

The Civil Engineer & the Emerging Nigerian Economy

NICE Warri 1st Annual Public Lecture & Seminar

Saturday 19th September-2015

What, Why, How

Civil Engineering and Nigeria

Ike Nwankwo – MSc, MBA, PMP

INTRODUCTION

What, Why, How - Civil Engineering and Nigeria

- The paper looks from an external perspective into the Civil Engineer and Civil Engineering and the roles and functions they play or should play, in the development of Nigeria. It focuses on a perspective of the “What”, “Why” and “How”, analyses various perceptions and solutions, whilst introducing project management as a key skill set and approach for the delivery of change



WHAT

Perceptions

- Buildings and Roads
- Contractors / Builders
- Structural Engineers
- Design
- Infrastructure Development

Civil Engineering

Civil engineering is a professional engineering practice that applies the knowledge of mathematics and the physical sciences to **design, construct and maintain** the physical and naturally built environment **for the benefit of man and the environment.**

NICE

- (NICE), the professional body that helps to maintain best standard in the practice of Civil Engineering in Nigeria.
- This body is dedicated to ensuring continuous improvement in the standard of civil engineering projects executed in Nigeria
- as well as equip engineers with the relevant professional development tools needed to execute top grade civil engineering projects internationally.
- To make unique contributions to the development of the Country by constituting itself such that it would be a reservoir of Civil Engineers with specialized knowledge, experience and skill, constantly updated through the highest standards of continuing professional development programmes
- To establish and maintain standards and codes for the practice of Civil Engineering.
- To be constantly in touch with Government at all levels, for necessary inputs and contributions to policies and matters affecting members and the development of the profession

Sub-disciplines

- Environmental engineering
- Geotechnical engineering
- **Structural engineering**
- Highway and transportation engineering
- Municipal or urban engineering
- Water resources engineering
- Materials engineering
- Coastal engineering
- Surveying
- Construction engineering



WHY

Perceptions

Visual

- Bad Roads
- Collapsed buildings
- Flooding
- Erosion
- Standards
- Poor Maintenance

Impact

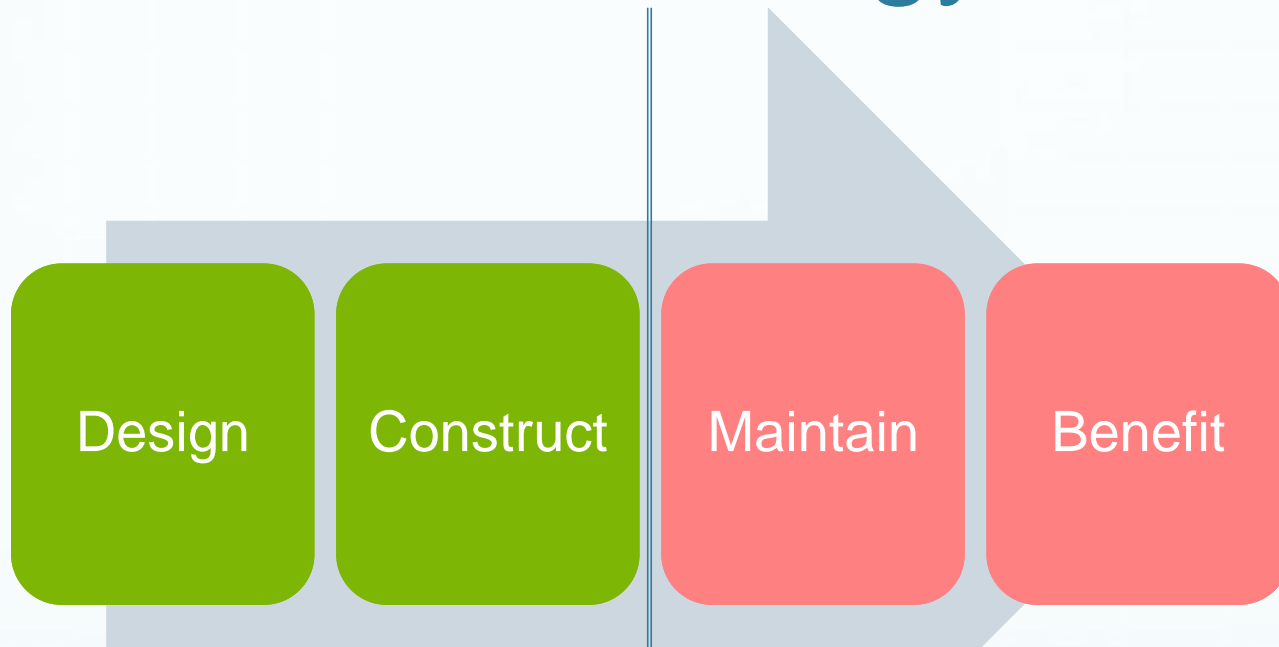
- Perceived benefits minimal
- Awareness
- Transportation
- Life & welfare
- Economy

In an Emerging Nigerian Economy?



HOW

Methodology



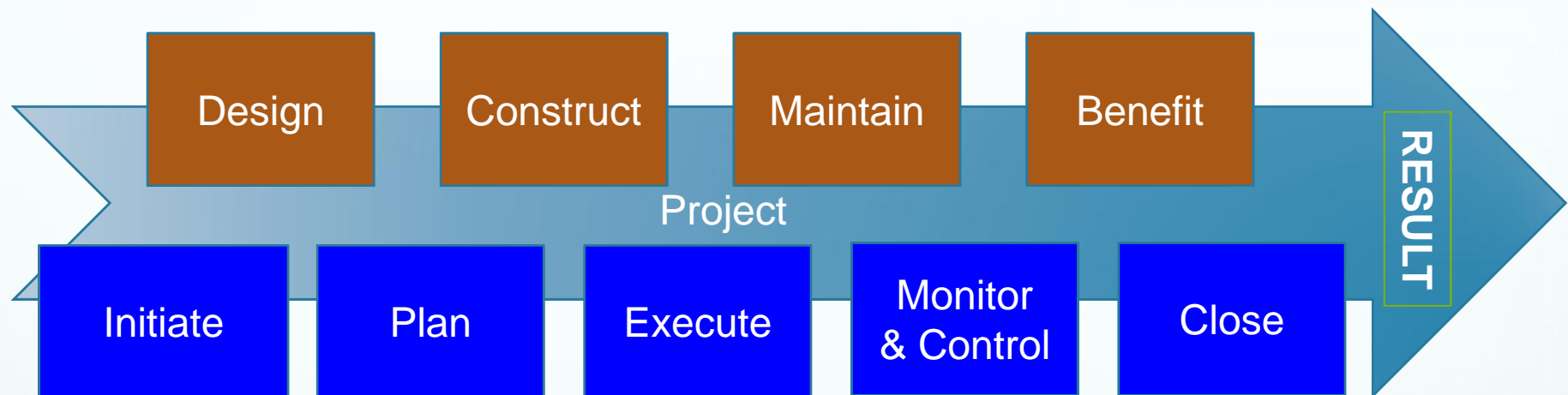
Perceived as being done to different degrees

Little or no perception of being done

Project Management

- A project is a **temporary** endeavor undertaken to produce a **unique** product, service or result.
- Project Management is the **application of** Knowledge, Skills, Tools and Techniques to project activities to meet the project requirements
- Accomplished through the appropriate application and integration of processes, categorized into five process groups, **Initiating, Planning, Executing, Monitoring and Controlling**, and **Closing**
- Balancing Project constraints including Schedule, **Quality, Budget, Scope**, Resources, Risks etc

Integration



Project Focused and Benefit Aligned

About PMI

- Project Management Institute (PMI) is the world's leading not-for-profit professional membership association for the project, program and portfolio management profession.
- PMI has more than 700,000 members, credential holders and volunteers in nearly every country in the world including Nigeria
- PMI is enhanced by globally recognized standards, certifications, resources, tools, academic research, publications, professional development courses, and networking opportunities.
- The **PMI Nigeria Chapter** is the representative Local chapter of PMI

Way Forward

Interaction

- Project Management as a Skill (or Profession)
- Project Management Methodologies
- Collaboration not Opposition

Integration

- Government Engagement
- Basic Standards
- Innovative Thinking
- Sustainable Infrastructure
- Designed and Built for Nigeria

“For the benefit of man and the environment”

For the Betterment of the Nigerian Emerging Economy

THANK YOU

Q & A



Ike Nwankwo MSc, MBA, PMP
President, PMI Nigeria Chapter
www.pminigeria.org, president@pminigeria.org

&
Project Management Consultant – Construction and IT
Ike.nwankwo@gmail.com t: 0816 310 6525