

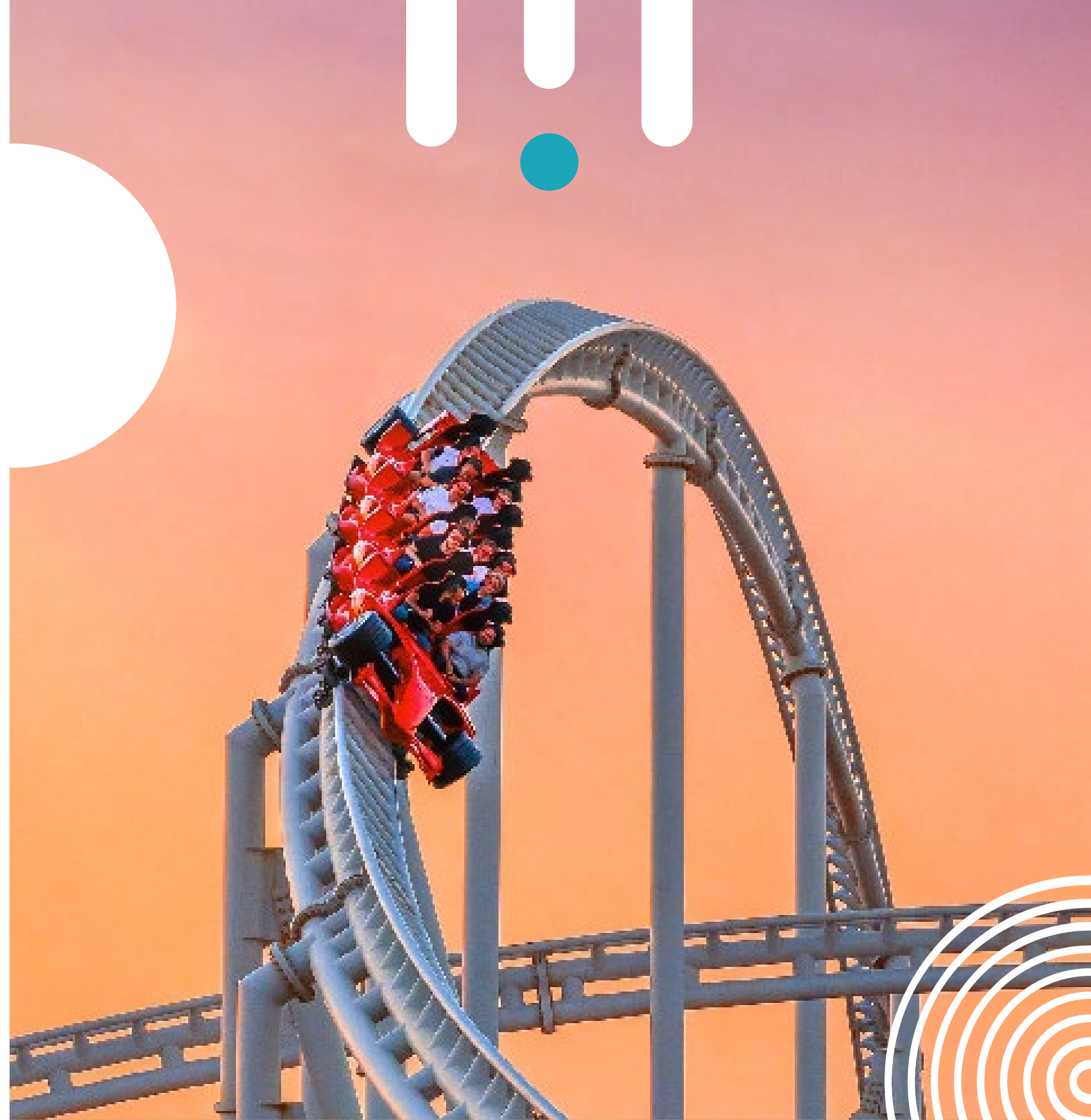


## DIGITAL TRANSFORMATION

**PAPER-BASED MAINTENANCE TO DIGITAL PLATFORM:  
STREAMLINE, AUTOMATE & EMPOWER**

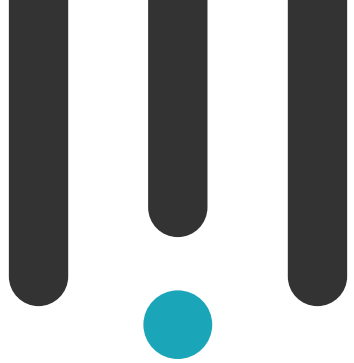
NATHIQ SYED  
Planning & Projects Director

# MIRAL Experiences






# MAXIMO IN NUMBERS



**1** Organization



**6** Sites



**245**  
Maximo Users



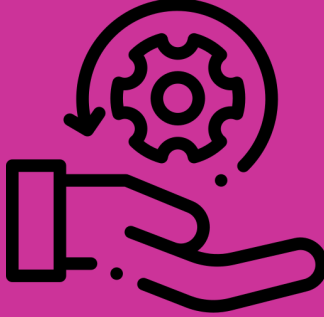
**380**  
Mobile Users



**30,000+**  
Assets



**800**  
PM Schedules



**571**  
Daily PM's




**150k**  
Workorders/year



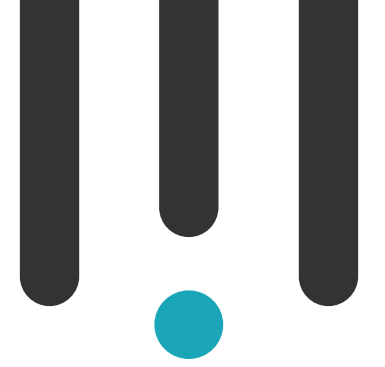
"THE ONLY CONSTANT IN  
LIFE IS CHANGE."

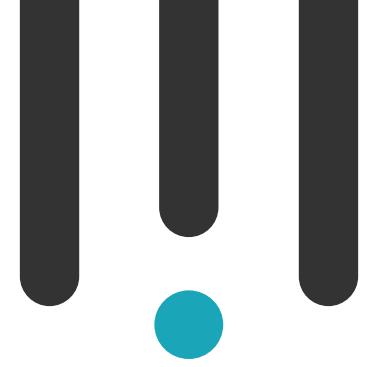
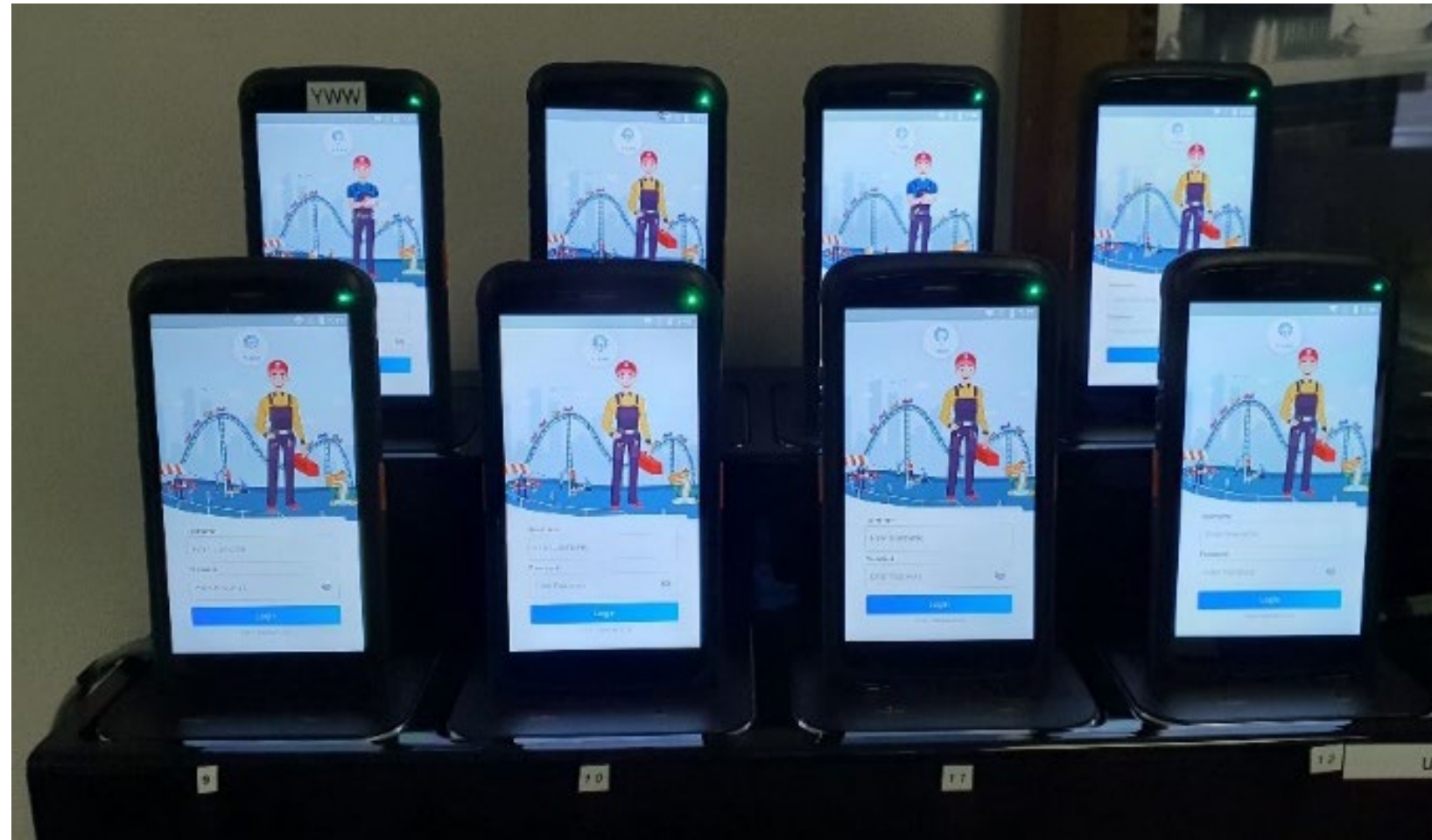
—  
Heraclitus

A photograph of a man and a woman kayaking on a calm lake at sunset. The woman is in the front of a blue kayak, wearing a red shirt, and the man is behind her in a dark blue shirt. They are both holding paddles. The background shows a line of trees and a sky with soft, golden light. The image is framed by a white circular graphic on the right and abstract shapes in the top left corner.

What does  
Transformation  
Look like?

Here you go..... **TRANSFORMATION**







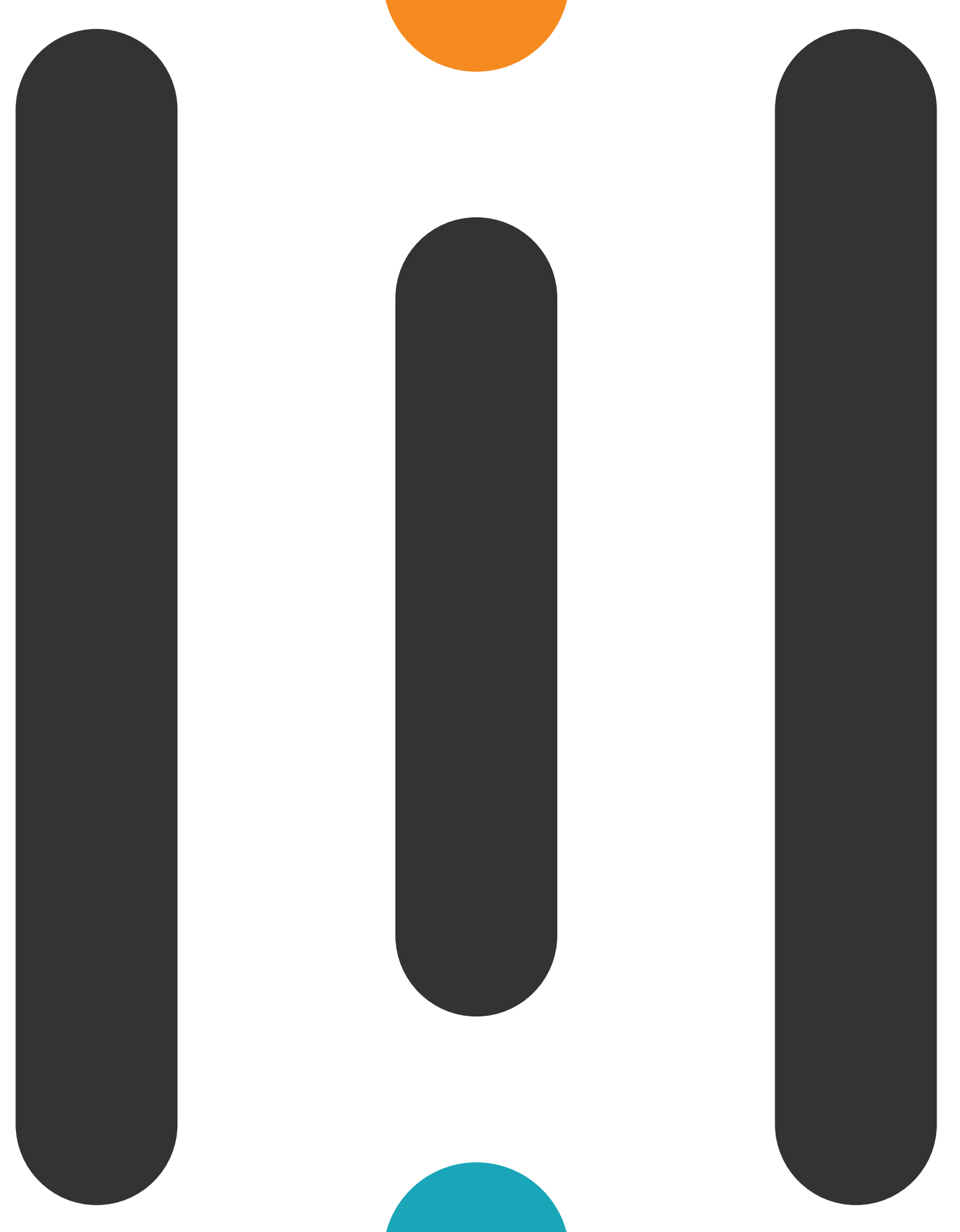
TRANSFORMATION

EXISTING PRACTICES

THOUGHT PROCESS

PROOF OF CONCEPT

PROJECT IMPLEMENTATION



# EXISTING PRACTICE

## CHECK LIST

Frequency: DAYS  
 Location: CC CC Batman:Knight Flight  
 Work Order: 12834155 7901 Batman Daily PM Vehicle 03

ID Number	Signature	Date/Time Started	Date/Time Finished	Duration
33591	MPF	12/2 2:30	12/2 4:00	1h 30min

Target Date	13/2/20
Date/Time Started	
Date/Time Finished	
Theoretical Capacity	
Total Available	
Starts from OCC	

Team Leaders Name	Brauer-T-2
Team Leaders Sign	
PM Number	7901-D-CC-VEH-03
Job Plan	JP-D-CC-VEH-01
Job Plan Duration (Hrs.)	05:36
Zone	RIDES
SiteId	WBAD

Task / WO #	Description	Ref:	OK	Not OK	Initials/ID	Comments
10	Vehicle Transport: Visual Check (VC) Inspect ride vehicle for the following: Signs of oil leaks around the gearbox (KUKA robot). Investigate and report any issues found to supervision prior to ride opening.		✓		33591	
20	Vehicle Transport: Visual Check (VC) Inspect vehicle track scrapers for condition and security. Investigate, repair or replace as needed prior to ride opening.		✓		"	
30	Vehicle Transport: Visual Check (VC) Inspect the vehicle caster wheels for condition and security. Investigate, replace as needed prior to opening the ride		✓		"	
40	Vehicle Transport: Visual Check (VC) Inspect pinch wheels and gas springs for proper adjustment and wear. Adjust or replace as necessary, report any issues found to supervision prior to ride opening.		✓		"	
50	Vehicle Transport: Visual Check (VC) Check gas springs of pinch drive mechanism for pressure and secure mounting. Pressure should be 1550 psi on a straight section of track. Recharge as needed.		✓		"	front = 1500 Psi Rear = 1600 Psi
60	Vehicle Transport: Visual Check (VC) Visually inspect each pinch wheel for damage including gouges ( greater than 3 mm -1/8 inch ), embedded debris ( greater than 1/2 inch ), and delamination. Replace as needed. Also check for indications of grease or oil. If present, use a rag dampened with a mild degreaser to clean, and soap water afterwards.		✓		"	
70	Vehicle Transport: Visual Check (VC) Visually inspect the pinch drive mechanism for lubrication leakage. Any leakage over the pinch wheels is unacceptable. Verify that all electrical connectors are secure.		✓		"	
80	Vehicle Transport: Visual Check (VC) Visually inspect bus bar brushes for wear and cleanliness. Replace or clean as necessary prior to ride opening.		✓		"	

12/02/20 8:07 AM

# EXISTING PRACTICE



## DAILY PREVENTIVE MAINTENANCE CHECKS POOL WATER TESTING – POOL-K&J [PM 060 D FB16 POOL K&J Water Testing] MAIN LOCATION: FB16/PM # 60-D-PKWT-01

MONTH:	YEAR:	DAY:	23.02.2022					24.02.2022					25.02.2022					26/02/2022								
PM TASKS [SOP: How to maintain the Pool Water Chemistry.]	SAMPLING TIME:	SAMPLING LOCATION:	pH	Chlorine		D 0.2 hrs.	Inspected by:		pH	Chlorine		D 0.2 hrs.	Inspected by:		pH	Chlorine		D 0.2 hrs.	Inspected by:		pH	Chlorine		D 0.2 hrs.	Inspected by:	
				Free [ppm]	ORP [mV]		Tech. ID#/Initial	Shift		Free [ppm]	ORP [mV]		Tech. ID#/Initial	Shift		Free [ppm]	ORP [mV]		Tech. ID#/Initial	Shift		Free [ppm]	ORP [mV]		Tech. ID#/Initial	Shift
Pool	08:00 AM		7.6	5.2	815	0.03	35303	A	7.0	5.2	825	0.03	35207	A	7.5	4	810	0.03	35203	A	7.4	2.0	785	0.03	35245	A
Controller	07:00 AM		7.55	5.1	828	0.03			7.2	5.2	824	0.03	35207	A	7.6	3.9	806	0.03			7.4	2.10	784			
Pool	08:00 AM		7.4	4.9	833	0.03			7.5	5.0	824	0.03	35207	A	7.4	3.8	812	0.03			7.4	1.94	771			
Total/Combine Chlorine [0.1 hrs.]	09:00 AM		5 ppm	0.1 ppm	0.03				5.0 ppm	0 ppm	0.03	35207	A	3.9 ppm	0.1 ppm	0.03				1.58 ppm	0.04 ppm					
Temperature °C [0.1 hrs.]	09:00 AM		24.5 °C		0.03				22.1 °C		0.03	35207	A	23.2 °C		0.03				23.2 °C						
Controller	10:00 AM		7.6	4.7	804	0.03			7.25	5.0	780	0.03	35207	A	7.5	3.2	788	0.03			7.5	1.88	776			
Pool	11:00 AM		7.5	4.5	801	0.03			7.6	4.9	782	0.03	35207	A	7.6	3.2	788	0.03			7.4	1.62	770			
Controller	12:00 PM		7.55	4.6	800	0.03			7.6	4.9	782	0.03	35207	A	7.5	2.5	154	0.03			7.6	1.76	725			
Pool	01:00 PM		7.6	5.2	798	0.03			7.35	4.8	784	0.03	35207	A	7.6	2.9	755	0.03			7.6	1.56	723			
Controller	02:00 PM		7.6	4.6	812	0.03	35303	A	7.6	4.2	784	0.03	35207	A	7.25	2.6	756	0.03	35203	A	7.6	1.65	720	0.03	35245	A
Pool	03:00 PM		7.6	3.20	790	0.03	35230	B	7.25	2.80	786	0.03	35015	B	7.50	2.40	752	0.03	35230	B	7.6	1.58	715	0.03	35252	B
Pool	04:00 PM		7.6	3.10	789	0.03	35230	B	7.25	2.90	784	0.03	35015	B	7.44	2.30	753	0.03	35230	B	7.6	1.58	715	0.03	35252	B
Total/Combine Chlorine [0.1 hrs.]	04:00 PM		3.50 ppm	2.40 ppm	0.03	35230	B	4.0 ppm	0.10 ppm	0.03	35015	B	2.40 ppm	0.10 ppm	0.03	35230	B	1.44 ppm	1.25 ppm							
Temperature °C [0.1 hrs.]	04:00 PM		23.7 °C		0.03	35230	B	22.6 °C		0.03	35015	B	24.9 °C		0.03	35230	B	25.3 °C								
T.A. Alkalinity [0.1 hrs.]	04:00 PM		55 ppm		0.03	35230	B	45 ppm		0.03	35015	B	40 ppm		0.03	35230	B	80 ppm								
C.Hardness [0.1 hrs.]	04:00 PM		390 ppm		0.03	35230	B	331 ppm		0.03	35015	B	250 ppm		0.03	35230	B	252 ppm								
Controller	05:00 PM		7.50	3.10	811	0.03	35230	B	7.6	3.40	789	0.03	35015	B	7.45	2.30	757	0.03	35230	B	7.6	1.22	709	0.03	35252	B
Pool	06:00 PM								7.50	3.50	791	0.03	35015	B							7.6	1.46	709	0.03	35252	B
Controller	07:00 PM																									
Pool	08:00 PM		7.45	5.0	81	0.03	319	A	7.50	3.30	780	0.03	319	A	7.25	3.10	782	0.03	319	A	7.45	1.34	728	0.03	35469	B
Controller	09:00 PM																									
Pool	10:00 PM		7.30	5.20	811	0.03	319	A	7.30	3.00	788	0.03	319	A	7.10	3.00	780	0.03	319	A	7.3	1.65	769	0.03	35469	B
Controller	11:00 PM																									
Pool	00:00 AM																									
Controller			7.0	5.20	840	0.03	34643	C	7.20	3.50	809	0.03	35167	P	7.45	2.00	781	0.03	35213	C	7.40	1.00	765	0.03	34643	C
Pool			23.6 °C		0.03	34643	C	23.1 °C		0.03	35213	C	24.4 °C		0.03	35213	C	24.2 °C		0.03	34643	C				
Controller			7.05	4.80	840	0.03	34643	C	7.15	3.20	815	0.03	35167	P	7.30	1.80	785	0.03	35213	C	7.30	1.80	764	0.03	34643	C
Actual Labour :[hrs.]			0.30		0.22									0.30		0.22		0.09			0.70					
Total Labour :[hrs.]																										
Service Report :[#]																										
Verified by :[Supervisor] [Shift A] [ID#/Initial]																										
Verified by :[Supervisor] [Shift B] [ID#/Initial]																										
Approved by :[Manager] [ID#/Initial]																										
Verified by :[Safety/Operations] [ID#/Initial]																										
Remarks:			TDS - 1360 CST - 0.2					TDS - 1395					TDS - 1342 CST - (-0.1)					TDS - 1315 CST - 10.9								

\* State : [S] Satisfactory [SM] Satisfactory but monitor [U] Unsatisfactory [N] Not done [SR] Service Request Issued [SRV] Service Report Issued

# EXISTING PRACTICE



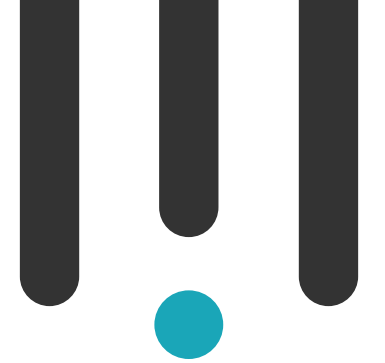
## DA / PREVENTIVE MAINTENANCE CHECKS PUMPS - [PM 001 D M100 PUMP Chemical Activity 17] MAIN LOCATION: M100/PM # 01-D-PUMP-01

MONTH:	YEAR:	DAY:	20-03-16		21-03-16		22-03-16		23-03-2016		24-03-16		25-03-16		26-03-16		
PM TASKS [SOP: HOW TO PERFORM PUMPS PM]	EQUIPMENT DESIGNATION	SHIFT A		SHIFT B		SHIFT A		SHIFT B		SHIFT A		SHIFT B		SHIFT A		SHIFT B	
		S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
Shift A .Before operational hours. 1. Check for unusual noise and vibration 2. Valves positions checked (aligned accordingly to the recommended positions) (0.05 hrs. per pump)	LR33-PAC-M100-B6A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	LR33-PCH-M100-B1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	IS30-PCH-M100-C1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	MA36-PCH-M100-E1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	PD29-PCH-M100-F1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	SP26-PAC-M100-G2A	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	SP26-PAC-M100-G3A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	SP26-PCH-M100-G1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	WP18-PAC-M100-A10A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	WP18-PAC-M100-A5A	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
Shift B. After operational hours. 1. Check for unusual noise and vibration 2. Remove any dust deposits and impurities. (0.05 hrs. per pump)	WP18-PAC-M100-A6A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	WP18-PAC-M100-A7A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	WP18-PAC-M100-A8A	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	WP18-PAC-M100-A9A	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	WR24-PAC-M100-D6A	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01	/	0:01
	WP18-PCH-M100-A1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	WR34-PCH-M100-D1H	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02	S	0:02
	Actual Labour	:[hrs.]	ID# 32979 D 0:28	ID# 32983 D 0:28	ID# 32978 D 0:28	ID# 31595 D 0:16	ID# 32976 D 0:28	ID# 32903 D 0:28	ID# 31762 D 0:28	ID# 31595 D 0:17	ID# 32976 D 0:28	ID# 32903 D 0:28	ID# 32929 D 0:28	ID# 32230 D 0:28	ID# 32976 D 0:28	ID# 32903 D 0:28	
	Service Report	:[#]	Total : 0:56		Total : 0:46		Total : 0:56		Total : 0:45		Total : 0:56		Total : 0:56		Total : 0:56		
	Inspected by	:[Technician] [ID#/Initial]	32979/32983	32978/31595	32976/32903	31762/31595	32976/32903	31762/31595	32976/32903	32929/32230	32976/32903	32929/32230	32976/32903	32976/32903	32976/32903	32976/32903	
Verified by	:[Supervisor] [ID#/Initial]	3176		30350 SN		30350 SN		30350 SN		30350 SN		30350 SN		30350 SN			
Approved by	:[Manager] [ID#/Initial]	SK		SK		SK		SK		SK		SK		SK			
Remarks:																	

\* State : [S] Satisfactory [SM] Satisfactory but monitor [U] Unsatisfactory [N] Not done [SR] Service Request Issued [SRV] Service Report Issued



# EXISTING WORKFLOW



Preventive Maintenance

Advanced Search | Book Query | Bookmarks

1 - 25 of 34

PM#	Description	Location	Asset	Route	Job Plan	Job Type	Date	PM Type	Status	GL Account	Frequency
4000	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4001	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4002	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4003	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4004	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4005	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4006	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4007	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4008	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4009	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4010	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4011	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4012	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4013	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4014	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4015	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4016	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4017	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4018	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4019	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1
4020	Justice League Daily Ride PM				JP-D-RI00-01	PREVENTANCE	09-09-22	ACTIVE		100-1012-0000-000-000-000	1



Preventive Maintenance / Work Order Tracking

Query | Find Work Order | Select Action

List View | Work Order | Plans | Actuals | Assignments | Related Records | Log | FM Details

Work Order: 19952352 | 6000 Justice League Daily Ride PM | P#Num: 6000-D-CB-RIDE-01 | Total Actual Labor Hours: 3.44 | Status: COMP | Parent WO:

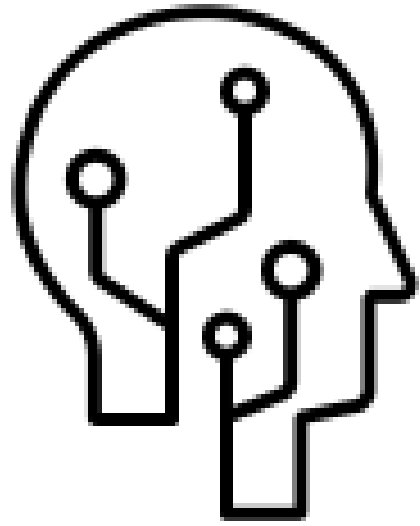
Labor | Materials | Services | Tools

Labor	Name	Start Date	Start Time	End Time	Regular Hours	Craft	Type
80963	Shine John	30/11/22	5:04 AM	5:11 AM	0:07	MECH	TRAINING
35644	Cherry Anne Niz	30/11/22	4:47 A	5:07 A	0:20	ELECT	WORK
80963	Shine John	30/11/22	5:15 A	5:16 A	0:00	MECH	TRAINING
80963	Shine John	30/11/22	5:50 A	5:55 A	0:05	MECH	TRAINING
80963	Shine John	30/11/22	5:03 A	5:04 A	0:00	MECH	TRAINING
35243	Nagere Besavera	30/11/22	4:30 A	5:06 A	0:36	ELECT	WORK

Enter Time By Crew | Select Planned Labor | New Row



# THOUGHT PROCESS



- What's Next?
- How do we evolve?
- What is going on around?
- How do we adapt?
- How do we start?



The Journey of a Thousand Miles Begin with a Single Step

# BUSINESS CASE

## Missing Functionalities

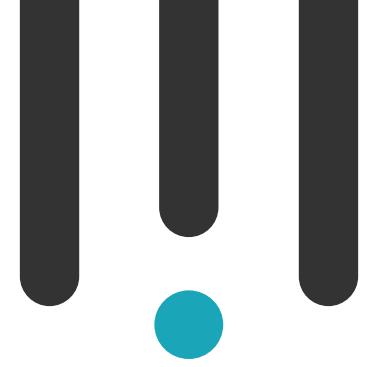
- Real time Data availability
- Automated System
- Reducing Inconsistencies
- Warehouse Functionalities

## Purpose

- Migration from paper-based work systems to enhanced Mobile solution
- Real Time data entry and Manpower utilization efficiency
- Reducing manual efforts – Work Order Printing, Data Encoding to Maximo
- Accurate Data Encoding from source, Dashboards and Reports
- Warehouse : Automation of Physical Counts, GRN's, Issuances, Returns, Transfers.



# ROI - RETURN ON INVESTMENT



## Manpower

Reduction in Admin Man hours/year – 7,300 hrs.  
Reduction on Admin Expenses/year – \$55,000 approx.



## GOGREEN

Average Papers sheets Printed - 450,000  
Average Costs of Printing – \$10,000



### EFFICIENCY

Mobility  
Data Accuracy  
Real-time Data  
Reduced Manual Intervention



# APPROACH

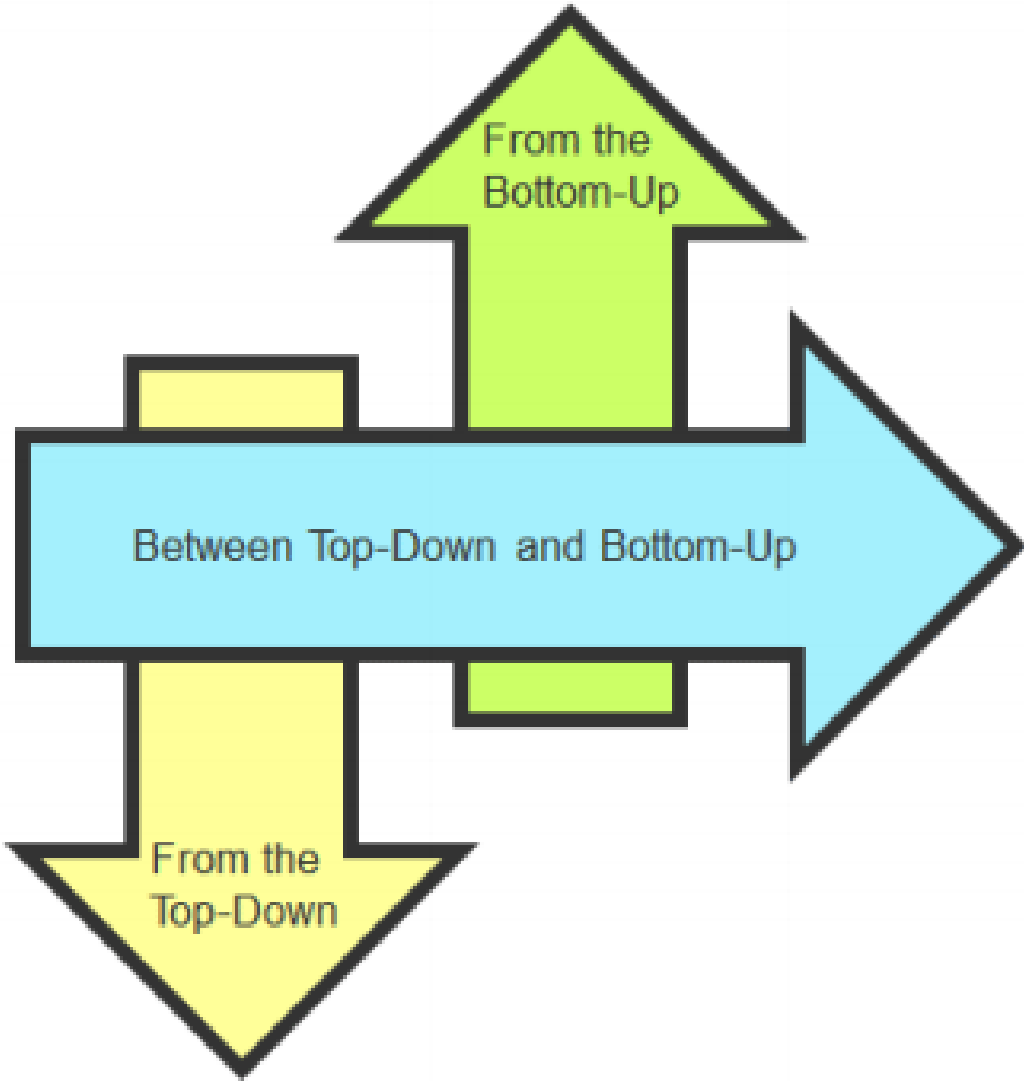


**Top Down?**

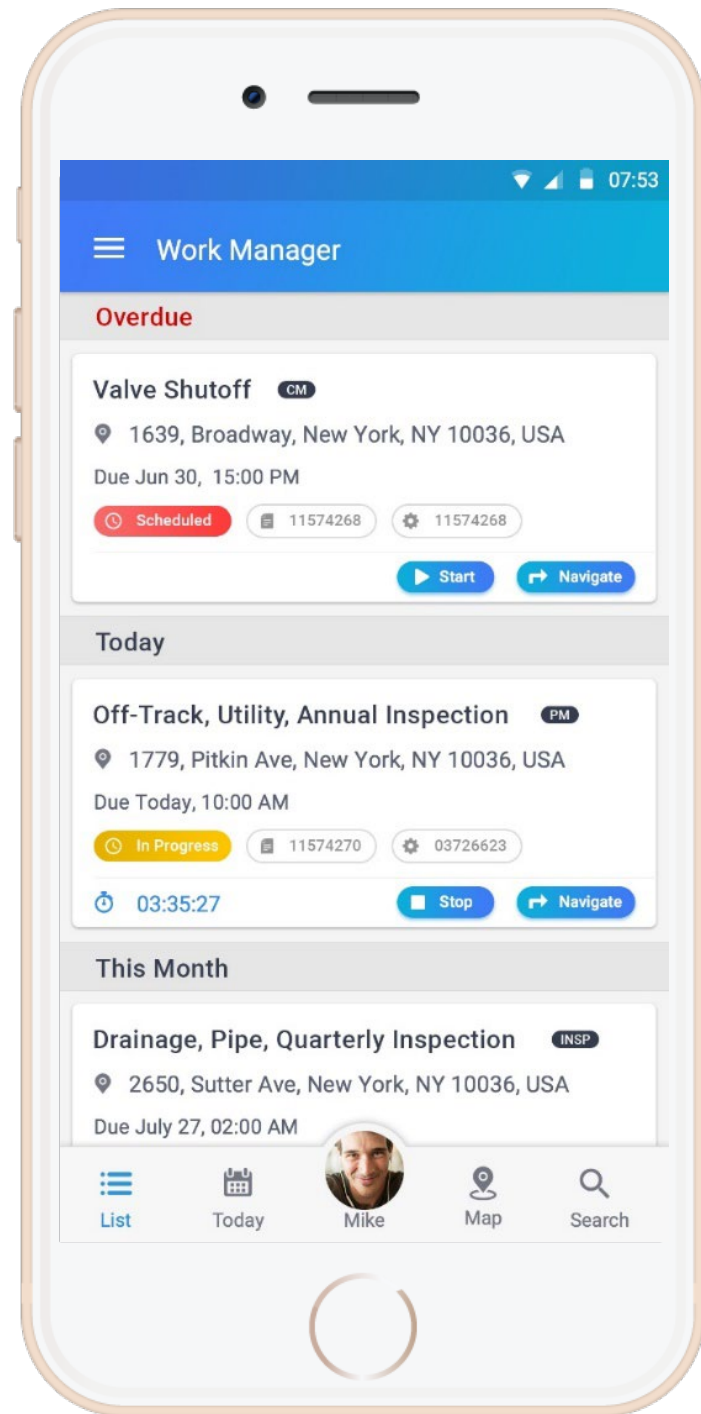
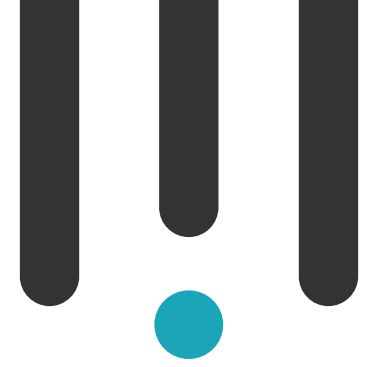
**OR**



**Bottom Up?**



# PROOF OF CONCEPT



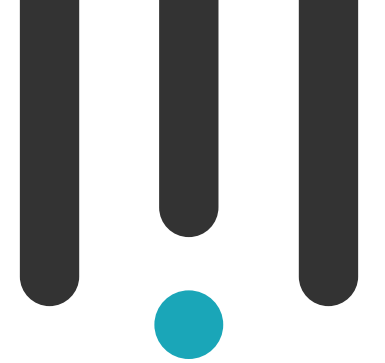
**STRATEGY**  
**PREPARATION IS**  
**HALF VICTORY**

Drivers for successful  
Maximo Mobile  
Implementation



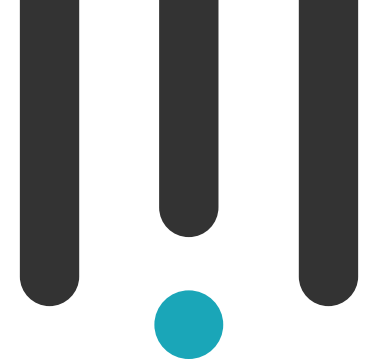
**ONE T-EAM... ONE MAINTENANCE DREAM**

# PROOF OF CONCEPT



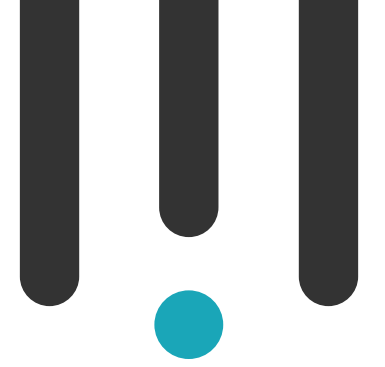
Zone	Emp. ID & Name	Application Feedback
Rides	Ramil (TL-33508)	1. NEED TO ADD FILTER FUNCTIONS (BY: RIDES NAME, TARGET DATE, STATUS, ZONE AND ETC) SIMILAR TO MAXIMO
		2. OBSERVED THAT LETTERS ARE LAGGING AS I TYPE IN SEARCH BOX (SLOW)
		3. I ASSIGNED SOME PM'S FOR RAVI AND RAKESH (DATED MARCH 4, 2019) BUT NOTHING APPEARED ON THEIR DEVICES, THEY TRIED LOGGING IN AND OUT BUT STILL NOTHING NOTHING APPEARED IN THEIR DEVICE. IF THEY TRY TO PRES THE CALENDAR BY MARCH 4, 2019 STILL NO PM SHOWING ON THEIR DEVICES. AFTER 4 HOURS @ 6:00 AM I CHECK MNTC-006-KEST, PM'S ASSIGNED ARE SHOWING UP TO LOKESH BUT APPLICATION FUNCTION IS STILL SLOW
		4. WORK ORDER NUMBER SHOULD ALSO APPEAR ON THE PM LIST.
		5. MUKESH LOGIN HAS ERROR, CAN'T LOG IN.
	Shanoob (Tech-33628)	1. AFTER COMPLETING 1 WORKING , ALL DISAPPEARED IN MY SCREEN.-K71 Tablet 7 Inch
		2. T-EAM APPS IS LITTLE BIT SLOW.-K71 Tablet 7 Inch
		3. SOMETIMES I CAN'T SIGN UP TO THE APPLICATION.-K71 Tablet 7 Inch
		4. WE CAN'T CARRY THE TABLET IN SOME TASK.-K71 Tablet 7 Inch
		5. WE CAN'T REVIEW ANY COMPLETED WORK ORDER.-K71 Tablet 7 Inch
		6. IN WORKORDER NOTIFICATION SCREEN "START" OPTION IS TOO SMALL.-K71 Tablet 7 Inch
		7. REMOVE CALL BUTTON.-K71 Tablet 7 Inch
		8. MINIMIZE WORKORDER DETAIL SECTION INSIDE WORK ORDER SO THAT TASK CAN BE SEEN EASILY.-K71 Tablet 7 Inch
		9. BATTERY CONSUMPTION IS GOOD, WHEN I TOOK IT WAS 95% AS OF 15:00 THEN RETURN IT BACK AT 18:00 AT 93% BATTERY PERCENTAGE-Chainway
		10. COMPARE TO TABLET ITS MORE EASY TO CARRY AND USE.-Chainway
	Lokesh (Tech-33687)	1. APPLICATION IS VERY SLOW.-Blackview
		2. APPLICATION SCREEN NEEDS TO BE BIG.-Blackview
		3. NEED SAFETY MOBILE COVER.-Chainway
		4. APPLICATION IS WORKING GOOD. SPEED IS GOOD-Chainway
	Ravi (Tech-33619)	1. NO WORK ASSIGNMENT WAS ALOTTED FOR ME-K71 Tablet 7
2. 04.03.2019 (MNTC-0001-TW) PM ASSIGNED TO ME IS NOT SHOWING IN MY DEVICE.		
3. WORK WAS NOT ASSIGNED TO ME.		
Anthony (Tech-33613)	1. ATTACHING FILES MAKE ERROR IN WORKORDER.	
	2. CAN'T ABLE TO UNDO THE TICK/COMPLETED TASK AFTER SOMETIME.	
	3. COMPLETED WORKORDER IS NOT VANISHING FROM MY INBOX EVEN AFTER REFRESHING AND IT SHOWS SOME ERROR IN WORK ORDER.	
	4. ADDITIONAL TASK, SHOULD NOT BE REQUIRED FOR TECHNICIANS DEVICE.	
	5. IF IT'S POSSIBLE TO REDUCE THE WORKORDER DESCRIPTION SPACE AND UTILIZE IT FOR OTHER DETAILS.	
	6. NO OPTIONS TO UNDO THE TICKED TASK.	
	7. EVEN WITHOUT STARTING THE WORK WE CAN TICK THE TASK.	

# PROOF OF CONCEPT

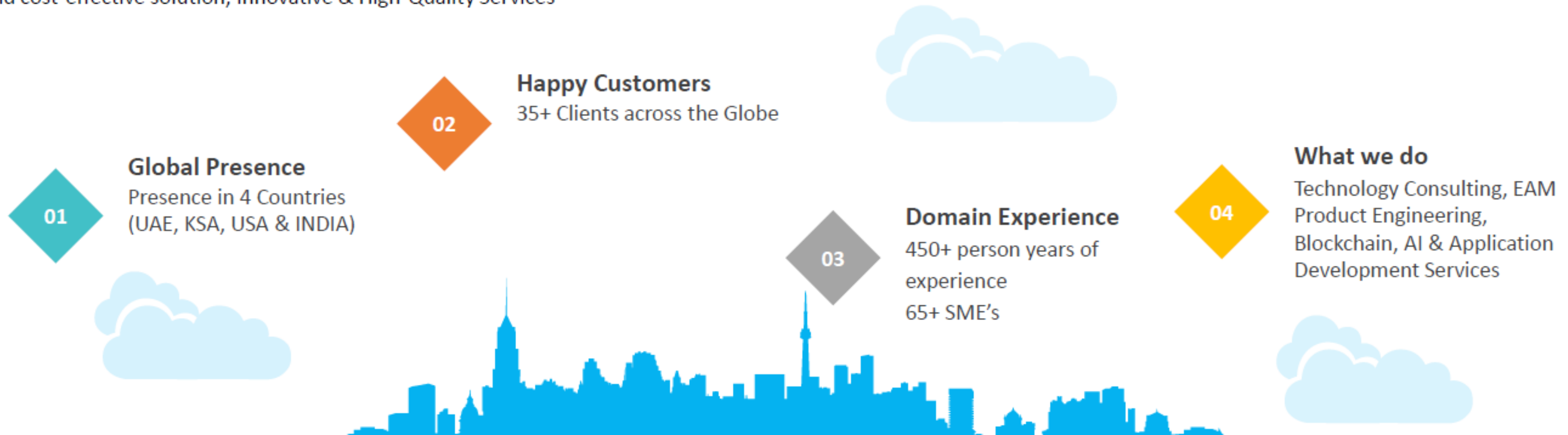


Mobile Device Feedback								
Emp. ID & Name						Site :	Zone :	Date :
Model	Rating	1 (Low)	2	3 (Med)	4	5 (High)	Additional Comments	
Chainway MNTC-008-KEST MNTC-0001-TW	Screen Size							
	Screen Resoultion							
	Battery							
	Easy to use							
	Easy to carry							
	Ruggedness Level							
K71 Tablet 7 Inch MNTC-009-KEST	Screen Size							
	Screen Resoultion							
	Battery							
	Easy to use							
	Easy to carry							
	Ruggedness Level							
Blackview MNTC-006-KEST MNTC-007-KEST	Screen Size							
	Screen Resoultion							
	Battery							
	Easy to use							
	Easy to carry							
	Ruggedness Level							
Zebra MNTC-004-TW	Screen Size							
	Screen Resoultion							
	Battery							
	Easy to use							
	Easy to carry							
	Ruggedness Level							
Newland MNTC-002-TW	Screen Size							
	Screen Resoultion							
	Battery							
	Easy to use							
	Easy to carry							
	Ruggedness Level							

# OUR PARTNER



THIRAN is an IT Software Services company that delivers business solutions leveraging cutting edge technology & products to Enterprise clients. With THIRAN, Clients are assured of a best in class and cost-effective solution, Innovative & High-Quality Services

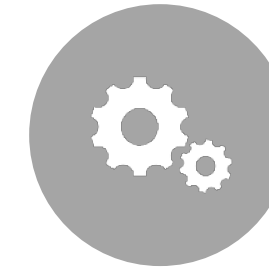
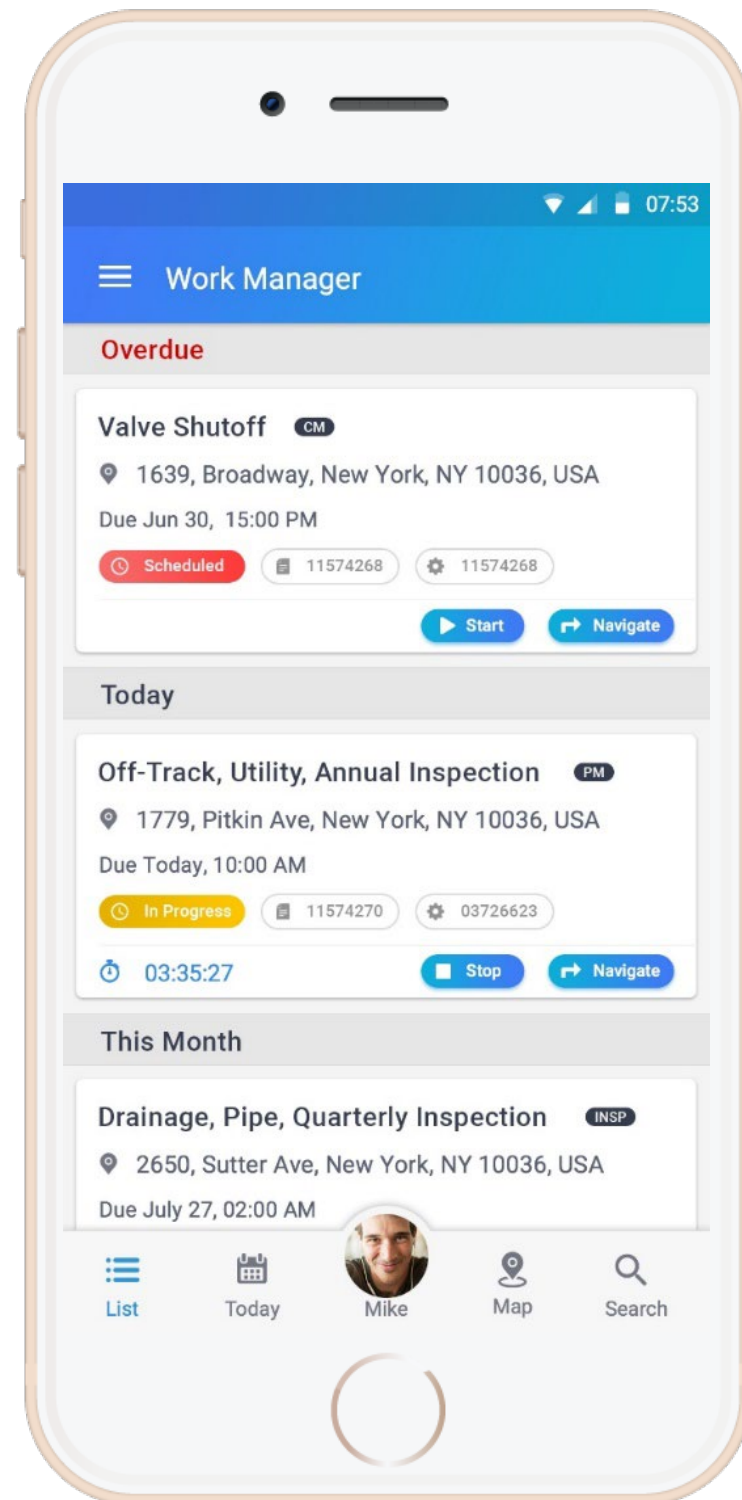


# T-EAM MOBILE SUITE

T-EAM currently interacts with IBM's Maximo application system in both real-time (connected) as well as offline (disconnected) modes.



T-EAM currently provides functionality for approving PR, PO, Workorder & MR, Inventory, Work Execution and Inspection.



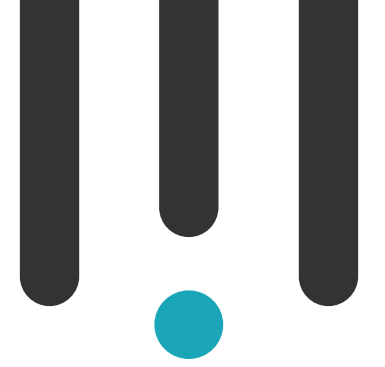
T-EAM Framework has been designed to integrate with Maximo using MIF



Built using Google's Flutter Framework (Hybrid) – Single code base

## IBM Approved Mobile Solution for Maximo

# T-EAM MOBILE SUITE



**Work Execution App**

01



**Manager's App**

02



**Inspection App**

03



**Asset Data Collection App**

04



**Inventory App**

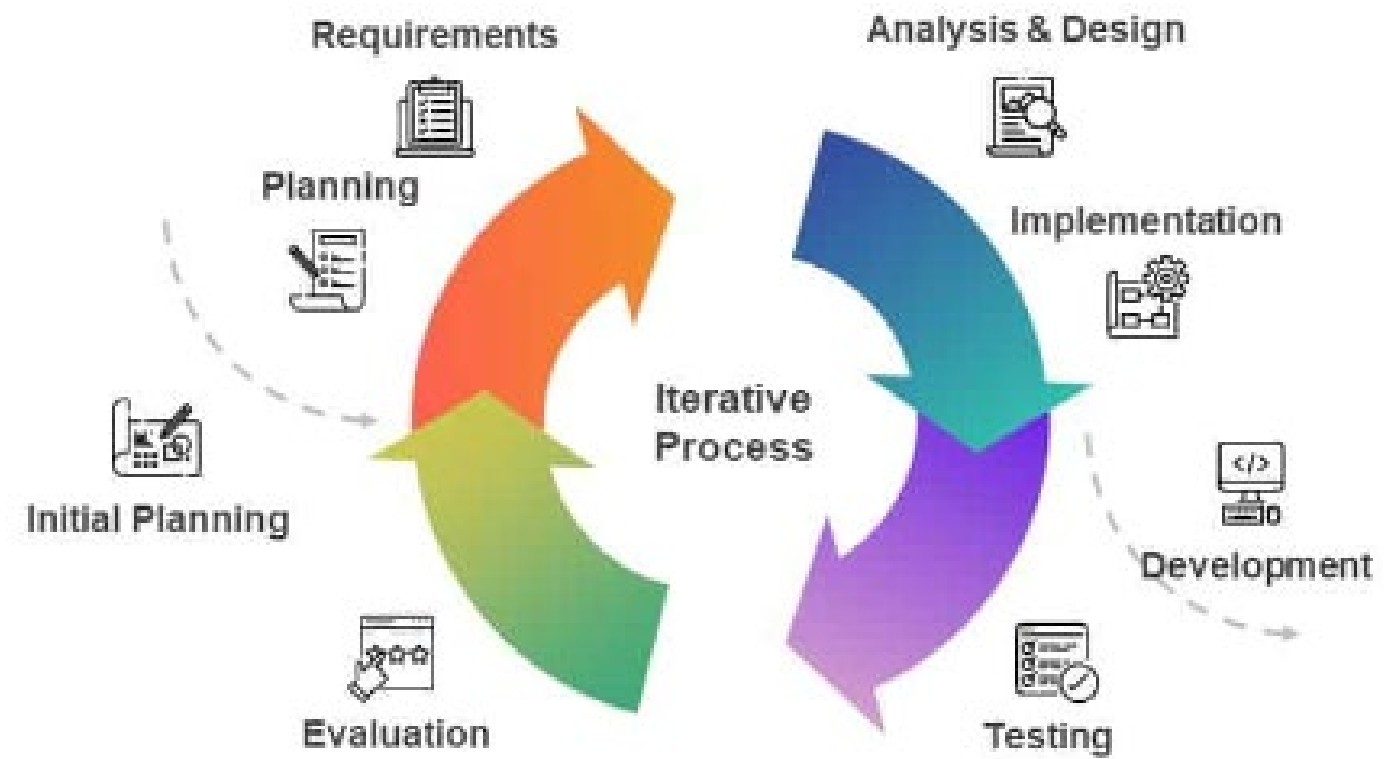
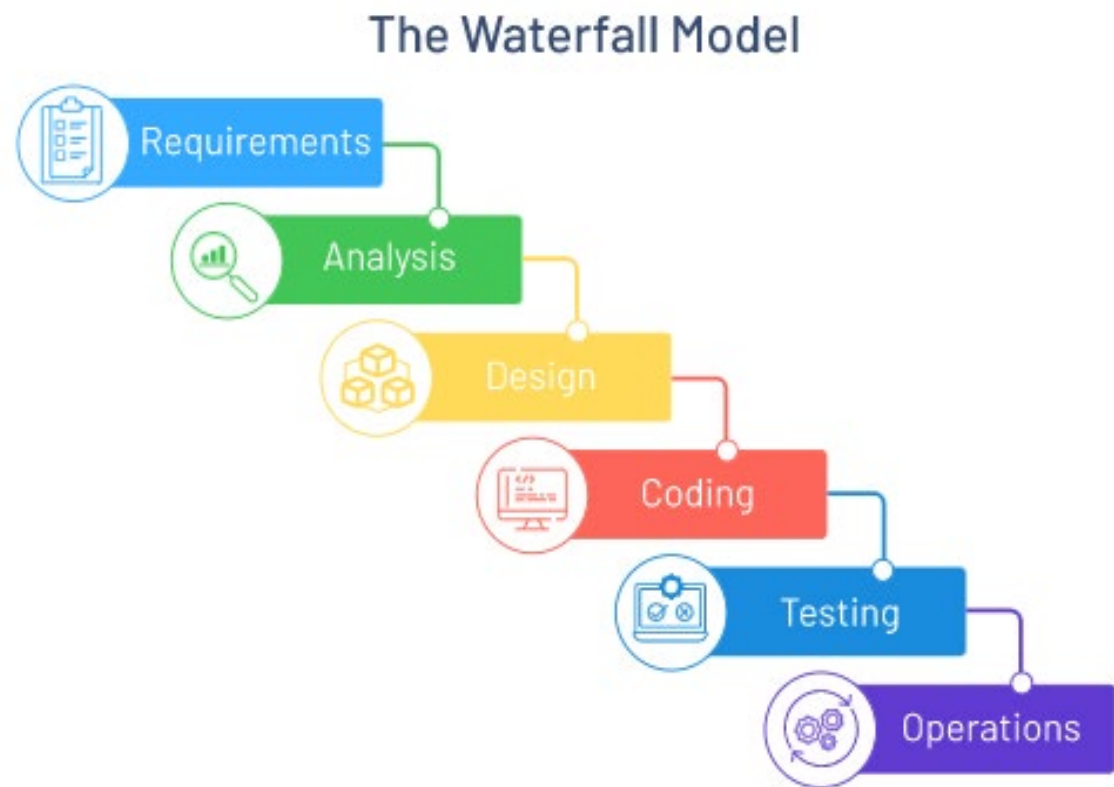
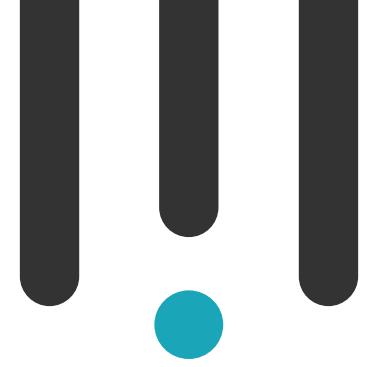
05



**100% Customizable to Fit Your Needs**

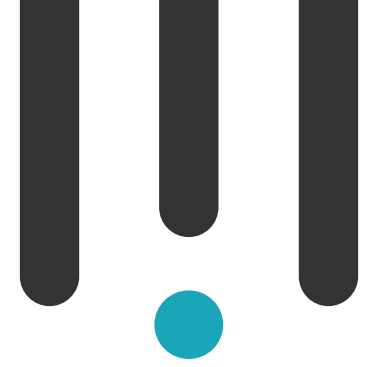


# PROJECT IMPLEMENTATION





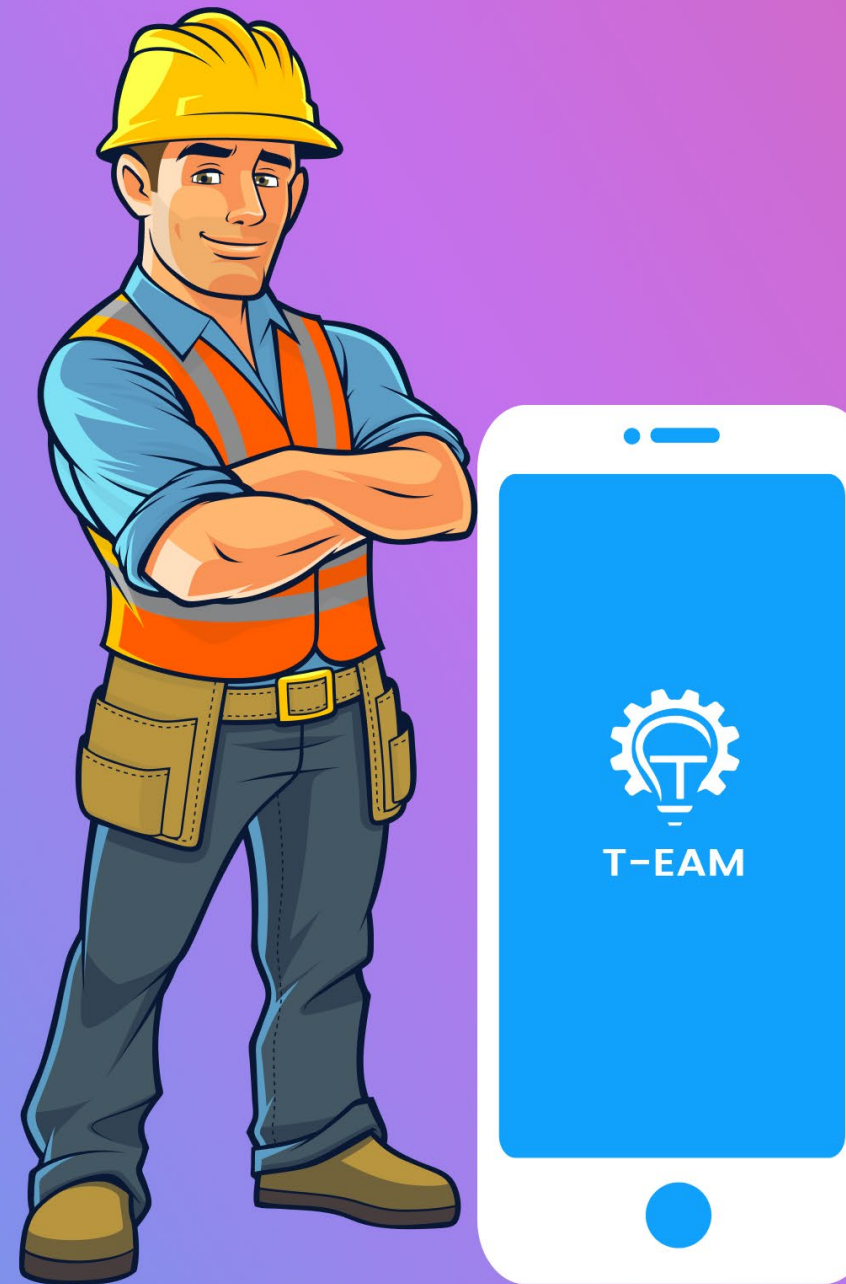
# OUR EXPERIENCE



We have experienced "all of the above".

# Maintenance at your Finger Tips

we really mean it !



**Photo and Documents Function**  
Take photos and attach or send easily documents with a single tap.



**Offline Mode**  
Do your service activities in the field without interruption, even if a network connection is not available.



**Work Day Schedule**  
See and overview all activities of your day and easily manage them. Technician Assignment, Status tracking etc.



**Paperless**  
Enter all relevant order data, working times, execution details and more.



**Material**  
Record Materials used for the work or request for additional materials.



**SOP's Online**  
Online access to SOP's and many more.



**Follow-Up WO (SRV & CM)**  
Create Follow-up (SRV & CM) & Service Request



**Time Spent**  
Automatic capture of Time spent

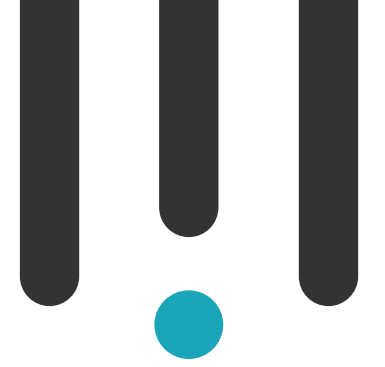


**Gaining More Time For Other Activities**  
Optimize your time and free yourself for other value-added activities, as the app can relieve you from a lot of planning work.



**Improve Responsiveness**  
As a technical service team, react quickly and efficiently and remain competitive, with automated workflows combined with real time data.

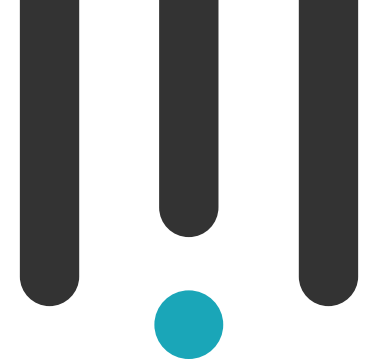
# CURRENT PRACTICE



TEAM LEADER



# T-EAM APPLICATION - WORK EXECUTION



**Work Orders** [Search] [Add] [Filter]

- Testing BM 27112022** [GEN]  
CA Green Lantern: Galactic Odyssey (CA)  
Created on 27-Nov-22, 07:16  
Targeted start 27-Nov-22, 00:00  
Tharinda Lakshan Appuhamilage  
WAPPR 19537168 ELC-ELC-PRJ (28)
- media server** [GEN]  
CC Batman:Knight Flight (CC)  
Created on 27-Nov-22, 07:15  
Targeted start 27-Nov-22, 00:00  
Ajay Fartiyal  
WAPPR 19537166
- Pre Sonus Studio live 16 audio mixer firmware update** [GEN]  
Showtech Workshop (GE-1001-ST)  
Created on 18-Nov-22, 19:41  
Targeted start 18-Nov-22, 00:00  
Sajith Wijesooriya Arachchiga  
WAPPR 19460460

**Work Execution** [Search] [Filter]

**Overdue 16**

- 04343-D-PW-Ride box Show Technical check during operational hourly** [PM]  
Warner Brother World Abu Dhabi (WBAD)  
Due 28-Nov-22, 00:00  
INPRG 19537056  
5/5 01:00 14:14
- 04333-D-Parkwide Lighting check during operational hourly** [PM]  
Warner Brother World Abu Dhabi (WBAD)  
Due 28-Nov-22, 00:00  
INPRG 19537068  
6/6 01:00 12:52

[List] [Today] [Profile] [Dashboard]

**WO# 19537170**

**Running Show - Big Belly Burger** [GEN]  
CU\_Area Development Metropolis (10A)  
Due 27-Nov-22, 07:49  
Niroshan Chaminda Bandara Jayasinghe Mudiyansele  
WREV

Assignments [Dropdown]  
Tasks 1/1 [Dropdown]  
Time Spent [Dropdown]  
Log [Dropdown]  
Discover More... [Dropdown]

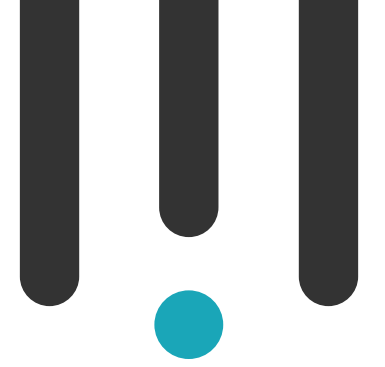
**WO# 19537056**

**Tasks 11/11**

- 10 check all the equipment on the AV rack are ON [Checked]
- 20 Ensure that all systems and all equipment are running [Checked]
- 30 Check on OCC Screen display to ensure that no fault lights are ON [Checked]
- 40 Ensure that All feature and Show lighting are working on the Qline area [Checked]
- 50 Check all safety Video are correct and good [Checked]

[More]

# T-EAM APPLICATION - WORK EXECUTION



WO# 11574268

Valve Shutoff **CM**

1639, Broadway, New York, NY 10036, USA

Due Jun 30, 15:00 PM

Scheduled 11574268 11574268

Required Materials Not Available Call Start Navigate

Task 1/2 >

Materials Consumed v

No Materials Consumed

Planned Material Add Material

Time Spent >

Failure Code >

Log >

Attachments +

WO# 11574268

Valve Shutoff **CM**

1639, Broadway, New York, NY 10036, USA

Due Jun 30, 15:00 PM

Scheduled 11574268 11574268

Required Materials Not Available Call Start Navigate

Task 1/2 >

Materials Consumed >

Time Spent v

10:30 AM, 07/14/2018 04:00 PM, 07/14/2018

6:30 Hrs

Add Time Spent

Failure Code >

Log >

Attachments +

WO# 11574268

Valve Shutoff **CM**

1639, Broadway, New York, NY 10036, USA

Due Jun 30, 15:00 PM

Scheduled 11574268 11574268

Required Materials Not Available Call Start Navigate

Task 1/2 >

Materials Consumed >

Time Spent >

Failure Code >

Log v

Valve is leaking 3:30 PM

Replace valve and shutoff

Add Log


Attachments >

Sign-off

Name

John Mike

Please Sign to Confirm Completed work Clear



Submit

# T-EAM APPLICATION – INVENTORY APP

The objective is to enhance our existing maintenance inventory management system by transitioning it to a fully automated mobile solution, leveraging Maximo technology.

Furthermore, we seek to innovate our warehouse inventory management by deploying the Maximo Mobile Solution.

This enhancement will tackle our present challenges, streamline manual processes, facilitate paperless transactions, and equip our organization with the efficiency, precision, and data-driven decision-making capabilities crucial for sustained success in a competitive marketplace.



# SOLUTIONS

## Issue Items to a work order using reservation list or without reservation list

This feature allows users to allocate items to a specific work order either by referencing a reservation list or without the need for a reservation list. It provides flexibility in managing inventory allocations for various work orders.

## Goods Receipts against a PO

With this feature, users can receive goods against a purchase order. It ensures that received items are properly documented and accounted for in the inventory system, enabling efficient tracking of incoming inventory.

## Carry out receipt inspections and asset serialization

This functionality enables users to perform inspections upon receipt of goods to ensure quality and accuracy. Additionally, it supports asset serialization, allowing each item to be uniquely identified and tracked throughout its lifecycle.

## Return received items (Return to Vendor)

Users can utilize this feature to return received items to the vendor when necessary. It streamlines the return process, facilitating efficient management of vendor returns and ensuring accurate inventory records.

## Receive the materials returned by maintenance team

This feature enables users to receive materials that have been returned by the maintenance team. It ensures that items returned for repair or replacement are properly documented and reintegrated into inventory.

## Update the lot # of the receiving material by scanning the barcode

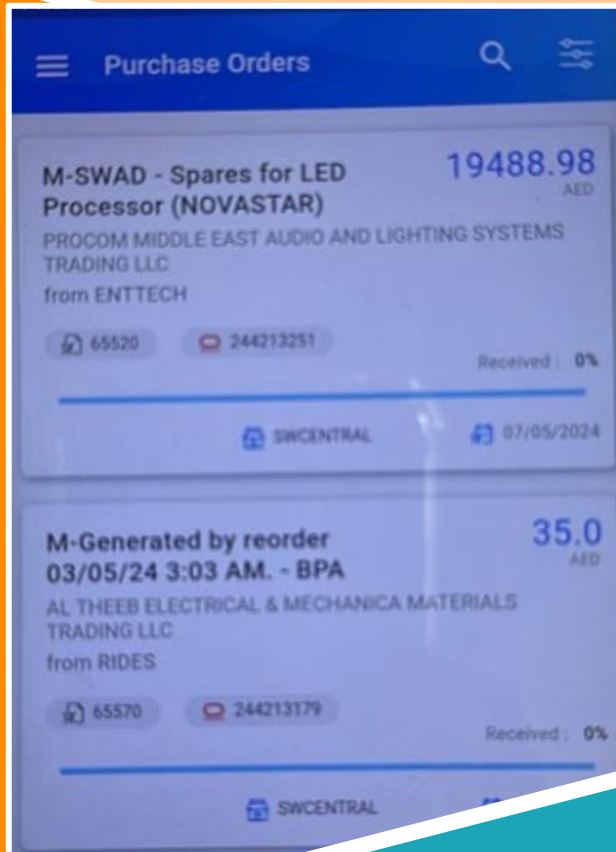
Users can update the lot number of received materials by scanning the barcode associated with each item. This functionality enhances accuracy and efficiency in lot tracking, ensuring compliance with regulatory requirements and quality standards.

## Perform the inventory cycle count

This feature allows users to conduct periodic inventory cycle counts to verify the accuracy of inventory records. It supports inventory accuracy initiatives by identifying discrepancies and facilitating timely adjustments to inventory levels.

## Review and reconcile the inventory balances

With this functionality, users can review and reconcile inventory balances to ensure accuracy and integrity of inventory data. It provides insights into inventory discrepancies, facilitating corrective actions to maintain optimal inventory levels and minimize stockouts or overstock situations.



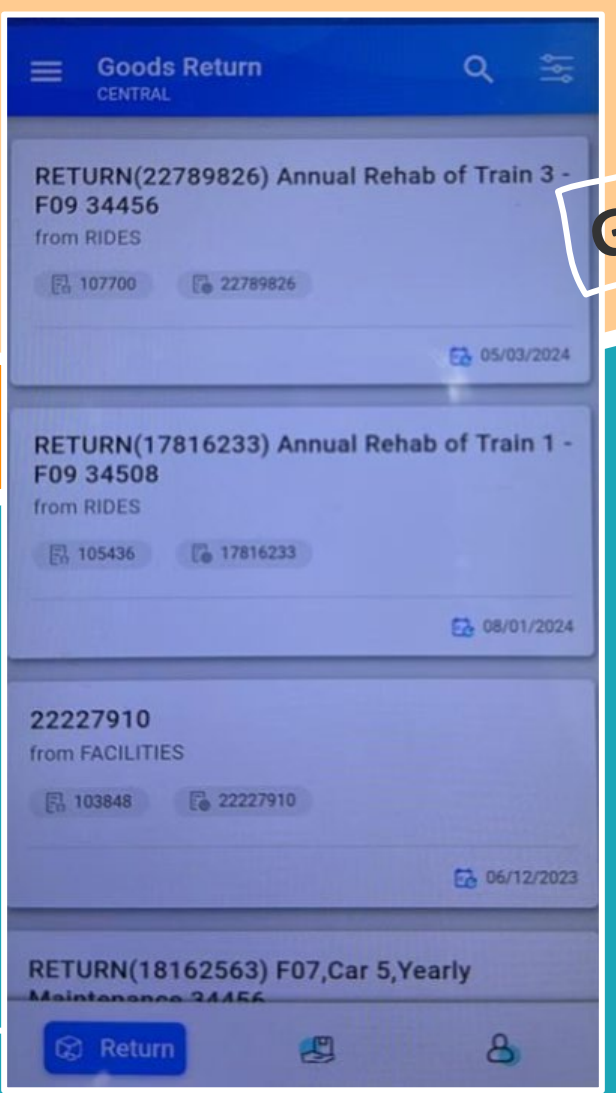
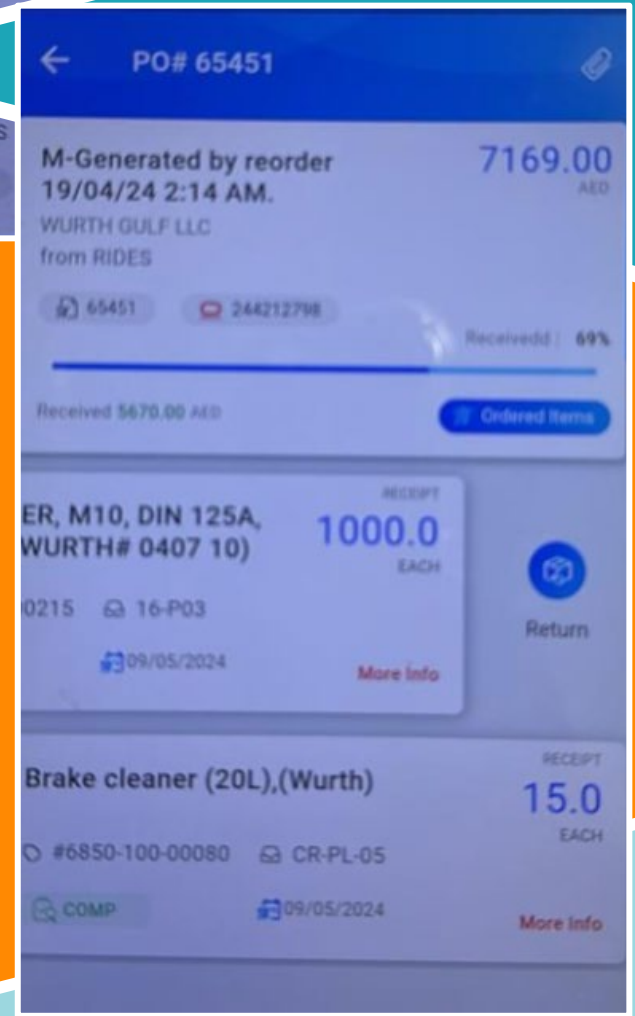
Issue based on FIFO-  
FEFO method

Issuances

Issuances Return

Barcode Scanning

Reports

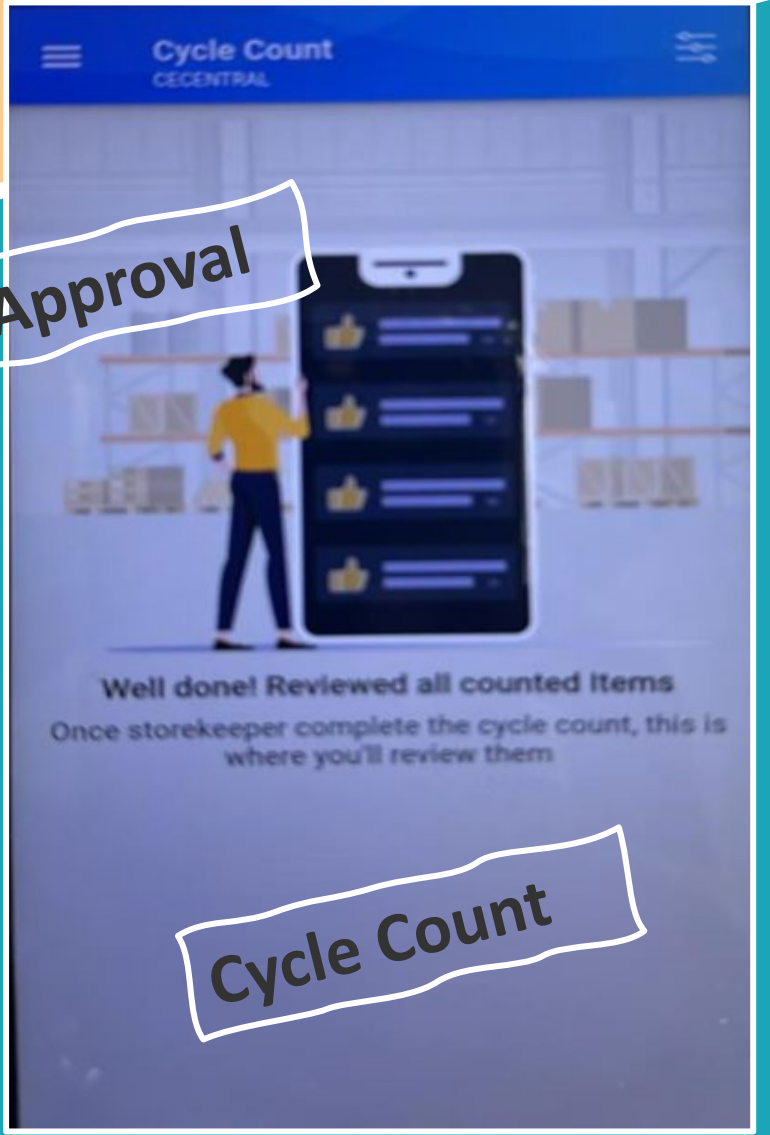


Goods Return

Cycle Count Approval

Quality inspection

Invoice Scanning



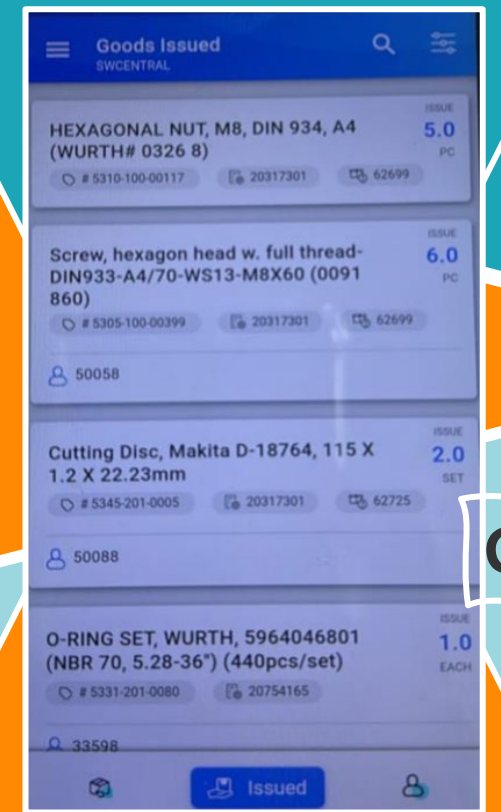
Cycle Count

Expiry updating

Lot number updating

Issuer's digital signature via mobile

Receiver's digital signature via mobile



GRN



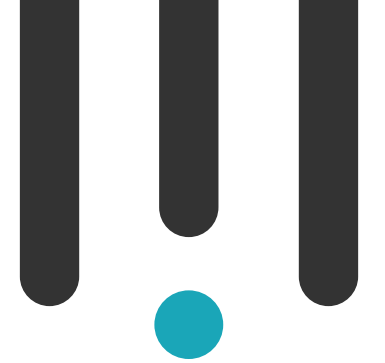
# REPORTS



## DAILY PREVENTIVE MAINTENANCE CHECKS POOL WATER TESTING

Date		October 28, 2021					
SAMPLING LOCATION	SAMPLING TIME	pH	Chlorine		oC / ppm	Inspected By	
			Free [ppm]	ORP [mV]		Tech	Name
<b>16503288 - 036 Daily WP19 POOL A P101 Water Testing</b>							
Controller	07:00 AM	7.35	4.00	824.00		33001	Aneesh Mon Baby Kutty
Pool	08:00 AM	7.40	4.00	826.00		33001	Aneesh Mon Baby Kutty
Pool	09:00 AM	7.35	4.00	828.00		33001	Aneesh Mon Baby Kutty
Temperature °C[0.1 hrs.]	09:00 AM				27.4	33001	Aneesh Mon Baby Kutty
Total Chlorine [0.1 hrs.]	09:00 AM				4.1	33001	Aneesh Mon Baby Kutty
Combine Chlorine [0.1 hrs.]	09:00 AM				0.1	33001	Aneesh Mon Baby Kutty
Controller	10:00 AM	7.35	2.20	820.00		33001	Aneesh Mon Baby Kutty
Pool	11:00 AM	7.40	2.60	802.00		33001	Aneesh Mon Baby Kutty
Controller	12:00 PM	7.35	2.40	800.00		33001	Aneesh Mon Baby Kutty
Pool	01:00 PM	7.40	797.00	2.20		33001	Aneesh Mon Baby Kutty
Controller	02:00 PM	7.40	3.40	799.00		33001	Aneesh Mon Baby Kutty
Pool	03:00 PM	7.45	2.00	794.00		33465	Victoria Shikoyeni
C.Hardness[0.1 hrs.]	04:00 PM				500	33465	Victoria Shikoyeni
Pool	04:00 PM	7.55	3.60	802.00		33465	Victoria Shikoyeni
T.Alkalinity [0.1 hrs.]	04:00 PM				75	33465	Victoria Shikoyeni
TDS	04:00 PM				3920	33465	Victoria Shikoyeni
Temperature °C[0.1 hrs.]	04:00 PM				28.9	33465	Victoria Shikoyeni
Total Chlorine [0.1 hrs.]	04:00 PM				4	33465	Victoria Shikoyeni
Combine Chlorine [0.1 hrs.]	04:00 PM				0.4	33465	Victoria Shikoyeni
Saturation Index	04:00 PM				0.15	33465	Victoria Shikoyeni
Controller	05:00 PM	7.55	3.90	811.00		33465	Victoria Shikoyeni
Controller	07:00 PM	7.20	3.30	820.00		33465	Victoria Shikoyeni
Pool	08:00 PM	7.20	3.50	823.00		33465	Victoria Shikoyeni
Temperature °C[0.1 hrs.]	09:00 PM				28	33465	Victoria Shikoyeni
Pool	10:00 PM	7.30	3.20	820.00		33465	Victoria Shikoyeni
Pool	02:00 AM	7.20	3.40	826.00		33476	Ajit Kumar Swain

# REPORTS



## Breakdown Maintenance Report - SWAD

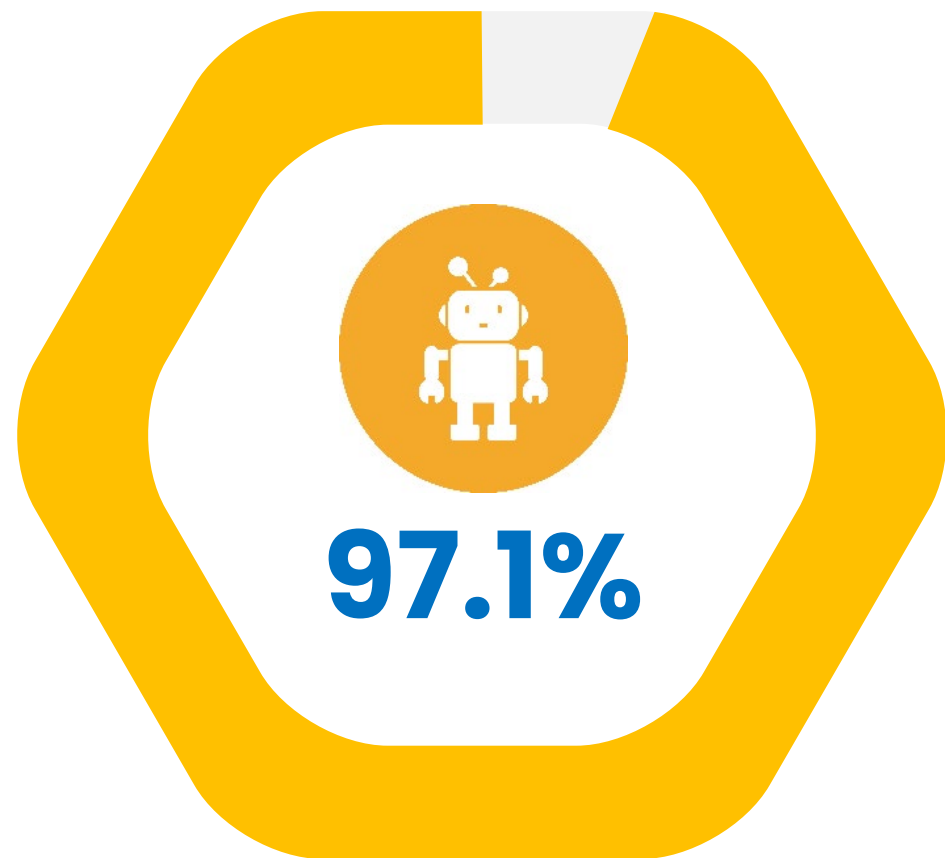
WO Num	Description	Work Type	Location	Location Description	Asset Num	Status	Zone	Down Time Start From	Down Time Start To	Down Time Duration	Failure Class	Problem Code	Problem Details	Cause Code	Cause Details	Remedy Code	Remedy Details	Site
25441305	Eel Racer, Ride, Dispatch Enable Push Button Discrep	BM	MO2A	EEL RACER - MICRO OCEAN	MO2A-RIDE-1	COMP	RIDES	May 8, 2024 4:50:00 PM	May 8, 2024 4:53:00 PM	00:03	ELECTRICAL	RIDEBRKDOWN	Warning 6.16 - Dispatch En	OPERATION	operator mistake	RESET	fault reset done ride handover to ops	SWAD
25441228	Eel Racer, Ride, Dispatch Enable Push Button Discrep	BM	MO2A	EEL RACER - MICRO OCEAN	MO2A-RIDE-1	COMP	RIDES	May 8, 2024 2:43:00 PM	May 8, 2024 2:46:00 PM	00:03	ELECTRICAL	OTHERS	Warning 6.16 - Dispatch En	OPERATION	Operator didn't press the di	RESET	Reset the fault and handed	SWAD
25441287	Jelly Plunge, Ride, Fast Descent Command Valve 1 ar	BM	MO2B	JELLY PLUNGE - MICRO OCEAN	MO2B-RIDE-1	COMP	RIDES	May 8, 2024 2:21:00 PM	May 8, 2024 4:14:00 PM	01:53	ELECTRICAL	RIDEBRKDOWN	Due to Alarm [ CLOS,2.23 ]	MAINTENANCE	Contactors were faulted	REPLACE	Replaced the contactors wi	SWAD
25441319	Hypersphere360, Ride, ASI Gateway Peripherie Fault,	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 5:47:00 PM	May 8, 2024 5:50:00 PM	00:03	ELECTRICAL	RIDEBRKDOWN	90+RCP1-U4 ASI Gateway	MAINTENANCE	ASI Gateway Peripherie Fau	RESET	Reset the fault Handover to ops	SWAD
25436050	Hypersphere 360,Ride, ASI gateway peripherie fault,	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 10:44:00 AM	May 8, 2024 10:47:00 AM	00:03	ELECTRICAL	RIDEBRKDOWN	90+RCP1-U2 Restraints AS	OPERATING	while lapbar closings time f	RESET	Reset.	SWAD
25441275	Hypersphere 360, Ride, ASI Gateway Peripherie Fault	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 4:19:00 PM	May 8, 2024 4:21:00 PM	00:02	ELECTRICAL	RIDEBRKDOWN	90+RCP1-U2 Restraint ASI	MAINTENANCE	ASI Gateway Peripherie Fau	RESET	Reset the fault Handover to ops	SWAD
25441215	Hypersphere 360, Ride, ASI Gateway peripherie fault,	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 2:46:00 PM	May 8, 2024 2:49:00 PM	00:03	ELECTRICAL	RIDEBRKDOWN	90+RCP1-U2 Restraints AS	OPERATING	while lap bar closings time f	RESET	Reset.	SWAD
25436056	Hypersphere 360, Falsefloor, Overspeed down, Repos	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 11:30:00 AM	May 8, 2024 11:35:00 AM	00:05	ELECTRICAL	RIDEBRKDOWN	due to the Falsefloor when Falsefloor Encoder speed Discrepancy	OPERATING	while the Falsefloor is comir Discrepancy fault.	RESET	Repositioned the Falsefloor	SWAD
25441314	Hypersphere360, Ride, False floor Encoder Speed Dis	BM	PO2A	HYPERSPHERE 360 (AR2A) - POL	PO2A-RIDE-1	COMP	RIDES	May 8, 2024 4:53:00 PM	May 8, 2024 5:14:00 PM	00:21	ELECTRICAL	RIDEBRKDOWN	21+MCC4-U1 Rotation	MAINTENANCE	Drive motion command fault.	RESET	Reset the fault Handed over to ops	SWAD
Totals										02:36								

# OUTCOME



71,671 Labor Actuals were encoded to Maximo in a month

## Auto Labor Entries

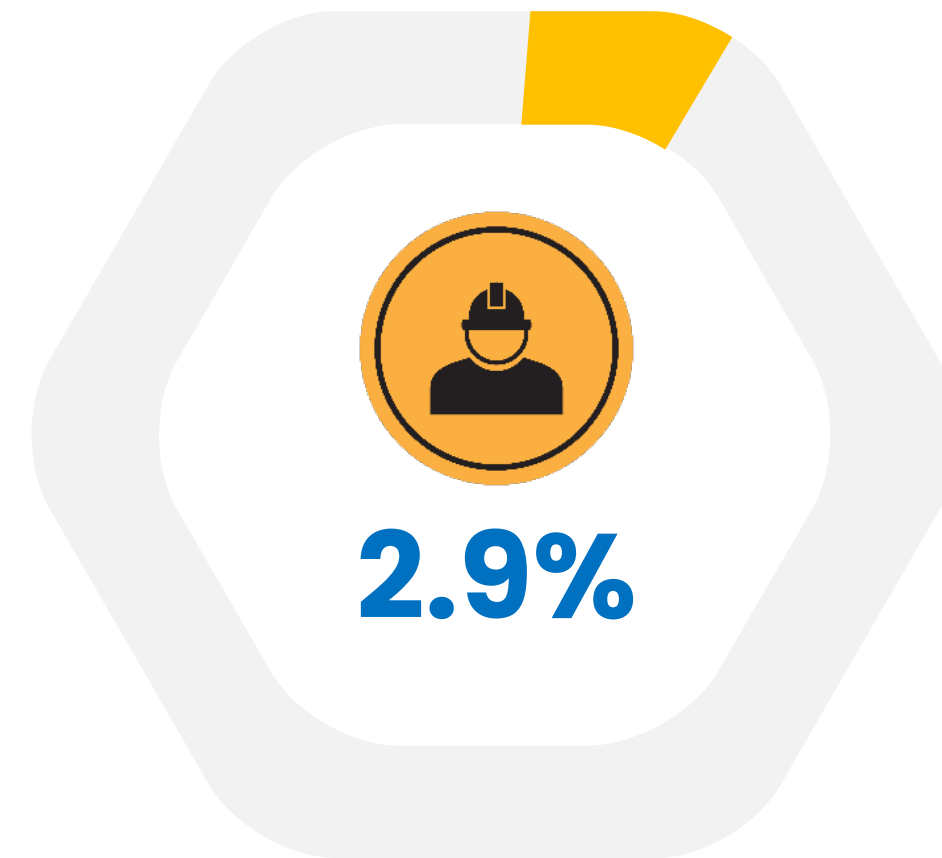


69,650

69,650 Labor Actuals were encoded using **Maximo Mobile Solution** across all Sites and Zones.

VS

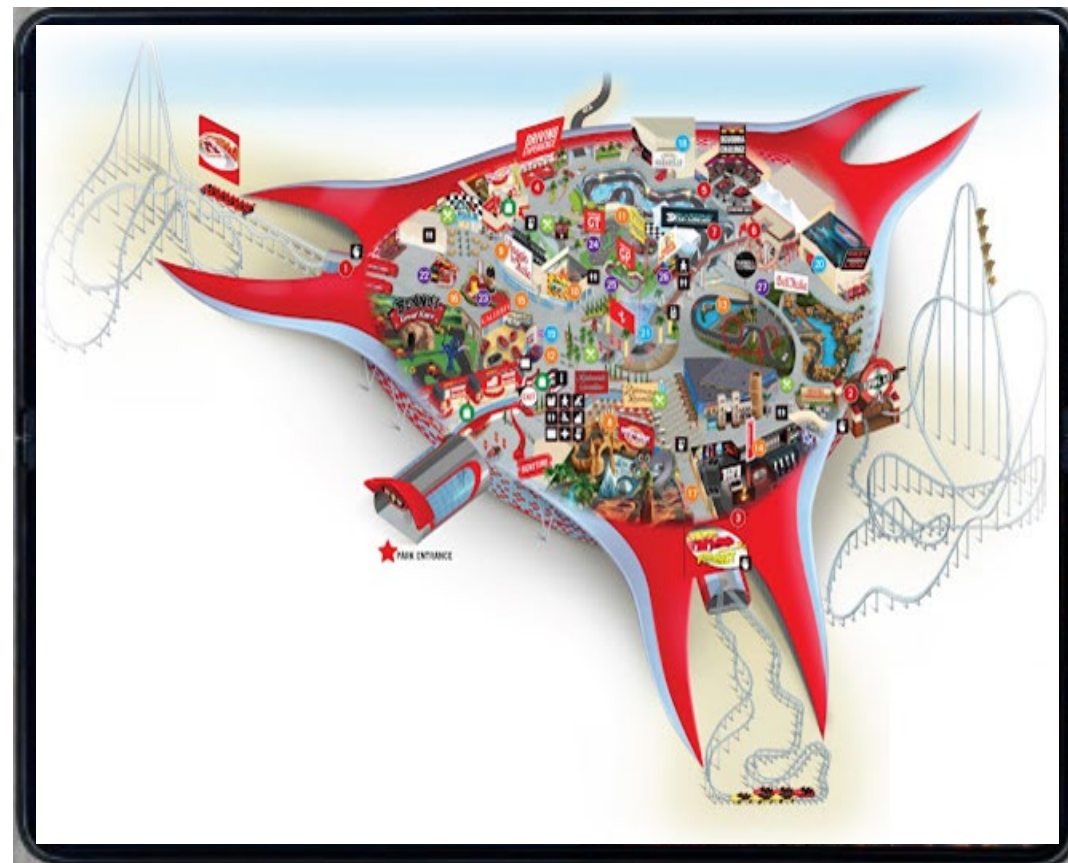
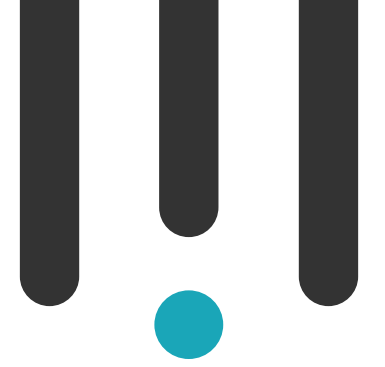
## Manual Labor Entries



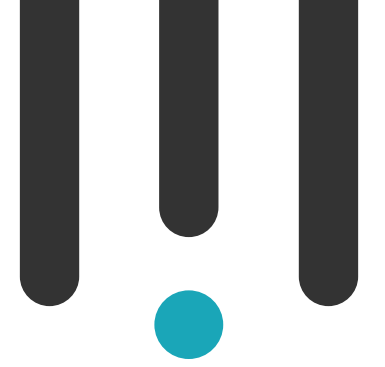
2,021

2,021 Labor Actuals were encoded **manually** across all Sites and Zones.

# COGNITIVE DASHBOARD – FUTURE IMPROVEMENTS



# ASSET & GEO TAGGING – FUTURE IMPROVEMENTS







THANK YOU!