Project Management
The Future Challenges
There are a number of approaches to managing project activities. Regardless of the methodology employed, careful consideration must be given to the overall project objectives, timeline, and cost, as well as the roles and responsibilities of all participants and stakeholders.

The traditional approach
A traditional phased approach identifies a sequence of steps to be completed. In the "traditional approach", five developmental components of a project can be distinguished (four stages plus control):

Typical development phases of a construction project:

1. initiation
2. planning and design
3. execution and construction
4. monitoring and controlling systems
5. completion
Stages in Project Management

- Not all projects will have every stage.
- Some projects do not follow a structured planning and/or monitoring process.
- And some projects will go through the same steps multiple times
- Many industries use variations of these project stages.

1. For example, when working on a brick-and-mortar design and construction, projects will typically progress through stages like pre-planning, conceptual design, schematic design, design development, construction drawings (or contract documents), and construction administration.
2. In software development, this approach is often known as the waterfall model, i.e., one series of tasks after another in linear sequence.
3. ‘Waterfall’ development works well for small, well defined projects, but often fails in larger projects of undefined and ambiguous nature.
Diverse Approaches to PM

Different approaches to ‘Structured Project Management can be followed:

- PRINCE2
- PRiSM (Projects integrating Sustainable Methods)
- Critical chain project management
- Event chain methodology
- Process-based management
- Agile project management
- Lean project management
- Extreme project management
- Benefits realisation management
Role and function of the PM

- Project managers can have the responsibility of the planning, execution, and closing of any project, typically relating to construction industry, engineering, architecture, computing, and telecommunications.

- A project manager is the person accountable for accomplishing the stated project objectives.

- Key project management responsibilities include creating clear and attainable project objectives, building the project requirements, and managing the ‘triple constraint’ for projects, which is **cost, time, and scope**.

- A project manager is often a client representative and has to determine and implement the exact needs of the client.

  CPM (Construction PM contract and fees)
Program (Timeline) Control
## Cost Estimate
### Actual vs. Budget

### Table: Budget vs. Actual Costs

<table>
<thead>
<tr>
<th>Work Area</th>
<th>Total Budget</th>
<th>Actual Cost</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>$50,000</td>
<td>$48,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Conference</td>
<td>$10,000</td>
<td>$12,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Kitchen</td>
<td>$5,000</td>
<td>$4,500</td>
<td>$500</td>
</tr>
<tr>
<td>Bathrooms</td>
<td>$3,000</td>
<td>$2,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Total</td>
<td>$78,000</td>
<td>$66,500</td>
<td>$11,500</td>
</tr>
</tbody>
</table>

### Additional Notes
- Actual costs were slightly lower than budgeted costs in most areas.
- The largest variance was in the Conference area, where the actual cost exceeded budget by $2,000.
- The Office area had the smallest variance, with an actual cost that was $2,000 lower than budgeted.

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**Business Park Town
Schedule Cost: BP Budget Costing Block FLS East Wing**

(*Dates and figures are placeholders for demonstration purposes.*)
Project Documentation

- Drawings
- Schedules
- Correspondence
- Minutes & meetings
- Appointments
  - Contractor
  - Professional Team
  - Consultants
- Oshact
- NHBRC
- Quality Assurance
- Handover
Construction Contract Types

- Lump Sum Contract
- Unit Price Contract
- Cost Plus Fixed Percentage Contract
- Cost Plus Fixed Fee Contract
- Cost Plus Variable Percentage Contract
- Target Estimate Contract
- Guaranteed Maximum Cost Contract
Contracts

JBCC
(Joint Building Contracts Committee)

- Principal Building Agreement
- N/S Nominated Subcontract Agreement
- Minor Works Agreement
Leadership skills for Project Managers

“Good leadership skills are what make a good project manager great“

- Inspire a Shared Team Vision
- Integrity
- Great Communication Skills
- Competency in the Subject Matter of the Project
- Promote Team Building
- Good with Task Delegation
- Good Problem Solving Abilities
- Stay Cool Under Pressure
How to manage projects in today’s risk economy

Plenty of risk, slow growth and unpredictable forecasting is what project managers face today. The most obvious of these is the euro zone’s debt crisis, which will limit growth for companies across the entire world.

What’s the view?
Project managers today need to have an objective view of required contingency to account for cost and schedule uncertainty, as well as:

• Identify common scheduling pitfalls that may result in misleading schedule or risk matrix analysis results
• Address full lifecycle risk management through cost and schedule analytics
• Report confidence levels with regards to project dates and costs

What’s the solution?
The solution lies in following a systematic process of identifying, analysing and responding to project risk over the full life-cycle of a project and being able to report accurately on risks and risk management plans.
# Project Management Scope

## Development Typologies

### Residential
- 1. Houses
- 2. Apartment Blocks
- 3. Townhouses
- 4. Cluster Units

*Special Types*
- Golf Estates
- Students Accommodation
- Residential Estates
- Property Syndication
- Land Only Estates
  - Developer packages

*Case Study: Devonshire Clusters*

### Commercial
- 1. Office Parks
- 2. Corporate Offices
  - Case Study: Vodacom TZ

### Leisure
- 1. Hotels (key sales)
- 2. Resorts/Timeshare
- 3. Themed Parks
- 4. Casinos
  - Case Study: HDL

### Public Dev. - PPP
- 1. Hospitals
- 2. Airports
- 3. Toll Roads
- 4. Other
  - Case Study: PPP Accommodation

### Retail
- 1. Shopping Malls
- 2. Neighborhood or convenience shopping
- 3. Line, Value Marts, etc.
  - Case Study: Neighborhood Shopping

### Industrial
- 1. Light Industrial
- 2. Warehousing
- 3. Other

### Public Dev. - PPP
- 1. Retirement Villages
- 2. Wellness Centers
- 3. Cemeteries
- 4. Frail Care/Clinics
- 5. Marinas
- 6. Etc.

### Mix Use
- 1. Life Style
- 2. Mix Use Developments
  - Case Study: Melrose Arch / Vanilla Solution

### Case Studies
- **Residential**: Devonshire Clusters
- **Commercial**: Vodacom TZ
- **Leisure**: HDL
- **Industrial**: PPP Accommodation
- **Public Dev. - PPP**: PPP Accommodation
- **Retail**: Neighborhood Shopping
- **Industrial**: HDL
- **Public Dev. - PPP**: PPP Accommodation
- **Mix Use**: Melrose Arch / Vanilla Solution
Case Studies

1 – Cluster Development
Devonshire Estate
- Acquisition
- Financing
- Rezoning
- Design
- Sales
- Transfer

2 – Retirement Village
Lynnwood - Pretoria
- Acquisition
- Feasibility
- Rezoning
- Design-SDP
- Design Units
- Sales
- Transfer

3 – Mix-Use Development
Melrose Arch
- Site Assembly
- Cadastral
- Bulk Allocation
- Bulk Disposal
- Massing Exercise
- Transfer of Title
- Melrose Arch
Project Management
The Future Challenges

THE END

Martin C. Argimon
(Pr.Arch)
School of Construction Economics
WITS University
The Retirement Village
Basic Development Concepts
AGENDA

1. Why do people move to a Retirement Village?
2. How to structure a Frail Care Facility
3. Units Analysis
4. Land Area Analysis
5. Support Facilities – Frail Care
6. Commercial
7. Medical Suites
8. Wellness Centre
9. Project Phases
10. All Business Units
Retirement Village
Basic Concepts

Why do people move to a retirement village?
1. Remain independent from their children
2. Security in times of sickness
3. Free from domestic and other responsibilities
4. Need to be near family and friends.
5. The long term success of any retirement village is reliant on the existence of frail care services. It is the best pull factor.

How do you structure frail care services?
1. High income market: tailored according to the client’s needs. Frail care expenditure as variable. You can negotiate the level of care required.
2. The internal take-up rate for beds in your frail care unit will be slow initially.
3. Remember: Geriatric care is high on touch and low on technology, you cannot provide a rehab service in a frail care environment without investing on technology.
On what basis do people occupy units?

1. Frail care units usually belong to the retirement village. Rooms in the frail care unit are rented out on a monthly basis.
2. The community centre also belongs to the retirement village.
3. Cottages can either be sold or rented.
4. Selling can be on a sectional title or full title basis. Share block schemes are not advisable.
5. If units are rented out, a popular method is long term rental through Occupational Life-right.
Retirement Village
Architecture & Design concepts
## Lifestyle Retirement Estate & Commercial Development

### IRENE

#### Schedule 1: Area Analysis - All Business Units (Construction & Coverage)

<table>
<thead>
<tr>
<th>Business Units</th>
<th>Units</th>
<th>Sub-Total Gross Construction Area</th>
<th>FootPrint Areas</th>
<th>Developer’s Footprint Areas</th>
<th>FGC FootPrint Areas</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>Parking</td>
<td>m²</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>Access Roads</td>
<td>m²</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Footpath</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Footpath &amp; Sidewalks</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>Open Area around the Retail Promenade</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Heritage Hall</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Memorial Park</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Chapel</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Bed&amp;Breakfast / Hotel</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Livery Stables</td>
<td>m²</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>m²</td>
<td>48822</td>
<td>127803</td>
<td>116203</td>
<td>11600</td>
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</tbody>
</table>

### Current Approximate Total ERF Area

- **m²** 200000

### Residual ERF Area After Zoning

- **m²** 72197

### Grand Total (Allocation)

- **m²** 116203
- **m²** 83797
The Wellness Centre & Spa

<table>
<thead>
<tr>
<th>Mind</th>
<th>Soul</th>
<th>Body</th>
<th>Body/cont.</th>
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<tbody>
<tr>
<td>Physiology</td>
<td>Chapel</td>
<td>Biokinetics</td>
<td>Family Practitioner</td>
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<tr>
<td>Psychology</td>
<td>Meditation</td>
<td>Rehabilitation</td>
<td>Dietician</td>
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<tr>
<td>Life Skills</td>
<td>Area of Quite</td>
<td>Physio</td>
<td>Sports Physiologist</td>
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<tr>
<td>Relaxation Techniques</td>
<td>Garden of Remembrance</td>
<td>Stepdown Facility</td>
<td>Sports Massage</td>
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<tr>
<td>Counselling</td>
<td>Guidance</td>
<td>Hospice</td>
<td>Hospice</td>
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<tr>
<td></td>
<td></td>
<td>Chronic Care</td>
<td>TechnoGym</td>
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<tr>
<td></td>
<td></td>
<td>Acute Care</td>
<td>Pilates</td>
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<tr>
<td></td>
<td></td>
<td>Overnight Facility</td>
<td>Full Medical Test</td>
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</tbody>
</table>

- This Facility will serve the Retirement Village as well as the General Community
- Patients would be cared for in a 50 bed “Hotelling” Facility with Consulting rooms of aprox. 2,000 m²
Wellness Program

Many of us lead fast-paced, stressful lives. Lifestyle diseases are on the rise, and it’s becoming increasingly more difficult to “move more and eat less” in this advanced world.

“Aims to reduce medicine usage and restore achievable health”

- Multidisciplinary Approach designed for patients’ individual needs by counselling with:
  - Dietician
  - Psychological Profiling
  - Biokinetic Assessment
  - Weight & Training Program
Residential Cluster Development
Business Plan & Basic Principles
## Cluster Homes Development
### Bryanston

### DEVONSHIRE CLUSTERS
#### Schedule A/B: Variation Orders

**HOUSE BAMFORD**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>VARIATION ORDERS</th>
<th>PC ITEMS</th>
<th>DIRECT CONTRACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item</td>
<td>Base</td>
<td>Owner by Owner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Credit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Difference</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Cost</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Difference</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amount paid by VNR</td>
<td>Forward paid by Owner</td>
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</tbody>
</table>

**SUB TOTAL COSTS**

<table>
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<tr>
<th>Item</th>
<th>Base</th>
<th>Amount</th>
<th>Difference</th>
<th>NOTES</th>
</tr>
</thead>
</table>

**GRAND TOTALS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Base</th>
<th>Amount</th>
<th>Difference</th>
<th>NOTES</th>
</tr>
</thead>
</table>

**FINANCE CHARGES TO AUGUST 96**

<table>
<thead>
<tr>
<th>Item</th>
<th>Base</th>
<th>Amount</th>
<th>Difference</th>
<th>NOTES</th>
</tr>
</thead>
</table>

**GRAND TOTALS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Base</th>
<th>Amount</th>
<th>Difference</th>
<th>NOTES</th>
</tr>
</thead>
</table>
Residential Cluster Development
Business Plan & Basic Principles

Various Project Documents

- Services Agreement
- Schedule of Draws
- Occupation-Health & Safety Act
- Conditions of Establishment
- Waiver of Builder’s Lien
- Other