

LEADING THE ELECTRICITY DISTRIBUTION INDUSTRY



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ASSET MANAGEMENT: INTERFACE BETWEEN THE BUSINESS AND THE SYSTEM YOU USE

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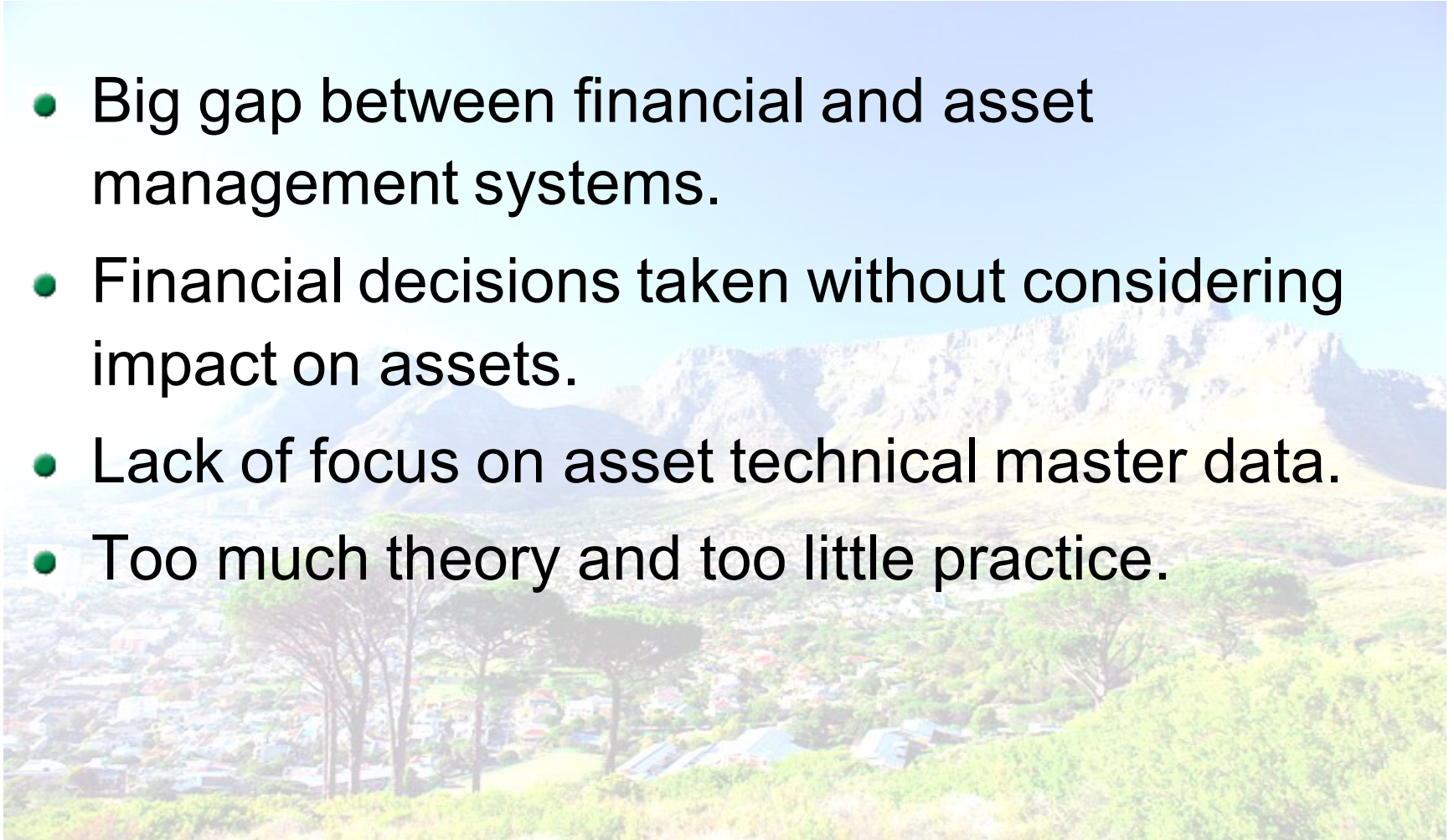
WHY ASSET MANAGEMENT FAILS



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- Big gap between financial and asset management systems.
- Financial decisions taken without considering impact on assets.
- Lack of focus on asset technical master data.
- Too much theory and too little practice.



WHY ASSET MANAGEMENT FAILS (Contd ...)



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- Need asset management system due to data volume and complexity
- Thorough system understanding required before implementation
- You can buy the best system in the world, but if you don't understand the building blocks, you will fail!

PRACTICAL EXAMPLE OF BAD ASSET MANAGEMENT



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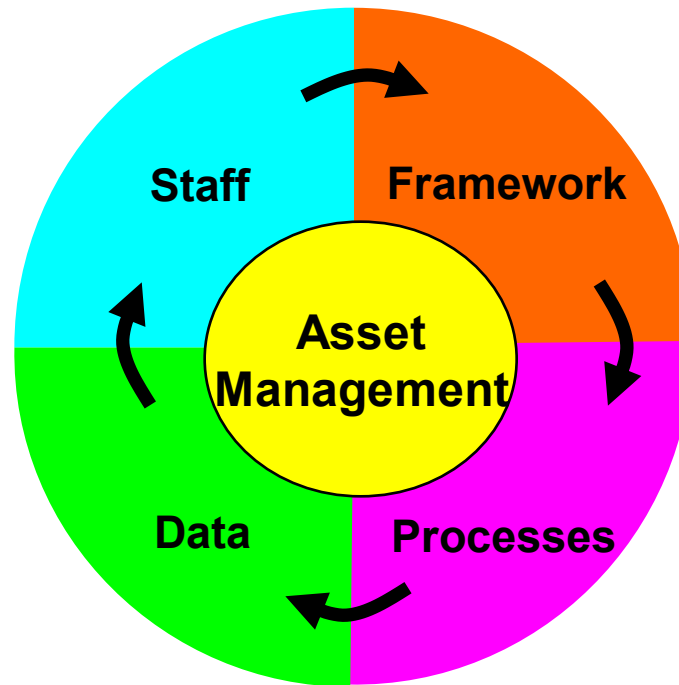


KEY ELEMENTS OF SUCCESS



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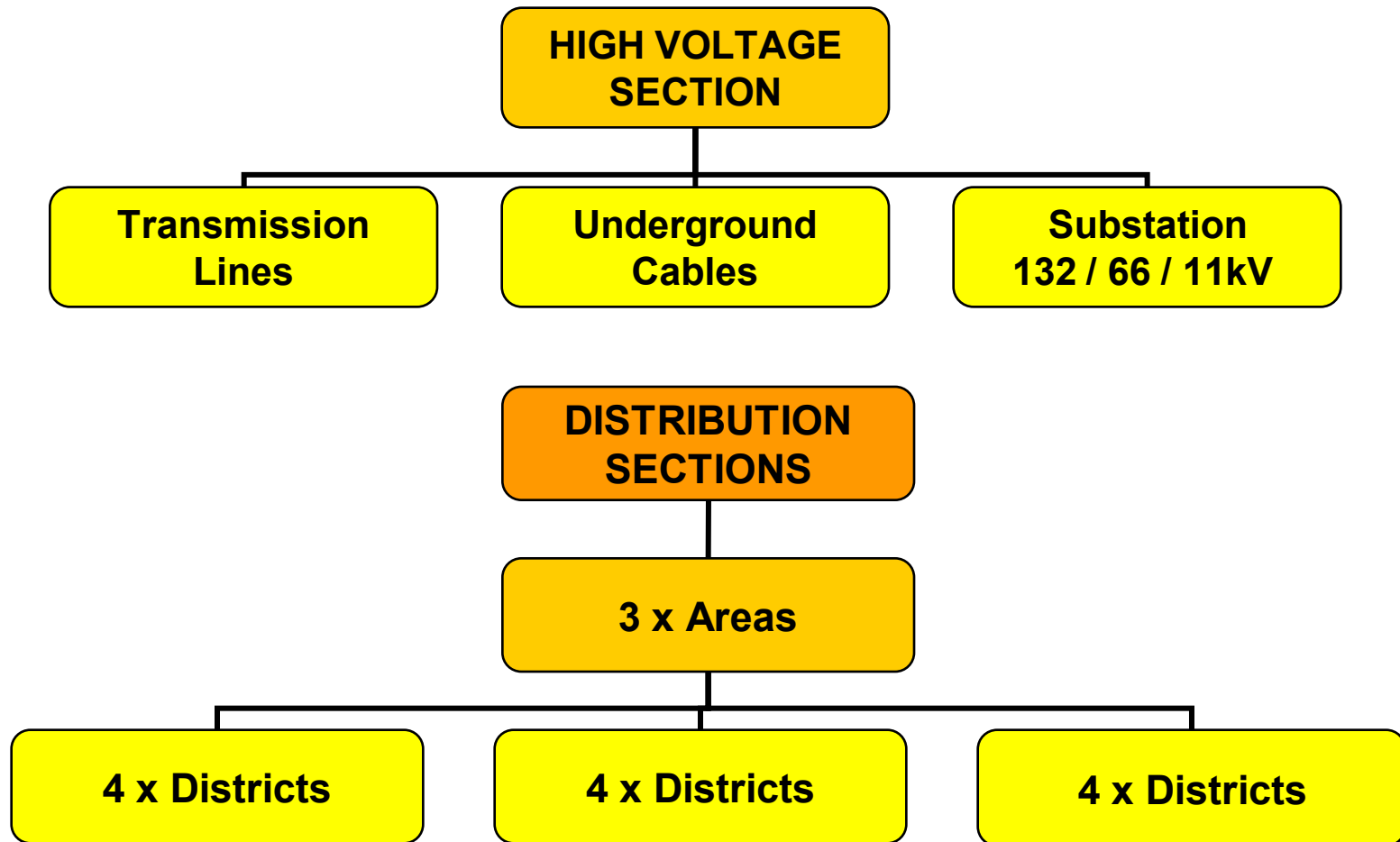


OPERATIONAL / ASSET STRUCTURE



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DISTRICT DATA



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Area	Districts	Demand MW	Protected Sub	Unprotected Sub	Minisubs
North	Atlantis	97	21	94	168
North	City	275	189	256	147
North	Mowbray	284	160	361	250
North	Vanguard	148	86	105	110
South	Gugulethu	52	16	63	204
South	Mitchells Plain	148	57	365	250
South	Muizenberg	134	84	291	315
South	Wynberg	175	119	308	308
East	Bloemhof	264	96	296	1051
East	Helderberg	122	25	30	831
East	Oostenberg	135	50	215	845
East	Parow	162	81	276	597
TOTAL		1996	984	2660	5076

WHAT IS THE KEY TO A SUCCESSFUL INTERFACE?



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- Management must be involved
- Clear-cut framework
- Knowledgeable team
 - Specialists within business and system
- Business must own and use the system
- System must reflect business
- Support teams constantly monitor system - importance of accountability
- Competence level - same across field

FRAMEWORK –

Key Elements



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- Asset Hierarchy
- Technical Asset Classes
- Nameplate Data
- Doc Links to Technical Objects
- GIS Integration
- Failure analysis
- Condition Assessment
- Spares List
- Task List
- Maintenance Plans
- Business Process Management
- Role Definition/Mapping

ASSET HIERARCHY



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Electricity
Distribution
Medium Voltage
Area
District
Operational Area

EDMCE101/P001=PSW01-CB

Protected Sub
Number of Asset
Asset Group Type (CB Panel)
Number of Asset Group Type
Asset Group Type Sub-Type

- Characters make up Asset Hierarchy Level
- Structured for Vertical Reporting
- Components follow after structure

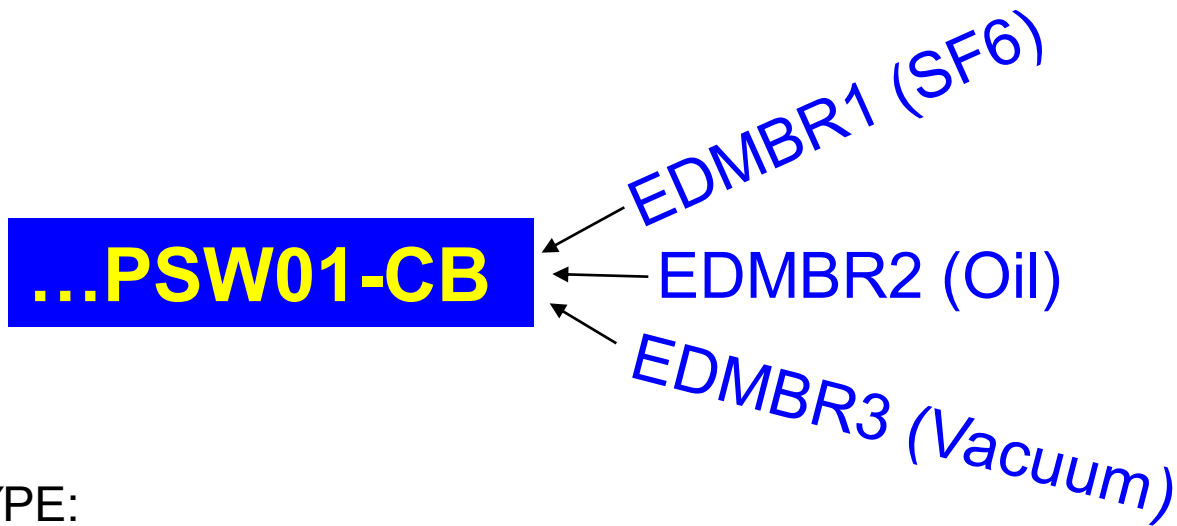
CLASSES

For horizontal reporting



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PLANT TYPE:

EDG – Facilities

EDM – Medium Voltage

EDL – Low Voltage

EDS – Secondary Plant

CLASSIFICATION (Nameplate Data)



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- Critical for life-cycle costing
- Replacement policy
- Condition Assessment

MV Panel	
Object Class	Type
Technical Object Description	Single/Double busbar
Functional Location Number	Internal Arc Rated (Yes/No)
Manufacturer	Internal Arc Rating (kA)
Serial No.	Accessibility (AFLR/AFL)
Manufacturer Date	Panel heaters fitted (Yes/No)
Commission Date	Panel heaters wattage (40/100)
Commissioned By	Remote Switching facilities fitted (Yes/No)
GPS Co-ordinates	Phasing facilities installed (Yes/No)

TASK LIST / MAINTENANCE PLANS



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- Preventative Maintenance Schedules
- Use NRS Specifications
- Key for: Cost / Budgets / Staff Requirements / Material Requirements



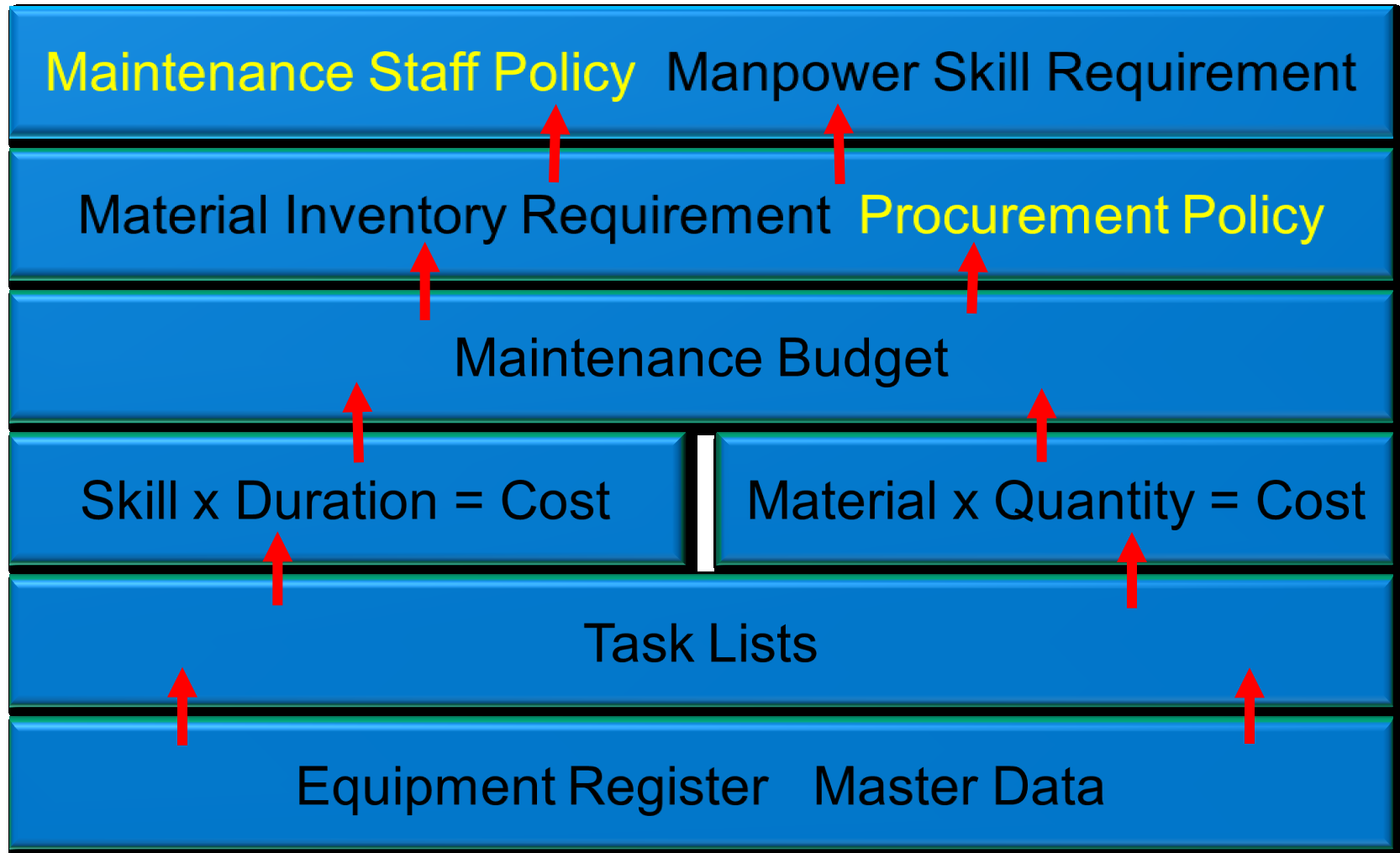
TASK LIST /

MAINTENANCE PLANS



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CONCLUSION



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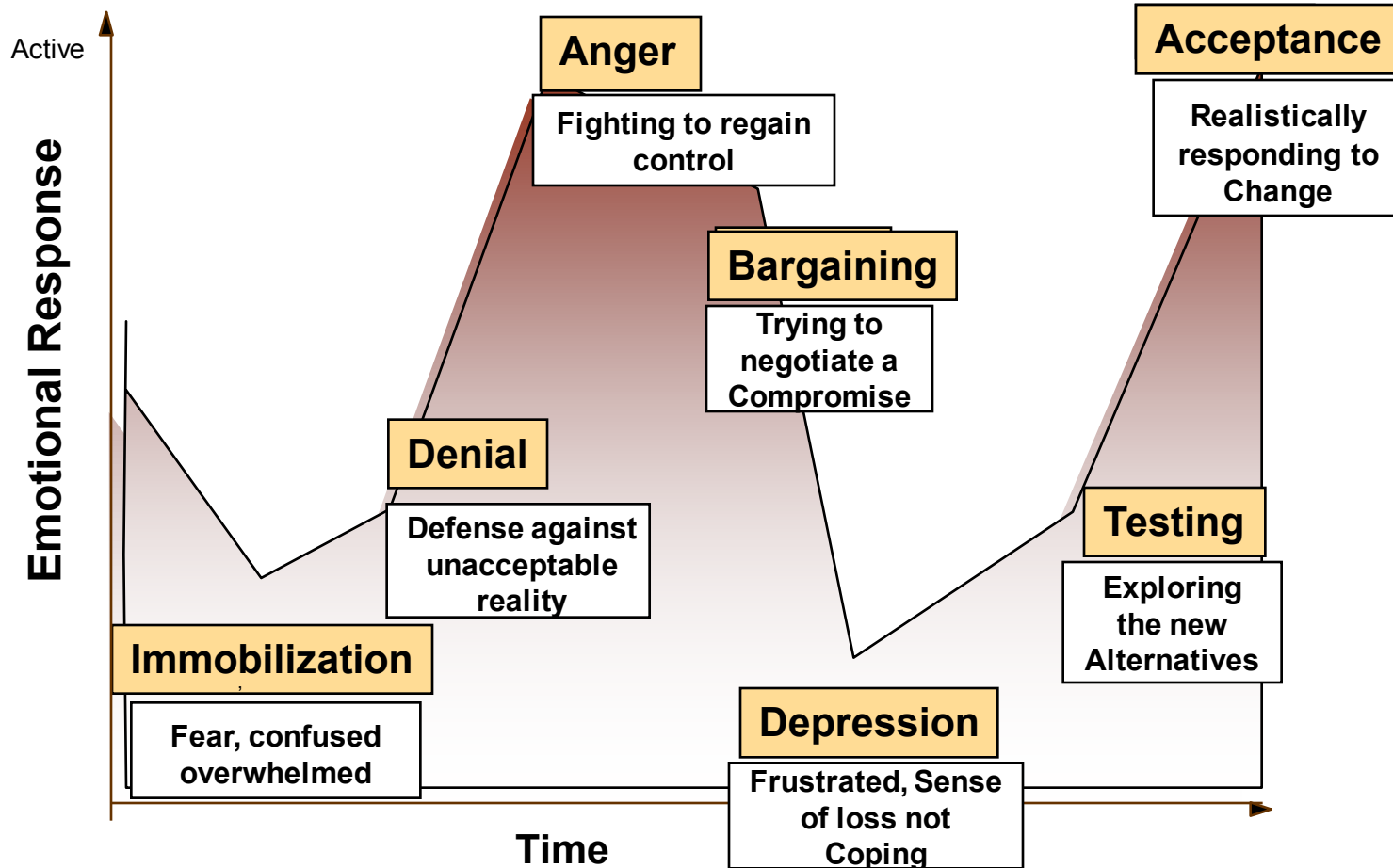
- Move away from “*we fix it when it breaks*”
- Visibility of budget requirements
- Optimise maintenance tactics – real-time processing
- Measure asset management performance
- Stability on core system
- Reduce future change management efforts

Emotional Response to Change



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Thank you

- ERP Team
- Maintenance Planners

