly and without the benefit of a change agent's attention. Unplanned changes may be disruptive or beneficial. The appropriate goal in managing unplanned change is to act immediately once it is recognized in order to minimize negative consequences and maximize possible benefits.

The planned change seems to represent the strategic change, as mentioned in the assertion of Armstrong (2006). It incorporates all the characteristics that are peculiar in the strategic change. Meanwhile, the unplanned change has the attributes that are peculiar to that of operational change.

According to Aldag (1987), there are three types of change: Technological Change, Structural Change and Changing People.

1. Technological Change: With increased pressure on organizational development and business growth, increased innovation and improved production efficiency, technological change has received considerable attention in the recent past. Technology refers to the conversion process that transforms organizational inputs into more improved, sophisticated and quality outputs. As such an organization's technology consists of machinery, knowledge (skills), tools, techniques, etc. and actions that are necessary to complete the transformation process. Thus, technological change involves alteration in the organization's conversion process. A problem that often confronts the management wishing to embark on technological change is how to achieve the right balance between creativity and routinization. As earlier said, creativity often leads to innovation, while routinization on the other hand often increases efficiency in production.

2. Approaches to Changing People: This refers to alteration in values, attitudes, skills, performance, perceptions and behavioral patterns on organization members. The effort to initiate human change may come from within an organization as provided by "training programmes" or may come from outside the organization through "**outsourcing**"; the change process directed at humans may involve an individual, groups or the entire membership of an organization.

Generally, change no matter the form, nature, type or sources create a situation of uncertainty. Employees, irrespective of their positions, educational backgrounds or experiences, tend to resist or react to change negatively as it involves plunging into the unknown.

3. Approaches to Structural Change: This refers to the alterations in organization's structures, lines of communication, work flow or managerial hierarchy, goals, strategies and several systems.

Change Process

Management of organizations must learn to respond to both external and internal forces bringing about change. Lewin (1989) studied the process of bringing about change, discovered that efforts at change fail for two reasons: that people are unwilling (or unable) to alter long-



established attitudes and behavior. Tell a manager that he is aggressive and abrasive in dealing with others, he or she may be resentful and resistant to change.

Lewin went further to develop a three-step sequential model of the change process, which was later elaborated by Edgar et al. as cited in Stoner et al. (2006) as unfreezing, changing and refreezing.

- 1. Unfreezing:** This involves making the need for change so obvious that the individual, group or organization can rapidly see and accept it.
- 2. Changing:** Involves discovering and adapting new attitudes, values and behaviors. That a trained change agent can lead individuals, groups or the entire organization through the change process. During this process of change, the agent will then foster new identification and internalization. Members will then identify the agent's values, attitudes and behaviors, internalizing them, once they perceive their effectiveness in performance.
- 3. Refreezing:** This refers to enshrining the new behavior pattern into place by means of supporting or reinforcing mechanisms, so that it becomes the new norm. Here the manager is concerned about stabilizing the change and creating the condition for its long term continuity. Refreezing is accomplished by appropriate rewards for performance, positive reinforcement and providing necessary resource support. It is also important to evaluate results carefully, provide feedback to the people involved and make any required modifications in the original change. It is worthy to note that, when refreezing is done poorly, changes are too easily forgotten or abandoned with the passage of time. When it is done well, change can be more long lasting.

To Ivancevich et al. (1994), five steps are involved in the change process, the steps are:

1. Identify and Analyze Current Situation

Mission (organization's reasons for existence in the society)

Objectives (Specific performance result)

Strategic (Comprehensive plan)

2. Analyze External and Internal Environments

Industry and external environment (opportunities and threats)

Organizational resources and capabilities (strength and weakness)

3. Revise Mission and Objectives, select new strategies

Corporate

Business

Functional

4. Implement Strategies

Corporate governance



Management systems and practices

Strategic leadership

5. Evaluate Results

Strategic control

Renew strategic management process.

Change must involve the people; change must be imposed on the people. People and teams need to be empowered to find solutions and responses, with facilitation and support from managers, tolerance and compassion from leaders and executives. Changes such as new structures, policies, targets, acquisitions, disposals, relocation, etc. all create new systems and environments. These need to be explained early enough, so that people's involvement in validating and refining the changes themselves can be obtained. Participation, involvement, openness, early and full communication are important factors when initiating change.

Workshops and seminars are very useful avenues to develop collective understanding, approaches, policies, methods, systems, ideas, etc. (Ubeku, 2004:205).

Resistance to Change or Innovation

Having looked at the concept of change and forces that necessitate change in our organizations, it is important at this point to look at the concept of resistance to change. Resistance to change is simply the opposition to these alterations. The Oxford Advanced Dictionary defines resistance as assailing, attacking, blocking, checking, confronting, counteracting, disappointing, frustrating, hindering, impeding, obstructing, thwarting efforts to alter either the technology, structure or the people (in terms of their skills and values). Stoner et al. (2000) views resistance to change as restraining forces fighting to maintain the status-quo. Sharing this position, Rostenzwey et al. (1979:575), opined that "if people in organization do not change, it must be because natural drives toward innovation are being stifled or held in check by countervailing forces". By countervailing forces, they mean those restraining forces fighting to maintain the status-quo in the organization. To them, this is because people are more comfortable doing routine tasks than having to alter skills and values in order to adapt to a particular change.

From the foregoing, it can be discerned that all the writers are of the opinion that resistance to change is simply an opposition by organizational members to a planned or emergent alterations in structure, technology or people in the organization. Schermerhorn (1999:388) was of the opinion that "change often brings with it resistance." He further said that "resistance is often viewed by change agents and managers as something that must be "overcome" in order for change to be "successful". This is not necessarily true. Resistance is better viewed as feedback that the informed change agents can use to constructively modify a planned change to better fit situational needs and goals. When resistance appears, it usually means that something can be done to achieve a better "fit" between the planned change, the situation and the people involved.



Management of Resistance to Change or Innovation

The fact that the members of the organization attempt to resist change is not necessarily to alarm managers. Resistance in some form should be expected to be either emergent or a planned change in organization, as understanding the cause of the resistance will enable managers to employ techniques to overcome it effectively. Some of the strategies according to Kotter (1997), which can be applied to weaken resistance to change include the following:

1. Education and Communication: Explaining the need for and logic for the change is an effective strategy for reducing resistance. Many times, members lack the information to grasp the change properly or have inaccurate perceptions of how the change will affect them. This makes them resist change. Managers can tackle this problem by educating and communicating the need and logic for the change to all members through lectures, seminars, public rally, special sessions with different departments at different times to acquaint them of the need for the change; printing and distribution of handbills containing all the information about the change and the procedures to be followed, raising of internal memo through the various heads of department to all members, of the need and benefit of the change. This will help weaken the forces against the change as members would be fully aware of the reasons and the need for the proposed change.

2. Participation and Involvement: Members can overcome resistance or weaken the restraining forces to change by having members participate in the planning and implementation of change. This can be done by meeting with workers and dramatically demonstrating the need for change to all members. Thereafter, all members can be asked to freely express their opinion about the intended change as well as suggest what they thought could be more appropriate to handle the situation on ground. By generally discussing and agreeing on the change, members will be more committed to the implementation of the change. This is because participation helps reduce uncertainty and misunderstanding about the purpose of the change. Members, by freely expressing their ideas or others through discussion of the change process, would understand why some approaches to the change were selected and others rejected thus, reducing the intended resistance to the change.

3. Facilitation and Support: The gradual introduction of the change process and provision of support to people affected by the change are effective means of weakening the restraining forces for change or overcoming resistance to change. Support can be provided to those members directly affected by the change by providing training programmes to get them use to the processes and procedures of the change, time off during the transition period to reduce stress and tension caused by the change and above all, managerial show of emotional support like encouragement and showing concern for the workers plight when the change process is at a difficult stage. All these will go a long way in building confidence in the workers about the initiators and prospect of the change, thus reducing resistance to such change(s).

4. Negotiation and Agreement: Sometimes, it is necessary for managers to negotiate or bargain to win acceptance or reduce resistance to change. Powerful individuals or departments in an organization may demand more resources to comply with the change, believing correctly or incorrectly that the change will reduce their power. Managers can manage the resistance arising from this by meeting with the affected individuals or departments over the issue for purposes of negotiation and agreeing on terms that will enhance the successful implementation of the change. During the bargaining session, managers can make the individuals or



departments realize the mutual benefits, which the intended change may avail all parties. They could also trade-off certain aspects of the change, which the people have serious reservations about, so that their commitment to the implementation of the change can be achieved. Managers are always advised to seek agreement through negotiation prior to the implementation of change to avoid disrupting the change process.

5. Explicit and Implicit Coercion: This seems to be the last resort, if managers seeking to implement the change hold an advantage of power over resisters, they may demand that members support the change or be threatened with loss of rewards and resources like pay cut, no promotion, termination of appointment, transfer, etc. This strategy has the potential of increasing resistance among members in the future and this is most appropriately used when change must occur quickly and without the opportunity to muster support through other strategies.

Managers are advised to take into consideration the nature of the intended change, the time frame required for its implementation, and the nature of its people before selecting a particular strategy and/or a combination of the resistance management strategies to manage resistance to change in our modern organization.

To Kotter (1997), he was able to highlight seven strategies for effectively managing organizational change as started below:

- ⇒ Put people first
- ⇒ Work with a change management model
- ⇒ Empower employees through communication
- ⇒ Activate leadership
- ⇒ Make change compelling and exciting
- ⇒ Pay attention to high and low points in momentum
- ⇒ Don't ignore resistance

Put People First

Successful change management prioritizes people. People fuel change and sustain its momentum. Change initiatives fail when the people involved don't understand, believe or engage in the change. Leaders or managers make change easier when they engage employees in the change. Leaders accomplish this through proactive change management communication that creates a desire to change across the workforce.

Work with a Change Management Model

Leaders are up against company culture, organizational momentum and human psychology when enacting change. To make change happen they need the right tools to guide them. Change management models help leaders connect business strategy to action, which increases the likelihood of success. There are a variety of change management models from which to choose, for example (Prosci's ADKAR model, Lewin's change management model, and Kotter's



change management model, among others). Each model varies, but all follows similar core tenants of identifying needs and planning for and implementing change.

Empower Employees through Communication

Communication is an essential part of effectively managing organizational change. A vision for change is only as good as the communication that supports it. Effective change management communication provides clarity for why the change is needed and mobilizes employees with a sense of urgency for the change. It is a well acclaimed fact that organizations fail to drive meaningful change when they fail to communicate effectively between the change agents and those to carry out the change.

Change management communication is not a one-time transfer of information, it requires commitment, clarity and consistency. It should engage employees through two-way communication methods like surveys, focus groups and informal feedback collection. To this extent when leadership involves employees, they feel valued, when employees feel valued, they are more likely to embrace change and participate effectively in making it happen.

Moreso, two-way communication also helps leaders identify barriers to change before they become a hindrance. Proactively identifying barriers can enable the organization to respond to and dissolve issues that create change resistance.

Active Leadership

The recent survey of change management models of the prosci ADKAR model, cited “active and visible executives’ sponsorship” as the top reason change initiatives succeed. Leadership’s impact on change is well-understood. The issue then is that many leaders don’t understand the vital role they play in the change process. Hence, the education of leaders on their roles is paramount, to advance change successfully.

Leaders of organizations are expected to:

- ⇒ Be responsible for achieving change goals from start to finish,
- ⇒ Help the organization understand and interpret what the change means for their teams, the organization and the marketplace,
- ⇒ Ensure those who enable organizational change stay actively involved,
- ⇒ Keep the train on the tracks and are ready to switch directions, choose a new path or create a new approach, if necessary.

Make Change Compelling and Exciting

Employees can better understand the rationale behind a change when the organization prioritizes purposeful, clear and consistent communication. This targeted communication strategy provides the context to understand the why, what and so what of the change.

Effective communication answers the most important question people are thinking:

- ⇒ What does this mean to me; how will it impact my work? Therefore, with a deeper, clearer understanding of the change, employees are much more likely to ask, “How can



I help?" strong employees support deter change resistance that could hold the organization back.

Pay Attention to High and Low Points in Momentum

There are likely tendencies that there will be both high and low points during change initiatives. Leaders can proactively manage and leverage these points in time. During the high points of change, leaders should celebrate wins to fuel momentum. At the low points, leaders can reset communication strategies to listen to employees input and build trust and support. Being proactive helps leaders manage momentum for the greatest success.

Don't Ignore Resistance

Change resistance truncates an organization's transformation. Resistance is much easier to counter when it's identified early. Leaders should pay attention to the signs of change resistance, including inaction, procrastination, withholding information and the spread of rumors. Communication is the key to identifying resistance. Create feedback channels and input sessions to proactively identify signs of resistance, then take fast action where necessary.

Change is the life-hub of successful, growing organizations and the heart of change is people. Leaders position themselves and their companies for managing organizational change effectively when they proactively engage employees and ensure communication is clear, consistent and transparent to ensure successful implementation and achievement of desired goals.

Change Agents Role

By change agents, we refer to a person or group who takes leadership responsibility for changing the existing patterns of behavior of another person or social systems. Change agents make things happen and part of every manager's job is to act as a change agent in the work setting.

To Jolaoso (1991:10), "all managers are change agents irrespective of their professional learning". He identifies seven groups which normally play the role of a change agent, these are: Investigators, inventors, application engineers, innovators, entrepreneurs, facilitators, life circle extenders (those who rescue the products from delay).

To Nwachukwu (1988:250), "for effective organizational change, the change agent should not only play a dominant role in initiating the change, his duty is to give direction to activities and play an active part in generating solutions". He enumerates the function of the change agent to include: setting the goals, observation, collection of required data, coaching, counseling and guidance, assessment of feedback.

It is most appropriate that the change agent should not only be involved in initiating the change, but fully participate in carrying it out by giving direction and encouragement in its execution.

To Greene et al. (1985:473), "planned change does not just happen, it is brought about by a person or persons referred to as a change agent". This person is the catalyst for change. The change agent might be an external or an internal consultant. They contend that effective management also needs to be effective change agents. It is their belief that the change is an integral part of the planned change process, interacting at virtually every phase of the process.



From the above assertion, a change agent role is he who initiates, consults and participates in the implementation of the change process.

Steps to Manage Change or Innovation

At a seminar on managing change, Tajumarwu and Adedavoh (2005) of Center for Management Development Shangisha highlighted the following steps:

Increase Urgency:

- Inspire people to move
- Make objectives real and relevant

Building the Guiding Team:

- Get the right people in place
- With the right emotional commitment
- The right mix of skills and levels

Get the Vision Right

- Get team to establish a simple vision and strategy
- Focus on emotional and creative aspects to drive service and efficiency

Communicate for Buy-in

- Involve as many people as possible
- Communicate the essentials simply
- Appeal and respond to people's needs
- Make technology work for rather than against

Empower Action

- Remove obstacles
- Enable constructive feedback
- Provide support for leaders
- Reward and recognize progress and achievement

Create Short-term Wins

- Set targets that are easy to achieve in bite-size
- Embark on manageable numbers of initiatives
- Insist on stage-by-stage completion of tasks



Don't Let Up

- Foster and encourage determination and persistence
- Encourage ongoing progress reporting
- Highlight achievements and future mile-stones

Make Change Stick

- Reinforce the value of successful change via; recruitment, promotion, new change leaders, etc.
- Weave change into culture.

The conscious application of these steps makes the introduction of a desired change in an organization a huge success. Managers are advised to first of all understand the nature of the change to be introduced, identify those to be affected by the change and then co-opt them into the change process in a logical way outlined above.

Concepts of Diversification

Diversification is the strategy of expanding operations into a new business or industry and producing new goods or services. (Gareth et al., 2000). Examples of diversification include Pepsico's diversification into the snack-food business and Dangote Group of Companies producing cement, sugar, etc. diversifying into petro-chemical refineries. There are two major kinds of diversification namely: Related and unrelated diversification.

Related Diversification

This diversification is the strategy of entering a new business or industry to create a competitive advantage in one or more of an organization's existing divisions or businesses. Related diversification can add value to an organization's products, it serves as a source of cost saving strategy, it also enhances organization's competitive advantage. Competitive advantages arise due to resource sharing, which enables both divisions to reduce their costs, and as a result, they can charge lower prices than their competitors and thus attract more customers. More so in related diversification, synergy is ensured, which makes the value created by two divisions cooperating greater than the value that would be created if the two divisions operated separately. In pursuing related diversification, managers often seek to find new businesses where they can use the existing skills and resources in their divisions to create synergies, add values to the new businesses, and improve the competitive position of the organization. On the other hand, managers may acquire a company in a new industry, with the belief that some of the skills and resources of the acquired company might improve the efficiency of one or more of their existing divisions. On successful operations, such skills transfer can help an organization to lower its costs or better differentiate its products, as a result of the synergy between the divisions.



Unrelated diversification

This arises when organizations enter new industries or buy companies in new industries that are not related in any way to their current businesses or industries. The main reasons why managers pursue unrelated diversification is that, sometimes, managers can buy a poorly performing company, transfer their management skills to that company, turnaround its businesses, and increase its performance, all of which will create value. More so, pursuing unrelated diversification is that purchasing businesses in different industries lets managers engage in portfolios strategy, which is apportioning financial resources among divisions to increase financial returns or spread risks among different businesses, much as individual investors do with their own portfolios. This can be analyzed as managers may transfer funds from a rich division a “cash cow” to a new and promising division “a star” and by appropriately allocating funds between divisions, create values, etc.

Other corporate levels manager’s strategies include:

International Expansion

The strategic decision of competing internationally brings about international expansion in business or industrial production. By international expansion as the strategy implies, it is made up of two broad perspectives, they are:

⇒ Global strategy

This is when managers decide that their organization should sell the same standardized product(s) in each national market in which it competes, and use the same basic marketing approach to reach out to the customers in the different countries of operation.

⇒ Multi-domestic strategy

This is when managers decide to customize products and marketing strategies to specific national conditions. Managers adopt various customized products and marketing strategies that are peculiar to each nation's business operations. These various strategies have their advantages and disadvantages peculiar to them.

For the global strategy, its advantages are that:

There is significant cost savings associated with not having to customize products and marketing approaches to different national conditions.

The disadvantages are:

By ignoring national differences, managers may leave themselves vulnerable to local competitors that do differentiate their products to suit local tastes.

For the multi-domestic strategy, its advantages are:

By customizing product offerings and marketing approaches to local conditions, the organization may be able to gain market share or charge higher prices for their products.

The disadvantages are:

By customization, that cost of production rises and puts the multi domestic company at a price disadvantage because it often has to charge prices higher than the prices charged by competitors pursuing a global strategy. Obviously, the choice to be made by managers between these two strategies cannot be adopted simultaneously during business operations by an organization.

Vertical integration

Vertical integration is all about organization, discovering new opportunities to create value by either producing their own inputs or distributing their own outputs. These concepts can further be explained as a corporate-level strategy, through which an organization becomes involved in producing its own inputs (backward vertical integration) or distributing and selling its own output (forward vertical integration).

It is empirical to say that vertical integration can help an organization to grow rapidly, also it can be a problem when forces in the organizational environment counter the strategies of the organization and make it necessary for managers to reorganize or retrench. More so, it can reduce an organization's flexibility to respond to changing environmental conditions. A major reason why managers pursue vertical integration is that it allows them either to add value to their products by making them special or unique or to lower the costs of value creation.

Conceptual Framework

The conceptual framework, as intuited by researchers, intends to link the proxies of both the independent and dependent variables and see how they can be able to bring to bear or ensure expanded and sustainable business organization that could cut across both local and international markets, as shown in fig. 2.1 below.

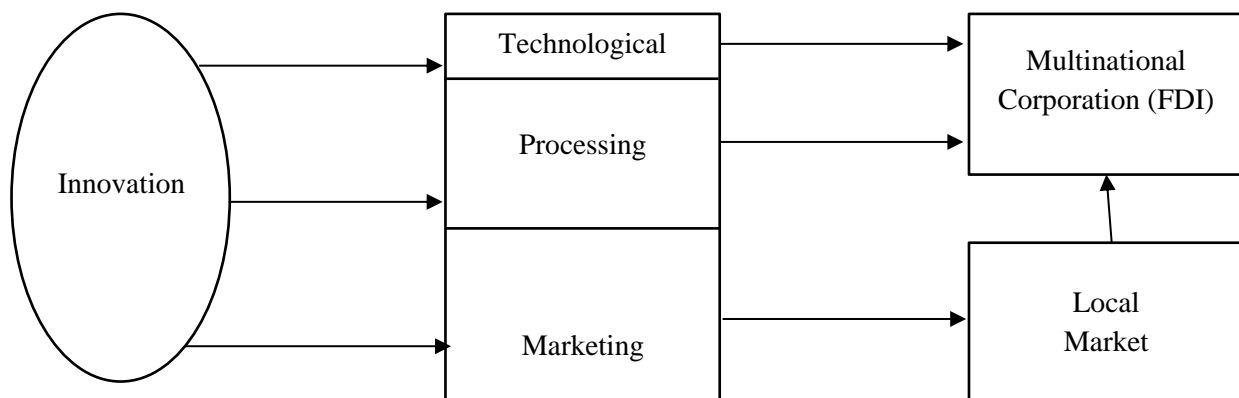


Figure 1: Conceptual framework for Innovation Strategy and diversification of manufacturing firms

Source: Researcher intuition, 2022.

From the diagram above, innovation which is the application of new technological ideas, application of sophisticated processing ideas and marketing strategy lead the business division



into diversifying into Foreign Direct Investment (FDI) as a multinational corporation and acquiring large market shares for its product in the local market

Review of Related Theories

Disruptive and Sustaining Innovation Theory

This theory was first propounded by Clayton Christensen (1997). Disruptive innovation, refers to a concept, product or service that creates a new value network either by disrupting an existing market or creating a completely new market. Disruptive innovations often are not “good enough” to satisfy current customers, they appeal to a different market situation. More so, sustaining innovation on the other hand refers to the type of innovations that exist in the current market and instead of creating new value networks, it rather improves and grows the existing ones.

The Innovation Matrix

Market (Disruptive and Sustaining)

Product (Incremental and Radical)	Radically Sustaining	Radically Disruptive
	A significant improvement on a product in an old market	Sales arguments are fundamentally changed through new innovations
	Incrementally Sustaining	Incrementally Disruptive
	Constant steady progress that happens in every business	Many incremental improvements that eventually lead to market disruption

Adopted from Viima Blog

- ⇒ Radically Disruptive: This is an innovation that harnesses new technology and creates a new business model. It is believed to have no clear competitors.
- ⇒ Radically Sustaining: Improvement on a product or process in an existing market that provides new value for the customers in the market as a result of the innovation.



- ⇒ Incrementally Disruptive: This refers to an incremental improvement in technology that leads to a dramatic disruption.
- ⇒ Incrementally Sustaining: This refers to small and cumulative changes that take place in an existing product, technology or service. This matrix can be used to classify initiatives in innovation portfolios.

Architectural Innovation Theory

This theory was introduced by Rebecca Henderson and Kim Clark in 1990. This innovation is described as the configuration of existing product technologies, the core components of architectural innovation is that, while the components of the products remain the same, the relationship between these components changes; this type of innovation entails the overall design, system or the way components interact. The authors realized that the categorization of innovation as either radical or incremental was “incomplete and potentially misleading” and did not explain much about the firms’ ability to innovate and the circumstances surrounding innovation. They therefore introduce their own framework to address this gap. To them, the knowledge required to develop successful new products is divided into two types: knowledge of the components and knowledge of the linkage between the components. The knowledge of the components relates to each of the core design concepts and the way in which they are implemented in a particular component. On the other hand, knowledge of the linkages between the components (in other words architectural knowledge) relates to knowledge about the ways in which the components of a product are integrated and linked together into a coherent whole.

The Teece Model Theory

This model was developed and put forward by David Teece ideas about innovation and how firms can benefit from innovations in 1986 ground-breaking paper, “Profiting from technological innovation”. The model tends to predict who will profit from an innovation and the roles of technology imitability and complementary assets in appropriating benefits from innovations. The model explains why firms can fail in appropriating economic returns from their inventions. To this model, merely inventing a product is not enough for a firm to benefit from it. There are two factors that determine who can profit from an innovation: Imitability and complementary assets. Imitability refers to how easily competitors can imitate or copy an innovation. To offset the challenges posed by imitability of inventions, firms can use several innovation protection mechanisms – like intellectual property rights, adopting secrecy and tacit knowledge, to protect their inventions from imitation by competitors.

Complementary assets on the other hand refers to the assets that firms can deploy to ensure profits from an invention. Complementary assets include such activities as distribution channels, marketing, brand name, customer service, alliances and collaborations. To this model, control over complementary assets and not just inventing, ensures that firms profit from their inventions. The model tends to also figure out which firms will have higher incentives to invest in certain innovations. The model explains further that, it will be difficult for a firm to benefit from its innovations if imitability is high, while the complementary assets it holds are not important and easily available in the market. On the other hand, if imitability is high and the complementary assets that a firm hold are important and not easily available, it will profit from the invention regardless of who developed the invention. The model explains that the



profit margins however increase further in this case if imitability is low. In the case of complementary assets not being controlled by competitors, most of the profits generated will accrue to the firm. Moreso, in the case of a firm holding complementary assets which are important as well, negotiations can take place with the competitors in which case the profits are shared as per the bargaining power of the parties involved.

METHODOLOGY

Research Design

The study adopted descriptive research designed using a simple survey method to facilitate the accomplishment of the objectives. The unit of analysis was the manufacturing firms, while the unit of enquiry was the business owner/managers. In each manufacturing firm, we purposely targeted a business owner/manager because they are key in the innovation process. In a broad sense, the main thrust of the study is to assess the dividend of innovation as a change strategy for the enhancement of diversification of the manufacturing firms in North central Nigeria.

Area of Study

The area of study comprises the geographical area which will cover North Central, Nigeria. The time scope is three years from 2021 – 2023. The study was narrowed to management staff and owner-founders of selected manufacturing industries that are registered with the state's ministries of trade, commerce, industries and tourism and are operational in the region.

Population of the Study

The population of the study consists of 18 manufacturing industries with staff strength of 60, made up of management staff of government owned and owner – founder of private manufacturing enterprises. The selection of the firms cut across all the manufacturing sectors and was done through convenience non probability sampling technique. Given the above conditions 18 manufacturing industries with staff strength of 60 respondents constitute the population as well as the sample size of the study. The population per state is given in table 1

Table 1: Breakdown of the manufacturing firms and population of the management staff of the selected industries.

S/N	Name of State	No. of Industries	No. of Staff
1	Plateau	3	10
2	Abuja	4	16
3	Benue	2	6
4	Niger	2	6
5	Kogi	2	6
6	Kwara	2	6
7	Nasarawa	3	10

Source: State's Ministries of trade, commerce, industry and tourism, 2022.



Description of Research Instruments

The most instruments used in this study were structured questionnaires and oral interviews. The structured questionnaire was designed in a five-point Likert scale. The questionnaire was divided into two parts. Part A was designed for information concerning the respondents' profile (bio-data and job experience) and Part B tends to address the research questions properly. Oral interviews were conducted to compliment data collected from the questionnaire.

Reliability of Research Instruments

Instruments reliability refers to the degree to which a test consistently measures the attributes it is supposed to be measuring (Gay, Mills & Airasian, 2006). An instrument is reliable if it would give the same result after repeated investigations. This study adopted a test-retest method of instrument reliability and a spearman ranking correlation coefficient method was used to analyze the result. The computed spearman ranking correlation coefficient (r) was 0.87, this indicated that reliability by the test instrument is very strong as the $r > 0.7$. Conventionally, if the reliability value of an instrument is greater than 0.7, it is said to be reliable.

Method of Data Analysis

In this study, descriptive statistics, such as frequency counts with simple percentages, will be used to analyze the bio-data of the respondents. At the inferential level of analyses hypotheses one and two will be tested with simple linear regression technique and hypothesis three will be tested using Pearson Product Moment Correlation (PPMC). More so, all the analysis shall be done through the application of Statistical Package for Social Science (SPSS 20.0).

Decision Rule

The decision rule for this study shall be: Reject null hypothesis (H_0), if $p\text{-value} < 0.05$. Do not reject if otherwise.

RESULTS/FINDINGS

Based on the findings illustrated in the tables, the five-point likert scale was used with values assigned from 5 (SA) to 1 (SD) for positive responses to questions asked.

Table 2: Summary of Bio-data of the Respondents

SEX	FREQUENCY	PERCENTAGE (%)
Male	54	90
Female	6	10
Total	60	100
STAFF DISPOSITION		
CEO	25	42
Management Staff	35	58
Total	60	100
HIGHEST EDUCATIONAL QUALIFICATION		
BSc/B.Ed/HND	40	67
MSc/Ma/MBA	10	17
PhD	5	8



Professional Certificate	5	8
Total	60	100
TYPES OF BUSINESS		
Manufacturing	60	100
Total	60	100

Source: Field Survey, 2022

Research Question 1

What is the extent to which technological innovation enhances improved quality of goods of manufacturing firms in North Central, Nigeria.

Questionnaire code from 1 – 4 were designed to provide answers to this research question. Responses from the respondents were analyzed as follows:

Table 3: Technological Innovation and Quality of Goods of Manufacturing Firms

Code	Items Description	F	SA	A	U	D	SD	Total	Mean
	Technological innovation and quality of goods								
1	The technological advancement in the manufacturing process helps increase the efficiency in operation thereby ensuring the production of total quality goods.	F %	30 50	15 25	5 8	10 17	- -	60 100	4.08
2	The innovational technology helps reduce costs as well as ensure rapid business growth	F %	40 67	10 17	5 8	5 8	- -	60 100	4.4
3	There is an increase in the efficiency of systems, quality products and services delivery.	F %	30 50	15 25	5 8	5 8	5 8	60 100	4.0
4	The innovation helps to track and streamline processes	F %	40 67	15 25	5 8	- -	- -	60 100	4.5

Source: Field Survey, 2022

There is a significant positive relationship between innovation and improved quality of goods produced by manufacturing firms in North Central, Nigeria, as the mean value 4.0 is even greater than the cut-off point of 3.0.



Research Question 2

How does process innovation technique enhance the competitive advantage of manufacturing firms in North Central, Nigeria.

Questionnaire codes 1 – 4 were designed to provide answers to this research question. Responses from the respondents were analyzed as follows:

Table 4: Process Innovation Technique and Competitive advantage of Manufacturing Firms

Code	Items Description	F	SA	A	U	D	SD	Total	Mean
	Process Innovation and Competitive Advantage								
1	The process techniques, feedback and survey from the end-users can help a company improve and modify products to serve their purposes best.	F %	30 50	15 25	5 8	10 17	- -	60 100	4.08
2	The decision-making process techniques enable a company to make future predictions about its products.	F %	40 67	15 25	- -	5 8	- -	60 100	4.5
3	The quality of your products as a result of process techniques, gives the company a competitive edge over other competitors	F %	40 67	20 33	- -	- -	- -	60 100	4.6
4	The increase in productivity of employees in recent time experienced in your organization, is as a result of process innovation techniques embraced by the firms	F %	40 67	15 25	5 8	- -	- -	60 100	4.5

Source; Field Survey, 2022

From the above findings, there is a positive significant relationship between process innovation techniques and the enhancement of competitive advantage by manufacturing firms that embraced process innovation techniques in its manufacturing process, as seen the mean value 4.5 is greater than the cut-off point 3.0.

Research Question 3

What is the extent to which marketing innovation affects the large market shares of manufacturing firms in North Central, Nigeria.

Questionnaire code 1 – 4 were designed to provide answers to these research questions. Responses from the respondents were analyzed as follow:

**Table 5: Marketing innovation and large market shares of manufacturing firms**

Code	Items Description	F	SA	A	U	D	SD	Total	Mean
	Marketing innovation and large market shares								
1	This strategy provides businesses with the flexibility to adapt to changing market conditions and adapt to a dynamic business environment.	F %	35 58	12 20	3 5	10 17	- -	60 100	4.2
2	Marketing innovation optimizes resources allocation, by prioritizing the areas that have the most significant impact on their target market and increases sales and revenue.	F %	30 50	20 33	- -	10 17	- -	60 100	4.1
3	My business has expanded by choosing the right distribution channels and developing effective promotional strategies.	F %	25 42	20 33	3 5	12 20	- -	60 100	3.9
4	The organization is looking forward to expanding to foreign direct investment (FDI) due to the incremental innovation adopted recently.	F %	30 50	15 25	5 8	10 17	- -	60 100	4.0

From the above findings, there is a positive significant relationship between marketing innovation and expansion of market shares of manufacturing firms when the firms tend to embrace aggressive marketing innovation. As can be seen, the mean value of 4.0 is greater than the cut-off point of 3.0.

DISCUSSION/HYPOTHESIS TESTING

To achieve the research objectives of this study, three hypotheses are tested in the alternate form thus:

- i. To a large extent technological innovation has a significant effect on the quality of goods produced by manufacturing firms in North Central, Nigeria.
- ii. Determine the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria.
- iii. To what extent does marketing innovation enhance large market shares of manufacturing firms in North Central, Nigeria.



The null hypotheses are thus:

- i. To a large extent technological innovation has no significant effect on the quality of goods produced by manufacturing firms in North Central, Nigeria.
- ii. Process innovation techniques do not enhance competitive advantages of manufacturing firms in North Central, Nigeria.
- iii. To a large extent marketing innovation does not enhance large market shares of manufacturing firms in North Central, Nigeria.

Test of Hypothesis One

H₁: To a large extent technological innovation has a significant effect on the quality of goods produced by manufacturing firms in North Central, Nigeria.

H₀: To a large extent technological innovation has no significant effect on the quality of goods produced by manufacturing firms in North Central, Nigeria.

Table 6: Model Summary for Hypothesis One

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.724 ^a	.535	.534	.4407

a. Predictors: (Constant) Technological Innovation

Table 7: ANOVA for hypothesis One

Model		Sum of squares	df	Mean square	F	Sig
1	Regression	208.876	1	208.876	560.42	.000 ^b
	Residual	98.692	508	.194		
	Total	307.567	509			

a. Predictors: (Constant) Technological innovation

b. Dependent variable: Quality goods produced

Source: SPSS version 20.0

Table 8: Coefficients of Hypothesis One

Model		Unstandardized coefficients		Standardized coefficients	t	Sig
		B	Std error	Beta		
1	Constant	.615	.046		-13.288	.000
	QGP	.760	.032	.724	23.763	.000

b. Dependent variable: Quality goods produced

Source: SPSS Version 20.0

From the tables above, there is a positive relationship between the variables ($r = .724$) and the coefficient of determination ($R^2 = .534$); this shows that 53% change in quality of goods of the manufacturing firms in North Central, Nigeria is brought about by technological innovation embark upon by the organization. More so, the F-statistics of 560.42 and the sig representing



the p-value is .000 ($p\text{-value} < 0.05$), this means to a large extent there is a significant positive relationship between technological innovation and quality of goods produced.

Decision Rule

To this extent, the null hypothesis is rejected and the alternate hypothesis, which states that to a large extent technological innovation has significant effect on the quality of goods produced by manufacturing firms in North Central, Nigeria accepted.

Test of Hypothesis Two

H₁: Determine the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria.

H₀: Determine the extent to which process innovation techniques do not enhance competitive advantages of manufacturing firms in North Central, Nigeria.

Table 9: Model Summary for Hypothesis Two

Model	R	R square	Adjusted R square	Std. error of the estimate
1	.738 ^a	.545	.544	.4490

a. Predictors: (Constant) Process Innovation Technique

Source: SPSS Version 20.0

Table 10: ANOVA for Hypothesis Two

Model		Sum of squares	df	Mean square	F	Sig
1	Regression	222.781	1	222.781	608.904	.000 ^b
	Residual	102.435	508	.202		
	Total	325.215	509			

a. Predictors: (Constant) Process Innovation Techniques

b. Dependent variable: Competitive edge/advantages

Source: SPSS version 20.0

Table 11: Coefficients of Hypothesis Two

Model		Unstandardized coefficients		Standardized coefficients	t	Sig
		B	Std error	Beta		
1	Constant	.623	.045		13.742	.000
	CA	.757	.031	.738	24.676	.000

a. Predictors: (Constant) Process Innovation Techniques

b. Dependent variable: Competitive edge/advantages

Source: SPSS Version 20.0



From the table 9 above, the model summary for hypothesis two indicates that there is a positive relationship between the variables ($r = .738$) and that 54% change ($R^2 = .545$) in competitive edge/advantages is explained by firms embracing process innovation techniques in their manufacturing process, thereby placing those manufacturing firms over and above other competitors. The F-statistics value of 608.904 and the p-value (sig) of 0.000 i.e (p-value < 0.05) this therefore, indicates that there is a significant positive relationship between process innovation techniques and firms having competitive edge/advantage over their competitors, when they embrace the strategy of process innovation techniques in their production process.

Decision Rule

The alternative hypothesis is accepted and it is stated that process innovation techniques enhance the competitive advantage or edge of manufacturing firms in North Central, Nigeria. The null hypothesis should be rejected.

Test of Hypothesis Three

H₁: To what extent does marketing innovation enhance large market shares of manufacturing firms in North Central, Nigeria.

H₀: To what extent does marketing innovation not enhance large market shares of manufacturing firms in North Central, Nigeria.

Table 12: Correlations for Hypothesis Three

MI	Pearson Correlation	MIM	EMS
	Sig (2-tailed)	1	.741
	N	60	.000
		60	60
	Pearson Correlation	.741	1
	Sig (2-tailed)	.000	
	N	60	60

**Correlation is significant at the 0.01 level (2-tailed)

Keys

MI: Marketing Innovation

EMS: Enhances Market Shares

Source: SPSS Version 20.0

Table 12 shows the correlation analysis for hypothesis three. The correlation coefficient shows 0.741 this value indicates that correlation is significant at 0.05 level (2 tailed) and implies that there is a significant positive relationship between marketing innovation and enhanced large market shares ($r = .741$). The computed correlation coefficient is greater than the table value of $r = .195$ at alpha level for a two- tailed test ($r = .741$, $p < 0.05$). To this extent since the computed $r = .741$ is greater than the table value of $.195$ we conclude that:



Decision Rule

The null hypothesis is rejected and the alternative hypothesis which states that: Marketing innovation enhances large market shares of manufacturing firms in North Central, Nigeria accepted.

Implication to Research And Practice

Results related to the first objective

Research Objective One: To a large extent technological innovation enhances improved quality of goods of manufacturing firms in North Central, Nigeria. The results in table 6 – 8 were used in analyzing the research objective using simple linear regression; it was proven that technological innovation enhances the quality of goods produced by manufacturing firms in North Central, Nigeria. A significant positive relationship was found between the variables as indicated by the $r = .724$, a t -value of 23.673 and F -statistics value of 560.42, $p < 0.05$ respectively. This result was in tandem with the work of strategists such as Cooper and Schendel, (1976) they point out the nature of strategic responses to technological threats and indicate that, more radical technological innovations (competence – destroying changes) may pressure existing incumbent firms to develop new competences, skills and capabilities and improved quality of goods and services which would ensure their competences among other competitors in the industry. More so, Dussauge, Hart and Ramanantsoa, (1996) portray incremental innovations as “refining and improving existing products or processes” and “radical innovation as introducing totally new concepts”. The strategist explains further that innovation may involve the development of new technologies, such as bio-engineering and genetic engineering which define new industries or the application of existing technologies to create new products or to enhance existing products.

Result related to the second objective

Research Objective Two: Determine the extent to which process innovation techniques enhance competitive advantages of manufacturing firms in North Central, Nigeria. The results in table 9 – 11 was used in analyzing the research objective using simple linear regression; it was proven that process innovation techniques enhances competitive advantages of manufacturing firms, as significant positive relationship was found in the variables, as indicated by the (r – value = .738) and the coefficient of determination ($R^2 = .545$). This shows that 54% change of competitive advantages of manufacturing firms in North Central, Nigeria is brought about by process innovation techniques, the F -statistics value of 608.904 and the sig representing the p -value is .000 i.e (p -value < 0.05), respectively.

This result was in line with the work of Cooper and Schendel (1976), as they postulated that incremental technological changes, which is like process innovation (competence-enhancing changes) reinforce the competitive positions or advantages of established firms in the industry.

There is also a path-breaking paper by Chris Piper (2008) on process innovation. He believes that manufacturing is not as separable from the other organizations as outsourcers would believe. He was of the opinion that “Effective in-house manufacturing provides the best opportunity to harmonize product design specifications with process capabilities as well as retain and protect intellectual property. It offers additional barriers to entry of potential competitors. In the same vein, he opined that equipment that is developed in house or purchased



in standard form and modified in house, allows its owner to obtain sustainable competitive advantages. In conclusion, products or goods that exploit in-house innovative process technology can blind-side the competition when the product's attributes cannot be replicated without the hidden intellectual property. On the other hand, new products produced by processes that are known can be duplicated and refined by any competitor who purchases the products and reverses the engineering processes.

Results related to the third objective

Research objective three: To what extent does marketing innovation enhance large market shares of manufacturing firms in North Central, Nigeria. The empirical results in table 12, were used in analyzing the research objective using Pearson product moment correlation coefficient. The results indicated that the correlation coefficient shows .741. This value indicates that correlation is significant at 0.05 level (2 tailed) and implies that there is a significant positive relationship between marketing innovation and large market shares of manufacturing firms ($r = .741$). The computed correlations coefficient is greater than the table value of $r = .195$ at alpha level for a two-tailed test ($r = .741, p < 0.05$) respectively.

This test is in line with the work of Zakiyah, Muslimin and Pricylia (2022) on marketing innovations and business sustainability. They found out that marketing innovation affects company values (Tang et al., 2021), because company performance can be generated from innovation skills (Sok et al., 2013). This indicates that innovation is vital for business continuity, which is all about an organization continually having adequate market shares that can guarantee their survival and diversification. Furthermore, their findings portray that innovation is needed in companies, especially related to the market economy system. It was demonstrated that product innovation and production processes are often carried out in a market economy system and there is also innovation in product marketing. In conclusion this means that innovation provides many benefits for an organization in developing their performance and maintaining business continuity, as a result of acquiring adequate market shares that can cover marketing, products and production of goods.

CONCLUSION

Innovation is a necessity in today's hyper competitive business environment. A business can only stand out and generate the best market drive through innovative tactics. The introduction of various innovation variables such as technological, process and marketing innovation, improves the performance of the firms in terms of efficiency of system, operations and effectiveness in management which brings about continuity and diversification of the firms. Moreso, such effective and efficient manufacturing operations tend to ensure quality of products produced, and also strengthen the organization's competitive position in the market environment. The need for innovation as change is becoming increasingly imperatives due to the globalization of markets, stiff competition, high quality product and/or service expectation by customers, thereby requiring the need for innovation to meet up with the expectations, for customers' satisfaction. It is worth mentioning that today human priorities and aspirations are changing at a rapid pace as a result of the persuasive influence of innovation as change. This places many demands on organizations to embrace innovation as change to effectively manage



and diversify organization as the means to an end, some of the change, which are meant to enhance the achievement of the desired goals.

Future Research

The following topics can be considered for future research:

Innovation Strategy and the Emerging Global Economy.

Innovation as Change and the Hyper-competitive Economy.

Innovation strategy and the Resilience of service rendering organization.

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