

**CONSTRUCTION OF HUNDRED HOUSES
FOR MASTER CITY GUJRANWALA**

NAME: MR. MUHAMMAD ASIM SHAHZAD

ENROLLMENT: 03-298142-051

NAME: MR. ABRAR ASHRAF CHUGHTAI

ENROLLMENT: 03-298142-044

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BAHRIA UNIVERSITY LAHORE CAMPUS

SUBMITTED TO:
SUBMISSION DATE:

MR. AHSAN MAQBOOL
JUNE 11th, 2016

Letter of Authentication

It is hereby to inform that Mr. Abrar Ashraf Chughtai (03-298142-044) and Mr. Muhammad Asim Shahzad (03-298142-051) visited Master City several times for their completion of Project work with reference to PMO Implementation. They provided us valuable suggestions and recommendation regarding implementation of PMO. We are hoping this valuable arrangement will helpful for successful completion of our Construction Project.

We also wish them very best in their future endeavors.

Chief Executive

For
Heer
01/06/20
(For Bahria University)



CERTIFICATE

It is certified that M.Phil/MS Project Report Titled "Construction of Hundred Houses" by MSPM-IV students named **Mr. Muhammad Asim Shahzad & Mr. Abrar Ashraf Chughtai** has been examined by us. I undertake the followings:

1. Project report has significant new work/knowledge as compared already published or are under consideration to be published elsewhere. No equation, diagram, table, paragraph or section has been copied verbatim from previous work unless it is placed under quotation marks and duly referenced.
2. The work presented is original and own work of the author (i.e. there is no plagiarism). No ideas, processes, results or words of others have been presented as Author's own work.
3. There is no fabrication of data or results which have been compiled / analyzed.
4. There is no falsification by manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Mr. Ahsan Maqbool

1 Abstract

As the role of Project Management in the modern Organization has grown, many organizations have identified a need to formalize the practice of Project Management and to develop centers of coordination and excellence for Project Management. A PMO (Project Management Office) is often viewed as a vehicle to achieve coordination, standardization, optimization and management of the practice of Project Management.

No project plans to fail but according to a research by the Standish Group, 19% of all projects fail – and another 46% of projects face significant challenges, such as delays, budget overruns, or end products with less than the required features and functions. These required failures and challenges can be attributed to undocumented project management methods, uncontrolled and reactive delivery, unrealistic budget or time expectations, limited planning, or a lack of executive commitment. This report explores and addresses such concerns which can be answered by implementation of PMO.

This report covers up a PMO model's recommendation for a construction company that has just stepped into this field i.e. **Master City** after studying the need of a PMO in the organization. There are different definitions available for a PMO. However, according to PMI (Project Management Institute) a PMO can be defined as: *An organizational body or entity assigned various responsibilities related to the centralized and coordinated management of projects under its domain.*

Moreover, in this report a project timeline has been made for the selected project of the organization. We have studied **Dynamics of PMO and EPM Server** in our degree program of **MS - Project Management** at **Bahria University Lahore Campus** by respected resource person **Mr. Ahsan Maqbool** who has been kind enough to guide us throughout the course work.

2. Acknowledgement

The Success and final outcome of our project required a comprehensive working and guidance; we would like to sincerely thank our respected resource person **Mr. Ahsan Maqbool** for his supervision and guidance to complete this report well in time and above all Alhamdulillah to Allah Pak for helping us out in every thick and thin of this report as well as that of our lives.

This project report that we have worked on has helped us to learn and grasp quite knowledgeable areas related to implementation of PMO and using MS-Project for Projects.

We thank every one of our classmates who have helped both of us in understanding of any concept in which we were stuck.

Thank You All

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3. Introduction

The Master City is the project of Master Company that was established in 1982 and now stands as one of the leaders in manufacturing of world class wall and floor tiles, sanitary fittings and plastic accessories along with a host of other high quality products. In 1987 the company established as the pioneer and market leader in world class sanitary fittings, Master introduced the concept of matching bathroom accessories in technical collaboration of England and Germany. Due to the quality product Master tiles had to meet the increasing demands, so respectively production capacities had to be tripled in the year 2000.

Thus by building this trust among the customers, the Masters has stepped into construction side as for providing the comfort of their quality in a house that can be equipped for comfortability and reliability in every perspective.

3.1 Vision

Master's vision is to lead the market with innovations in product development to improve the quality of life and lifestyle of its customers. With timely adaptations to rapidly developing technologies and meaningful investment in human resource training, Master will strive to maintain the differentiation edge through provision of unmatched products and services to its customers at a competitive price.

3.2 Mission

The mission of organization is to force the improvement of quality of life across the world. Master aims to be the leading manufacturer of best quality ceramic tiles and pledges to provide its customers with latest designs, varieties and innovative products in line with the internationally changing trends. And to equip our houses with the top quality product for our customers to gain their loyalty with this mission and achievement of our aim we will enhance the wealth and well being of our stakeholders, employees and communities, whom we serve and in which we operate.

3.3 Strategy

Maintaining our competitive position in the core business, we employ our brand name, unique organizational culture, professional excellence and financial strength diversifying in local and

multinational environments through acquisitions and new projects thus achieving synergy towards value creation for our stakeholders.

3.4 Master as Group

Sr	Companies
1	Master Sanitary Fittings
2	Master Plastic Films
3	Master Tiles and Granite
4	Baby Masters Diapers
5	Master Poly Propylene Industries
6	Master Ball Point Pen Industry
7	Master Multi Products
8	Master PPRC Industry
9	Master City – Construction Company

Table 01

3.5 Implementation of IMS (Integrated Management System)

International standards for management systems have the common purpose of assisting organizations for risk management, improved product quality, customer satisfaction and continual improvement. These standards provide a foundation and framework for organizations to monitor performance and achieve business excellence.

Master has focused on product quality in all areas since its inception and as a result, its products have established significant place in tiles and sanitary fittings. FFC is ISO certified in management systems, occupational health & safety, quality management and environment. Master is ISO certified in management systems, occupational health & safety, quality management and environment.

3.6 Product Portfolio

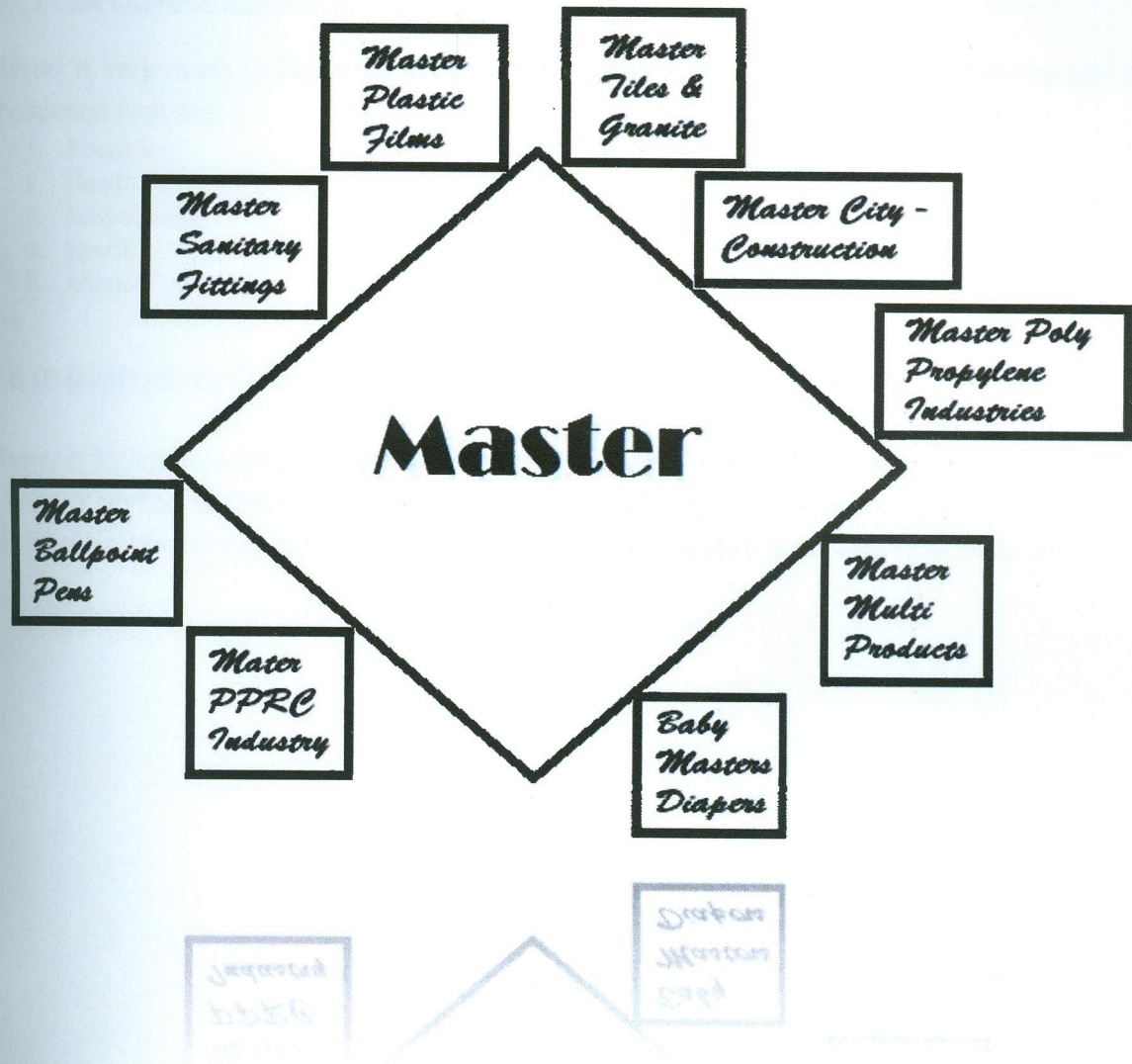


Figure 01

3.7 Corporate Social Responsibility

Master is facilitating communities and its people through social responsibility initiatives. The Company started its social responsibility setups in 1998 by providing agricultural services for the farmers. Master has plans to bring sustainability and desires to achieve international standards by aligning CSR with its business objectives in order to align with international standards.

3.7.1 CSR Current Interventions

Master is very much in for social activities for elevation of deprived communities around its production facilities:

1. Education
2. Health
3. Environment
4. Sports
5. Annual Fun Fares

3.8 Organization Chart

Master is facilitating communities and its people through social responsibility initiatives. The Company started its social responsibility setups in 1998 by providing agricultural services for the farmers. Master has plans to bring sustainability and desires to achieve international

Construction of Hundred Houses - Master City

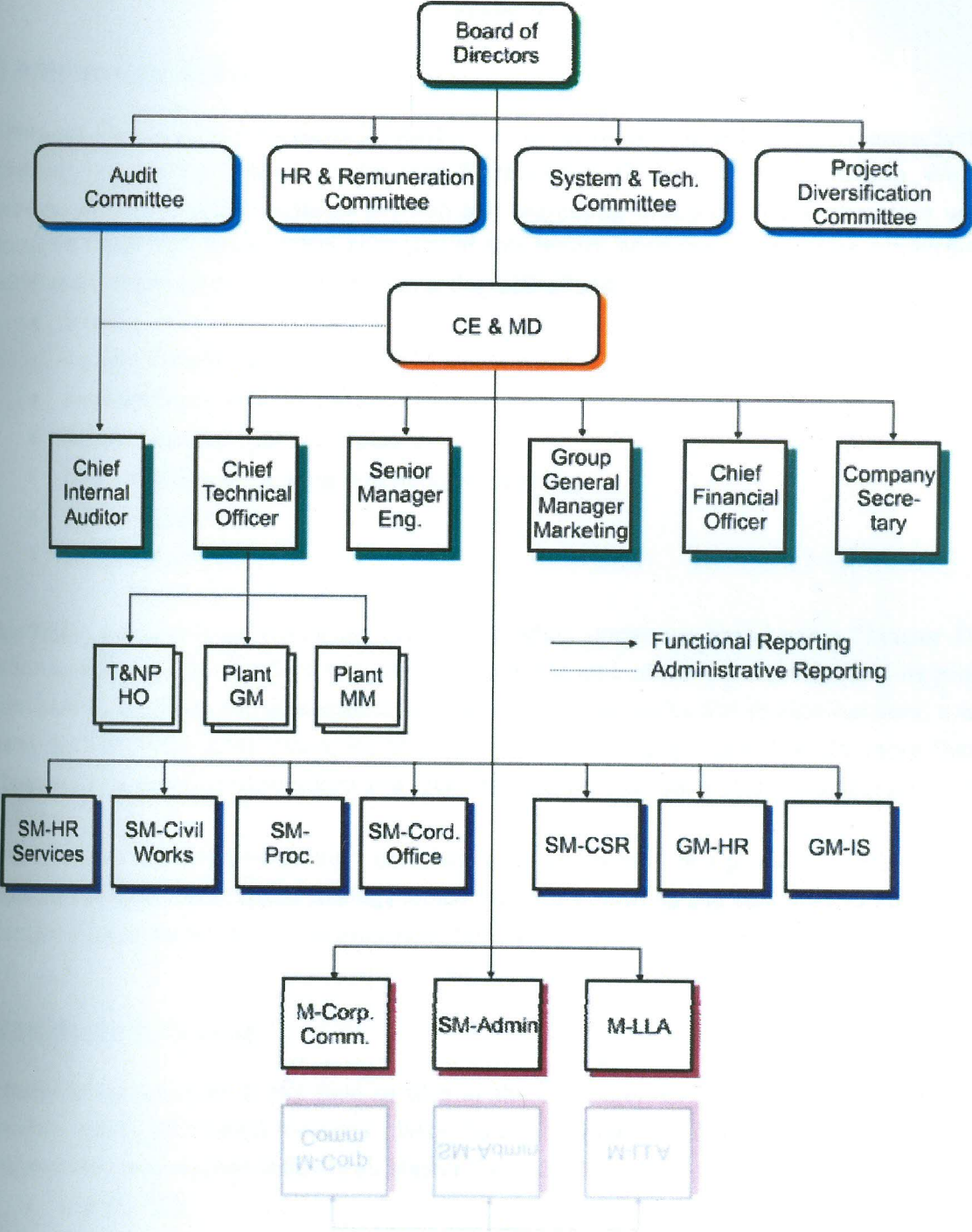


Figure 02

3.9 Marketing Group

There are five groups or divisions in Master named as Marketing Group, Information Systems Division, Engineering Division, Technology & Operations Group and Finance Group. We have worked with Information Systems Division and Marketing Group of Master therefore we will focus on these two areas of the company in this report. Marketing Group was established in 1995 and is responsible for different marketing operations like:

- Sales
- Product Distribution
- Advertisement and Sales Promotion
- Management of field warehouses
- Finance (Sales accounting & general accounting).
- Administration
- Market research

Marketing group started marketing company product under the brand name “Master Tiles.” After starting with Master Ceramics, the company has also added other products in its product line. Marketing group has its presence throughout Pakistan by its distribution network. It has a sales division, three sales zones, fourteen sales regions, sixty six sales districts, more than six thousand sale points, one hundred and fifty one field warehouses and a marketing group office in Lahore.

The company has focus on selling a complete program instead of a product. The company has defined customer orientation strategy which includes educating the customer in Pakistan. The company is playing its role in the improving the style of masses across Pakistan.

3.10 Master Products

Master Group stepped in the field of tiles at the start then moving on to the ceramics and sanitary wares afterwards towards plastic films and now last but not the least they have stepped into construction industry as Master City – Gujranwala, a project of Master.

- Master Tiles
- Master Sanitary Fittings
- Master Plastic Films
- Master Poly Propylene
- Master Multi Products
- Master PPRC

- Baby Master Diapers
- Master City – Construction
- Master Ballpoint Pens

3.11 Market Share

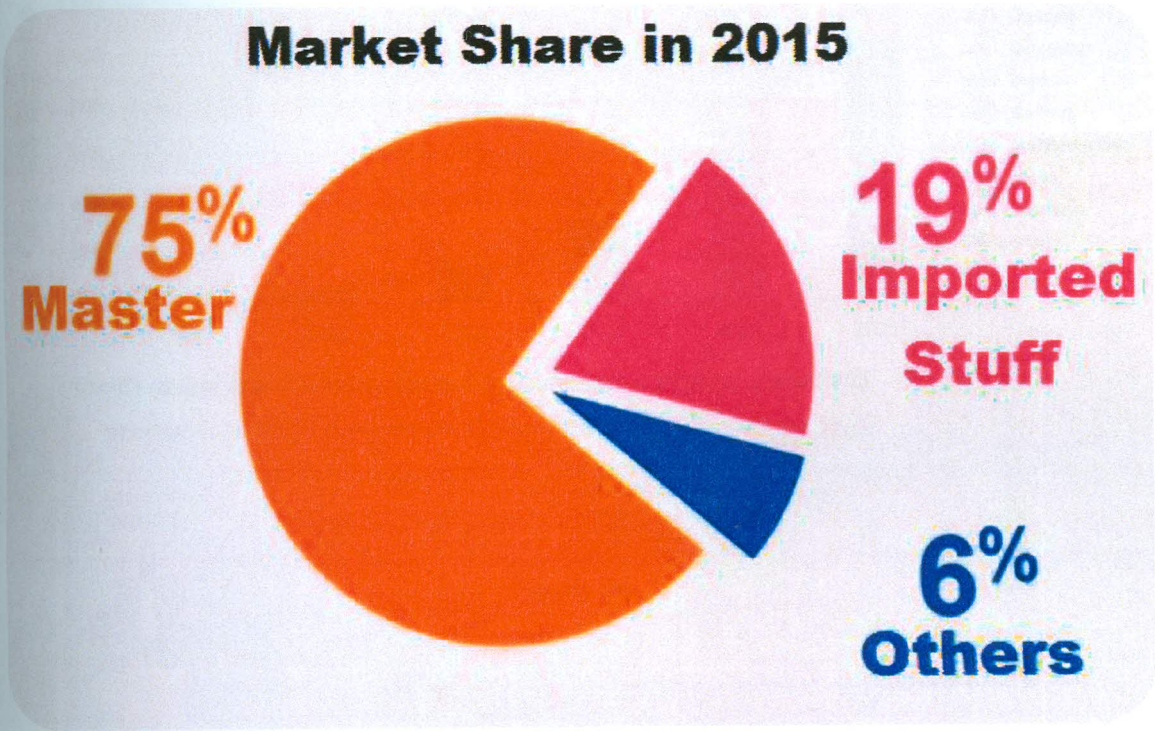
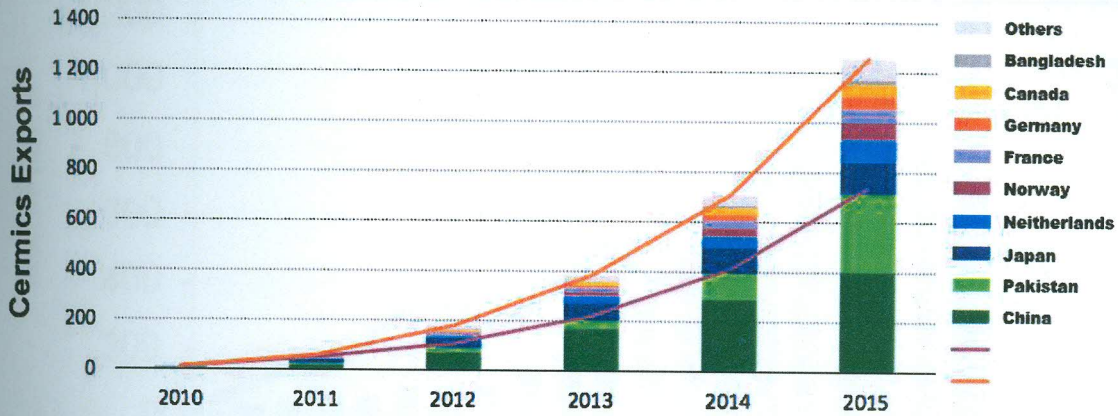


Figure 03

3.12 Export Comparison

Evolution of Ceramics Products, 2010-15



The Ceramics Exports are estimated on Cumulative Exports since 2005

The Ceramics Exports are estimated on Cumulative Exports since 2005

Figure 04

3.13 Export of Master



Figure 05



Figure 06

4.1.1 Process

When developing project management processes, you need to adapt best practices that are commonly used in the industry such as PMI-PMBOK, PRINCE-2, etc.

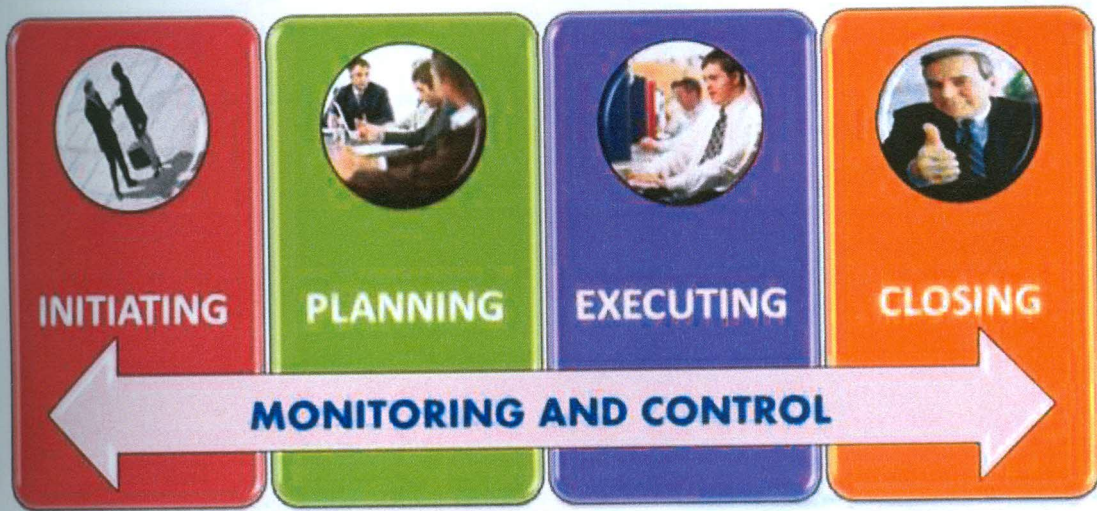


Figure 07

4.1.2 Governance

Reporting structure for effective PMO operations should be governed at the project operational level, program management level, as well as portfolio management level. The tasks in governance may include:

- Milestone status monitoring
- Risks & benefits management
- Budgets & project accounting
- Expenses & materials reviews
- Issues & actions tracking
- Resource conflict resolution
- Skills demand forecasting
- Standards & processes
- Analysis & improvement
- Audits & compliance
- Standard & custom reporting

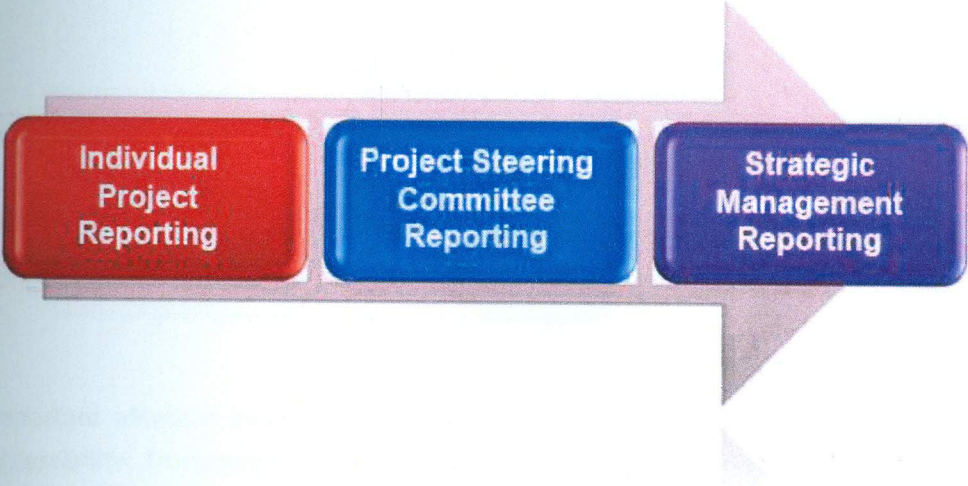


Figure 08

4.1.3 Organization

A PMO must be able to deliver benefits to the organization. The areas of focus include project accountability and business operational responsibility.

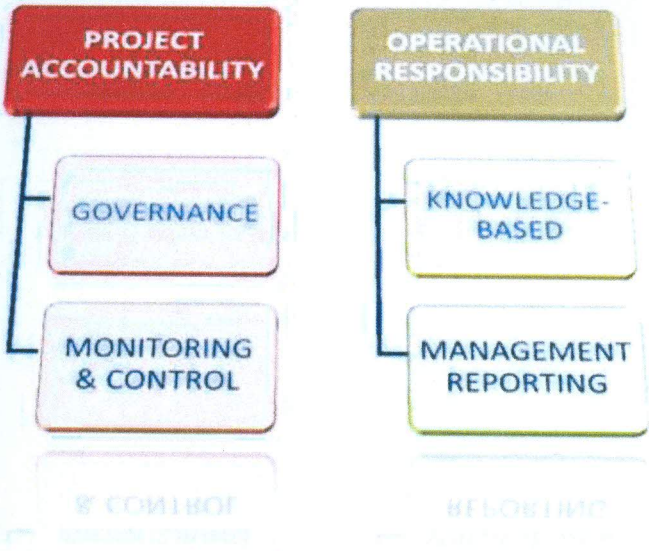


Figure 09

4.1.4 Resources

People factor plays vital role in PMO organization and they should have quality conscience, ethical and extensive experience. Skills development programs should be established to build these aspects in PMO team.

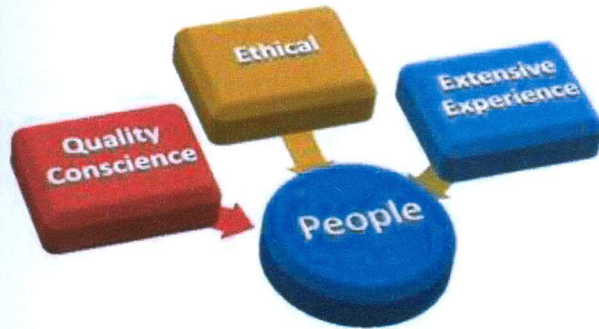


Figure 10

Other important element include Knowledge-based for consistency in project documents & easier accessibility. Documents should be generated through standardized templates which should be available in project knowledge-based. Any further information which may be required for guidance on project current state from internet should be in access of the project team.

4.2 PMO Roles

There are several roles of PMO structures in organizations, each varying in the degree of control and influence they have on projects within the organization, such as:

- Supportive
- Controlling
- Directive

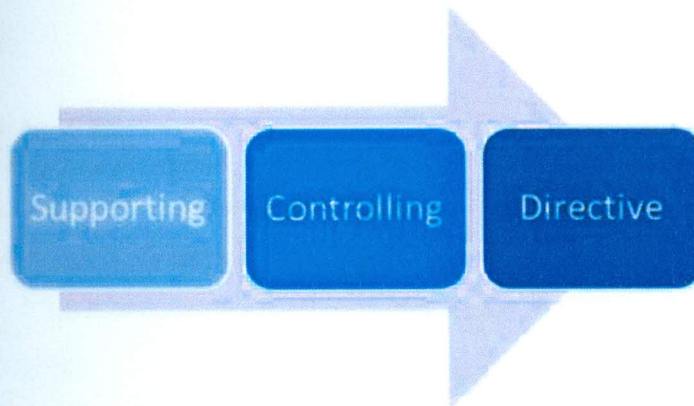


Figure 11

4.2.1 Supportive

Supportive PMOs' provide a consultative role to projects by supplying templates, best practices, training, access to information and lessons learned from other projects. This type of PMO serves as a project repository. The degree of control provided by the PMO is low. The supportive PMO generally provides support in the form of on-demand expertise, access to information, and expertise on other projects.

4.2.2 Controlling

Controlling PMOs' provide support and require compliance through various means. Compliance may involve adopting project management frameworks or methodologies, using specific templates, forms and tools, or conformance to governance. The degree of control provided by the PMO is moderate. This model assumes that the PMO is responsible for defining and controlling use of methodologies, standards, templates, and policies related to project delivery.

4.2.3 Directive

Directive PMOs take control of the projects by directly managing the projects. The degree of control provided by the PMO is high. The PMO is accountable for the project management function within the company and responsible for providing program and project management resources to run projects. As organizations undertake projects, professional project managers from the PMO are assigned to the projects.

4.3 Types of PMO

There are three types of PMO:

- Weather Station - Governance
- Control Tower - Centre of Excellence
- Resource Pool - Project Support

4.3.1 Weather Station

The Weather Station PMO reports on what is going on but does not try to influence it. This PMO doesn't bother any of the PMs who are leading projects. These Weather Station people accumulate data about projects and summarize it for executives without making any decisions or enforcing any standards. They just pass on the information to anyone who is interested. It often turns out that no one uses their data. The Weather Station can be implemented painlessly and if the information is focused, they can serve decision-makers' needs. Sometimes executives get nervous about all the money they're spending on projects without their really knowing what's happening. They get confused by different reporting formats coming from different project managers with different varieties of jargon, plus the sheer number of activities going on at once. To end their confusion, weather station is suggested/implemented in organizations.

4.3.2 Control Tower

In the Control Tower PMO, the project office gives project managers direction on methodology. This includes project initiation, acquiring resources and correcting variances. While each PM manages its own project, the Control Tower PMO will alert them to impending problems. It will also identify situations where the PM is not adhering to the methodology, particularly during scheduling and verification of deliverables.

4.3.3 Resource Pool

This type of PMO helps projects to conform and perform. The solution organizations that rely heavily on projects to do business cannot afford inattention to this key capability. They set up a “Resource Pool” for project managers. Managers and executives needing projects then “hire” a project manager from this repository of expertise. It makes logical sense to combine the Resource Pool with the two earlier PMOs. With a Resource Pool properly in place, executives may reasonably expect project managers supervised to ensure that they properly apply their skills.

4.4 PMO Responsibilities

The PMO continuously ensures that enterprise assets and resources are strategically aligned with business goals. The exact roles of a PMO vary from organization to organization depending upon their needs and nature of the on-going projects. The major role of the PMO is to define and maintain process standards by providing a framework to establish standard performance measures based on organizational goals and objectives, and providing tools and procedures to achieve this. This results into three key areas:

- Establishing Project Methodologies
- Project Tracking
- Project Support

4.4.1 Establishing Project Methodologies

A major PMO role includes providing a project baseline or the implementation road map for the project. The PMO estimates the size of the proposed project, required timeline, required project resources and defines the project management methodology. It generates artifacts like project charter, plans (risk, communication, cost management, quality, procurements etc.), work breakdown structure and standard forms and templates for record-keeping and reporting.

4.4.2 Project Tracking

A PMO is supposed to audit and track ongoing projects in the organization at certain frequency to ensure that projects are following the approved methodology and are on course/track. In

addition to that during project tracking, PMO is responsible to collect and archive project experience to improve the implemented project management methodology.

4.4.3 Project Support

PMO is supposed to provide continuous support for successful execution of the on-going projects in an organization.

4.5 Role of Project Managers vs PMO

Sr	Project Managers	PMO
1	A Project Manager focuses on the specified project objectives	PMO manages major scope changes in program which may be considered as potential opportunities to better achieve business goals.
2	A project manager controls the assigned project resources in order to meet project objectives	PMO is responsible for optimize use of shared organizational resources across all on-going projects
3	A project manager is responsible to manage the project constraints e.g. scope, schedule, cost, quality etc.	PMO manages the standards, methodologies, overall risks/opportunities, metrics and any interdependencies among projects at organizational level

Table 02

A brief difference between PMO Manager and Project Manager can be depicted as follows

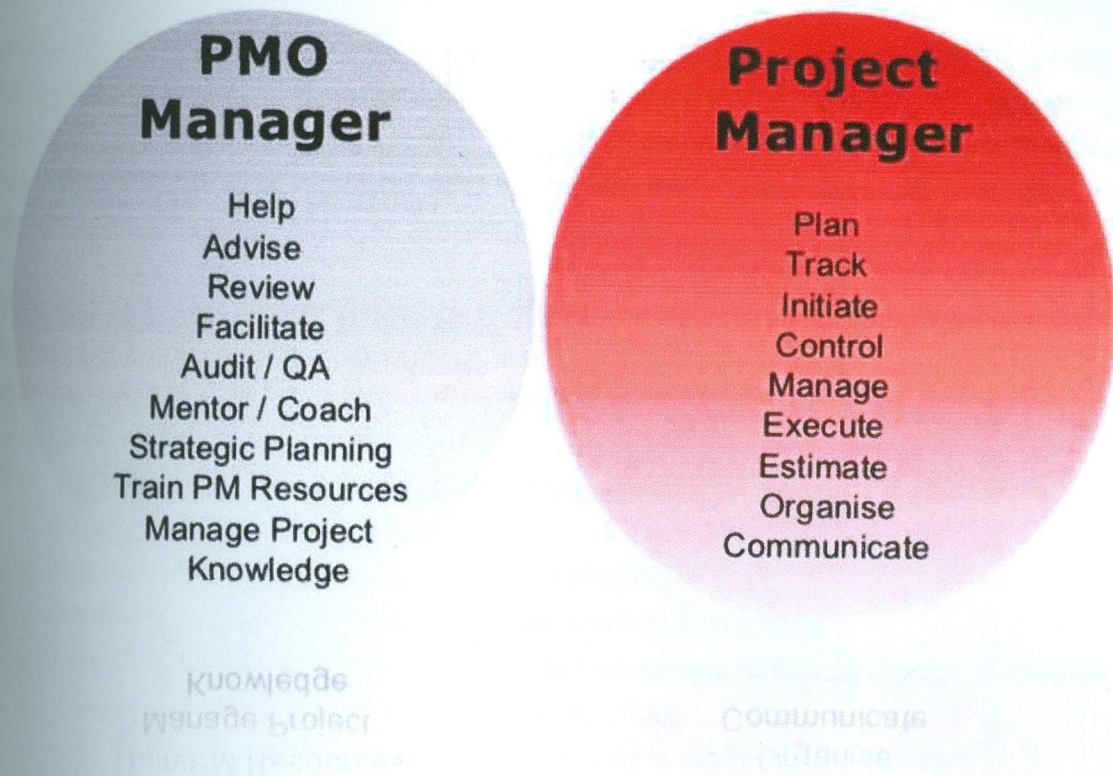


Figure 12

4.6 PMO Goals

An effective PMO can serve several key goals like:

- Improve project performance through established standards
- Lower project costs through minimized redundancies
- Leverage specialized project management skills and expertise
- Centralize management of a multi-project portfolio
- Standardize project management services to diverse business units
- Consolidate project oversight for project performance metrics
- Maximize external vendor contracts for the delivery of outsourced project management services

4.7 Challenges of PMO

An effective PMO should be supported by senior management, which is one of the most critical and common challenges. A direct consequence of the lack of executive sponsorship and support is inadequate resourcing. Another challenge is corporate culture and failure to manage organizational resistance to change. Many times, the PMO is also expected to interact with poorly trained project managers. As a result, the PMO devotes time on up-training them.

Other experts say the generic challenge PMOs face is defining the PMO's responsibility and abiding by it. Most often, supportive PMOs try to micromanage the projects, which is not under their responsibilities. PMOs should strictly follow the model that has been chosen. Following are the major challenges of the PMOs:

- Connecting the PMO to organization's strategic vision
- Establishing a metric-based approach
- Maintain consistent PM framework across projects
- Managing the resource pool and avoiding resource bottlenecks
- Lack of acceptance of the need for the role from people delivering aspects of the work
- Being requested to reduce the amount of reporting
- Lack of senior leadership acceptance of the need to really engage with staff

4.8 Elements of an Effective PMO

An effective PMO is a combination of the right people, the right tools and the right data. The right people should have been covered from multiple disciplines. It is very important to select required EPM tools. Project status reports showing right data should be provided to the management for measuring project success. These elements for an effective PMO can be depicted as:



Figure 13

5. PMO Implementation is Master

While repeating the course of **Dynamics of PMO and EPM Server** we will discuss PMO implementation requirements for Master City. Presenting the current scenario of Master City, there is no PMO implementation in the organization yet. The numbers of projects are continuously growing in Master, so does the risk of failure as resources get stretched and oversight lags.

It is becoming increasingly important to define project management processes and develop metrics and best practices for keeping projects on time and within budget for Master, that means implementing a PMO. The PMO setup will increase projects' performance and at the same time will promote optimize utilization of project resources. In the coming sections of this report, it has been discussed that which factors indicate the need of a PMO.

5.1 Organizational Structure

Master has the balanced matrix organization, as described by PMI’s PMBOK; this type of organizational structure recognizes the need of the project manager. However the PM doesn’t have much of the authority over the project

There are five different groups/divisions i.e. Engineering, Finance, Information Systems Technology & Operations and Marketing. The scope of this project report will be only information systems and marketing group/division.



Figure 14

As it can be seen in the following figure, different groups/divisions can have their projects in progress. Project team members are normally reporting to multiple channels. For example, an officer working as a project team member reports to the respective project manager and at the same time to his functional manager. This results in overloaded project resources and reduced project output.

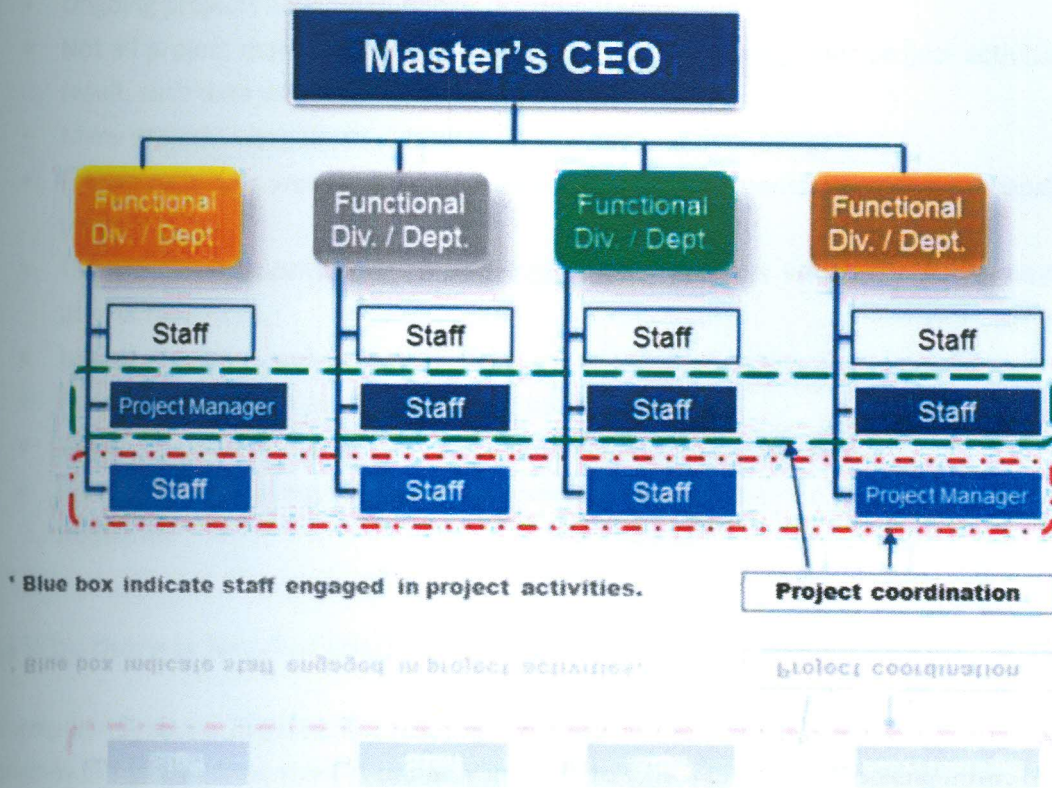


Figure 15

5.2 Problems without a PMO

Following problems have been identified which exploring the need of a PMO in Master:

- The scope of construction projects continually changes during their lifecycles. As a result projects were completing late and ultimately unable to provide required business value.
- Top management and clients have to contact multiple departments/functions in order to check project status. Since there are multiple departments/functions in Master, there was lack of single source of truth for projects' information.
- One group of resources manages multiple projects at the same time, which results in overloading of resources and underutilization of other resources.
- Some projects required frequent interaction with vendors/contractors. Lack of consistent interaction with relevant vendors/contractors affects one or more project objectives.
- Project managers were used to share project reports as per their own criteria. Most of the time, project reports were on requirement basis by the senior management.
- Project managers were unable to present consolidated reports and metrics representing all projects.

- Ongoing projects have been poorly documented.
- Not all project managers were properly tracking / auditing their project activities. As a result, such data was missing for many projects.
- Many projects were finished later than planned and over budget.
- Project resources were not being used across IT departments/functions for construction projects.
- There was no prioritization of existing/ongoing projects which results in wastage of project resources.
- Lack of proactive project management.
- Reactive project management with no business value.
- Lessons learned on one project were not applied to other projects.
- Executives were using whatever methods and tools fit their needs and change them like frequently

5.3 Why there is Need of PMO

Information Systems division is providing computerization and automation services in the company. All groups have their IT systems in place to which IS group is looking after. Need of a new computerized automated system is not uncommon phenomena. Master has IS departments at each plant site, Marketing Group Lahore Office, HO and Regional Offices. All these departments report to IS Division at HO Lahore. New projects are managed by the respective IS function at each location of Master. In order to better manage and track the performance of on-going projects at all locations, a PMO setup is mandatory. This PMO will be set up at HO and headed by CIO and all locations will be reporting to this PMO with the required project information as agreed upon by all IS departments/functions' heads.

5.4 Proposed PMO for Master

Keeping in view the problems which the company is facing due to nonexistence of a PMO, the proposed PMO type for Master is Control Tower. The Control Tower treats project management as a business process to be protected and developed. The Control Tower will make possible improvements in the project management process. The Control Tower PMO will perform four general functions:

- Establish Standards for Managing Projects
- Consult on how to follow those Standards
- Enforce the Standards
- Improve the Standards

6. Establishing PMO Office

By establishing the proposed PMO and implementing key processes and reporting structures, Construction Company of Master will realize several improvements/benefits which have been listed in later section. Five step PMO roadmap will be adopted in order to set up centre of excellence (COE) for Master City. In coming sections of this document, these five steps have been explained in further detail with respect to COE establishment in Master. These five steps include:



Figure 16

6.1 PMO Strategy

6.1.1 PMO Scope

- The PMO will serve the computerization/automation needs of all IS departments/functions located at different company sites i.e. Head Office, Marketing Lahore, Head Office and Regional Offices. All IS departments/functions will in turn look after computerization/automation needs of their respective locations.
- The PMO will be headed by CIO and will be reporting body for all IS departments/functions in terms of new/existing projects.
- The PMO will define a standard project status reporting process and create a single summarized report for senior management on monthly basis that would reflect project efforts in Master City.
- The PMO will build a set of standard templates for use by project managers at all locations of Master City.

- A PMO steering committee will be established to guide further development of the PMO based on company business needs.
- The PMO will fulfill training requirements of project teams at all locations.
- The PMO will procure all required project management tools which will be used by project teams at all locations. The PMO will also conduct trainings for such tools.
- Required resources for PMO will be taken from IS division.
- The PMO will be established at HO Lahore.

6.1.2 PMO Mission

The mission of the PMO is:

- To put in place a highly effective approach to Project Management resulting in project scope, schedule, and cost performance success on every project undertaken by Master.
- To create a foundation for consistent project success throughout the enterprise through the development of a strong and pervasive Project Management culture and supporting environment.

6.1.3 PMO Vision

The PMO for Master is an effective team of experts who will identify, manage, and eliminate problems so that projects' succeed, delivering high quality results on time and within budget as per the project plan.

6.1.4 PMO Values

The PMO team will:

- Gather and Report Accurate, Unbiased Information.
- Support all Projects and Project Managers to the best of our ability.
- Maintain high quality of service, and work as efficiently as possible.

6.1.5 Stakeholders

Following is the list of main stakeholders involved in PMO establishment in Master. A brief analysis of these stakeholders is also provided. The stakeholder analysis helped to determine the primary stakeholders that require constant and effective communication channel with them so that their buy-in as well as their support can be obtained.

6.1.6 Proposed PMO Functions and Objectives

The proposed PMO will have following functions & objectives:

- Streamlined and standardized project processes
- Govern rules and procedures in project delivery
- Monitor and Control Project delivery scopes
- Custodian of projects' knowledge base
- Development of appropriate skill-sets for project teams
- Advise senior management on optimized resources allocation
- Centralized project support office
- Management of competency levels of the project resources
- Centralized repository of project resources e.g. project managers and project team members
- Inter location usage of project team members
- Select and maintain project management tools
- Imparting trainings
- Ensure project baselines for measuring project performances
- Central body for defining reporting, tracking or auditing requirements
- Creation of templates / forms required in projects
- Team development
- Career development
- New projects' assessments
- Scheduling of projects
- Defining standards and policies for projects
- Uniform distribution of resources across projects

6.1.7 PMO Implementation Prerequisites

Before implementation starts, all stakeholders will be having a detailed meeting may be through video conferencing system (available at all company sites) in order to avoid extra cost.

The objectives of this meeting are:

- Determination of company business needs
- Master culture Evaluation
- Detailed stakeholders analysis
- Assessment of current project management practices

- PMO structure and alignment

Based on the above information, a preliminary PMO charter is defined. Based on the charter, PMO functionality is determined. Based on the required functionality, PMO implementation plan is prepared and reviewed by all stakeholders. The plan will be first approved by CIO and finally approved by CEO of Master. PMO implementation prerequisites can be viewed in the following diagram:

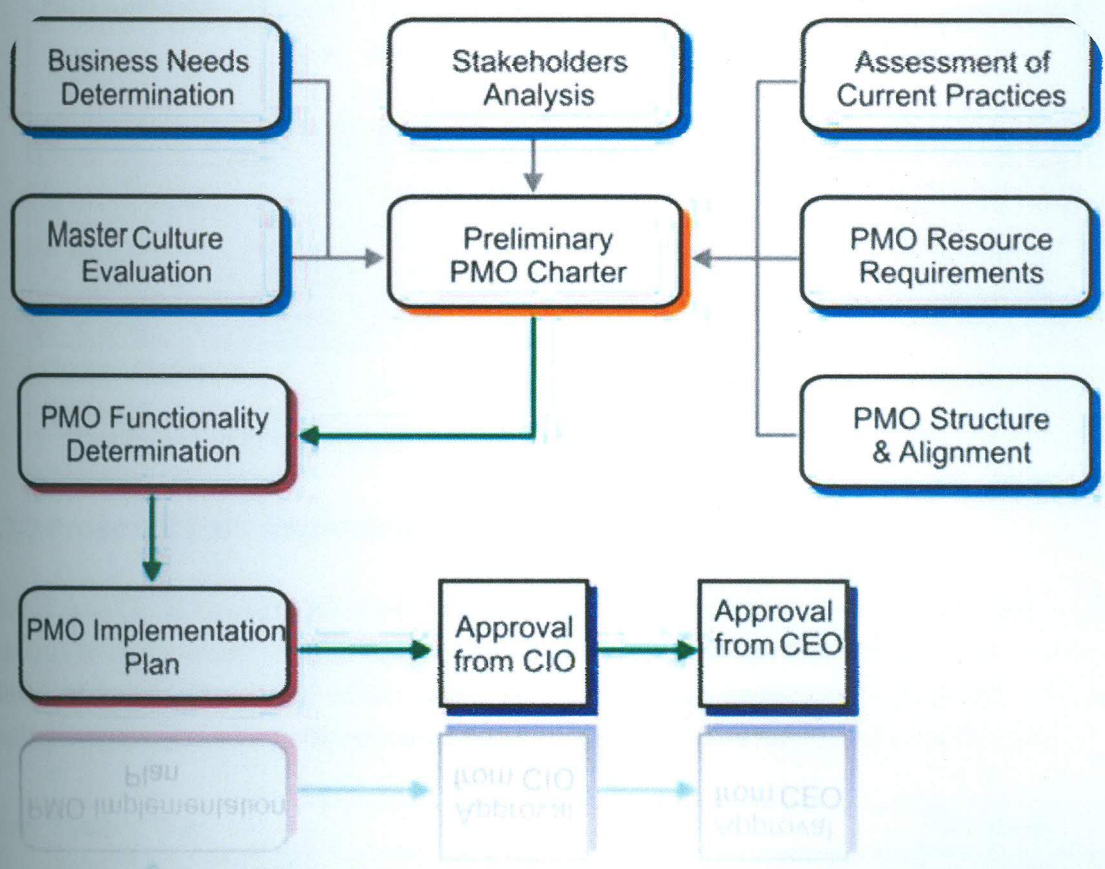


Figure 17

6.1.8 PMO resource requirements

The PMO charter indicates the relationship of the PMO to other business entities in the organization. It identified the resources for establishing and conducting PMO operations. Following PMO charter has been used in Master:

Charter Area	Charter Element	Notes
PMO Business Alignment	• PMO Head • Sponsor- Master • PMO Team	Comments
PMO Authority	• Budget Management • Project Resource Management • Vendor/Contract Management • Business User Relationship Management • Business Development	Comments
PMO Resource & Funding	• Development Resources • Operational Resources • Development Budget • Initial Fund Allocation • Other	Comments
Charter Review & Approval	• Reviewer's Designation and Approval Date	Comments

Table 03

6.1.9 Proposed PMO Implementation Layout for Master

After due deliberations with all stakeholders, a PMO implementation plan was established. The plan was to divide overall PMO implementation in Master in three main phases. Each phase will consist of some steps/tasks which when completed shall have some outcomes. The said implementation plan was to be reviewed by all stakeholders and finally approved by CIO.

Phase	Step	Task	Detail	Outcomes
1	1	Project Planning and Initiation		Project Plan & Schedule
	2	Assessment of Current Environment	• Resources • Organization Readiness • Governance and Escalation Mode	SWOT Analysis
	3	Establish Vision & Mission	• PMO Mandates • PMO Policy & Direction • Critical Success Factors • PMO Models	Consensus, PMO Vision & Mission
	4	Establish Goals &		Consensus,

Construction of Hundred Houses - Master City

		Objectives		PMO Goals & Objectives
	5	Develop Business Case	• High Level PMO • Requirements • Implementation • Strategies & Schedule • Cost Estimates	Business Case Development
2	1	Define Organizational Structure and Staffing Requirements	• Roles & Responsibilities • Identify PMO Lifecycle • Framework • Identify PMO Process Domains	Organizational Structure & Staffing Requirements
	2	Facilitating Supporting IT Governance & Escalation Structure	• Integrate PMO with current Governance Processes • Facilitate Buy-in Consensus	Updated IT Governance & Escalation
	3	Define PM Methodology Framework	• Define PMO Lifecycle	Project Management Methodology Framework
	4	Establish Goals & Objectives		PMO Processes & Supporting Documents
	5	Establish Review Process & Performance Metrics	• Balanced Scorecard • 360 Degree Feedback • Etc	PMO Review Metrics
	6	Development & Training Requirements	• PMP Certification • Coaching or Mentoring Skills Development • Sourcing & Relationship Management Skills	Training Requirements
3	1	Develop Deployment Plan	• Schedule • Resources • Cost	PMO Deployment Plan
	2	Deploy PMO	• Acquire / Develop PM Methodology • Add PMO Staff	Program Assessment, Semi – Annual PMO Review

			• Pilot run PMO	
--	--	--	-----------------	--

Table 04

6.1.10 PMO Roles and Responsibilities

- Development and implementation of a standardized project chartering and approval process
 - A standard project charter template has been developed which is available in Annex-A
 - A standard project scope statement template has been developed which is available in Annex-A
 - The PMO will monitor and ensure compliance to standardized documents by all respective IS departments/functions
 - The PMO will define and manage a single company wide process for project review and approval
- Coordination of project management training and development
 - All new project managers will go through project management training
 - Training vendors for project management training will be contacted and training schedule will be finalized before every project management training
 - Training material will be the responsibility of the training vendor
 - The PMO will coordinate with all IS departments/functions to obtain their training requirements
- Development, implementation, and management of Master wide project management process
 - The PMO will coordinate will senior management of Master to identify their consolidated project reporting requirements
 - Development of standard reporting templates as per company's senior management requirements
 - Provision of developed templates and procedures to all IS departments/functions at all locations

6.1.11 PMO Steering Committee

The steering committee makes the policy decision to amend the required PMO objective through change request (CR). Change request format is attached in Appendix A. The Steering Committee will be comprises of following members

- PMO Head (Head of Steering Committee)
- Projects Consultant

- Manager Project Standards
- Manager Knowledge Management
- Project Managers
- IS Departments/Functions Heads

6.1.12 Change Request Process

Any change in the PMO objectives will follow the established project change request process. Approvals for changes must be approved by the CIO through steering committee. Change request approval process is as follows:

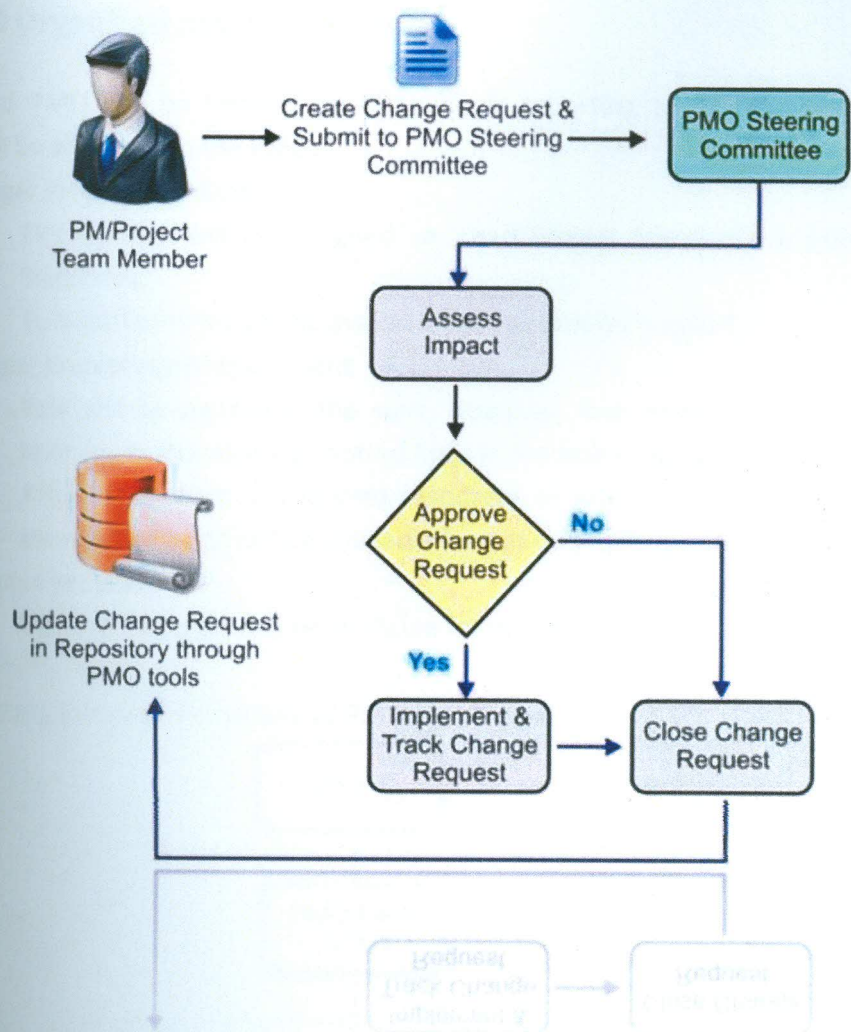


Figure 18

6.1.13 PMO Organizational Structure

The proposed PMO will be headed by CIO who is reporting to CE/MD. Initially following resources will be allocated to the PMO:

- Manager Project Standards
 - Two officers will be assigned i.e. Lead Project Standards & Executive Project Standards.
 - Two staff persons will be available for operational support
- Manager Knowledge Management
 - Role will be created in the start. However, two more officers will be assigned later on, as described by dotted lines in the following figure
 - After assignment of required resources to Manager Knowledge Management, two staff persons will be available for operational support
- Projects Consultant
 - Two staff persons will be available for operational support
- Two staff persons

The proposed organizational structure of PMO is as follows:

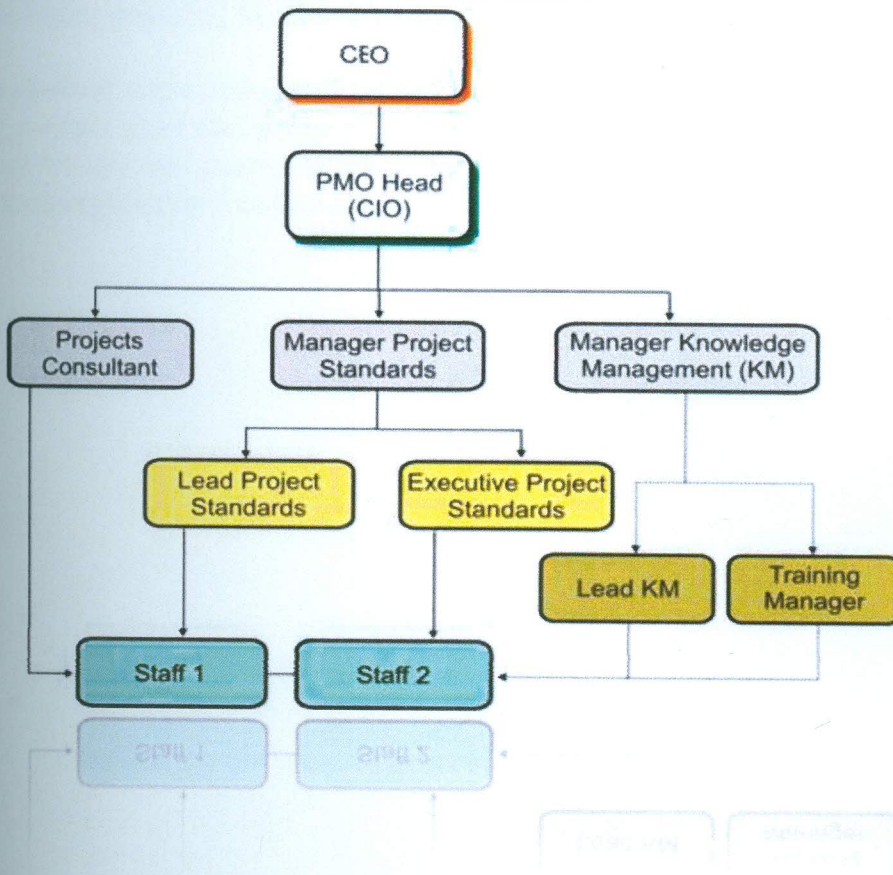


Figure 19

6.1.14 PMO RACI Matrix

The suggested PMO’s responsible, accountable, consulted and informed (RACI) matrix is as follows:

Sr.	Description	PMO	Master	M. PS	PM	M. KM	H. IS
1	Methodology Development	R	I	A	C	I	I
2	Project Selection	R	I	I	A	I	I
3	Project Initiation	A	I	R	R	I	I
4	Project Planning	A	A	R	R	C	I
5	Project Reporting	R	I	A	A	C	I
6	Project Closing	A	A	R	R	C	I
7	Training & Knowledge Management	R	I	C	C	A	C

Table 05

7. Project Management Methodology

Project management methodology defined by PMBOK will be used by the proposed PMO. The project management processed will be presented with well-defined interfaces. The application of the project management processed will be iterative.

Following figure explains the standard project management methodology defined by PMBOK.

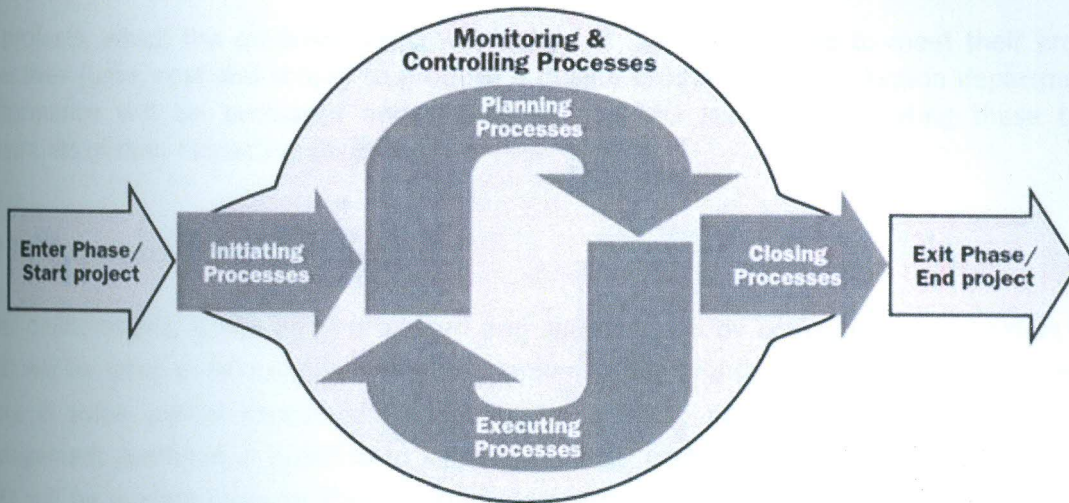


Figure 20

As we can see Monitoring & Controlling process starts immediately when a project is started. During initiating process, project scoping must be clearly defined and agreed by all the stakeholders. Hence, a project charter document will be established to dictate the higher level project scope, project duration, project cost, project resources, who's the stakeholders (from users) and their roles, key deliverables, project constraints and assumptions. A kick-off meeting will be conducted with all the stakeholders to officially start project and also to gain all stakeholders agreement on project scope, time and cost/budget allocated for the project.

Project management methodology will help to:

- Develop required project management processes
- Develop required project templates, registers and checklists
- Develop a standard issue management processes
- Develop a standard change management processes
- Develop standard project management guidelines
- Develop management reporting system
- Develop auditing/tracking requirements

7.1 Project Performance Indicators

A high quality project is one that delivers the required product, service or result within time, cost and scope. Triple constraints affect the overall project quality. Balancing the three is crucial to project quality.

All projects, which the proposed PMO will look after, will be required to meet their project objectives (time, cost and scope) to produce a quality product. All construction departments' performance will be evaluated and monitored at PMO level by evaluating these triple constraints of their respective projects.

7.2 Project Administrative Support

After deliberations, it has been discussed and agreed upon by concerned stakeholders that PMO will be setup at HO Lahore. Obviously, implementing and sustaining a PMO is not cheap. There is some capital investment in setting up a PMO, particularly because it will add management overhead in addition to existing projects' costs. Budgeting requirements of the PMO will be worked upon by PMO steering committee. After budget approval from CEO for PMO setup, an office premises will be set up by Administration department. Procurement department at HO will procure necessary office equipments and furniture for the PMO. Furthermore, services of an interior designer will be obtained by Administration department at HO to make the office ready for PMO team.

Required project management tools will be used by PMO and all construction departments.

Tools used by the PMO include:

- Microsoft Project 2013
- Microsoft Office 2013
- Microsoft Enterprise Project Management (EPM) Server 2010
- SAP Enterprise Portal for online repository of knowledge management and online workflow approval mechanism e.g. change request approval and other project management processes which required formal approval process
- An online help desk system will be used by all departments to track business user requests and project teams performance in order to resolve those requests
- A documents archiving system will used by the PMO and all IS departments/functions to manage electronic record of all physical documents e.g. duly signed documents by the business users. The archiving software will also serve the purpose of promoting less paper working environment in the company

The PMO will also provide administrative support to IS departments/functions at other locations in preparation of project plans; schedule the development requirements and fulfilling the administrative reporting requirements.

7.3 Critical Success Factors

Critical success factors for the proposed PMO set up in Master are:

- Buy-in from all business user departments
- Support from senior management Effective communication and stakeholders' management
- Company sponsorship
- Capability development
- PMO teams' awareness of project purpose, priorities, objectives, goals and values
- Compliance with project management standards
- Continuous reporting and measurement of defined project goals

7.4 Project Training & Coaching

A regular training program for project managers will be conducted by the PMO every six months. Local and foreign training courses may also be provided to project managers on requirement basis. Nominations for local / foreign training courses will be obtained by the PMO from all construction departments and finally will be approved by CIO. The said list will be forwarded to HR department for further necessary action.

The PMO will develop the human resource which will serve the coaching purpose of other project teams at other locations. This team will also assess the existing organizational structure of the PMO and provide recommendations which will be reviewed by the CIO. There may be changes in PMO organizational structure subject to approval by the CIO.

7.5 Management Reporting

There's an ocean of data, but you have to fish for measures that support your business processes. To report ongoing projects status, dashboards will be developed and made available to senior company management through SAP Enterprise Portal (EP). A web based software application will be developed by IS department at HO after approval from CIO to track all projects related information. Management dashboards will be based on the data recorded by PMO team in the said application.

A sample dashboard displaying projects high level detail is given below:

Construction of Hundred Houses - Master City



Figure 21

The PMO will be responsible to brief senior management about status of currently in-progress projects.

PMO Head will prepare a presentation for this purpose on monthly basis for briefing to company's senior management. All project managers will be responsible to share their project statuses data i.e. key performance indicators (KPI) which will be in the form of project objectives (time, cost, scope & quality) to the PMO on fortnightly basis.

PMO reports will ensure that project teams and all stakeholders are aware of the status and the plans. Reports will be generated and updated as needed and will be stored electronically in the project library located at knowledge management server on SAP enterprise portal (EP).

Furthermore, data of those projects which have been completed successfully will be archived in documents archiving system for future use. However, lessons learned will be recorded by PMO team for each project and the information will be saved in the application which will be

developed for the PMO. This application will also be accessible by all IS & Construction departments at different locations for their reporting requirements.

7.6 Continuous Improvement

The PMO team will continue to focus on all these areas after initial PMO implementation. Key areas to focus are management, process, people, technology and information. The PMO team will be required to continuously look for room for improvement in these areas and improve the PMO performance. To achieve the purpose, an internal audit of the PMO will be held annually by IS and Construction department of HO. The audit team will submit its report head of IS department at HO for his review.

Head of IS department HO will submit the report to CIO for review and approval of the recommendations (if any) submitted by the audit team. Standardized audit reports formats will be developed by the responsible department and get approved from CIO. After approval, these formats will be developed in a web based application for the PMO so that audit reports can be accessible by all IS departments/functions at multiple company locations.

The PMO team can add more services, processes or features in the implemented PMO solution. The new services, processes or features should be reviewed by all project managers and their team at all IS and construction departments before finalization. Obviously, final approval from CIO would be required before implementing new service, process or feature.

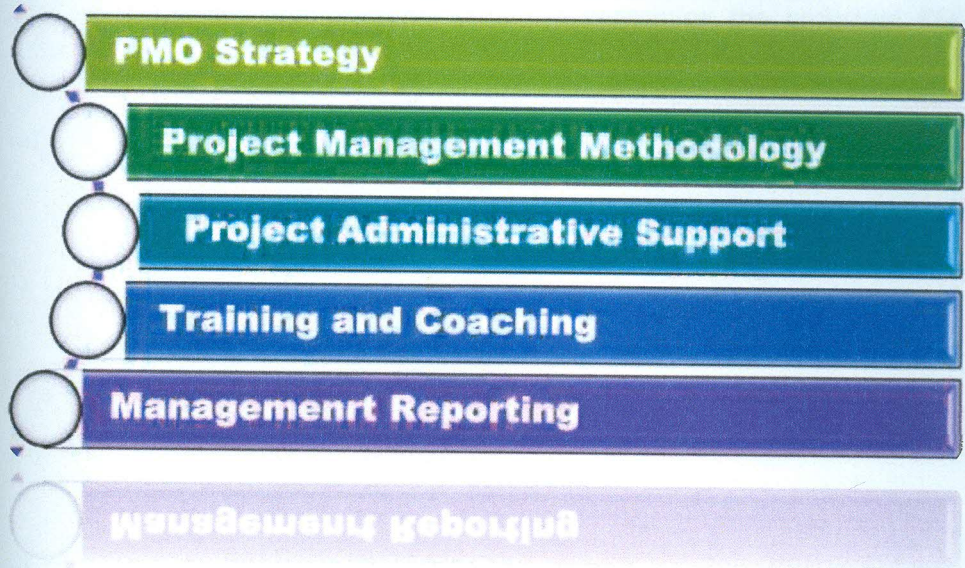


Figure 22

7.7 PMO Structural Model for Master

One of the first important considerations that must be addressed by an organization considering the implementation of a PMO is the basic structural model that will be used within the organization. The specific scope or reach of the PMO will be of interest to management as it considers chartering the PMO.

After establishing the proposed PMO setup, Master's composite organizational structure will be updated with a PMO headed by CIO with various project managers reporting to it. These project managers may be located at different IS or Construction departments at different locations in the company. They may be sharing project resources available at their respective locations or at different locations. Project managers' will be responsible for maintaining required coordination level between local project resources and those based at different sites. The proposed PMO will be a single point of contact for all the company groups for up-to-date information about their ongoing projects.

PMO will collect project status data and provide Master's management with an ability to have a single view of the project landscape within the organization and to receive consolidated information regarding projects undertaken in the organization as needed. This would result in powerful management reporting and trend analysis that would be otherwise difficult.

New company's composite organizational structure containing the proposed PMO can be viewed as:

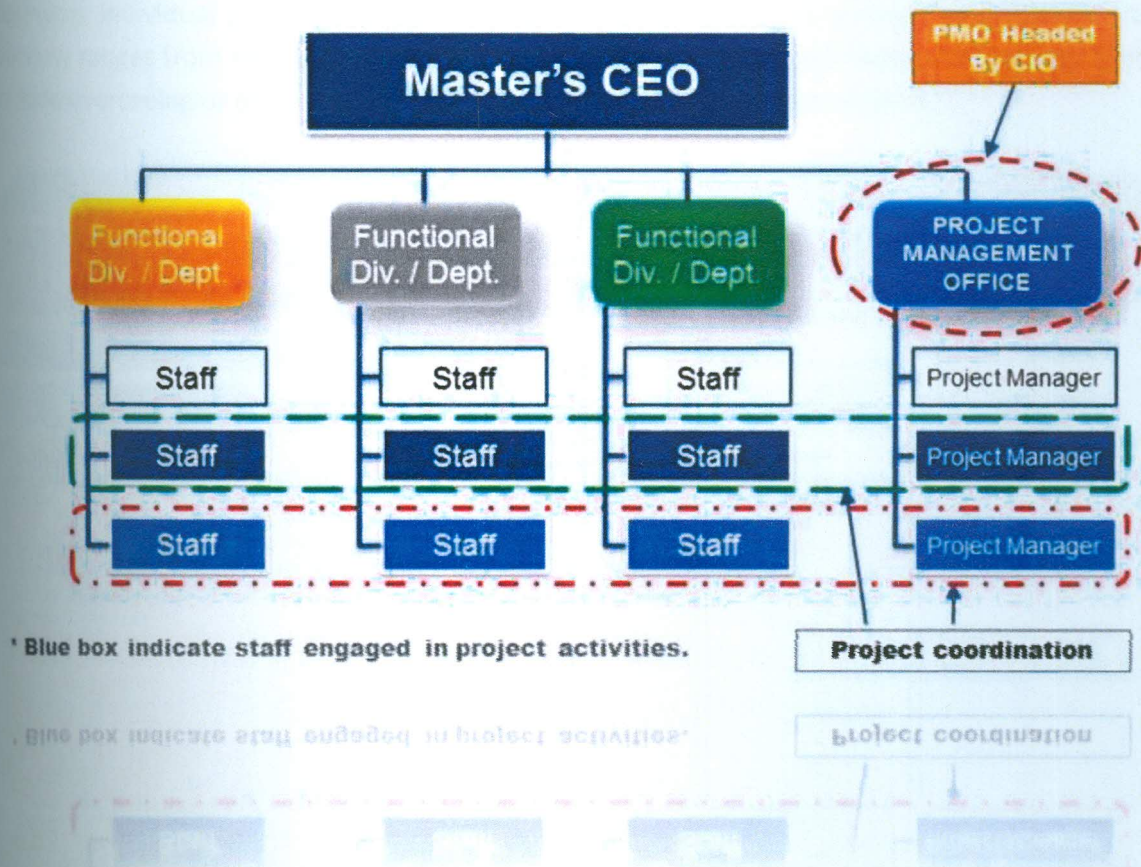


Figure 23

7.8 PMO Stages for Master

There are five stages for a PMO to establish in sequential manner. For Master, after evaluating company's PMO requirements, we have implemented the PMO up to Stage-3 which is about Standard PMO and it is about Process Support. It will focus on establishment of capability and infrastructure to support and govern a cohesive projects environment. At stage three of PMO in Master, the company would have:

- Multiple ongoing projects
- Multiple Project Mangers
- Program Managers
- Director Senior Program Manager (CIO)
- Fulltime PMO Support Staff

The Stage 3 PMO is central to the PMO competency continuum, representing the essence of a complete and comprehensive PMO capability. Although it continues to address project management oversight and control, the Stage 3 PMO introduces a new focus on support that

optimizes individual and project performance in the project management environment. Its purview ranges from managing multiple projects and multiple project managers and may even include overseeing or otherwise aligning with one or more program managers.

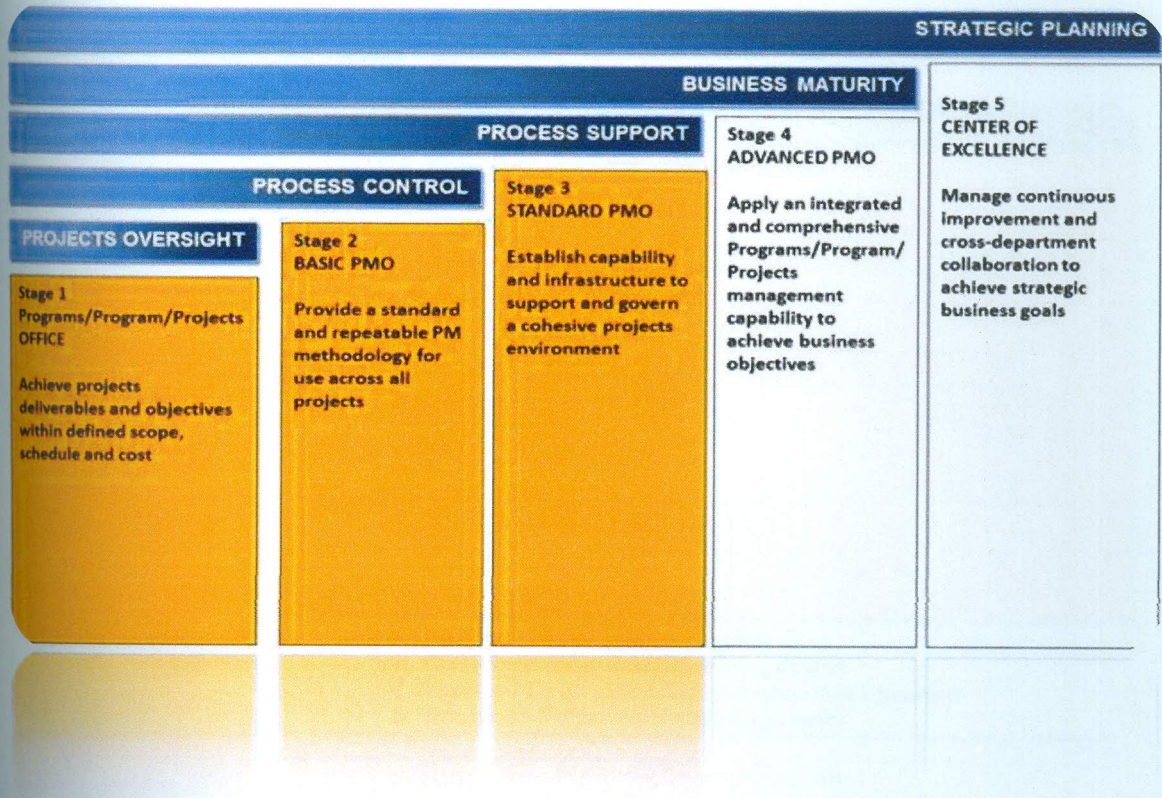


Figure 24

7.9 Master PMO Functional Model

There are five PMO functional models that we discussed in our course Dynamics of PMO and EPM Server. However, as PMO implementation strategy has been discussed for Master in previous sections of this report, we have gone up to stage 4.

Stage	Description	Master PMO Functinal Model
1	Practice Management	A. Project Management Methodology B. Project Tools C. Standards and Metrics D. Project Knowledge
2	Infrastructure Management	A. Project Governance B. Assessment C. Organization and Structure D. Facilities and Equipment Support
3	Resource Integration	A. Resource Management B. Training and Education C. Career Development D. Team Development
4	Technical Support	A. Mentoring B. Project Planning C. Project Auditing D. Project Recovery
5	Business Alignment	A. Project Portfolio Management B. Customer Relationship Management C. Vendor / Contractor Relationship Management D. Business Performance Management

Figure 25

7.10 Summary – PMO Model for Master

Below is a summary of the PMO operational model for FFC. Possible areas have been identified

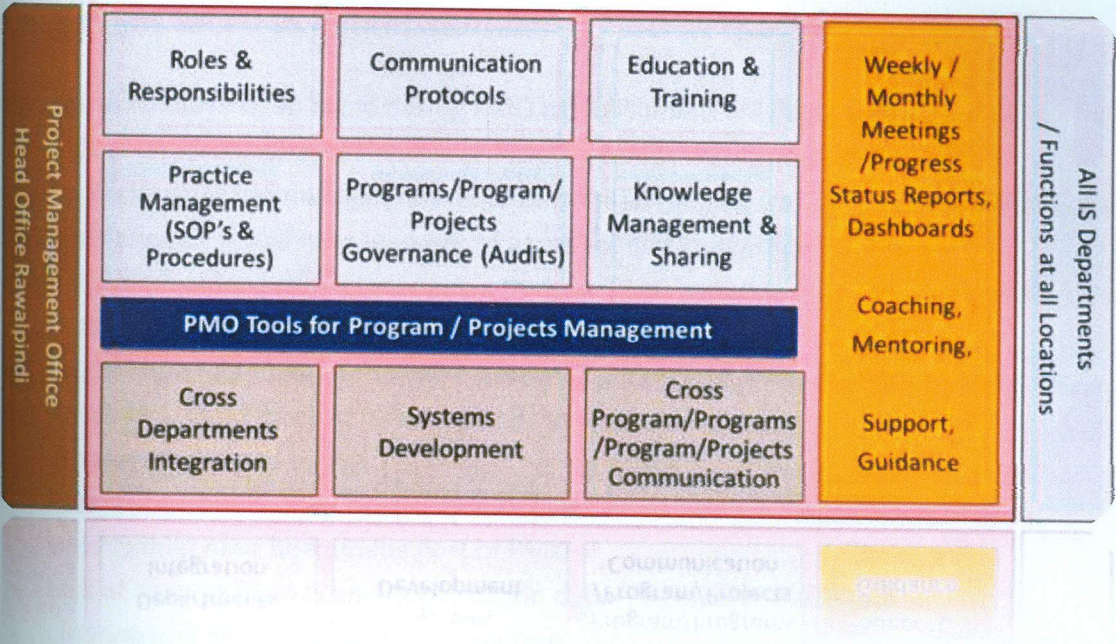


Figure 26

7.11 First PMO Session

After establishment of PMO for Master, it is supposed to conduct first introductory session will all business users at all locations. A proposed SOP for PMO to conduct first PMO session is as follow:

- Put up first PMO session requirement to CIO for his review and approval
- After CIO approval, circulate first PMO session detail to all departments via e-mail and check their availability and inputs, if any
- Evaluate feedback received from all locations and review it with CIO
- Suggest a schedule for the session and get approval from CIO
- Circulate the final schedule detail to all locations with information that the meeting with be through video conferencing. (This will save company cost)
- In actual PMO session
 - Present current or AS-IS analysis report
 - Discuss issues, dependencies, projects plan recommendations, role of PMO going forward

8. Challenges faced in Establishment of PMO at Master

Challenges which have been faced during PMO establishment are listed below:

- Lack of understanding of the role of PMO by senior management
- Concerns from top management regarding initial funding and ongoing operational cost
- Resistance by senior management to accept centralized projects control
- Perception among project managers that the PMO will serve as an obstacle to the timely accomplishment of project management goals
- Lack of understanding of the value proposition that PMO provides by management
- Resistance from project management teams in compliance to new processes and procedures defined by PMO
- Resistance from IS and Construction departmental heads while releasing their resources which would have been made part of PMO
- Lack of support from IS and Construction departments for PMO team
- Creation of a new organizational structure
- PMO policies, processes, and support services were to be introduced in a phased manner, and their implementation was to be prioritized in a time-phased manner
- Recognition of the project management as a core competency
- Implementation of a consistent approach to planning and managing projects

Following challenges are questionable points in sustainability phase of the PMO setup for Master:

- Continuous Improvement in PMO operations
- Reporting KPI by IS and Construction departments to PMO
- Quality Management by PMO
- Standards enforcement by PMO and compliance by all respective departments
- Project performance evaluation by PMO

8.1 How to Tackle these Challenges

The above mentioned challenges were tackled by applying the following:

- Streamlining all processes
 - Standardized project management processes
 - Standardized product development processes
 - Well defined management reporting processes
- Obtaining buy-in from various stakeholders through improved communication and continuous involvement of the following key stakeholders:

- Business users' departments/functions
- IT Heads at all IS and Construction departments
- Project teams at all locations
- Software development teams at all locations
- Operational & Support teams at all locations
- Commitment from Company Senior Management:
 - To apply and enforce all standardized processes as mentioned above
 - To allow PMO in ongoing projects monitoring and control
 - To recognize project performances

9. PMO Value Addition for Master

- A major benefit of PMO is that right resources are allocated to the right projects at the right time, and that in general projects are delivered on-time, on-budget, and on-scope
- A consistent project management delivery approach across the company
- Assignment of qualified project managers to significant company projects
- Project managers and project teams would now be accountable for project success through use of consistent project performance measurements and metrics
- PMO can perform tasks in projects that are normally the responsibility of other functional groups, such as procurement or human resources departments
- PMO can also conduct financial or cost/benefit analysis to determine what projects should be undertaken
- Project management office (PMO) can ensure that projects succeed every time
- Single view of the project landscape within the organization
- Powerful management reporting and trend analysis
- Troubled projects still existed, but the PMO would help communicate problems earlier and raise issues and risks to senior management
- PMO may develop and maintain a project management lessons learned program to ensure a robust flow of lessons learned
- PMO will ensure company-wide project management standards and procedures

10. Master Business Drivers

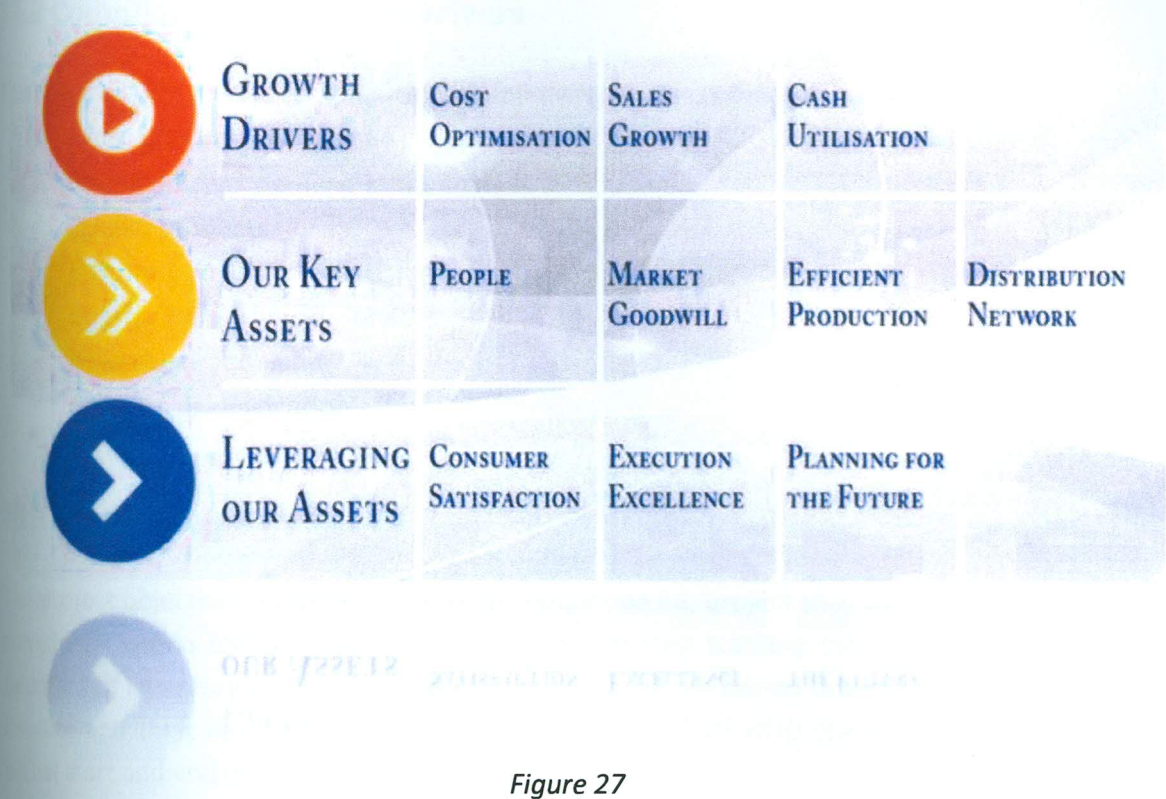
Business drivers are critically important factors that determine, or cause, an increase in value or major improvement of a business. Business driver is a resource, process or condition that is vital for the continued success and growth of a business. Business drivers affect the performance of business and the secret is to focus on these business drivers which are:

Construction of Hundred Houses - Master City

- Expansion in sales revenue
- Strong product demand in the market
- Competitive freights for haulage contractors
- Strong distribution network
- ERP system (SAP)
- Quality products
- Customer / consumer satisfaction
- Compliance to government policies
- Construction advisory services
- Powerful brand name
- Efficiency enhancement
- Business diversification
- Operational efficiency
- Cost economical
- Skilled manpower
- Stakeholders' engagement

10.1 Business Model

The Master business model depends upon growth drivers (business drivers), key assets and leveraging our assets



11. Selected Project

The selected project for this organization for implementation of PMO is the construction of 100 houses being done under the label of Master City – Gujranwala <http://www.mastercity.com.pk/> this is the first construction project of Master and from the start they want to leave a positive impression on the mind of their customers and want to make their mark in the market, thus this thing have made us able to convince them for the implementation of PMO for their projects and to use the MS Project for the purpose of Project Planning.

11.1 Project Title

Construction of 100 Houses – Master City - Gujranwala

11.2 Compliance to Business Drivers

The selected project has compliance with following Business Drivers of the Organization:

- Expansion in sales revenue
- Strong product demand in the market
- Quality products
- Customer / consumer satisfaction
- Construction advisory services
- Powerful brand name
- Business diversification

11.3 Project Objectives

The project objectives includes within time completion i.e. project shall be on schedule, shall be completed within the planned cost with an automated tracking system using RFID for the updation of inventory and tasks in MS Project as for the pre casted fabrications to be moved on the site and their installation shall be done and tracked via RFID scanners to note down the actual start and end of the product.

11.4 Critical Success Factor

Critical success factors (CSF) of the selected project are as follows:

- Support from senior management and production departments
- Effective communication
- Company and vendor collaboration
- Project team input into development and implementation
- Employee awareness of project purpose, priorities, objectives, goals and values
- Activities are supportive of organizational values
- End product should meet business requirement

11.5 External Dependencies

- Required raw material is to be provided by the vendor
- Required SDK (Software Development Kit) is to be provided by the vendor for RFID Scanning and its integration with MS Project and MS Excel
- Software application is to be integrated with legacy application for tracking through RFID Scanners

11.6 Project Documentations

For the purpose of this project demonstration, following project documents will be prepared.

- Project Charter
- Project Scope Statement
- Resource Sheet
- Work Breakdown Structure (WBS)
- Project Schedule (Bar chart)
- Network Diagram
- Views from Microsoft Project
- Reports from Microsoft Project

11.7 Implementation Strategy

The Strategy being used for implementation of RFID system for the tracking of the project activities is:

Construction of Hundred Houses - Master City

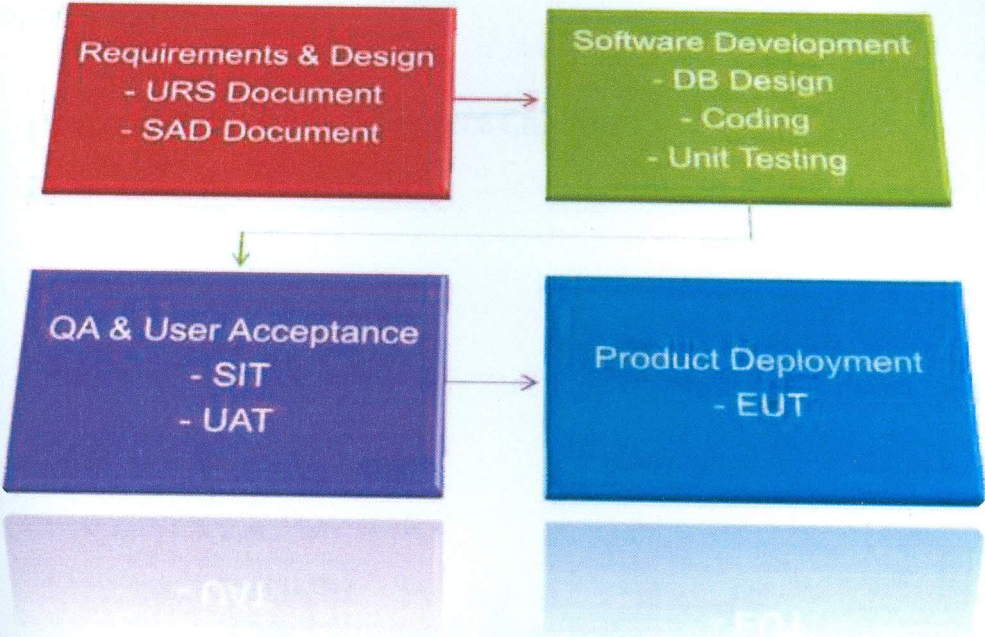


Figure 28

12. Project Charter

Project Charter



Project: Construction of Hundred Houses – Master City - Gujranwala

Master City - Gujranwala
Version: 1.0: 25-June-2016

12.1 Version History

Version	Completed By	Revision Date	Approved By	Approval Date	Reason
1.0	Abrar Ashraf Chughtai	25-June-2016	PMO	30-June-2016	Initial Charter

12.2 Introduction

As per PMI PMBOK, the project charter is the document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities. The project charter documents the necessary information required by decision maker(s) to approve the project for funding. The project charter should include the needs, scope, justification, and resource commitment. It is created during the initiating phase of the project.

12.2 Project Objectives

The construction of hundred houses, that shall be completed on time and within budget along with the implementation of RFID scanning system to track down the project objectives.

12.3 High Level Requirements

The project shall be completed in time within budget with quality products to be installed in the houses as for the quality is the main emphasize of this project to create its mark and leave its impression.

12.4 Success Criteria

Project should have the following features:

- Construction of Houses as per schedule
- Installation of RFID Scanners for tracking
- Quality Products installation in Houses
- Project Completion on Time
- Task/activities scheduling via RFID Scanners for Pre casted fabrications
- Management reports

12.5 Estimated Duration

After the approval of the total duration of the Project is 131 Days to complete the construction of hundred houses.

12.6 Project Budget Estimates

Sr	Cost Head	Total (PKR)
1	Estimated Cost	32,128,500/-
2	Contingency Reserve – 5%	4,819,275/-
3	Project Cost	36,947,775/-

12.7 Project Charter Approval

The undersigned acknowledge that they have reviewed the project charter and authorize and fund the project. Changes to this project charter will be coordinated with and approved by the undersigned or their designated representatives.

Signature: _____
Name: _____
Designation: _____

Signature: _____
Name: _____
Designation: _____

Signature: _____
Name: _____
Designation: _____

13. Assumptions

- The Houses must be completed in time
- Software application should be user-friendly, efficient and professional with the minimum required data entry on need basis
- A prototype should be demonstrated before start of actual configuration of RFID scanner with MS Project
- Required trainings of all relevant users at construction sites should be discussed and finalized before start of the development
- Availability of technical / user manuals before solution deployment
- Constructed houses will be deployed with Master products only

14. Project Exclusions

- All civil works required for the completion of this project is outsourced. Respective site manager is responsible for ensuring of civil works completion at their end

15. Microsoft Project Sheets

The project plan for the selected project has been prepared in Microsoft Project. This section contains views and reports generated from Microsoft Project for our project “**Construction of Hundred Houses Master City - Gujranwala**”. The project is in progress, some tasks have been completed whereas rest of the tasks is in progress:

15.1 Project Dash Board

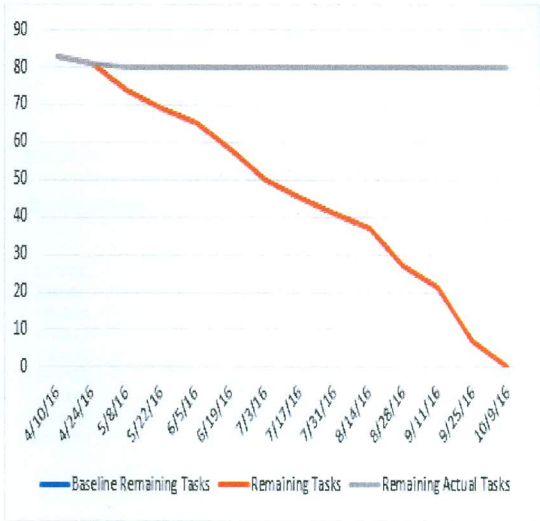
Fri 4/22/16 - Fri 10/21/16

BURNDOWN



WORK BURNDOWN

Shows how much work you have completed and how much you have left. If the remaining cumulative work line is steeper, then the project may be late. Is your baseline zero?



TASK BURNDOWN

Shows how many tasks you have completed and how many you have left. If the remaining tasks line is steeper, then your project may be late.

Construction of Hundred Houses - Master City

COST OVERVIEW

FRI 4/22/16 - FRI 10/21/16

COST

Rs32,128,500.00

REMAINING COST

Rs29,986,905.00

% COMPLETE

14%

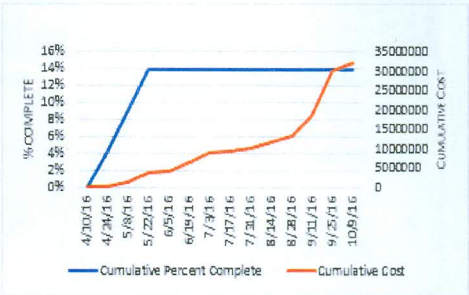
COST STATUS

Cost status for top level tasks.

Name	Actual Cost	Remaining Cost	Baseline Cost	Cost	Cost Variance
Construction or 100 Houses	Rs2,141,595.00	Rs29,986,905.00	Rs32,128,500.00	Rs32,128,500.00	Rs0.00

PROGRESS VERSUS COST

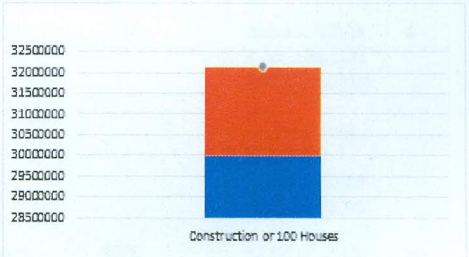
Progress made versus the cost spent over time. If % Complete line below the cumulative cost line, your project may be over budget.



COST STATUS

Cost status for all top-level tasks. Is your baseline zero?

[Try setting as baseline](#)



15.2 Project Overview

PROJECT OVERVIEW

FRI 4/22/16 - FRI 10/21/16

% COMPLETE

14%

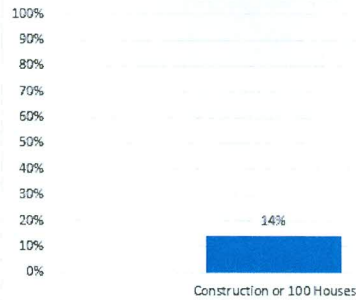
MILESTONES DUE

Milestones that are coming soon.

Name	Finish
------	--------

% COMPLETE

Status for all top-level tasks. To see the status for subtasks, click on the chart and update the outline level in the Field List.



Construction of Hundred Houses - Master City

LATE TASKS

Tasks that are past due.

Name	Start	Finish	Duration	% Complete	Resource Names	ID
Caisson Excavation	Fri 4/22/16	Thu 4/28/16	5 days	90%	M2,L6,M1,M3,M4,M5,L1,L2,L3,L4,L15,Other Work[Rs50,00 0.00]	5
Drilling Cassion	Fri 4/29/16	Thu 5/5/16	5 days	85%	L7,M6,M7,M8,M9,M10,L8,L9,L10	6
Prefabricated Steel Casing	Tue 5/17/16	Fri 5/20/16	4 days	80%	L11,L12,L13,L4,L15,L14,M11,M13,M14,M15,Iron/Steel[1 0]	7
Installation Temporary Steel Casing	Fri 5/6/16	Mon 5/9/16	2 days	70%	M1,M2,M3,M4,M5,L16,L17,L18,L19,L20,Other Matirial[100], Other Work[Rs50,00 0.00],E4,E5,E6	8
Remove water from Hole	Tue 5/10/16	Thu 5/12/16	3 days	65%	L1,L2,L3,L4,L5,L6,M1,M2,M3,M4,M5,Other Matirial[500], Other Work[Rs50,00 0.00],E7,E8,E9,E10	9

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Installation Reinforced Bars	Fri 5/13/16	Tue 5/17/16	3 days	80%	M6,M7,M8,M 9,M10,L7,L8,L 9,L10,E4,E5,Ot her Matirial[100], Other Work[Rs20,00 0.00]	10	▲
Pouring Concrete Work	Fri 5/13/16	Mon 5/16/16	2 days	97%	L20,L19,L18,L1 7,L15,L14,L13, E10,E9,E8,Oth er Matirial[100]	11	
Concrete Vibration	Fri 5/13/16	Mon 5/16/16	2 days	0%		12	
Positioning Formwork	Wed 5/18/16	Fri 5/20/16	3 days	78%	L10,L9,L8,L7,M 1,M2,M3,M4, M5,E7,Other Matirial[200], Other Work[Rs50,00 0.00],L6,L5	14	
Prefabricated Reinforcement Bar	Mon 5/23/16	Tue 5/31/16	6 days	67%	L4,L3,L2,L1,M7 ,M8,M9,M10,I ron/Steel[20], Other Matirial[200], Other Work[Rs40,00 0.00]	15	
Installation Reinforcement Bar	Mon 5/23/16	Wed 5/25/16	3 days	78%	L20,L19,L18,L1 7,L16,M15,M1 4,M13,M12,E1 0,E9,E8,Other Matirial[100],	16	▼

Construction of Hundred Houses - Master City

Pouring concrete	Wed 6/1/16	Fri 6/3/16	3 days	57%	L1,L2,L3,L4,L5, M9,M8,M7,M 6,E6,E5,E4,E3, Other Matirial[200],S tones[200],Sa nd[200],Ceme nt[200]	17
Concrete Vibration	Wed 6/1/16	Fri 6/3/16	3 days	44%	M1,M2,M3,M 4,M5,E7,E8,Ot her Matirial[200], Other Work[Rs50,00 0.00],L6,L7,L8, L9,L10,E10	18
Curing Process	Wed 6/1/16	Wed 6/1/16	1 day	47%	L11,L12,L13,L1 4,L15,M10,M1 1,M12,M13,M 14,M15,E1,E2, Other Matirial[200], Other Work[Rs25,00 0.00],Iron/Ste el[2],Cement[5 0]	19
Striping Concrete Formwork	Thu 5/26/16	Mon 6/6/16	4.17 days	38%	M6,M7,M8,M 9,M10,L8,L7,L 6,L5,E1,Other Matirial[200], Other Work[Rs50,00 0.00]	20

15.3 Upcoming Tasks

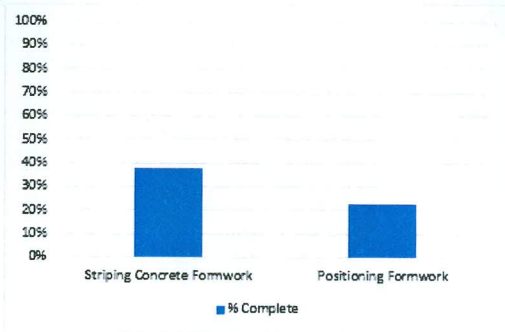


Fri 4/22/16 - Fri 10/21/16

UPCOMING TASKS

REMAINING TASKS

Status of remaining tasks that are due this week

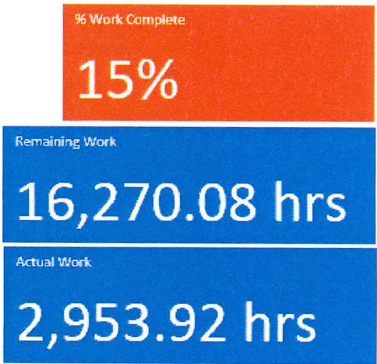
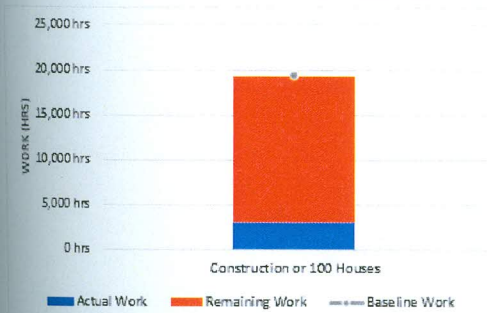
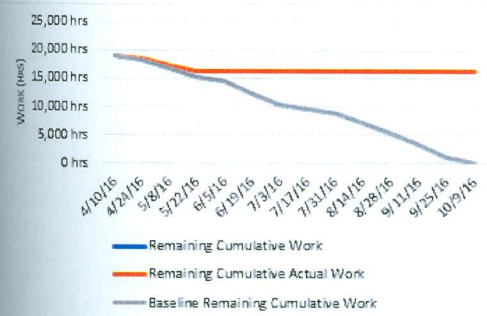


TASKS STARTING SOON

Status of tasks starting in the next week

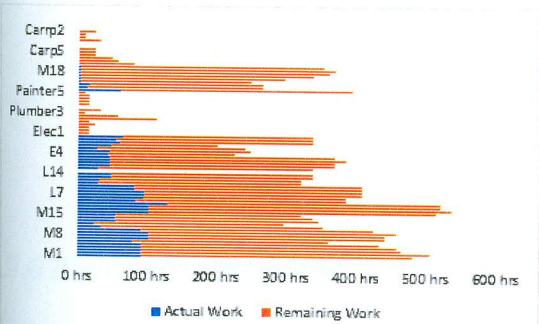
Name	Resource Names	Start	Finish	Work
Positioning Formwork	M11,M13,M14,M15,L4,L3,L2,L1,E10,E9,Other Matirial[200],Other Work[Rs20,000.00]	Tue 6/7/16	Thu 6/9/16	240 hrs
Prefabricated Reinforcement Bar	M16,M17,M18,M19,M20,L15,L14,L13,L12,E7,E6,E5,Other Matirial[200],Other Work[Rs30,000.00]	Fri 6/10/16	Tue 6/14/16	288 hrs

15.4 Work Overview



WORK STATS

Shows work stats for all top level tasks.

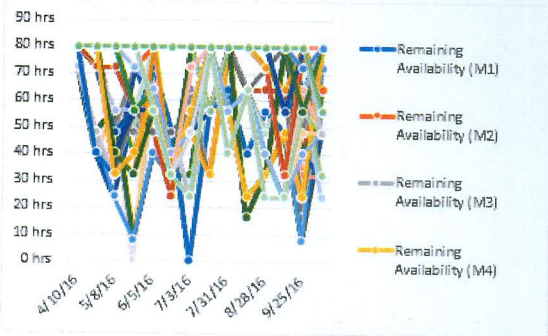


RESOURCE STATS

Shows work stats for all your resources.

WORK OVERVIEW

Fri 4/22/16 - Fri 10/21/16



REMAINING AVAILABILITY

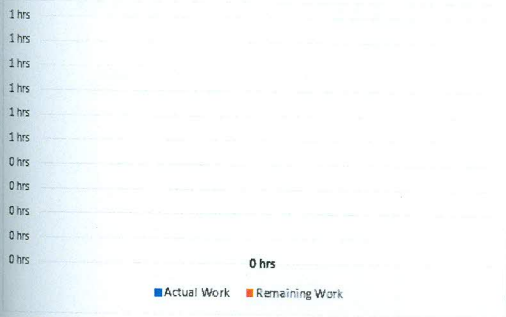
Shows remaining availability for all work resources.

15.5 Over allocated Resources

OVERALLOCATED RESOURCES

WORK STATUS

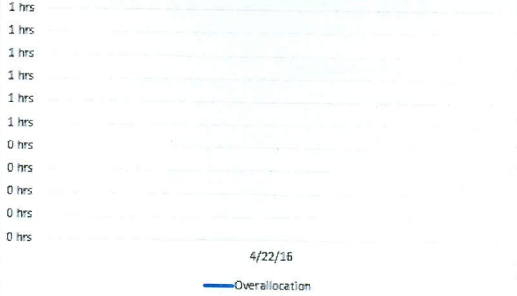
Work status for overallocated resources.



OVERALLOCATION

Surplus work assigned to overallocated resources. To resolve overallocations use

[Team Planner View](#)

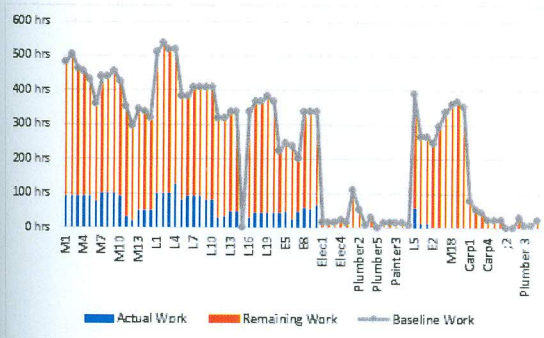


15.6 Resource Overview

RESOURCE OVERVIEW

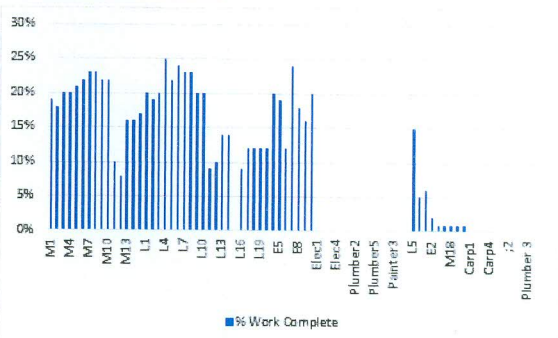
RESOURCE STATS

Work status for all work resources.



WORK STATUS

% work done by all the work resources.



15.7 Resource Status

Construction of Hundred Houses - Master City

L4	Fri 4/22/16	Mon 10/10/16	391.43 hrs
L15	Fri 4/22/16	Fri 10/21/16	300.23 hrs
L6	Fri 4/22/16	Thu 9/29/16	290.43 hrs
L7	Fri 4/29/16	Thu 9/29/16	312.83 hrs
L8	Fri 4/29/16	Thu 9/29/16	312.83 hrs
L9	Fri 4/29/16	Tue 10/4/16	325.52 hrs
L10	Fri 4/29/16	Tue 10/4/16	325.52 hrs
L11	Tue 5/17/16	Wed 10/12/16	290.63 hrs
L12	Tue 5/17/16	Wed 10/12/16	287.77 hrs
L13	Fri 5/13/16	Wed 10/12/16	288.23 hrs
L14	Fri 5/13/16	Fri 10/21/16	288.23 hrs
L15	NA	NA	0 hrs
L16	Fri 5/6/16	Fri 10/21/16	306.08 hrs
L17	Fri 5/6/16	Tue 10/18/16	322.57 hrs
L18	Fri 5/6/16	Tue 10/18/16	322.57 hrs
L19	Fri 5/6/16	Tue 10/18/16	338.57 hrs
L20	Fri 5/6/16	Tue 10/18/16	322.57 hrs
E4	Fri 5/6/16	Wed 10/5/16	179.92 hrs
E5	Fri 5/6/16	Wed 10/5/16	201.03 hrs
E6	Fri 5/6/16	Wed 10/5/16	212.23 hrs
E7	Tue 5/10/16	Thu 9/29/16	152.23 hrs

Construction of Hundred Houses - Master City

RESOURCE STATUS

Remaining work for all work resources.

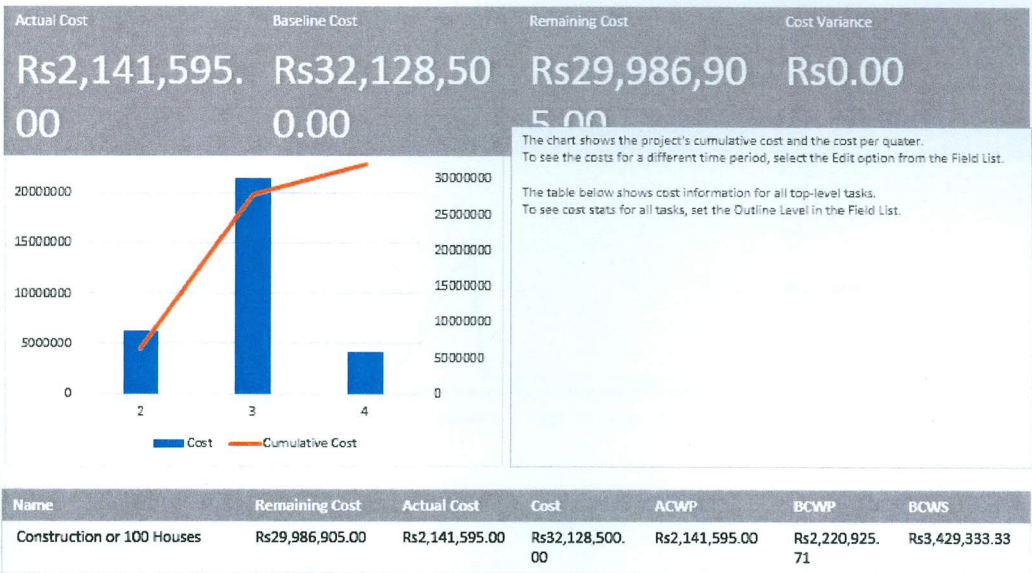
Name	Start	Finish	Remaining Work
M1	Fri 4/22/16	Thu 10/13/16	387.92 hrs
M2	Fri 4/22/16	Thu 10/13/16	411.92 hrs
M3	Fri 4/22/16	Tue 10/11/16	371.92 hrs
M4	Fri 4/22/16	Mon 10/10/16	363.92 hrs
M5	Fri 4/22/16	Wed 10/5/16	339.92 hrs
M6	Fri 4/29/16	Thu 9/29/16	280.43 hrs
M7	Fri 4/29/16	Fri 9/30/16	337.6 hrs
M8	Fri 4/29/16	Fri 9/30/16	337.6 hrs
M9	Fri 4/29/16	Tue 10/4/16	353.6 hrs
M10	Fri 4/29/16	Tue 10/4/16	331.52 hrs
M11	Tue 5/17/16	Wed 10/12/16	317.12 hrs
M12	Mon 5/23/16	Wed 10/12/16	273.52 hrs
M13	Tue 5/17/16	Wed 10/12/16	290.4 hrs
M14	Tue 5/17/16	Wed 10/12/16	282.4 hrs
M15	Tue 5/17/16	Wed 10/12/16	266.4 hrs
L1	Fri 4/22/16	Thu 10/13/16	409.03 hrs
L2	Fri 4/22/16	Thu 10/13/16	433.03 hrs
L3	Fri 4/22/16	Tue 10/11/16	417.03 hrs

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E8	Tue 5/10/16	Wed 10/12/16	275.6 hrs
E9	Tue 5/10/16	Wed 10/12/16	280.63 hrs
E10	Tue 5/10/16	Wed 10/12/16	270.08 hrs
Elec1	Mon 10/3/16	Tue 10/4/16	16 hrs
Elec2	Mon 10/3/16	Tue 10/4/16	16 hrs
Elec3	Mon 10/3/16	Tue 10/4/16	16 hrs
Elec4	Mon 10/3/16	Wed 10/5/16	24 hrs
Elec5	Mon 10/3/16	Tue 10/4/16	16 hrs
Plumber1	Tue 7/19/16	Tue 10/18/16	112 hrs
Plumber2	Tue 9/20/16	Wed 10/12/16	56 hrs
Plumber3	Wed 9/28/16	Wed 9/28/16	8 hrs
Plumber4	Wed 9/28/16	Wed 10/5/16	32 hrs
Plumber5	NA	NA	0 hrs
Painter1	Thu 10/6/16	Fri 10/7/16	16 hrs
Painter2	Thu 10/6/16	Fri 10/7/16	16 hrs
Painter3	Thu 10/6/16	Fri 10/7/16	16 hrs
Painter4	Thu 10/13/16	Fri 10/14/16	16 hrs
Painter5	Thu 10/6/16	Thu 10/6/16	8 hrs
L5	Tue 5/10/16	Wed 10/5/16	331.3 hrs
E3	Wed 6/1/16	Tue 9/27/16	250.32 hrs
E1	Thu 5/26/16	Tue 9/27/16	247.55 hrs
E2	Wed 6/1/16	Tue 9/27/16	244.23 hrs

15.8 Cash Flow

CASH FLOW



The chart shows the project's cumulative cost and the cost per quarter. To see the costs for a different time period, select the Edit option from the Field List.

The table below shows cost information for all top-level tasks. To see cost stats for all tasks, set the Outline Level in the Field List.

15.9 Cost Overruns

COST OVERRUNS

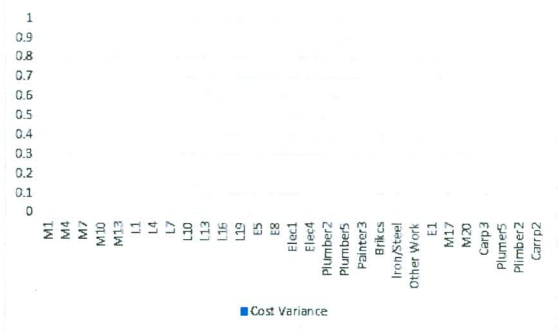
TASK COST VARIANCE

Cost variance for all top-level tasks in the project.



RESOURCE COST VARIANCE

Cost variance for all the work resources.

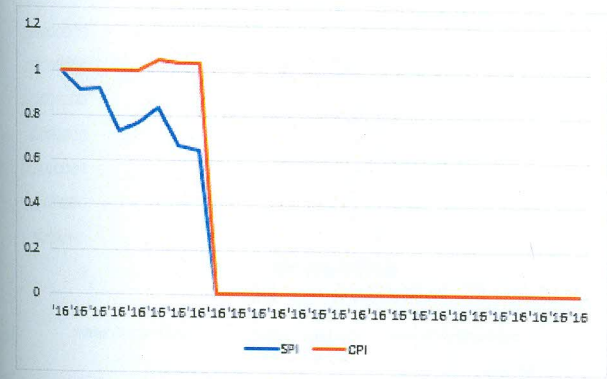
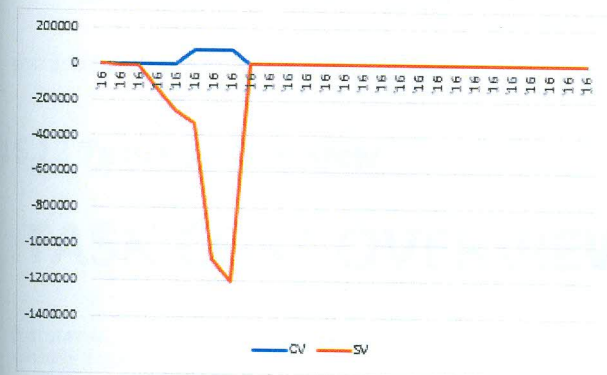


15.10 Earned Value Report

EARNED VALUE

Earned value management helps you quantify the performance of a project. It compares costs and schedules to a baseline to determine if the project is on track.

If the charts don't look right, make sure you have set a baseline, assigned costs to tasks or resources, and entered progress.

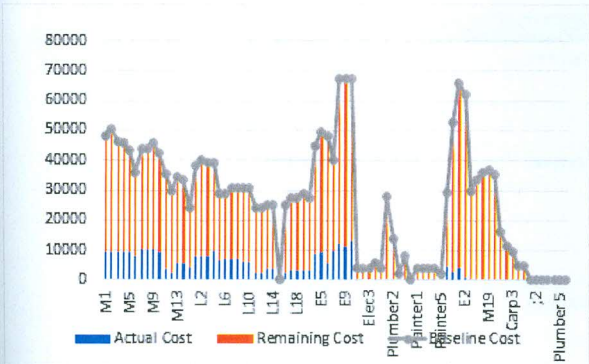


15.11 Resource Cost Overview

RESOURCE COST OVERVIEW

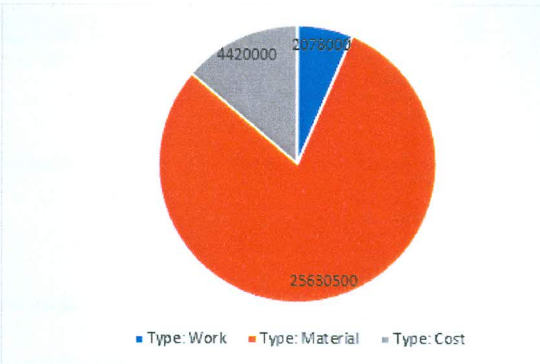
COST STATUS

Cost status for work resources.



COST DISTRIBUTION

How costs are spread out amongst different resource types.



COST DETAILS

15.12 Task Cost Overview

TASK COST OVERVIEW

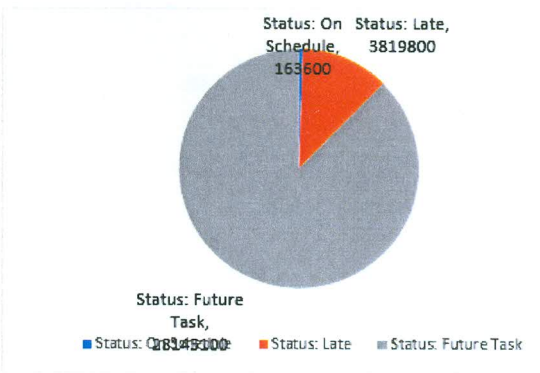
COST STATUS

Cost status for top-level tasks.



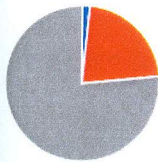
COST DISTRIBUTION

How costs are spread out amongst tasks based on their status.



15.13 Critical Tasks

CRITICAL TASKS



■ Status: On Schedule
■ Status: Late
■ Status: Future Task

A task is critical if there is no room in the schedule for it to slip.
[Learn more about managing your project's critical path.](#)

Name	Start	Finish	% Complete	Remaining Work	Resource Names
Caisson Excavation	Fri 4/22/16	Thu 4/28/16	90%	44 hrs	M2,L6,M1,M3,M4,M5,L1,L2,L3,L4,L15,Other Work[Rs50,000.00]
Remove water from Hole	Tue 5/10/16	Thu 5/12/16	65%	126 hrs	L1,L2,L3,L4,L5,L6,M1,M2,M3,M4,M5,Other Matirial[500],Other Work[Rs50,000.00],E7,E8,E9,E10
Installation Reinforced Bars	Fri 5/13/16	Tue 5/17/16	80%	52.8 hrs	M6,M7,M8,M9,M10,L7,L8,L9,L10,E4,E5,Other Matirial[100],Other

Prefabricated Reinforcement Bar	Mon 5/23/16	Tue 5/31/16	67%	126.72 hrs	L4,L3,L2,L1,M7,M8,M9,M10,Iron/Steel[20],Other Matirial[200],Other Work[Rs40,000.00]
Installation Reinforcement Bar	Mon 5/23/16	Wed 5/25/16	78%	63.37 hrs	L20,L19,L18,L17,L16,M15,M14,M13,M12,E10,E9,E8,Other Matirial[100],Other Work[Rs30,000.00]
Positioning Formwork	Tue 6/7/16	Thu 6/9/16	23%	184.8 hrs	M11,M13,M14,M15,L4,L3,L2,L1,E10,E9,Other Matirial[200],Other Work[Rs20,000.00]
Prefabricated Reinforcement Bar	Fri 6/10/16	Tue 6/14/16	12%	253.43 hrs	M16,M17,M18,M19,M20,L15,L14,L13,L12,E7,E6,E5,Other Matirial[200],Other

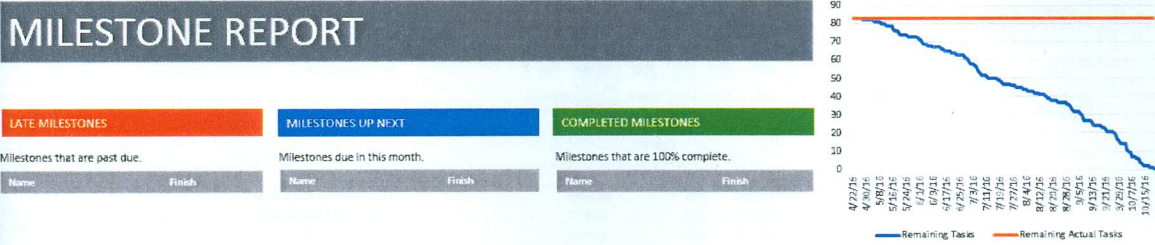
Construction of Hundred Houses - Master City

Installation Reinforcement Bar and Plumbing	Wed 6/15/16	Thu 6/16/16	0%	208 hrs	M1,M2,M3,M4,5,L1,L2,L3,L4,L1,E2,E3,Other Matirial[100],C er Work[Rs20,000 0]
Pouring concrete	Fri 6/17/16	Mon 6/20/16	0%	192 hrs	M6,M7,M8,M9,10,L6,L7,L8,L9, ,E6,E7,Other Matirial[200],C er Work[Rs20,000 0],Cement[100 ones[100],Sani 00]
Concrete Vibration	Tue 6/21/16	Thu 6/23/16	0%	312 hrs	M11,M12,M13,14,M15,L11,L13,L14,L15,E1C ,E8,Other Work[Rs25,000 0],Other Matirial[200]
Striping Concrete Formwork	Fri 6/24/16	Tue 6/28/16	0%	360 hrs	M1,M2,M3,M4,5,M6,L1,L2,L3, L5,L6,E2,Other Matirial[50],Ot Work[Rs20,000]
Installation of Base Reinforcement Concrete (BRC)	Wed 6/29/16	Fri 7/1/16	0%	240 hrs	L1,L2,L3,L4,L5,M1 ,M2,M3,M4,M5,O ther Work[Rs20,000.0 0],Other Matirial[100]
Striping Concrete Formwork	Mon 7/4/16	Wed 7/6/16	0%	240 hrs	M1,M2,M3,M4,M5,Cement[100],Iro n/Steel[20],Stone s[100],Sand[100], L1,L2,L3,L4,L5
Column Rebaring	Thu 7/7/16	Fri 7/8/16	0%	144 hrs	M13,M14,M15,L13,L14,L15,E1,E2,E3,Other Matirial[100],Oth er Work[Rs20,000.0 0]
Positioning Formwork	Tue 7/19/16	Wed 7/20/16	0%	160 hrs	M6,M7,M8,M9,M10,L6,L7,L8,L9,L10 ,Other Matirial[100],Oth er Work[Rs20,000.0 0]
Pouring Concrete	Thu 7/21/16	Tue 7/26/16	0%	168 hrs	M11,M2,M13,L11 ,L12,L13,L15,Othe

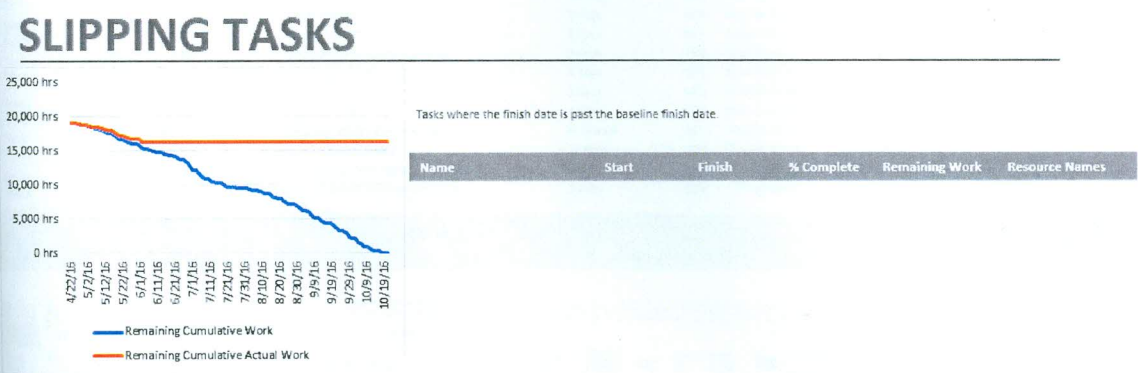
Construction of Hundred Houses - Master City

Installation Reinforcement Bar	Mon 8/15/16	Wed 8/17/16	0%	312 hrs	M6,M7,M8,M9,M10,L6,L7,L8,L9,L10,E8,E9,E10,Other Matirial[100],Other Work[Rs20,000.00]
Poured Concrete	Thu 8/18/16	Fri 8/19/16	0%	160 hrs	M16,M17,M18,M19,M20,L16,L17,L18,L19,L20,Cement[200],Sand[200],Stones[150],Other Matirial[100],Other Work[Rs20,000.00]
Concrete Vibration	Mon 8/22/16	Mon 8/29/16	0%	624 hrs	M1,M2,M3,M4,M5,L1,L2,L3,L4,L5,E10,E9,E8,Other Matirial[100],Other Work[Rs20,000.00]
Striping Concrete Formwork	Mon 8/22/16	Wed 8/31/16	0%	224 hrs	M11,M12,M13,M14,M15,L11,L12,L13,L14,L15,E7,E8,E9,E10,Other Matirial[100],Other Work[Rs20,000.00]
Striping Concrete Formwork	Mon 8/22/16	Wed 8/31/16	0%	224 hrs	M11,M12,M13,M14,M15,L11,L12,L13,L14,L15,E7,E8,E9,E10,Other Matirial[200],Other Work[Rs40,000.00]
Installation of reinforcement bar	Tue 8/30/16	Wed 8/31/16	0%	192 hrs	M16,M17,M18,M19,M20,L16,L17,L18,L19,E1,E2,E3,Other Matirial[100],Other Work[Rs20,000.00]
Mortar mixed	Thu 9/1/16	Fri 9/2/16	0%	208 hrs	M1,M2,M3,M4,M5,L1,L2,L3,L4,L5,E4,E5,E6,Other Matirial[100],Other Work[Rs40,000.00]
Concrete Block Lying	Thu 9/1/16	Tue 9/6/16	0%	224 hrs	M11,M12,M13,M14,M15,L11,L12,L13,L14,L15,E1,E2,E3,E4,Cement[100],Other Matirial[100],Other Work[Rs20,000.00]

15.13 Mile Stone Report

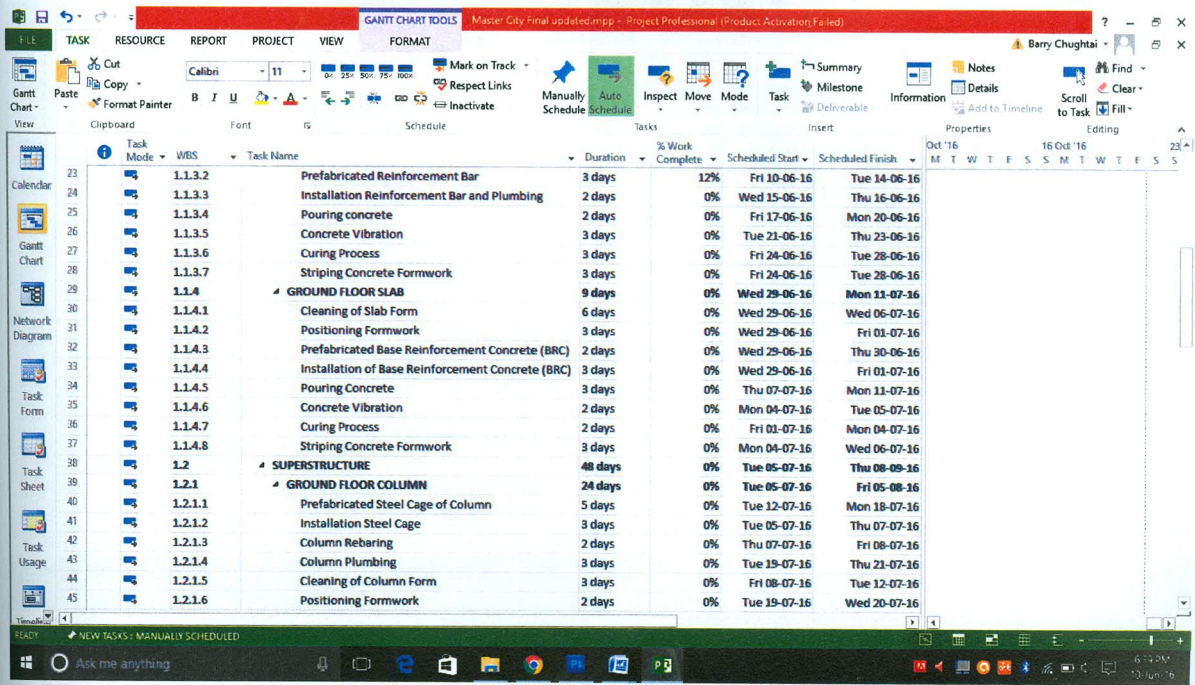
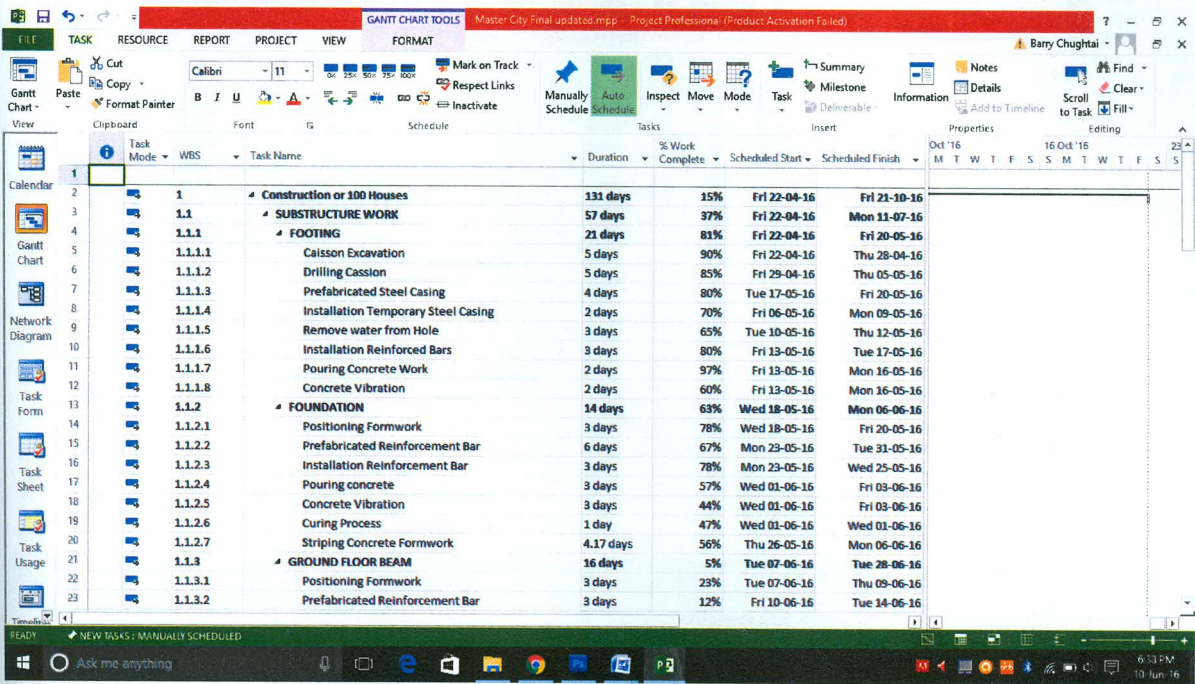


15.14 Slipping Tasks

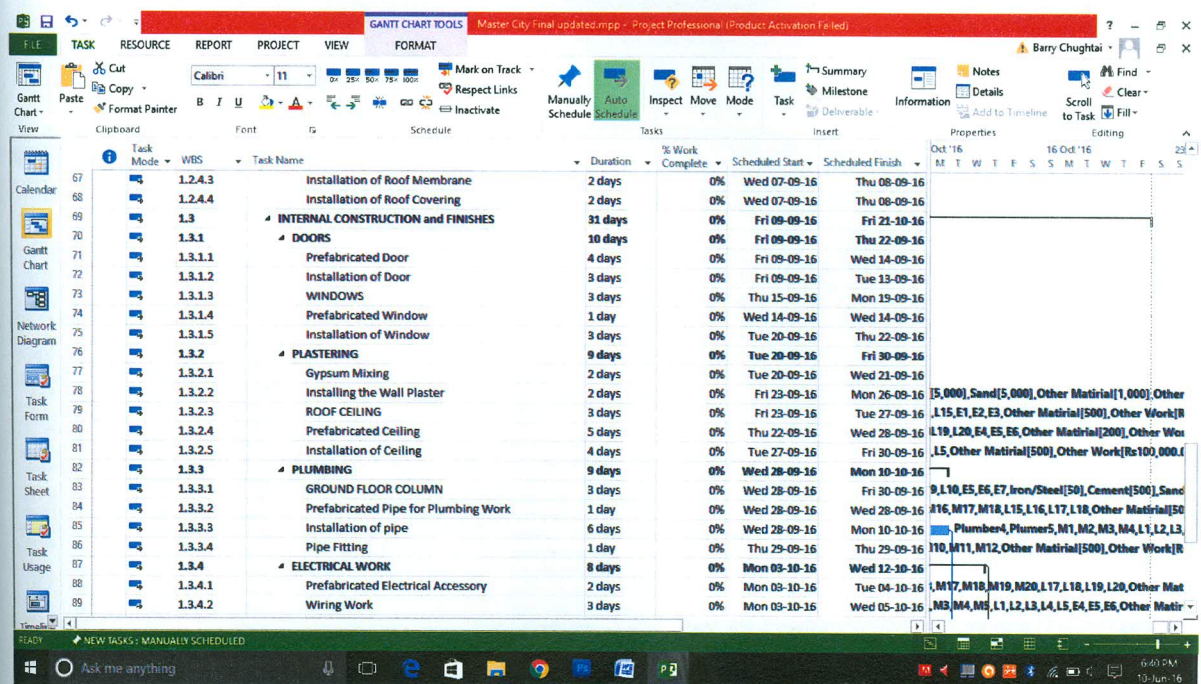
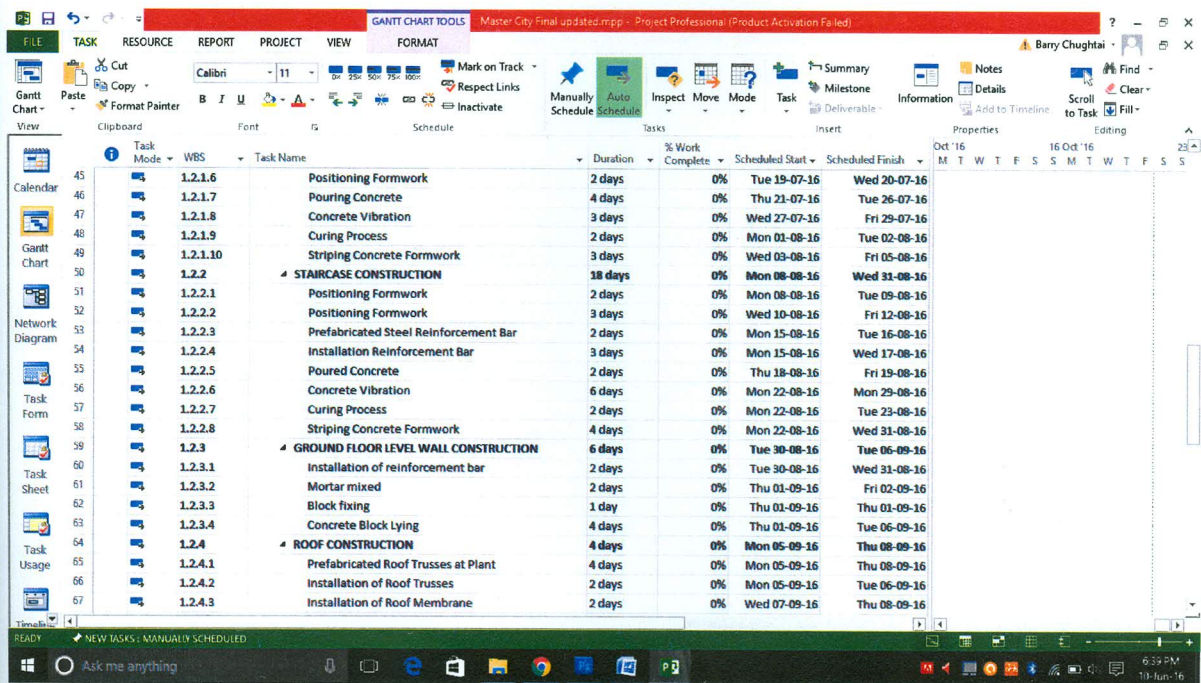


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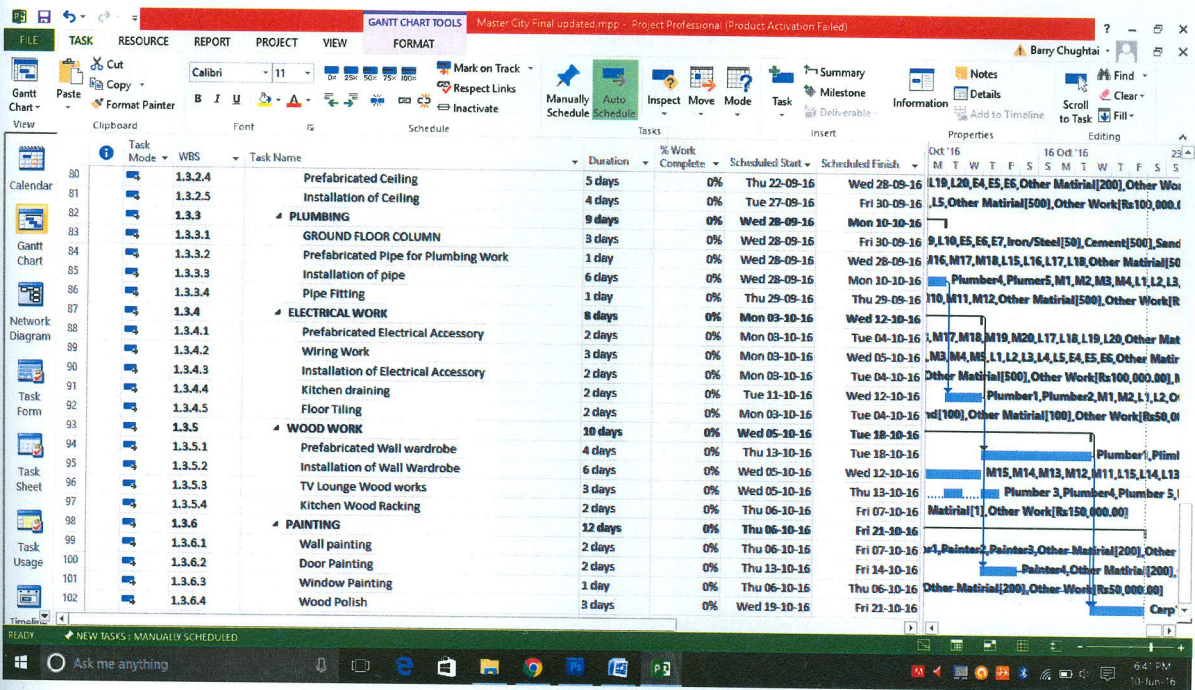
15.15 Gantt Chart



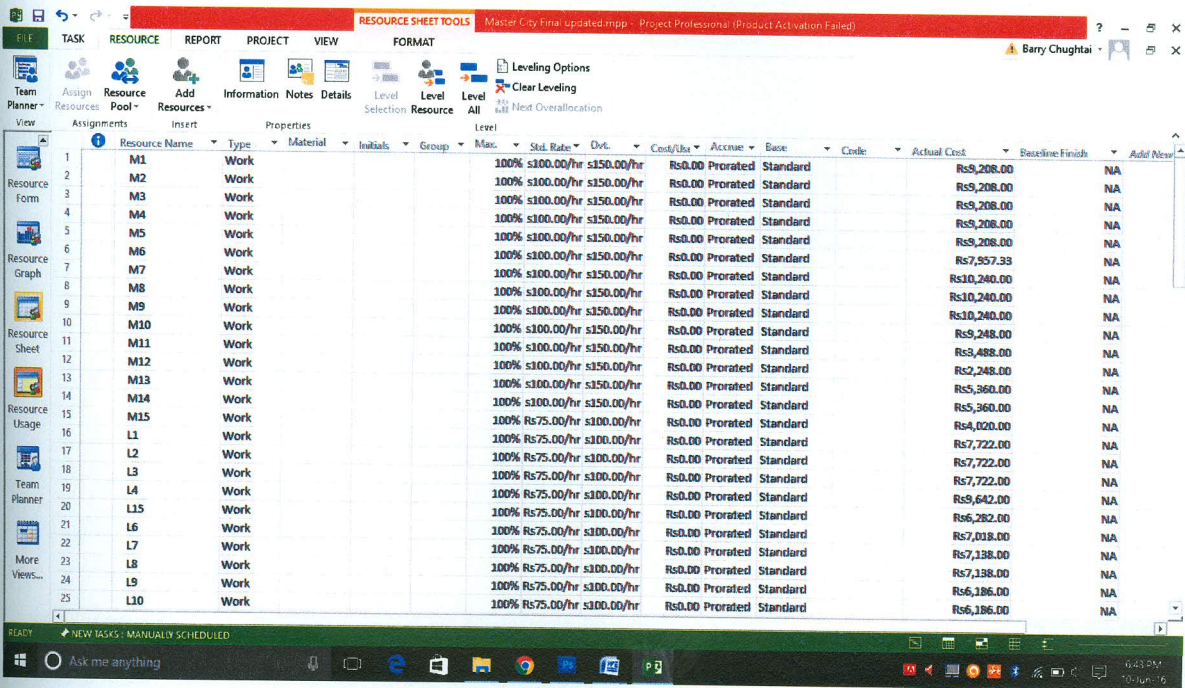
Construction of Hundred Houses - Master City



Construction of Hundred Houses - Master City



15.16 Resource Sheet



Construction of Hundred Houses - Master City

FILE

TASK

RESOURCE

REPORT

PROJECT

VIEW

Team Planner

Assign Resources

Resource Pool

Add Resources

Information

Notes

Details

Level Selection

Level Resource

Level All

Leveling Options

Clear Leveling

Assignments

Insert

Properties

Level

Master City Final updated mpp - Project Professional (Product Activation Failed)

Barry Chughtai

	Resource Name	Type	Material	Initials	Group	Max	Std. Rate	Ovt.	Cost/Ux	Accru	Base	Code	Actual Cost	Baseline Finish	Add New
25	L10	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs6,186.00	NA	
26	L11	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs2,202.00	NA	
27	L12	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs2,418.00	NA	
28	L13	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,582.00	NA	
29	L14	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,582.00	NA	
30	L15	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
31	L16	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs2,244.00	NA	
32	L17	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,408.00	NA	
33	L18	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,408.00	NA	
34	L19	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,408.00	NA	
35	L20	Work					100% Rs75.00/hr	\$100.00/hr	Rs0.00	Prorated	Standard		Rs3,408.00	NA	
36	E4	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs8,816.00	NA	
37	E5	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs9,392.00	NA	
38	E6	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs5,552.00	NA	
39	E7	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs9,552.00	NA	
40	E8	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs12,080.00	NA	
41	E9	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs11,072.00	NA	
42	E10	Work					100% \$200.00/hr	\$250.00/hr	Rs0.00	Prorated	Standard		Rs13,184.00	NA	
43	Elec1	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
44	Elec2	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
45	Elec3	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
46	Elec4	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
47	Elec5	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
48	Plumber1	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	
49	Plumber2	Work					100% \$250.00/hr	\$300.00/hr	Rs0.00	Prorated	Standard		Rs0.00	NA	

READY

NEW TASKS: MANUALLY SCHEDULED

Ask me anything

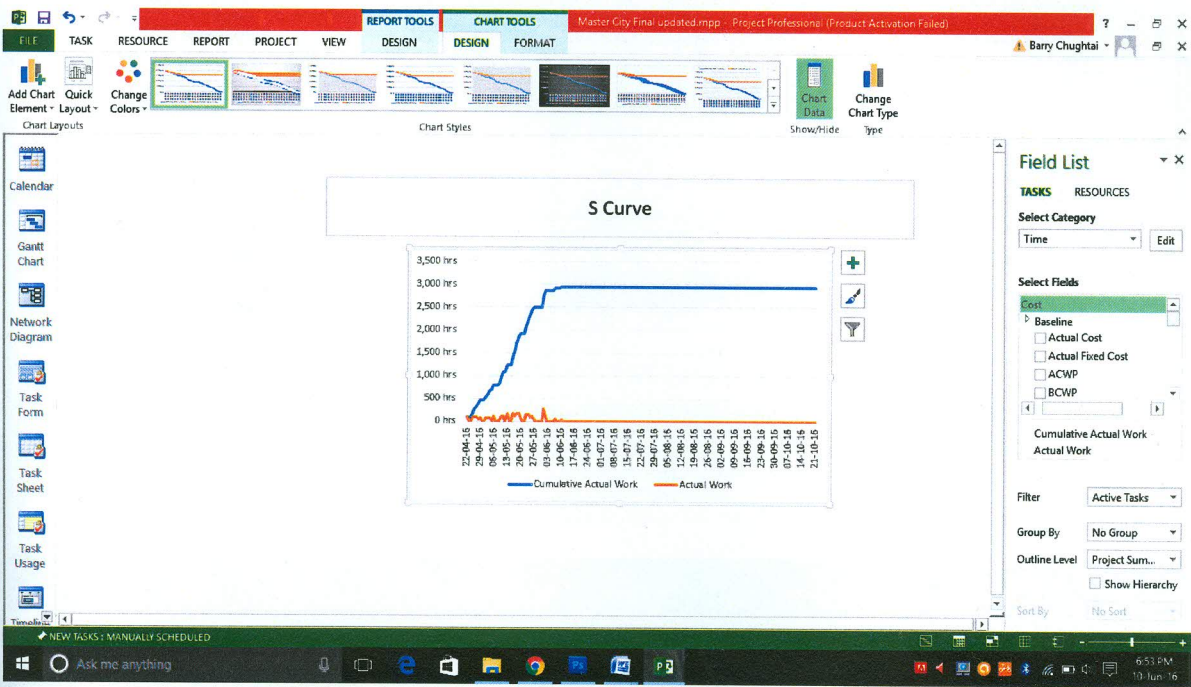
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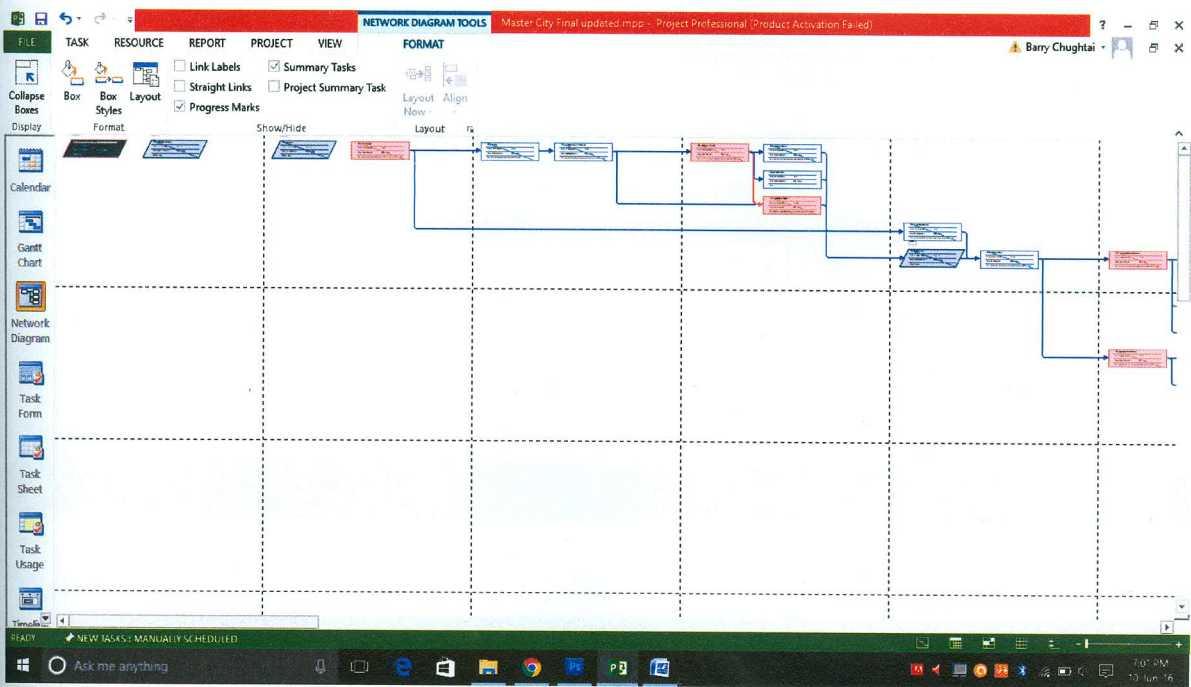
RESOURCE SHEET TOOLS Master City Final updated.mpp - Project Professional (Product Activation Failed)														
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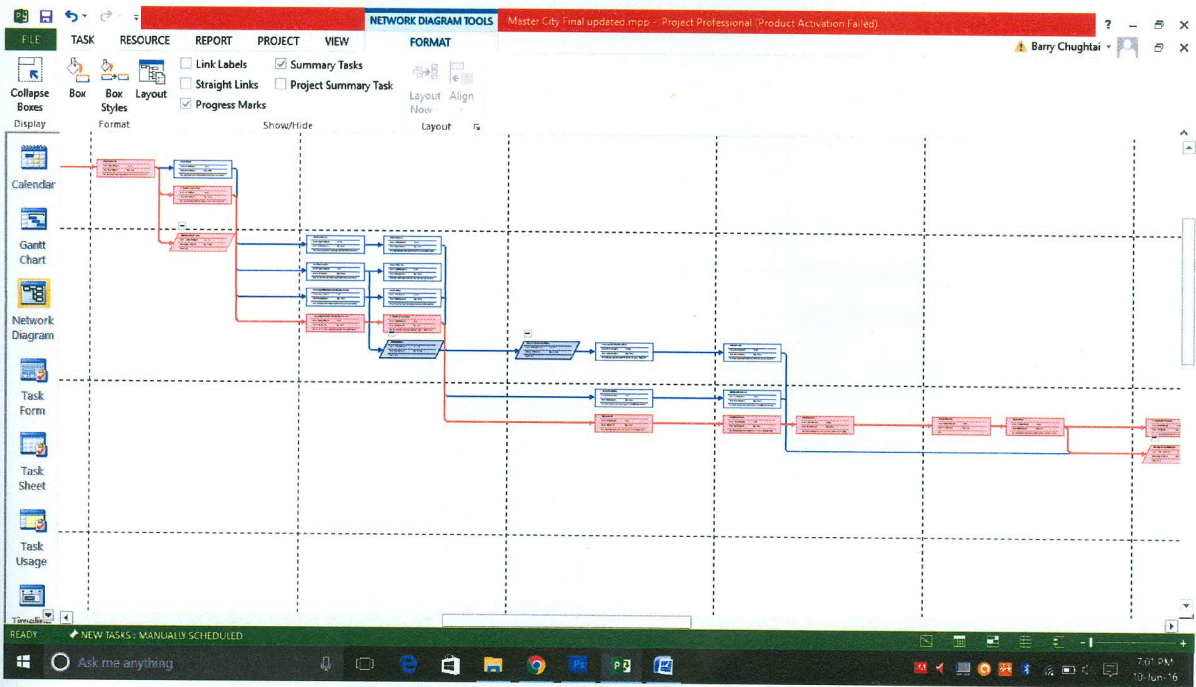
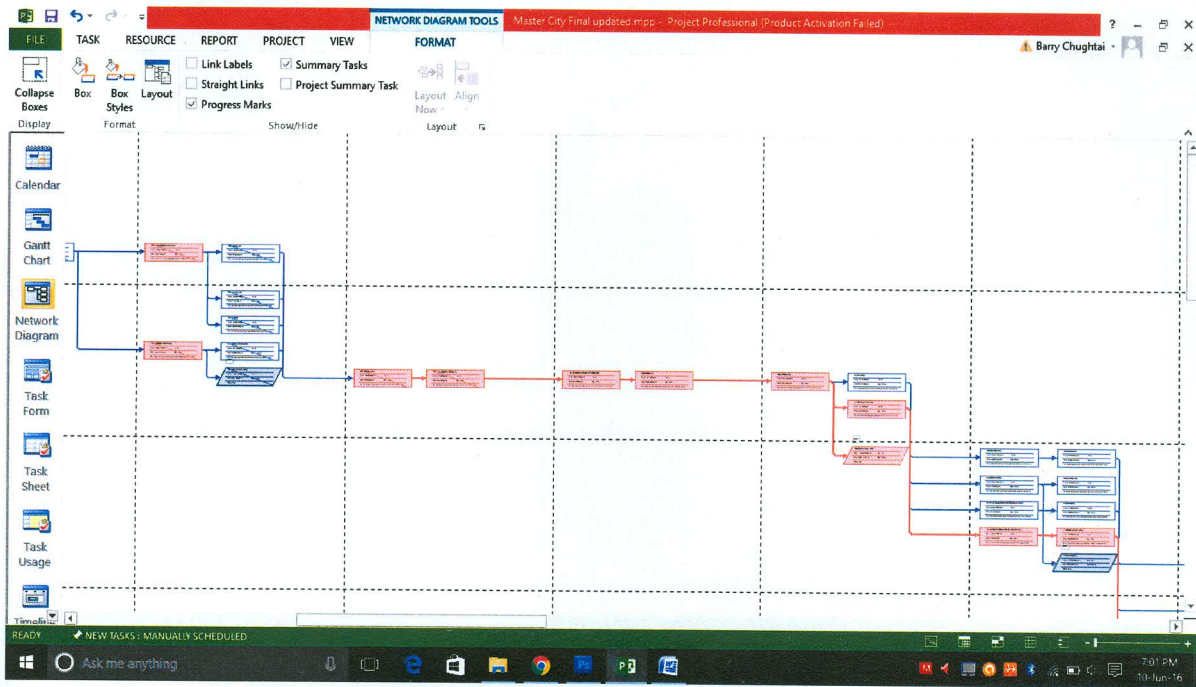
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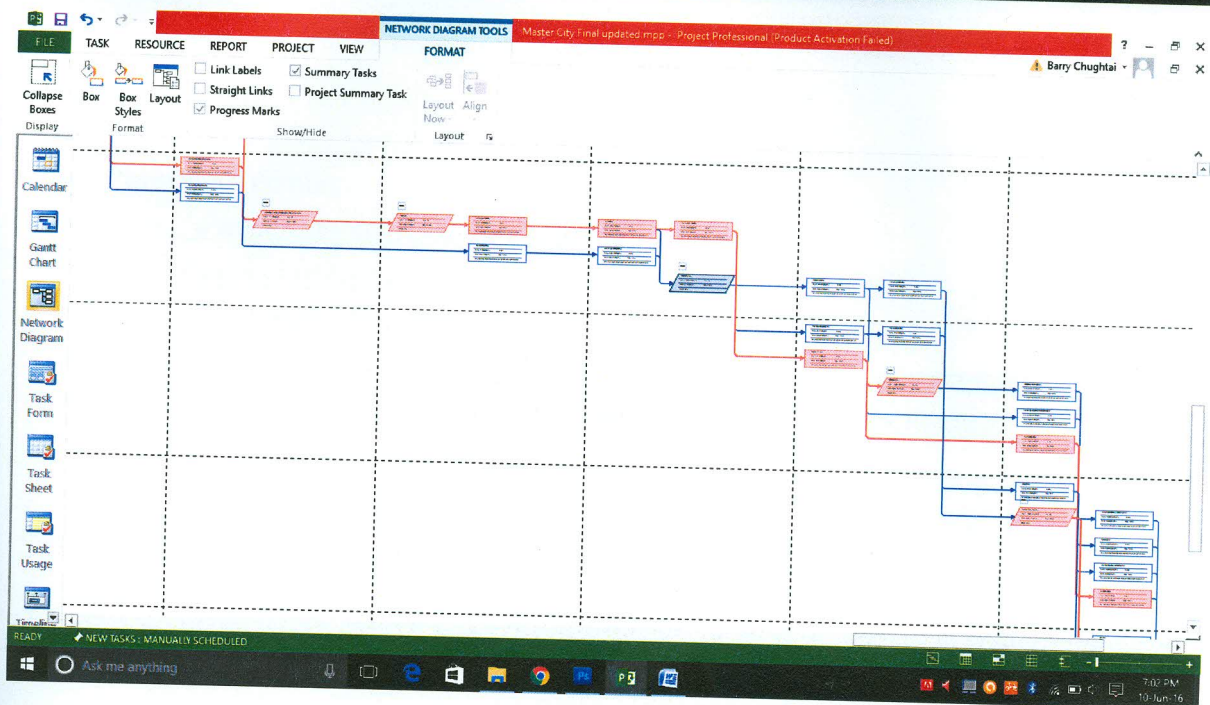
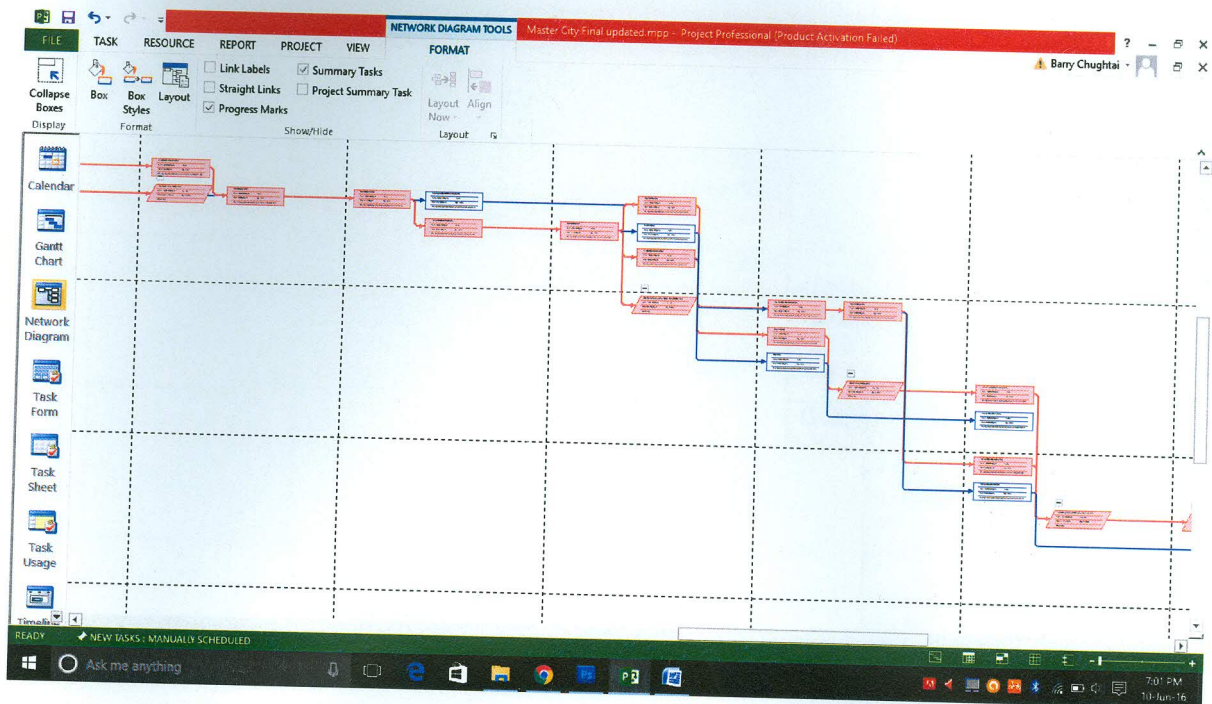
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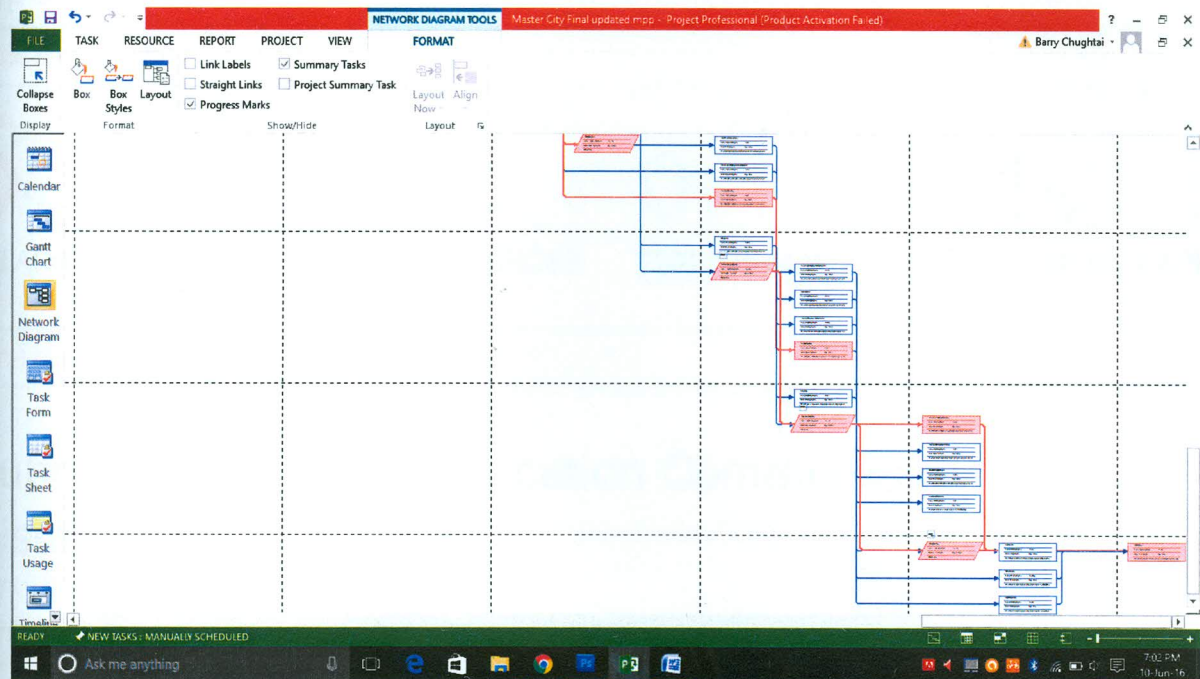
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