

# DIGITAL PROOF OF SHIPMENT



## THE OPCIMIZERS

TEAM: THE OPTIMIZERS READY FOR GROWTH?





## PROJECT NAME: DC GOING GREEN-PAPERLESS DELIVERIES

**Target Achievement:** 

" To achieve 100% reduction in the use of paper in our inter-store deliveries from the Distribution Centre from the year 2022 and have a paperless warehouse environment"





## **PROJECT TEAM**

THE OPTIMIZERS:

KAVIT SWAMY – DISTRIBUTION CENTER PLANNER SAILESH KUMAR – DISTRIBUTION CENTER & LOGISTICS MANAGER SAIYED DEAN – WMS ANALYST DIPPIKA RAJ – GROUP LEARNING & DEVELOPMENT OFFICER HR. JANINE PILLAY – GROUP SENIOR HR. OFFICER





#### **DIGITAL** PROOF OF SHIPMENT - **DPOS**

#### Why Digital?

Running a warehouse on 85% paperless innovated the DC management to completely remove the usage of paper within the DC and take its operations to the next level of becoming the only Distribution Centre in the country with paperless environment. DPOS is an electronic proof of delivery in a digital format replacing the traditional paper delivery note and shipping manifest documents.

DPOS app-based solution can be installed in different mobile devices and facilitates paperless data capture. It is essential for subsequent billing of the customer/store and serves as an important acknowledgement to mark the delivery as completed.

The DPOS solution can be easily integrated with any ERP and WMS platform via API integration.



## **PROBLEM SELECTION**

Brainstorming

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- Problem ranking
- Cause & Effect diagram (Fishbone)
- Decision Matrix





## PROBLEM RANKING

#### Process Types:

- Receiving
  - > ASN
  - Inbound
- Stock Replenishment
  - Cross dock
  - > Move
- Auditing / Cycle Counts
   Stock take
- > Order Management
  - Order Picking
- Shipping
  - Pack & Load
- Stock Delivery
  - Manual
  - STO Copies







## **PROBLEM SELECTION :**

### **DECISION MATRIX**

<b>Process Types</b>	Efficiency/ Effectiveness	Process (Manual / Automated)	Stock Management	Traceability / Maintenance	Data Retrieval	Total
	1 – 5 (20%)	1 – 5 (20%)	1 – 5 (20%)	1 – 5 (20%)	1 – 5 (20%)	(100%)
Receiving Type: > ASN > Inbound	2	2	2	I	I	8
Stock Replenishment Cross – Dock Move	2	2	2	I	I	8
Auditing/Cycle counts → Stock take	2	2	2		2	9
Order Management <ul> <li>Order Picking</li> </ul>	l	2	I			6
Shipping <ul> <li>Pack &amp; Load</li> </ul>	4	5	4	4	4	21
Stock Delivery>Manual>STO Copies	5	5	4	5	5	24

I = Excellent (Pass) 2 = Very Good (Pass) 3 = Good (Pass) 4 = Weak (Fail) 5 = Unacceptable (Fail)



## PROBLEM RANKING

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<b>Process Type</b>	Total Points 100%	Ranking Order
<ul><li>Stock Delivery</li><li>➢ Manual</li><li>➢ STO Copies</li></ul>	24	Ι
Shipping ➤ Pack & Load	21	2
Auditing / Cycle counts ➤ Stock take	9	3
Stock Replenishment > Cross - Dock > Move	8	4
Receiving Type: > ASN > Inbound	8	5
Order Management <ul> <li>Order Picking</li> </ul>	6	6

#### **PROBLEM STATEMENT**

High paper usage in the Pack & Load / Shipping Dept. and Transport Dept.

#### DRIVERS MANUALLY MARK OFF TOTES USING A SHIPPING MANIFEST





STO COPIES PRINTED OUT AFTER PACK & LOAD AND SHIPPING

TOTES LOADED IN DELIVERY RUNS WITH THE USE OF SHIPPING MANIFEST.

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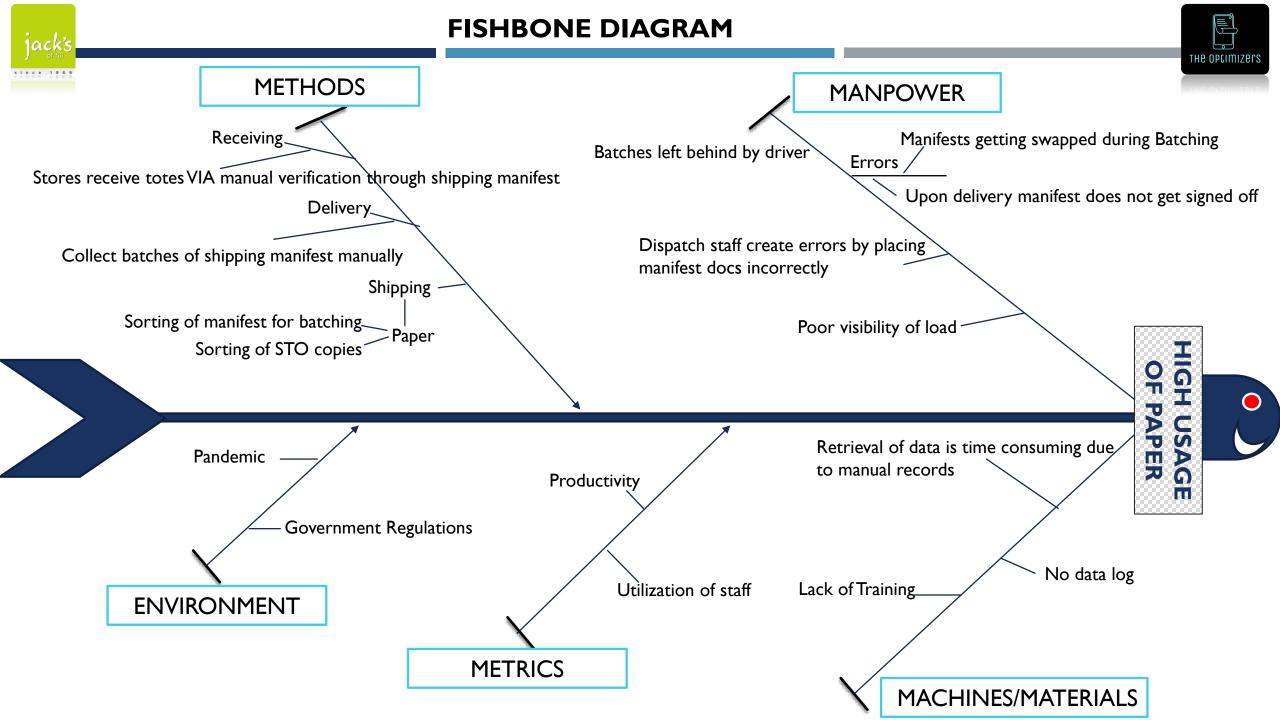






#### MILESTONE CHART

	Project Details	Timeline	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
	Team meet and discussion on Project																
PLAN	Planning																
	Evaluate current processes							)									
	Data and Material collection																
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DO	Implement new process																
	Evaluate the results																
CHECK	Standardise the process																
	In-House Training																
ACT	Future tweaks and upgrades of the software										,						

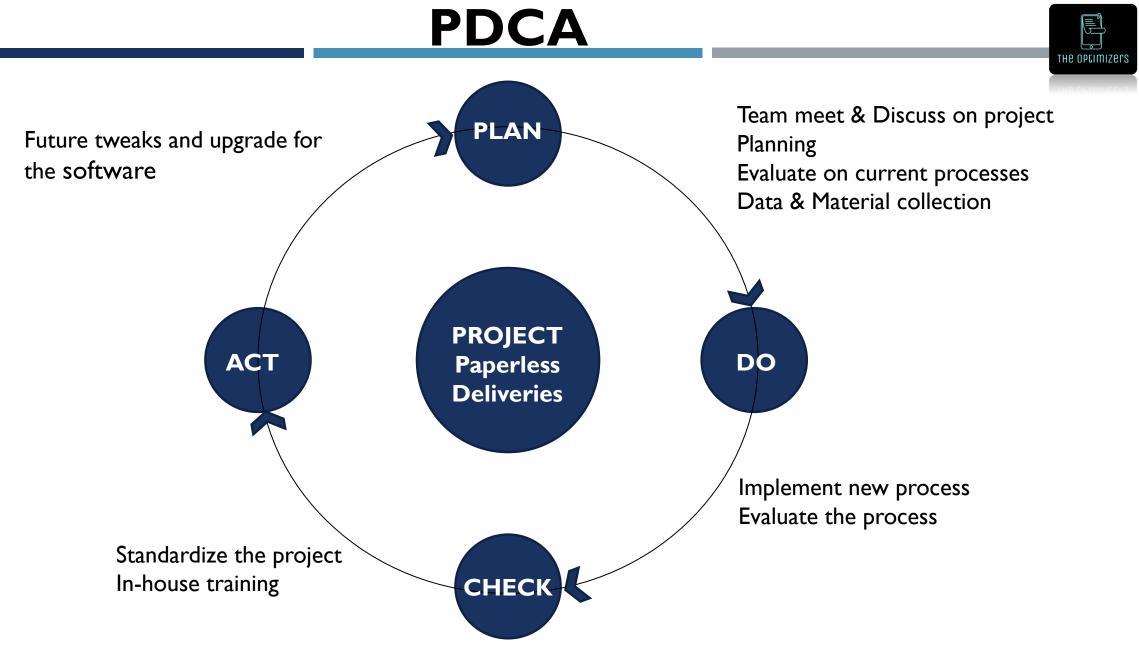




### FISH BONE ANALYSIS



Items	Category	Impact Rating	Significance
Productivity	Operational	Medium	Medium
Lack of training	Training	Medium	Medium
Shipping	Process	High	Medium
Delivery	Process	High	High
Receiving at store level	Process	Medium	Medium
Batches left behind	Process	Medium	High
Errors	Training	Medium	High
Poor visibility of load	System	High	Medium
Utilization of staffs	Operational	Low	Low
Retrieval of data	System	High	Medium
No Data Logs	System	Medium	High
Government regulations	Operational	Low	Low
Pandemic	Operational	Medium	Low



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#### **PROPOSED SOLUTIONS**

- Operations
- Increase producitvity level
- Comply with Government Initiatives Go Green

Set up future plans to avoid backlog

✤ Have an automated delivery system

- Processes
- Have a fully digitalized & semi automated warehouse operations

#### System

- Paperless delivery
- Have a live visibility of drivers and shipments on the go
- Have access to delivery data in an App & eliminating traditional use of delivery manifest (paper)
- Retrieve data on the go & track n trace as and when required by store with a click of a button

#### Training

- Provide in-house training
- ✤ Awareness to all staff
- Monthly reviews







## **PROPOSED SOLUTION – DECISION MATRIX**

Process Types	Efficiency/ Effectiveness 1 – 5 (20%)	Process 1 – 5 (20%)	Stock Management 1 – 5 (20%)	Traceability / Maintenance 1 – 5 (20%)	Data Retrieval 1 – 5 (20%)	Total (100%)
Operations	5	5	5	5	5	25
Increase productivity level Comply with Government Regulations Set up future plans to avoid backlog Have an automated delivery system						
Processes	5	4	5	5	5	24
Have a fully digitalized & semi automated warehouse operations						
System	4	4	5	5	5	23
Paperless delivery Have a tracker in place for orders Have access to data in an App Get visibility on data in the App						
Training	4	4	4	5	5	22
Provide in-house training Awareness to all staff						

Monthly reviews 5= Excellent (Pass) 4 = Very Good (Pass) 3 = Good (Pass) 2 = Weak (Fail) 1 = Unacceptable (Fail)



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#### **DIGITAL PROOF OF SHIPMENT SOLUTION - INITIAL INVESTMENT, COST AND BENEFITS**

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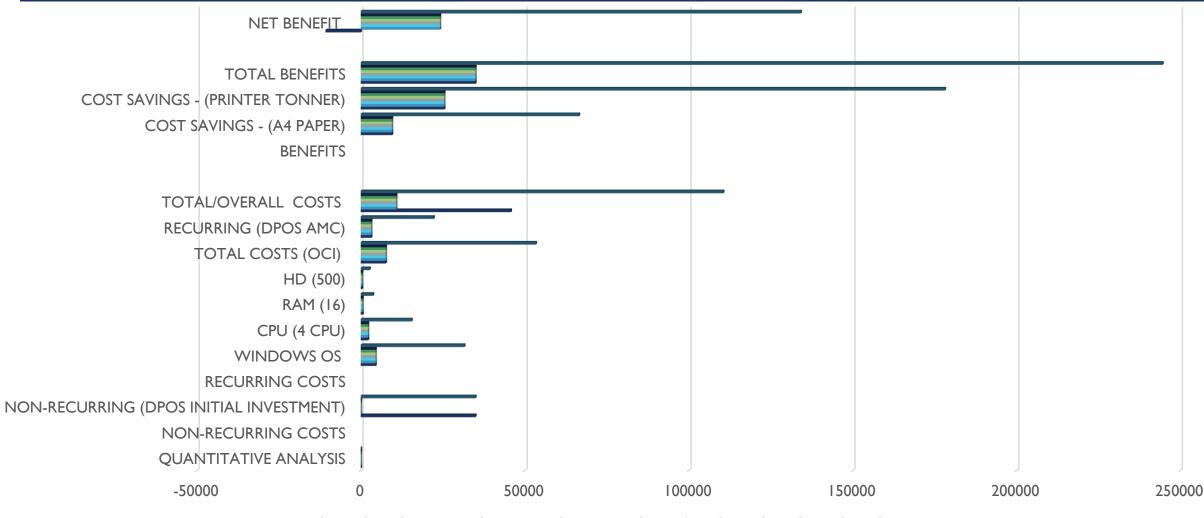
QUANTITATIVE ANALYSIS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 4 YEAR 5		YEAR 7	TOTAL
NON-RECURRING COSTS								
NON-RECURRING (DPOS INITIAL INVESTMENT)	\$ 34,920.63	\$-	\$-	\$-	\$-	\$-	\$-	\$ 34,920.63
RECURRING COSTS								
WINDOWS OS	\$ 4,506.84	\$ 4,506.84	\$ 4,506.84	\$ 4,506.84	\$ 4,506.84	\$ 4,506.84	\$ 4,506.84	\$ 31,547.88
CPU (4 CPU)	\$ 2,207.04	\$ 2,207.04	\$ 2,207.04	\$ 2,207.04	\$ 2,207.04	\$ 2,207.04	\$ 2,207.04	\$ 15,449.28
RAM (16)	\$ 528.60	\$ 528.60	\$ 528.60	\$ 528.60	\$ 528.60	\$ 528.60	\$ 528.60	\$ 3,700.20
HD (500)	\$ 378.60	\$ 378.60	\$ 378.60	\$ 378.60	\$ 378.60	\$ 378.60	\$ 378.60	\$ 2,650.20
TOTAL COSTS (OCI)	\$ 7,621.08	\$ 7,621.08	\$ 7,621.08	\$ 7,621.08	\$ 7,621.08	\$ 7,621.08	\$ 7,621.08	\$ 53,347.56
RECURRING (DPOS AMC)	\$ 3,175.00	\$ 3,175.00	\$ 3,175.00	\$ 3,175.00	\$ 3,175.00	\$ 3,175.00	\$ 3,175.00	\$ 22,225.00
TOTAL/OVERALL COSTS	\$ 45,716.71	\$ 10,796.08	\$10,796.08	\$10,796.08	\$10,796.08	\$10,796.08	\$10,796.08	\$110,493.19
BENEFITS								
COST SAVINGS - (A4 PAPER)	\$ 9,505.00	\$ 9,504.00	\$ 9,504.00	\$ 9,504.00	\$ 9,504.00	\$ 9,504.00	\$ 9,504.00	\$ 66,529.00
COST SAVINGS - (PRINTER TONNER)	\$ 25,440.00	\$ 25,440.00	\$25,440.00	\$25,440.00	\$25,440.00	\$25,440.00	\$25,440.00	\$178,080.00
TOTAL BENEFITS	\$ 34,945.00	\$ 34,944.00	\$34,944.00	\$34,944.00	\$34,944.00	\$34,944.00	\$34,944.00	\$244,609.00
NET BENEFIT	\$ (10,771.71)	\$ 24,147.92	\$24,147.92	\$24,147.92	\$24,147.92	\$24,147.92	\$24,147.92	\$134,115.81



#### **RESULTS** COST SAVING FOR 7 YEARS

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■ Series 8 ■ Series 7 ■ Series 6 ■ Series 5 ■ Series 4 ■ Series 3 ■ Series 2 ■ Series 1

## **TANGIBLE** BENEFITS

- Enhanced data collection
- Encourages digital culture (with improved collaboration)
- Improved productivity
- Total savings per year on paper & toner \$ 34,944.00
- Enhanced employee morale
- Lower operational cost

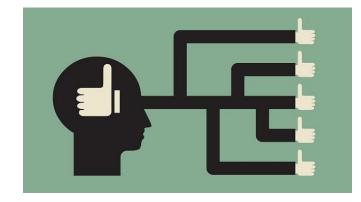


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## **INTANGIBLE** BENEFITS

- Brand reputation in the market Strong brand awareness
- Respect in the industry
- Customer and professional satisfaction
- Employee morale
- Enhanced user experience











#### **STANDARDIZATION**

For effective digitalization, first you need standardization.

- With such significant cost savings and innovative ideas to improve on the warehouse standards, this will soon be applied to JOF inter companies for invoicing and proof of shipment notification.
- Moving from a semi- automated to a fully automated Warehouse



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Branches										
🐮 Teams	512	8		218	183	35	148 4691	4691 53	17	0
Delivery Agent	All		Una	ssigned	Pending	Accepted	Picked Delivered	R. Delivered Rejected	RTO	Cancelled
Lustomers	S.No.		Actions	Load No	Load Date	Branch Name	Customer Name	Customer Location	Driver	Load Order Statu:
Products	1		≣୭∎	L0015074	25-Oct-2022	Jacks Distribution Center	JACKS SUVA	Western Division - Vatukarasa	Hamendra Prasad	Delivered
Delivery Orders	2		=	L0015023	25-Oct-2022	Jacks Distribution Center	JACKS SIGATOKA	Western Division - Vatukarasa	Ravikash Sharma	Pending
Load Orders	3		≣୭∎	L0014748	21-Oct-2022	Jacks Distribution Center	JACKS SHERATON	Western Division - Denarau Island	Nilam Reddy	Delivered
Track your Deliveries	4		≣୭∎	L0014727	21-Oct-2022	Jacks Distribution Center	BABY JACKS STORE	Western Division - Vatukarasa	Hamendra Prasad	Delivered
🖨 Handling Units	5		≣୭	L0015021	19-Oct-2022	Jacks Distribution Center	JACKS NAKASI (RUPS MALL)	Central Division - Suva	Hamendra Prasad	Picked
Settings	б		≣୭	L0015020	19-Oct-2022	Jacks Distribution Center	JACKS NAKASI (RUPS MALL)	Central Division - Suva	Hamendra Prasad	Picked
	7		≣ൗ	L0015014	19-Oct-2022	Jacks Distribution Center	JACKS HILTON	Western Division - Vatukarasa	Gyaneshwar Prasad	Picked
	8		≡	L0015112	18-Oct-2022	Jacks Distribution Center	JACKS LABASA	Western Division - Vatukarasa	Labasa Admin	Pending

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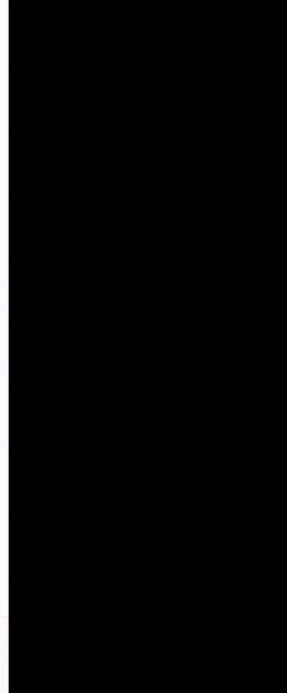
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## **BENEFITS OF DPOS SYSTEM**

- Remove paperwork and paper cost DC approximately used 1500 2000pcs (3 4 reams) of A4 paper per day. Equivalent to 730,000 pcs of paper per year
- Enhance communication and notifications Pre delivery notification to stores via email once DC driver begins deliveries. Delivery tracking; pre delivery notification will have an estimated delivery time allowing clients to trace the route of their parcel
- Proof of delivery Drivers can capture signature and photo proof from within the app and submit real time confirmation for the delivery
- Electronic signature & Traceability E-Signature for confirmation of delivery taken on real time. Electronic documents are store online for further traceability and search purposes after the delivery process is complete
- Beneficial for Other Jacks Businesses The DPOS system has a functionality of generating real time invoices for a third-party customer for any delivered consignment from within the app itself and can be send to the customer on real time basis with the signature details

## **DC PERFORMANCE**

- With our Distribution Centre fully run by the WMS, this has enabled us to enhance our performance and take it to the next level in terms of :
  - Order turn around time (within 8-12hr)
  - Stock shrinkage
  - Variance level overall stands at 0.01%
  - Enhance receiving of inventory within the warehouse- ASN (Advance Shipping Notice)
  - Overall stock management

Through this project..

- We wanted to fully eliminate the usage of paper and be 100% a paperless warehouse environment
- Enhance shipping and delivery process by having a fully digital platform
- Set a benchmark for the warehouse operations in the country



## CONCLUSION

To conclude this project we would like to acknowledge the Directors, management and all stakeholders of Jacks of Fiji in investing into such systems and giving us this opportunity to implement world class technology for a very modern warehousing environment in the nation.



## THANKYOU

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