

XYZX Knitting & Dyeing Mills Ltd.

Industrial Engineering Department

SMV & Efficiency Variance Report of Marketing Vs Production: Buyer-H&M, Style-Kylie

Mar'19 to Apr'19 Data Analysis (Unit-01 & Unit-02)

Date: 20th June,2019

Report Objective:

1. To find out SMV & Efficiency variance between Marketing & Production
2. To analyze the root causes of variation
3. To find out solution to improve

Data analysis:

SI No.	Style	Season	Item/Option	Order Quantity	Production Unit	Unit Wise Production Quantity	Marketing SMV	Marketing EFF%	Achieve SMV	Achieve Eff%	SMV Variation	Efficiency Variation	Marketing CM/DZ	Use CM/DZ	CM Variance(DZ)	Total Marketing CM	Total Use CM	CM Variance	CM Profit or Loss	No. of line	Avg. per line prod. (PCs)	
1	KYLIE SL-SET	S0	Round Neck T-Shirt	144,644	Unit-01	89079	6.64	50%	6.4	37%	0.24	-13%	4.32	7.36	-3.04	\$ 32,068.44	\$ 54,611.28	\$ (22,542.84)	Loss	9	9898	
		S0	V Neck T-Shirt	144,644	Unit-01	77998	7.55	50%	7.33	37%	0.22	-13%	4.62	8.51	-3.89	\$ 30,029.23	\$ 55,318.29	\$ (25,289.06)	Loss	5	15600	
		S0	Short Pant	289288	Unit-01	134506	5.65	50%	6.18	41%	-0.53	-9%	4.47	6.48	-2.01	\$ 50,103.49	\$ 72,582.06	\$ (22,478.58)	Loss	8	16813	
2	KYLIE N-SLIP	S0	Round Neck T-Shirt (Solid)	143,211	Unit-02	73376	6.59	50%	6.89	52%	-0.3	2%	5.64	5.69	-0.05	\$ 34,486.72	\$ 34,805.91	\$ (319.19)	Loss	7	10482	
		S0	V Neck T-Shirt (Stripe)	143,211	Unit-01	52788	8.15	50%	9.63	36%	-1.48	-14%	5.88	11.56	-5.68	\$ 25,866.12	\$ 50,834.84	\$ (24,968.72)	Loss	5	10558	
		S0	V Neck T-Shirt (Stripe)	143,211	Unit-02	12343	8.15	50%	9.63	51%	-1.48	1%	5.88	8.16	-2.28	\$ 6,048.07	\$ 8,393.09	\$ (2,345.02)	Loss	2	6172	
3	KYLIE 2PK SHORTS	S0	Short Pant (Solid)	67325	Unit-01	74600	7.33	45%	8.22	35%	-0.89	-10%	5.58	10.09	-4.51	\$ 34,689.00	\$ 62,722.83	\$ (28,033.83)	Loss	9	8289	
		S0	Short Pant (Stripe)	67325	Unit-01	78424	7.84	45%	8.73	43%	-0.89	-2%	5.58	8.72	-3.14	\$ 36,467.16	\$ 57,000.39	\$ (20,533.23)	Loss	6	13071	
				1,142,858	593114												\$ 249,758.23	\$ 396,268.69	\$ (146,510.46)			

Findings:

SI No.	Style	Production Unit	Item/Option	Reason of SMV Variation	Reason of Efficiency Variation
1	KYLIE SL-SET	Unit-01	Round Neck T-Shirt	1. SMV reduces because of Label make process elimination, i/o compound label added	1. Production Manpower used more than Layout target Manpower 2. Frequent line layout change
		Unit-01	V Neck T-Shirt	1. SMV reduces because of Label make process elimination, i/o compound label added	1. Production Manpower used more than Layout target Manpower 2. Frequent line layout change
		Unit-01	Short Pant	1. SMV increases because of Label make process added, i/o compound label 2. Achieve SMV more than Marketing SMV because of unskilled Kansai machine operator & rented Kansai m/c.	1. Production Manpower used more than Layout target Manpower 2. Frequent line layout change 3. Rented low quality m/c 4. Unskilled Kansai machine Operator
2	KYLIE N-SLIP	Unit-02	Round Neck T-Shirt (Solid)	1. SMV increases because of using excess manual operations (Exp: Front & back part match, sleeve & body match, after sleeve join, side seam & before sleeve ,bottom hem garments arrangement)	1. Production Manpower used more than Layout target Manpower, but achieved efficiency
		Unit-01	V Neck T-Shirt (Stripe)	1. SMV increases because of using excess manual operations (Exp: Front & back part match, sleeve & body match, after sleeve join, side seam & before sleeve ,bottom hem garments arrangement. Neck rib cut in sewing line i/o cutting section.)	1. Production Manpower used more than Layout target Manpower
		Unit-02	V Neck T-Shirt (Stripe)	1. SMV increases because of using excess manual operations (Exp: Front & back part match, sleeve & body match, after sleeve join, side seam & before sleeve ,bottom hem garments arrangement. Neck rib cut in sewing line i/o cutting section.)	1. Production Manpower used more than Layout target Manpower, but achieved efficiency
3	KYLIE 2PK SHORTS	Unit-01	Short Pant (Solid)	1. SMV increases because of Label make process added, i/s compound label 2. Achieve SMV more than Marketing SMV because of unskilled Kansai machine operator & rented Kansai m/c.	1. Production Manpower used more than Layout target Manpower 2. Frequent line layout change 3. Rented low quality m/c 4. Unskilled Kansai machine Operator
		Unit-01	Short Pant (Stripe)	1. SMV increases because of Label make process added, i/s compound label 2. Achieve SMV more than Marketing SMV because of unskilled Kansai machine operator & rented Kansai m/c.	1. Production Manpower used more than Layout target Manpower 2. Frequent line layout change 3. Rented low quality m/c 4. Unskilled Kansai machine Operator

Feedback:

1. Manual operations need to be reduced.
2. Before changeover, required m/c with quality must be ensured.
3. Need to train operator & improve skillness
4. Unit-01 need to improve more by reducing helping operations(Exp: KYLIE N-SLIP V neck T-shirt Stripe). Unit-01 achieved efficiency 36% & Unit-02 achieved efficiency 51%
5. Style wise big volume sewing quantity but short time running in several lines, that`s why line average efficiency reduce. During line planning this factor should be considered.

Data Source:

1. DPR Report
2. CM from Merchandising