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**Innovation: Strategy for Growth and Development**

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The Chairman,  
Trustees of NIIE  
Fellow Industrial Engineers  
Ladies and Gentlemen

Permit me to once again welcome you to this reunion and rebirth of our Institution after a long period of dormancy. This time around it must fully optimised both through short and long range innovative planning!

### **1.0 Introduction**

Peter Drucker looks as the Discipline of Innovation as specific function of entrepreneurship, whether in an existing business, a public service institution or a new venture started by a lone individual in the family kitchen. He defines Innovation as the means by which the entrepreneur either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth. The Economist magazine[1] defines it as “new products, business processes, or organic changes that create wealth or social welfare,” or simply, “the fresh thinking that creates value.”

Historically, innovation has been practiced within institutions. And it has been largely driven by companies, individual innovators, or specialized researchers and designers rather than by those who are ultimate users of the innovations. Over the last few decades, innovation has been moving to a more open and networked process—open to new ideas from enthusiasts (“the crowd”), from other fields, and from customers and end-users.

### **2.0 Innovation and Development**

The private sector has driven this experimentation and expansion of innovation models—companies from Toyota to eBay have applied “open and user-driven” processes to their product development and the results have been revolutionary.

While some nonprofit organizations and companies are increasingly embracing open and user-driven innovation, these models are not being widely applied to meet the needs of poor or vulnerable people. Industrial Engineers must be in the forefront of these “open and user-driven” innovation processes. The wave of momentum on open and user-driven innovation has just begun to reach the development sector. For example, the Rockefeller Foundation through their “Accelerating Innovation for Development” initiative aims to explore whether the new innovation approaches can be applied more widely in development, and whether they can be scaled up and diffused for greater adoption.

The initiative focuses on the following four primary levers for change:

- Testing the applicability of commercial innovation models for addressing social problems.
- Encouraging NGOs and others focused on pro-poor innovation to use open innovation models.
- Scaling existing socially-focused and non-profit innovation models.
- Influencing providers of innovation platforms to sustainably and systematically provide their services to the social sector.

### 3.0 Pragmatic Innovation Processes

As Industrial Engineers, we should also play key role in advancing these initiative to apply proven innovative process to national development.

Peter Drucker mentions several sources of innovation as: Unexpected Occurrence, Incongruities; Process Needs; Industry and Market Changes; Demographic Changes; Changes in Perception; New Knowledge

But a note of caution: Ideation and Innovation are not Synonymous. While ideation is the generation of ideas but innovation is the implementation of ideas.

However, permit me to quote great innovators that corroborates the need for pragmatism in Innovation.

Lt Gen Ronald Kadish, Director of Missile Defence Agency in US Dept of Defence says **Mix People Up**[2] *“One of the surest way to get a job done innovatively is, quite simple, to reorganise frequently. When you put people in a new structure, it stimulates them to rethink what they’re doing on a day-to-day basis. I find that people respond well if you can get them to focus not on the inconveniences of restructuring but on the satisfaction of setting high goals and then knocking down the barriers to achieving them”*

Hal Tovin, Group Executive Vice President of the Emerging Channels Division of Citizens Financial Group, Rhodes Island says: **Hire Outsiders**[3] - *The most important step I’ve taken to encourage innovation is to hire people who have experience outside of banking – creative people who can apply what they’ve learned in dynamic, customer-centric categories to our more traditional businesses”*

Larry Keeley, President of Doblin, an innovation strategy firm in Chicago and San Francisco says **Abandon the Crowd**[4] - *The principal thing we’ve done to encourage innovation is to help people see that there are actually many types of innovation – Product Innovation, Customer service Innovation. You can actually spend less and make more money in innovation if you pay attention to valleys, those places your competitors have overlooked.*

Mike Lazaridis, Founder, President and co-CEO of Research in Motion, Waterloo, Canada. Maker of a wide range of wireless solutions including Blackberry says: **Fight Negativity**[5] - *'Innovation is like a professional sports: It looks easy, but when you're on the field, you see how complicated and difficult it is. To me the key is building conviction. Always hire people who are smarter than you'*

As Industrial Engineers, we are taught to always **Ask "What If?"**[6] - Mark Dean, IBM Fellow and Vice President of Systems of IBM Research, New York. An Engineer and Inventor, having more than 30 patents including 3 of 9 IBM original PC patents, says - *'We are continually encouraged to spend time exploring new ideas and asking "what if?" questions, and we're allowed to pursue the ones think have the most promise. Researchers always want to go for that last 2% of performance. But it's better to get a sufficient solution out fast and then continue to enhance it'*

John Talley, Vice President of Drug Discovery at Microbia in Cambridge, Massachusetts. Led the chemistry team at Pharmacia that found Celebrex, and anti-arthritis drug and received the Pharmaceutical Research and Manufacturers of America Discoverers Award 2002 says: **Merge Patience and Passion**[7] - *'Almost 80% of the people who go into medicinal chemistry retire never having worked on a discovery that leads to a commercial product. If tools your working with are hammers, you don't want all problems to be seen as nails'*

## Conclusion

In Conclusion, widespread use of cutting edge innovation processes will increase the scale and efficiency with which social problems affecting poor and vulnerable people are solved. The Industrial Engineer of today will play a great role in the industrialisation and national development of Nigeria and the Africa as a whole. So in the words of Esther Dyson, an active inventor, adviser to a wide range of young IT companies in the US and Europe says: **Don't Just Innovate. Solve Problems**[8] - *'I try to encourage creative solutions to real problems. Innovation is good only if it's useful. "How do I encourage useful innovations?" ... Promote risk taking.....Give people reason to be enthusiastic about trying new tools.....'*

Thank you

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[1] **Advancing Innovation Processes to Solve Social Problems**

<http://www.rockefellerfoundation.org/what-we-do/current-work/advancing-innovation-processes-solve>

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