Efficiency Improvement in Construction Projects
Efficiency Improvement in Construction Projects

➢ **Introduction**

➢ **Project Management & PMO**

➢ **Construction Management**

➢ **Finance Controlling**

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Introduction

The Challenges

How the Client explained it

How the Project was understood

How the Designer designed it
Introduction
The Challenges

How the Contractor constructed it
What was the result for testing
What was ready for handover

How the Client was billed
Introduction

The Challenges

What the Client really needed
The Project Life Cycle

Initiation

Decision Gate

Planning I
Basic & Strategic Planning

Decision Gate

Planning II
Execution Planning

Decision Gate

Execution & Control
Decision Gate

Closing
Decision Gate

Operation
Project Management & PMO
The Understanding

Management
managerial responsibility
LINE FUNCTION

Governance
(PMO & Technical Support)
operational duties
STAFF FUNCTION

Other participants
eexecution
Project Management & PMO
The Understanding
Project Management & PMO
The Methodology

Performance Control

Progress Control

Project Controlling

SUCCESS
Cost
Time
Quality

Project Management Services

acc. Project Management Institute

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The Back Office
- providing project-related services;
- supporting a specific project or program.

The Core
- providing enabling processes;
- supporting continuously the management of projects or program throughout an organization.

The Organization
- responsible for the alignment of projects and program works to corporate strategy;
- establishing and ensuring appropriate enterprise governance;
- performing portfolio management functions to ensure strategy alignment and benefits realization.
Construction Management

The Approach

- Organization & Communication
- Design & Coordination
- Logistics & Site Observation
- Procurement & Contracting
Construction Management

The Approach

Program Setup
Optimization

Organization & Communication
Design & Coordination
Logistics & Site Observation
Procurement & Contracting

Financial Status
Project Controlling
Construction Management

The Approach

Program Setup
Optimization

Lean Management

Organization & Communication
Design & Coordination
Logistics & Site Observation
Procurement & Contracting

Progress & Performance Control

Financial Status
Project Controlling

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Construction Management

The Programs

Construction Management

set up & manage

Management

Construction period
Construction Management

The Programs

Start

Construction Management

set up & manage Management

Construction period

Advisory Services

train, advise & guide Improvement

Completion

6 months
Construction Management

The Programs

Start

Completion

Construction Management

set up & manage

Management

Construction period

Advisory Services

train, advise & guide

Improvement

6 months

Task Force Services

manage & execute

Completion

3-6 months
Construction Management

The Target Systems

- Project Setup
- Finance
- Design Works
- Building/Construction Works
- Construction Site
- Logistics
- Contracting
- Program

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Construction Management
The Improvement Process

- Project Setup
- Finance
- Design Works
- Building/Construction Works
- Construction Site
- Logistics
- Contracting
- Program

SYSTEMBUS

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Construction Management

The Principle

CAUSE

Diagnosis
Evaluation
Improvement

EFFECT

on site

Performance
Control

Progress
Control

Discovery
Analysis

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Construction Management

The Communication

Without
- Everyone's on 'his' own
- Rumours and hearsay – no proof
- Lots of copies & versions
- No data security in the www
- Inadequate documentation
- Inefficient and costly
Construction Management

The Communication

Project Platform

- Developer client
- General planner/architect
- Specific planners
- Authorities
- Contractors
- Sub-contractors
- Service providers
- Project management

With

- Central interface for EVERYONE
- Unmistakable results + proof
- Rules for/to communicate
- High data security using https
- Efficient documentation & research
- Considerable potential savings

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Finance Controlling
The Base Cost/ Budget Estimation*

- Cost of building works
- Main contractor's preliminaries
- Main contractor's overhead & profit estimate
- Project/ design team fees
- Other developments cost
- Imputed cost (risk & inflation)

* mid-size project assumed (SAR 200m < Base Cost < SAR 800m)
Finance Controlling
The Cash Flow Forecast

Phase -1 (Initiation)
Phase 0 (Planning I)
Phase 1 (Planning II)
Phase 2 (Execution & Control)
Phase 3 (Closing)

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Many thanks for your attention!