Project-EcoDrive Innovations: Production Efficiency Analysis

Case

Get Started

Ecodrive Innovations, a manufacturer of electronic bikes, seeks an evaluation of their production center's performance by comparing actual output with target output for the first six months of the year.

Objective

Production Center Performance: Assess the production performance of each production center and determine whether they achieved their overall and monthly targets.

Company-Wise Overview: Evaluate the company's production performance over the first six months and identify trends or areas of concern.

Data

Target Production Data: This dataset outlines the monthly production targets for electronic bikes to be produced by each production center over the first six months of the year.

Actual Production Data: This dataset outlines the actual monthly production of electronic bikes by each production center for the first six months of the year.

Target Production								
Production Center	Jan	Feb	Mar	Apr	May	Jun		
Bangalore	4600	3800	3700	3800	4100	4000		
Chennai	4700	4400	4400	4700	4800	4700		
Mumbai	3600	3700	4000	4100	4100	4200		
Delhi	2700	3000	3500	3800	4000	3400		
Kolkata	3800	4500	4700	4100	4200	4000		
Ahmedabad	2800	2900	2000	3500	4000	4000		
Jaipur	2500	2600	2900	3000	3500	3800		

Patna	2000	2500	2600	2000	2500	2900
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Actual Production								
Production Center	Jan	Feb	Mar	Apr	May	Jun		
Bangalore	4000	3500	4000	3500	4600	5000		
Chennai	4800	4900	5000	5200	5300	5600		
Mumbai	3000	4500	4000	3400	4000	4700		
Delhi	2300	3000	4200	3900	4200	3900		
Kolkata	3400	4000	4700	4100	4300	4800		
Ahmedabad	2200	2500	2500	3500	4000	4800		
Jaipur	2000	2300	2500	2600	2700	3000		

Production Overview						
Total Production	160400					
Number of Months	6					
Number of Production Centers	7					
Average Production per Month	26733.33333					
Average Production per Center	22914.28571					

Month-wise Production Analysis					
Month	Production				
Jan	21700				
Feb	24700				
Mar	26900				
Apr	26200				
May	29100				
Jun	31800				

Min Production	21700
Max Production	31800

Production Center-wise Analysis					
Production Center	Total Production				
Bangalore	24600				
Chennai	30800				
Mumbai	23600				
Delhi	21500				
Kolkata	25300				
Ahmedabad	19500				
Jaipur	15100				

Min Production	15100
Max Production	30800

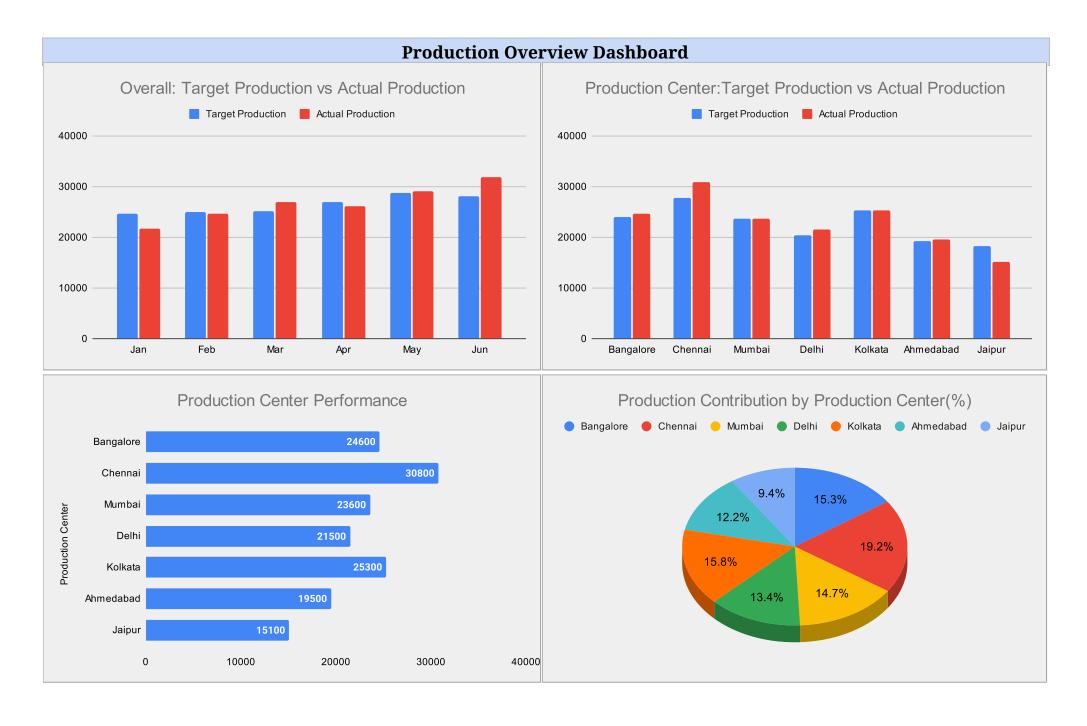
	Production Center Performance Analysis																	
			Target Pr	oduction					Actual Pr	oduction					Target	vs Actual		
Production Center	Jan	Feb	Mar	Apr	May	Jun	Jan	Feb	Mar	Apr	May	Jun	Jan	Feb	Mar	Apr	May	Jun
Bangalore	4600	3800	3700	3800	4100	4000	4000	3500	4000	3500	4600	5000	Target Missed	Target Missed	Target Achieved	Target Missed	Target Achieved	Target Achieved
Chennai	4700	4400	4400	4700	4800	4700	4800	4900	5000	5200	5300	5600	Target Achieved					
Mumbai	3600	3700	4000	4100	4100	4200	3000	4500	4000	3400	4000	4700	Target Missed	Target Achieved	Target Achieved	Target Missed	Target Missed	Target Achieved
Delhi	2700	3000	3500	3800	4000	3400	2300	3000	4200	3900	4200	3900	Target Missed	Target Achieved				
Kolkata	3800	4500	4700	4100	4200	4000	3400	4000	4700	4100	4300	4800	Target Missed	Target Missed	Target Achieved	Target Achieved	Target Achieved	Target Achieved
Ahmedabad	2800	2900	2000	3500	4000	4000	2200	2500	2500	3500	4000	4800	Target Missed	Target Missed	Target Achieved	Target Achieved	Target Achieved	Target Achieved
Jaipur	2500	2600	2900	3000	3500	3800	2000	2300	2500	2600	2700	3000	Target Missed					

Overall Performance Analysis							
Month	Target Production Actual Production Target vs Actual						
Jan	24700	21700	Target Missed				
Feb	24900	24700	Target Missed				
Mar	25200	26900	Target Achieved				
Apr	27000	26200	Target Missed				
May	28700	29100	Target Achieved				
Jun	28100	31800	Target Achieved				

Product Center Overall Performance							
Production Center	Target Production	Actual Production	Target vs Actual				
Bangalore	24000	24600	Target Achieved				
Chennai	27700	30800	Target Achieved				
Mumbai	23700	23600	Target Missed				
Delhi	20400	21500	Target Achieved				
Kolkata	25300	25300	Target Achieved				
Ahmedabad	19200	19500	Target Achieved				
Jaipur	18300	15100	Target Missed				

Overall Growth Trend								
Month	Actual Production	Growth Rate						
Jan	21700							
Feb	24700	13.82%						
Mar	26900	8.91%						
Apr	26200	-2.60%						
May	29100	11.07%						
Jun	31800	9.28%						

Growth Trends-Production Center											
Actual Monthly Production						Month-wise Production Growth%					
Production Center	Jan	Feb	Mar	Apr	May	Jun	Feb	Mar	Apr	May	Jun
Bangalore	4,000	3,500	4,000	3,500	4,600	5,000	-13%	14%	-13%	31%	9%
Chennai	4,800	4,900	5,000	5,200	5,300	5,600	2%	2%	4%	2%	6%
Mumbai	3,000	4,500	4,000	3,400	4,000	4,700	50%	-11%	-15%	18%	18%
Delhi	2,300	3,000	4,200	3,900	4,200	3,900	30%	40%	-7%	8%	-7%
Kolkata	3,400	4,000	4,700	4,100	4,300	4,800	18%	18%	-13%	5%	12%
Ahmedabad	2,200	2,500	2,500	3,500	4,000	4,800	14%	0%	40%	14%	20%
Jaipur	2,000	2,300	2,500	2,600	2,700	3,000	15%	9%	4%	4%	11%



Insights from Analysis									
Company Performance									
Details	Month	Total Production							
Highest Production Month	Jun	31800							
Lowest Production Month	Jan	21700							
Production Performance									
Details	Center	Total Production							
Best Production Center	Chennai	30800							
Underperforming Production Center	Jaipur	15100							

Report for Management

- 1 June has been the most productive month, achieving the highest production output with 31,800 units.
- 2 January recpords the lowest production output, with only 21,700 units produced.
- 3 The Chennai Production Center stands out as the top-performing facility, with a total production of 30,800 units.
- 4 The Jaipur Production Center has underperformed, managing to produce only 15,100 units, indicating an area of potential improvement.