



THE UNIVERSITY OF TEXAS AT EL PASO

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# Engine Logistics IE 4466

- Alexis Gutierrez
- Fernanda Marquez
- Joanna Hernandez
- Brissa Lucero

## PROBLEM / Abet 5

- Improve weekly scorecards metrics
- Maximize financial gain
- Improve the percentage on the metrics



# DEFINE



amazon

STAKEHOLDER



# ABET 3

## POINT OF CONTACT: Jose Garza - Chief Operating Officer

Calendario - jhernandez161@miners.utep.edu

### Senior Design meeting

🕒 Jue 2024-02-15, 'de' 13:30 a 16:00

📍 Microsoft Teams Meeting

[Unirse](#)

**SD** SENIOR DESIGN te invitó.  
Aceptados: 2, 2 sin respuesta

💡 [Presentación Formal .pptx](#) +2

📅  Asistiré [Cambiar](#)

Calendario - jhernandez161@miners.utep.edu

### SENIOR DESIGN

🕒 Vie 2024-02-09 (todo el día)


📍 Reunión de Microsoft Teams

[Unirse](#)

**MF** Marquez, Fernanda te invitó.  
3 sin respuesta

📧  Enviar correo electrónico al organizador

Sí  ? Tal vez  No



**Senior Design** [✎](#)

Grupo · 5 miembros

Añade una descripción del grupo [✎](#)

Grupo creado por Brissa Lucero el 9/2/2024 a la(s) 2:20 p. m.

Archivos, enlaces y documentos [15 >](#)

## ABET 2

# D



### DEFINE

- Launch Team
- Establish Charter
- Plan Project
- Gather the Voice of the Customer
- Plan for Change

# M



### MEASURE

- Document the Process
- Collect Baseline data
- Narrow project focus

# A



### ANALYZE

- Analyze Data
- Identify Root Cause
- Identify and Remove Wastes

# I



### IMPROVE

- Generate Solutions
- Evaluate Solutions
- Optimize Solutions
- Pilot
- Plan and implement

# C



### CONTROL

- Control the Process
- Validate project benefits

# The operation process of the DSP (Delivery Service Provider)



**Package Arrival at Amazon Warehouse**



**Sorting Packages**



**Assign Parcel to a Driver**



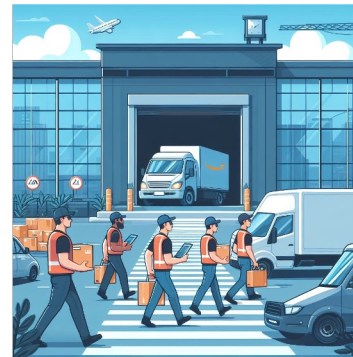
**Load Out of Packages**



**Check the Amazon Route**



**Delivered Packages**



**Leave the Warehouse**



# Types of Amazon DSP Delivery Vans



# Week 1, 2023

## Overall Standing: **Fantastic**



## Safety and Compliance: **Fantastic**



*i* On-Road Safety Score\*

*i* Safe Driving Metric

**Fantastic**

828 | **Fantastic**

Compliance

*(These metrics do not currently reflect all areas of DSP Compliance)*

## Quality: **Great**



Customer Delivery Experience *i*

Customer Escalation Defect DPMO *i*

Customer Delivery Feedback

**Great**

12 | **Great**

91.83% | **Poor**

*i* Delivery Completion Rate *i*

Delivery Success Behaviors

Standard Work Compliance

*i* Photo-On-Delivery

*i* Contact Compliance

*i* Attended Delivery Accuracy

99.23% | **Fantastic**

232 | **Fantastic**

**Fantastic**

98.76% | **Fantastic**

98.32% | **Great**

100.00% | **Fantastic**

## Team: **Fantastic**



*i* High Performers Share *i*

Low Performers Share

82.29%

| **Fantastic**

0.00% | **Fantastic**

*i* Tenured Workforce

78.64% | **Fair**





# Week 39, 2023

## Overall Standing: **Fantastic Plus**



## Safety and Compliance: **Fantastic**



*i* On-Road Safety Score\*  
*i* Safe Driving Metric

**Fantastic**  
Coming Soon

Compliance

*(These metrics do not currently reflect all areas of DSP Compliance)*

## Quality: **Great**



Customer Delivery Experience *i*  
Customer Escalation Defect DPMO *i*  
Customer Delivery Feedback

**Fair**  
13 | **Great**  
91.27% | **Poor**

*i* Delivery Completion Rate *i*  
Delivery Success Behaviors  
Standard Work Compliance  
*i* Photo-On-Delivery

99.71% | **Fantastic**  
397 | **Great**  
**Fantastic**  
98.60% | **Fantastic**

*i* Contact Compliance

99.70% | **Fantastic**

*i* Attended Delivery Accuracy

100.00% | **Fantastic**

## Team: **Fantastic**



*i* High Performers Share *i*  
Low Performers Share

81.81% | **Fantastic**  
0.00% | **Fantastic**

*i* Tenured Workforce

82.75% | **Great**



# MEASURE

Drivers ranked by overall score, descending.					Safety - metrics (except FICO) are measured as events per trip at DA level																
#	Name	Transporter ID	Overall Tier	Delivered	Key Focus Area	Fico Score	Seatbelt Off Rate	Speeding Event Rate	Distractions Rate	Following Distance Rate	Sign/Signal Violations Rate	CDP	CED	DCR	DSB	SWC-PDD	SWC-CC	SWC-AD	DSB DNR	POD Opps.	CC Opps.
1	Colten Mundy	A2V00ZUK8QVUY	Fantastic	54		Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	0	100.0%	Coming Soon	100.0%	Coming Soon	Coming Soon	Coming Soon	43	0
2	Faith Tucker	A2RDG0R2WZ21J4	Fantastic	458		Coming Soon	0.0	0.0	0.0	0.0	0.0	100.0%	0	100.0%	0	100.0%	Coming Soon	0	0	265	0
3	mackenzie murdoch	AQHYZH5RFE5	Fantastic	45		Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	0	100.0%	Coming Soon	100.0%	Coming Soon	Coming Soon	Coming Soon	37	0
4	Marina Howard	A1HFNFAVL3AALM	Fantastic	533		Coming Soon	0.0	0.0	0.0	0.0	0.0	100.0%	0	100.0%	0	100.0%	100.0%	0	0	332	20
5	Mauricio Garcia	A3KZCSQCLLIAR	Fantastic	469	POD	Coming Soon	0.0	0.0	0.0	0.0	0.0	Coming Soon	0	100.0%	0	99.3%	Coming Soon	0	0	277	0
6	Alysa Lamberth	AMSLLUYCYLSAJ	Fantastic	1283	POD	801	0.0	0.0	0.0	0.0	0.0	100.0%	0	100.0%	0	98.8%	100.0%	0	0	572	160
7	Steven Williams	A3LQEU454WFGMJ	Fantastic	67	PDD	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	100.0%	0	100.0%	0	98.0%	100.0%	0	0	50	3
8	Jesse Garcia	A24QJNM7Q10FH	Fantastic	367	DCR	Coming Soon	0.0	0.0	0.0	0.0	0.0	100.0%	0	99.7%	0	99.6%	Coming Soon	0	0	234	0
9	Mikaela Applebury	A1Q50NHWTCT4JW	Fantastic	1995	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	99.1%	0	99.8%	0	99.8%	Coming Soon	0	0	1230	0
10	Diana Abad	AC9GZCVNGQ9DG	Fantastic	1846	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	99.0%	0	99.8%	0	99.9%	100.0%	0	0	1152	1
11	Ryan Woodward	A16H1OC1EX72	Fantastic	905	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	98.3%	0	100.0%	0	98.7%	100.0%	0	0	542	1
12	Carlos Rositas	A1H081W0IU7KRK	Fantastic	1896	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	97.9%	0	100.0%	0	99.5%	100.0%	0	0	807	8
13	Ray Barros	A2IYQLWG258QQ	Fantastic	1971	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	98.8%	0	99.8%	0	97.8%	100.0%	0	0	996	87
14	Emily Young	ACZ5BT1KXDGIS	Fantastic	1383	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	97.5%	0	100.0%	0	99.6%	Coming Soon	0	0	853	0
15	Dorien Shannon	A2P9CTH4R8V4CN	Fantastic	2019	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	97.8%	0	99.9%	0	99.9%	100.0%	0	0	1239	2
16	Damien Clark	A1562OAD72OCO2	Fantastic	1711	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	97.8%	0	100.0%	0	98.0%	100.0%	0	0	891	2
17	Ricardo Archaga	A1350F3S1IU6ZL	Fantastic	1897	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	97.8%	0	99.8%	0	100.0%	Coming Soon	0	0	750	0
18	Isaac Mancias	A1O4YHLTCR28Y3	Fantastic	2285	SSVR	Coming Soon	0.0	0.0	0.0	0.0	0.3	98.9%	0	99.9%	0	99.5%	100.0%	0	0	1381	14
19	Rachel Gunn	A3QCKE6EXUE2E	Fantastic	922	DCR	Coming Soon	0.0	0.0	0.0	0.0	0.0	100.0%	0	99.1%	0	99.6%	100.0%	0	0	535	3
20	Marcos OrdóñezAlvarado	A2IM8XFDOEJW7	Fantastic	184	DCR	Coming Soon	0.0	0.0	0.0	0.0	0.0	Coming Soon	0	99.5%	0	99.2%	100.0%	0	0	127	11
21	Eduardo Garcia	A2EB15MJA2I6R	Fantastic	1296	CDF	Coming Soon	0.0	0.2	0.0	0.0	0.0	98.3%	0	100.0%	0	98.7%	100.0%	0	0	750	1
22	Oscar MorenoGarcia	A3K5ORABPY5T3	Fantastic	1967	CDF	Coming Soon	0.0	0.0	0.0	0.4	0.0	97.8%	0	100.0%	0	99.8%	100.0%	0	0	1225	3
23	Landon Pederson	A3RYN97IVDBERJ	Fantastic	1513	CDF	Coming Soon	0.0	0.0	0.0	0.0	0.0	96.8%	0	99.9%	0	99.3%	Coming Soon	0	0	846	0



## ANALYZE / Abet 5

Weeks	Focus Area Safety	Focus Area Quality	Focus Area Team	Performance
1	Safe Driving Metric	Customer Delivery Feedback	Tenured Workforce	Fantastic
		Delivery Completion Rate		
		Delivery Success Behaviors		
		Contact Compliance		
2		Customer Delivery Experience	Tenured Workforce	Fantastic
		Customer Delivery Feedback		
		Delivery Completion Rate		
		Delivery Success Behaviors		
3	Safe Driving Metric	Customer Delivery Experience	Tenured Workforce	Fantastic
		Customer Delivery Feedback		
		Delivery Completion Rate		
		Delivery Success Behaviors		
4	Distractions Rate Followin Distance	Customer Delivery Experience	Tenured Workforce	Fantastic
		Customer Delivery Feedback		
		Delivery Success Behaviors		
		Contact Compliance		

## Annual Financial Analysis

Incentive	Weeks	\$ per Deliv	Earnings	Annual Percentage
Fantastic plus	31	\$ 0.15	\$ 375,576.92	59.6%
Fantastic	21	\$ 0.07	\$ 118,730.77	40.4%
Annual			\$ 494,307.69	
Deliver/ year	4200000			
Deliver/ Week	80769.2		\$ 494,307.69	

Safety	Weeks	Percentage
Safe Driving Metric	5	9.62
Distractions Rate Following	8	15.38
Distance	1	1.92
Following Distance Rate	5	9.62
Speeding Event Rate	5	9.62
Working Hour Compliance	6	11.54

Quality	Weeks	Percentage
Customer Delivery Experience	47	90.38
Customer Delivery Feedback	48	92.31
Customer Escalation Defect	25	48.08
Delivery Completion Rate	8	15.38
Delivery Success Behaviors	11	21.15
Contact Compliance	41	78.85
Standard Work Compliance	8	15.38
Delivery and Received	12	23.08
Attended Delivery Accuracy.	2	3.85

Team	Weeks	Percentage
Tenured Workforce	46	88.46
High Performance Share	12	23.08

## Potential Solutions / ABET 7

Safety	Weeks	Percentage
Distractions Rate Following	8	15.38
Quality	Weeks	Percentage
Customer Delivery Experience	47	90.38
Customer Delivery Feedback	48	92.31
Customer Escalation Defect	25	48.08
Contact Compliance	41	78.85
Team	Weeks	Percentage
Tenured Workforce	46	88.46

- Training for drivers in Safety and Quality (Distractions, Delivery Experience, Contact Compliance)
- PPE Requirement
- Bonuses for drivers (Most Contact with Customer, Quality of Delivery)
- Decrease the rotations of drivers (Stay with the drivers with most experience)

## Earnings Projection

Incentive	Weeks	\$ per Deliv	Earnings	Annual %
Fantastic plus	31	\$ 0.15	\$ 375,576.92	59.6%
Fantastic	21	\$ 0.07	\$ 118,730.77	40.4%
Annual			\$ 494,307.69	

Incentive	Weeks	\$ per Delivery	Earnings	Annual %
Fantastic Plus	39	\$ 0.15	\$ 472,500.00	75%
Fantastic	13	\$ 0.07	\$ 73,500.00	25%
Annual Total			\$ 546,000.00	

**Diference** **\$51,692.31**

