

Crown Melbourne's Maximo Everyplace Implementation

Pulse 2013

Jeremy Sampson – Engineering Services Manager

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This Presentation:

- What is Crown Melbourne -
- Why we implemented Maximo Everyplace -
 - Implementation challenges -
 - Project outcome and learnings -
 - Project Management 101 -
- Questions -



Crown Melbourne EAM Implementation

Company Background



Crown Melbourne

- Australia's leading integrated resort
- 18 million visitors each year.
- Over 510,000 square meters
- 120 full time maintenance staff
- 3 hotel towers 1,600 premium/luxury guest rooms
- 8,850 employees - Australia's largest single site employer.



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Company Background



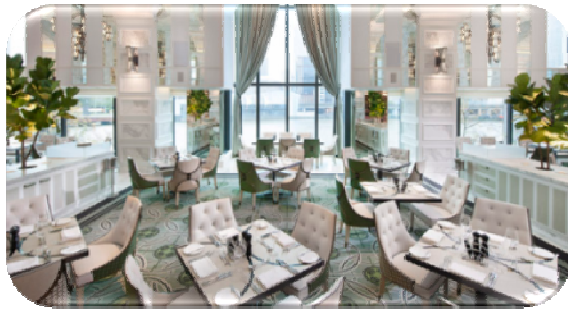


CROWN
CROWNING ACHIEVEMENT

NEWS

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Property Features



40 Restaurants



1600 Hotel Rooms



12 bars/nightclubs



29 Shopping Outlets



Gaming and VIP Gaming



2 World Class Spas

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Property Infrastructure



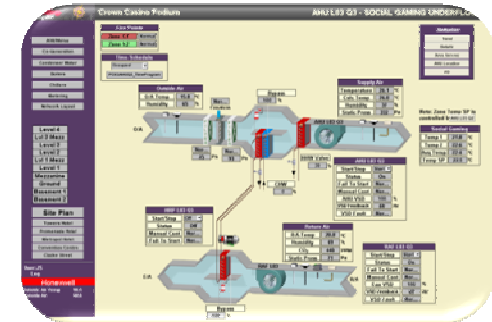
130 lifts & escalators



229 air-conditioning pumps & 31 Boilers



900 electrical boards



45,000 BMS points & 1300 meters



2900 Air conditioning units



27 air conditioning Water Chillers



8 Cogen Generators



35 high voltage substations



Why we implemented Maximo Everyplace



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Crown Melbourne implemented Maximo & Maximo Everyplace in Nov 2012

Reasons for Crown EAM implementation:

- **Customer experience** – facility issues were not rectified in the shortest possible time.
- **Cost control** – ongoing costs were not easily transparent.
- **Inventory Control** - many work orders waiting on parts.



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Project drivers – Example issues with legacy systems

1) Duplicate work orders. Multiple maintenance teams would sometimes attend the same job.

2) No asset history. Assets were not easily specified in the work order. Issues with one escalator could be described by multiple descriptions (eg. ID#, lower floor location, upper floor location, etc...)

3) Financial accuracy. Finance information lived in 2 separate systems and full transparency wasn't available until the end of each month

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Our Maintenance Roadmap

- 5 star resort service levels
- Asset condition trending and failure forecasting
- Life-cycle costs for major assets
- Minimal out of stock parts
- Increased preventive maintenance
- Improved maintenance personnel utilization

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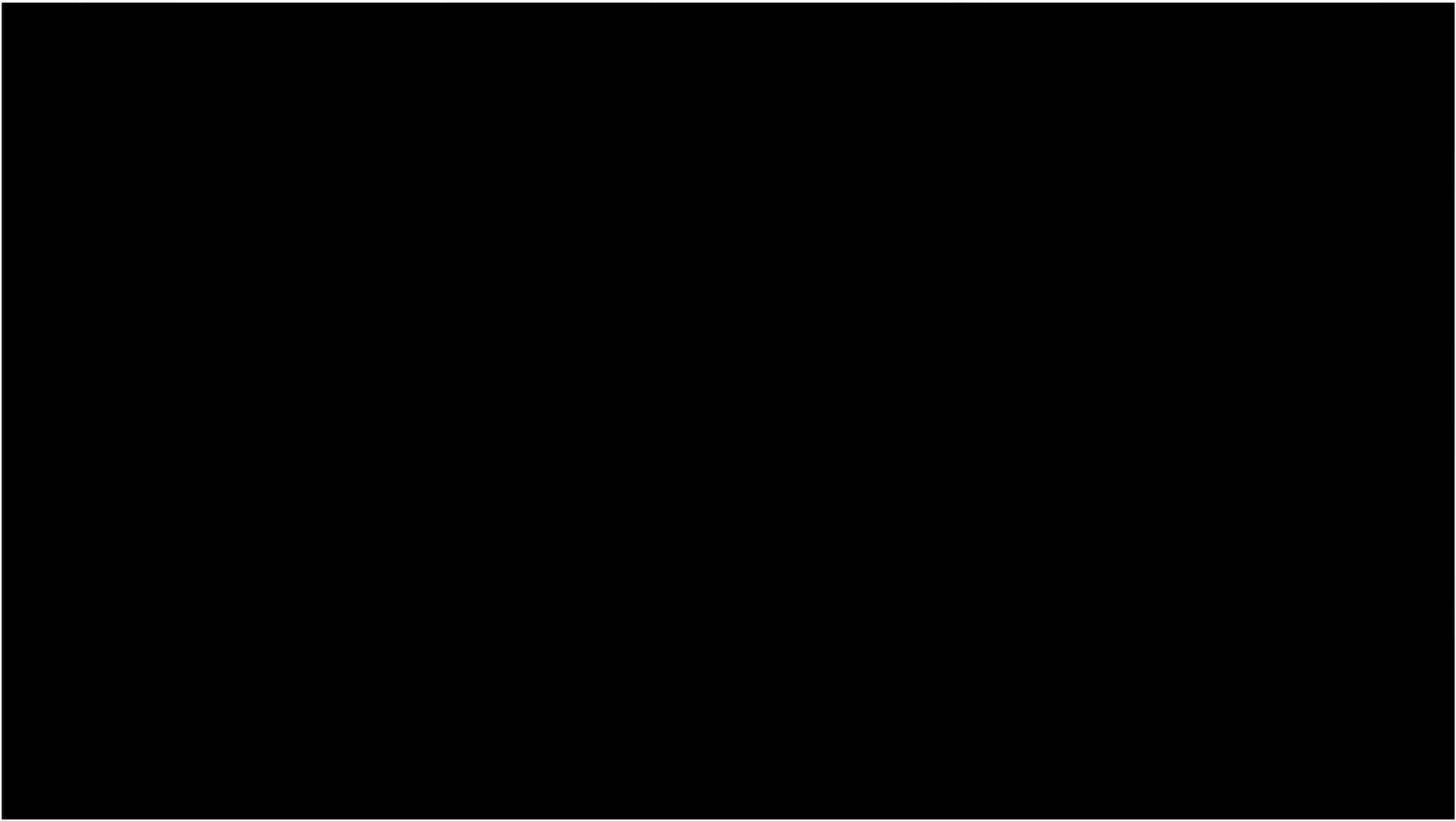


Plumbing Team - Trades Person - Daily Activity Report

Entered By	Work Order	Description	Status	Craft	Entered Date	Start Date	End Date	Start Time	End Time	Regular Hours	
374965	73984	repair/replace solenoid B1 mains water meter room	COMPLETE	PLUMB	13/02/13	13/02/13	13/02/13	6:26:41 AM	9:20:47 AM	02:54	
374965	73835	install tap to wash down cooling towers conference center L4	INPRG	PLUMB	13/02/13	13/02/13		9:21:39 AM		00:00	
Total work order count -		2						Total hours logged - 02:54			
Entered By	Work Order	Description	Status	Craft	Entered Date	Start Date	End Date	Start Time	End Time	Regular Hours	
374998	58389	git railing project (pump lift out) wash down hoses install	INPRG	PLUMB	13/02/13	13/02/13	13/02/13	6:40:39 AM	3:22:42 PM	08:42	
Total work order count -		1						Total hours logged - 08:42			
Entered By	Work Order	Description	Status	Craft	Entered Date	Start Date	End Date	Start Time	End Time	Regular Hours	
367631	73984	repair/replace solenoid B1 mains water meter room	COMPLETE	PLUMB	13/02/13	13/02/13	13/02/13	7:13:17 AM	12:54:29 PM	05:41	
367631	73835	install tap to wash down cooling towers conference center L4	INPRG	PLUMB	13/02/13	13/02/13	13/02/13	12:59:41 PM	3:06:02 PM	02:06	
Total work order count -		2						Total hours logged - 07:47			
Entered By	Work Order	Description	Status	Craft	Entered Date	Start Date	End Date	Start Time	End Time	Regular Hours	
116379	58389	git railing project (pump lift out) wash down hoses install	INPRG	PLUMB	13/02/13	13/02/13	13/02/13	6:19:58 AM	6:55:36 AM	00:36	
116379	74612	inspection/clean maintenance pump wells and G.I.T	INPRG	PLUMB	13/02/13	13/02/13	13/02/13	6:56:32 AM	12:18:14 PM	05:17	
116379	74612	inspection/clean maintenance pump wells and G.I.T	INPRG	PLUMB	13/02/13	13/02/13	13/02/13	12:53:32 PM	3:16:31 PM	02:23	
Total work order count -		3						Total hours logged - 08:16			

14/02/2013 6:00 AM

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Implementation Challenges

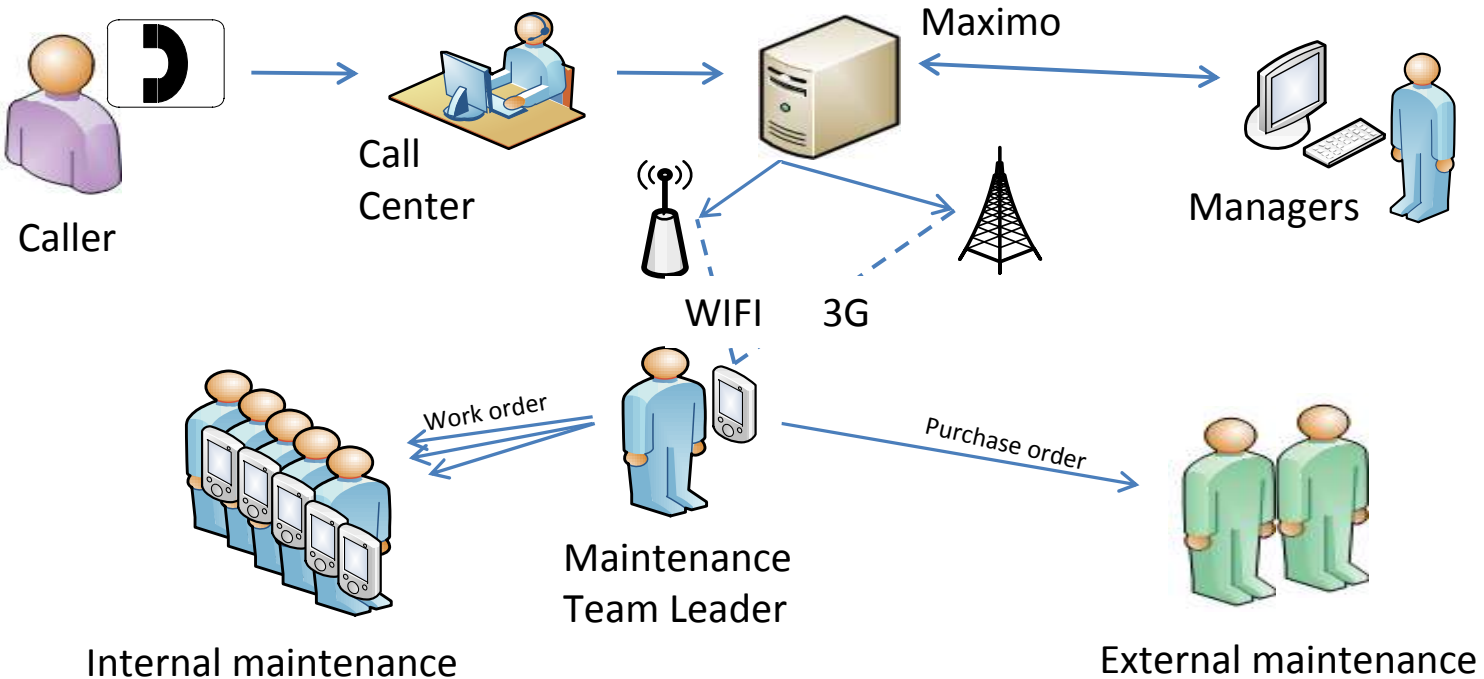


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Implementation Challenges

• **High Volume** – Crown maintenance reacts to over 100,000 work orders per year



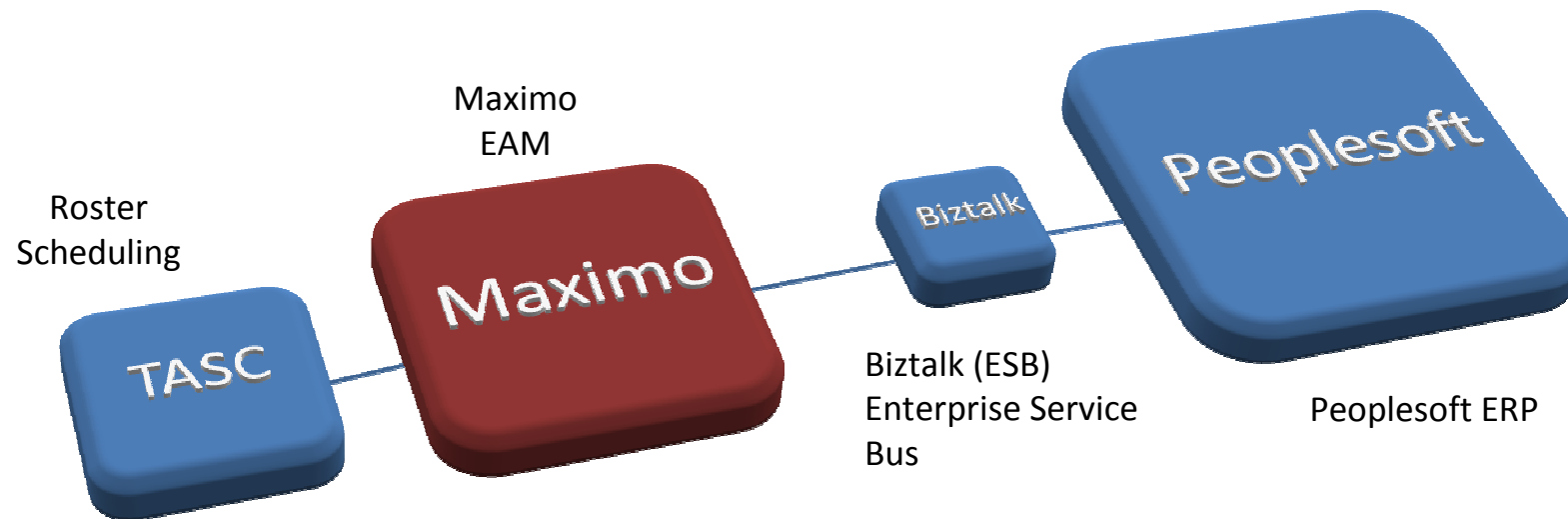
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Implementation Challenges

- **High Volume** – Crown maintenance reacts to over 100,000 work orders per year
- **ERP Integration** – All financials needed to be fully integrated with Crown's ERP



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Implementation Challenges

- **High Volume** – Crown maintenance reacts to over 100,000 work orders per year
- **ERP Integration** – All financials needed to be fully integrated with Crown’s ERP
- **Mobile** – Crown currently had a mobile solution, we couldn’t step backward

Old mobile devices WIFI
– Store forward

New mobile devices
WIFI+3G – Always connected



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Implementation Challenges

- **High Volume** – Crown maintenance reacts to over 100,000 work orders per year
- **ERP Integration** – All financials needed to be fully integrated with Crown's ERP
- **Mobile** – Crown currently had a mobile solution, we couldn't step backward
- **Large staff numbers** – Crown operates 24/7 has over 120 rostered maintenance staff

Engineering & Maintenance Department

Hotel
tower
1

Hotel
towers
2&3

Food & Bev
Gaming
Electronics

Carpentry
Electrical
Plumbing

5 Rostered Shift teams

Project Outcome & Learnings



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Project outcomes

- Maximo and Maximo Everyplace has been online for 6 months
- Project came in on time and within 1% of budget
- Maximo Everyplace running on 100+ dedicated iPhone 4's
- Focus over the next 12 months
 - Gathering actual operations cost data
 - Optimizing inventory levels
 - Move toward preventive maintenance
 - Productivity and realising savings

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Project Learnings

- Changeover of **key BAU project team members** during the project was a high risk to the project. Risk mitigation should have been much more strict.
- Process time requirements** should be identified in scope and UAT. User expectations are that the new system will be the same or faster. Not achieving this will hamper user acceptance
- Processor speed** of mobile devices is critical for some Everyplace applications
- Fully understand the **limitations of the other systems to be integrated.** (eg. ERP)
- Fully understand **license types** and limitations
- Identify basic requirements around **mobile screen usability** and layouts.

Cost & Timeline control

Project Management 101



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On Time and On Budget

This project was delivered on-time and within 1% of budget because of strict adherence to the following:

- **Project governance**
- **“Vanilla” requirements**
- **Scope work completed upfront**

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Cost & Timeline Control



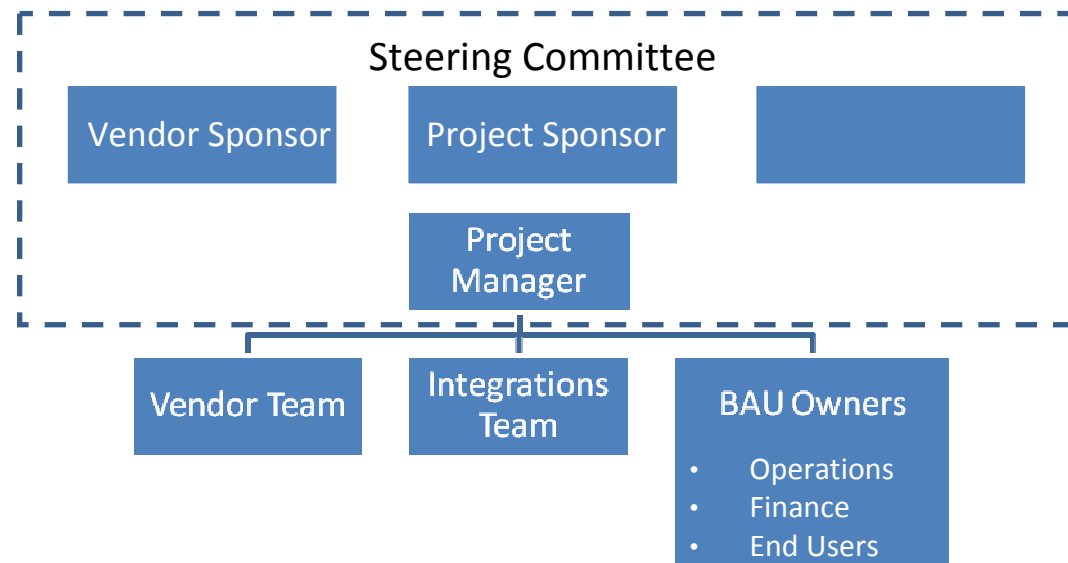
Project Governance

•A signed project charter, executive steering committee, and BAU resources are the key to eliminate scope changes.



Project Charter

- Scope
- Cost
- Timeline
- Signatures
- Accountability



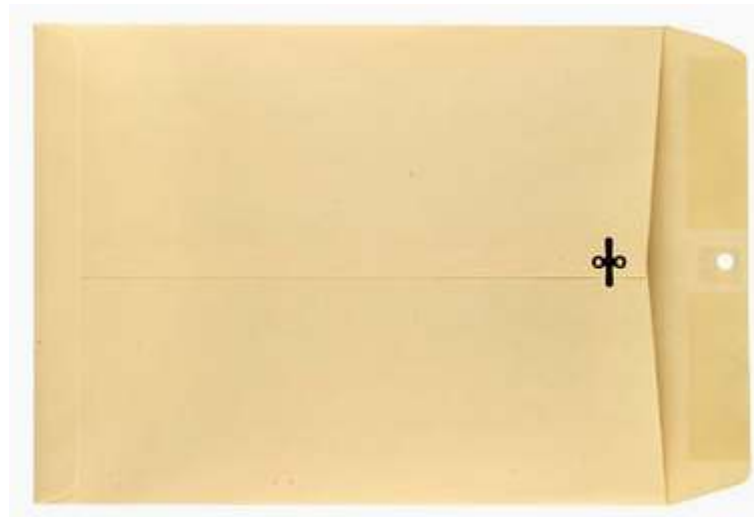
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Cost & Timeline Control



“Vanilla” Requirements

- Customizations must be minimised to control project cost and complexity.
- Every customization requirement should be fully scrutinized and must be approved by the steering committee.



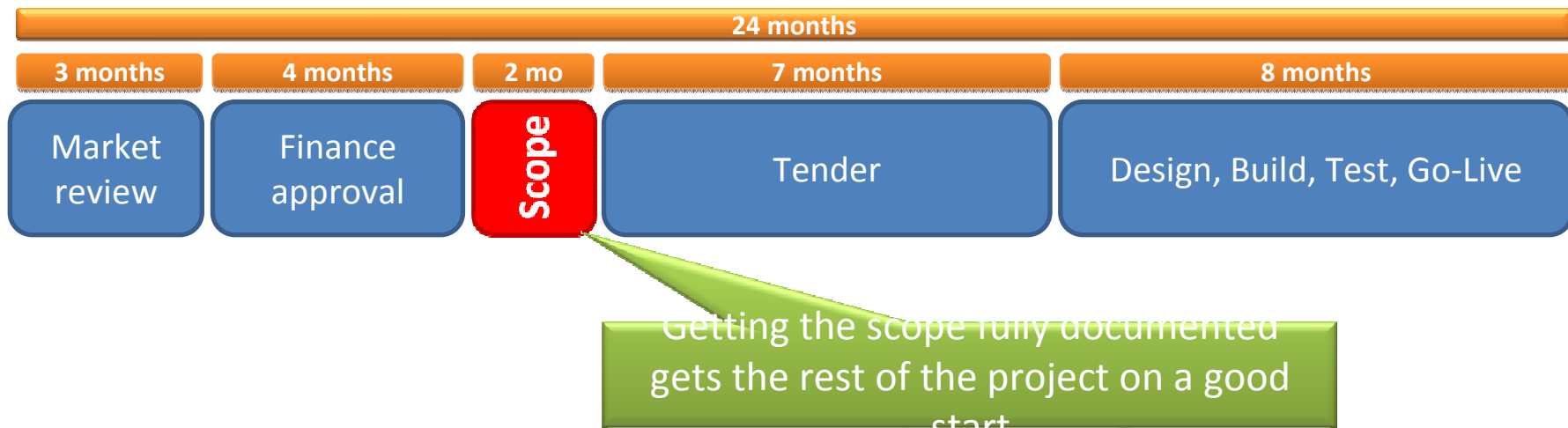
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Cost & Timeline Control



Get the Scope right early,

- **Business representatives** – Pull key individuals out of the business during the scoping phase. Backfill their roles and ensure they are part of the design and test team.
- **“Vanilla Envelope” requirements** – Ensure your scope is not prescriptive. Standard configurations will likely fulfil your business requirements without customization



Questions

Jeremy Sampson
Engineering Manager – Crown Melbourne

