

# Executive Presentation

To address the loss of customers due to increasing competition and protect the existing market share, we performed analysis over transaction data and market data for year 2015 in the following three areas:

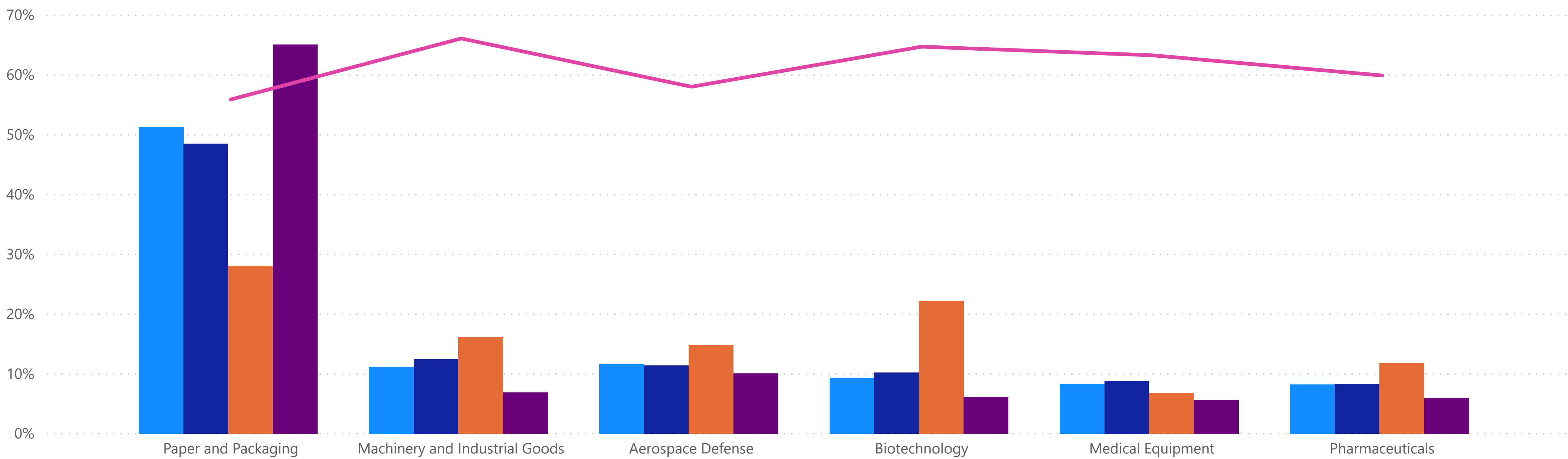
1. Markets/industries
2. Products
3. Divestment and its revenue impact

and have the following summary:

We should consider divest the worst product performer **chemical A** and the worst performing industry **Pharmaceuticals** and reinvest the money in the product with the highest gross profit margin - **chemical E** and the industry with the highest gross profit margin and biggest market, namely **Machinery and Industrial Goods**. The conservative estimation of the divestment impact on revenue is additional **\$4.5 million**.

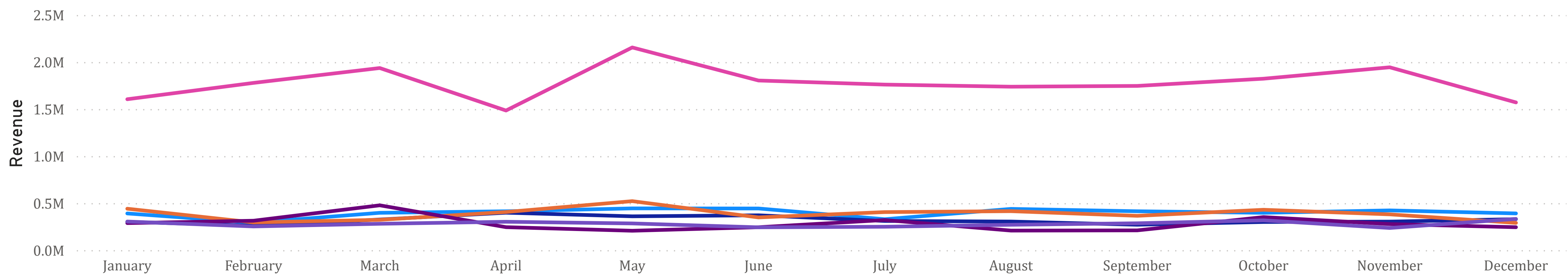
%GT Revenue, %GT Gross Profit, %GT Customer, %GT Quantity, Gross Margin by Business Type

%GT Revenue %GT Gross Profit %GT Count of Customer ID %GT Quantity Gross Profit Margin

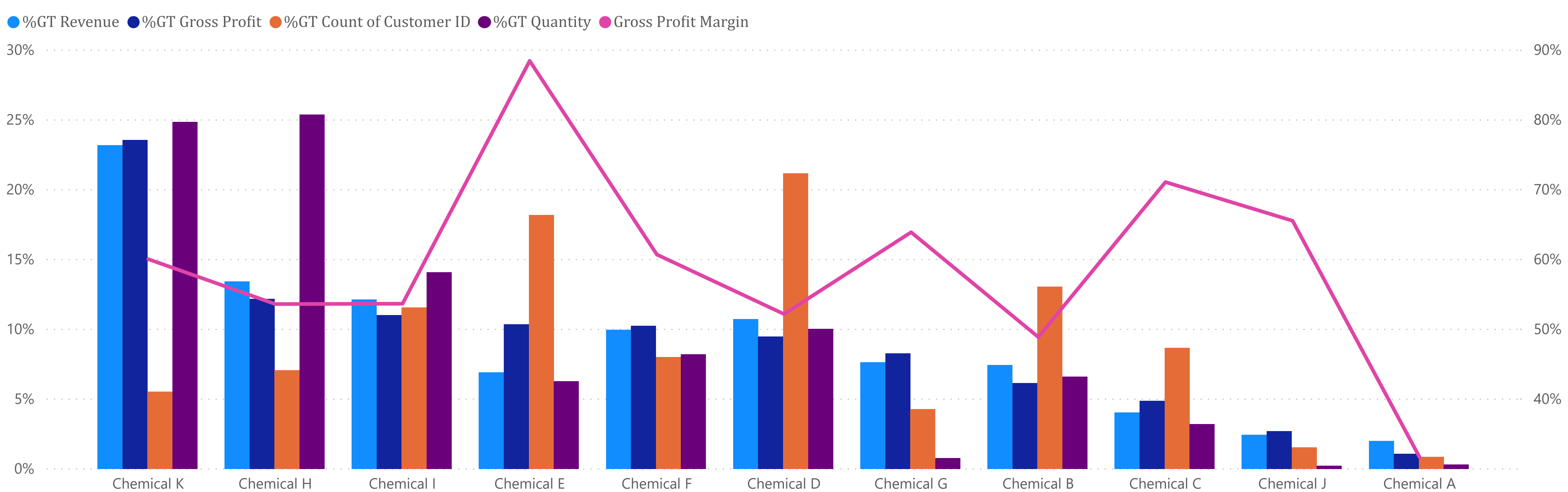


Revenue by Month and Business Type

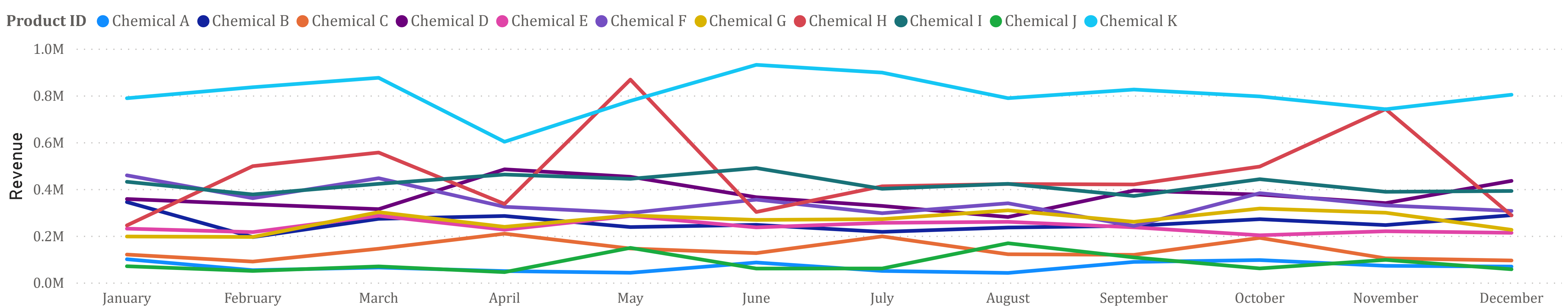
**Business Type** Aerospace Defense Biotechnology Machinery and Industrial Goods Medical Equipment Paper and Packaging Pharmaceuticals



%GT Revenue, %GT Gross Profit, %GT Customer, %GT Quantity, Gross Margin by Products



Revenue by Month and Product ID



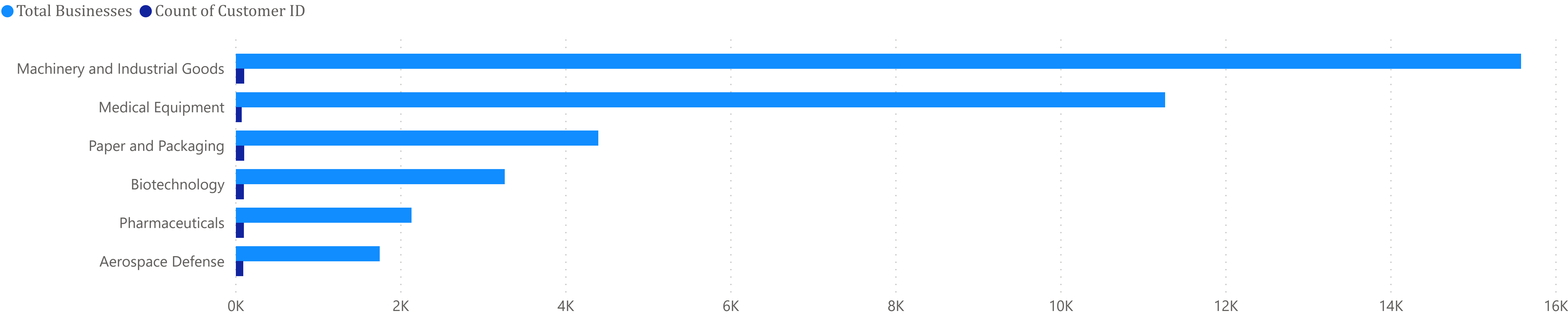
Gross Profit by Business Type & Product

Business Type	Chemical A	Chemical B	Chemical C	Chemical D	Chemical E	Chemical F	Chemical G	Chemical H	Chemical I	Chemical J	Chemical K	Total
Paper and Packaging	\$142,596	\$7,031	\$19,976	\$24,998	\$20,569	\$165,255	\$51,145	\$2,979,937	\$2,628,136	\$135,643	\$5,807,402	\$11,982,689
Machinery and Industrial Goods	\$75,771	\$355,653	\$333,160	\$446,097	\$379,821	\$772,872	\$299,143	\$5,724	\$62,586	\$374,712	\$94	\$3,105,634
Aerospace Defense	\$18,750	\$257,399	\$213,468	\$572,528	\$759,938	\$447,447	\$508,441	\$3,462	\$7,029	\$27,518	\$736	\$2,816,715
Biotechnology	\$3,756	\$264,515	\$115,670	\$679,023	\$781,155	\$36,649	\$598,433	\$7,918	\$14,237	\$19,952	\$12,191	\$2,533,500
Medical Equipment	\$15,932	\$197,069	\$333,922	\$269,635	\$219,116	\$851,422	\$226,994	\$404	\$7,035	\$71,403		\$2,192,930
Pharmaceuticals	\$9,035	\$439,009	\$186,421	\$351,398	\$399,995	\$257,488	\$359,494	\$12,277	\$2,853	\$40,942	\$10	\$2,058,922
Total	\$265,840	\$1,520,677	\$1,202,619	\$2,343,678	\$2,560,593	\$2,531,134	\$2,043,649	\$3,009,723	\$2,721,876	\$670,169	\$5,820,433	\$24,690,390

Gross Profit Margin by Business Type & Product

Business Type	Chemical A	Chemical B	Chemical C	Chemical D	Chemical E	Chemical F	Chemical G	Chemical H	Chemical I	Chemical J	Chemical K	Total
Machinery and Industrial Goods	57%	57%	75%	55%	90%	66%	65%	76%	57%	72%	87%	66%
Biotechnology	48%	48%	70%	56%	89%	63%	62%	82%	69%	57%	79%	65%
Medical Equipment	23%	54%	78%	64%	91%	58%	67%	52%	61%	60%		63%
Pharmaceuticals	31%	48%	69%	53%	89%	58%	63%	85%	60%	58%	56%	60%
Aerospace Defense	33%	40%	61%	43%	86%	62%	65%	76%	55%	58%	76%	58%
Paper and Packaging	26%	43%	68%	57%	90%	55%	66%	53%	54%	59%	60%	56%
Total	32%	49%	71%	52%	88%	61%	64%	54%	54%	66%	60%	59%

Number of Business in the Market vs Number of Customers by Business Type





- Assumption:
1. 2016 sales are consistent with 2015 (before divestment)
  2. chemical E and industry Machinery and industrial Goods demand are not yet saturated in 2016.

Row Labels	Average of GM %	Sum of Cost (total)	Sum of Revenue (total)	Move from A to E Revenue	Net Extra Revenue
Chemical A	32%	\$573,881	\$839,721	=A Cost/(1-E GM%)	=New E Rev- A Rev
Chemical E	88%	\$333,630	\$2,894,222	\$4,978,389	\$4,138,668

Column Labels								
Machinery and Industrial Goods				Pharmaceuticals				
Row Labels	Average of GM %	Sum of Cost (total)	Sum of Revenue (total)	Average of GM %	Sum of Cost (total)	Sum of Revenue (total)	Move from Phar to Mach Rev	Net Extra Revenue
Chemical B	57%	\$263,714	\$619,368	48%	\$484,832	\$923,841	\$1,138,691	\$214,850
Chemical C	75%	\$110,313	\$443,473	69%	\$84,079	\$270,500	\$338,011	\$67,510
Chemical D	55%	\$362,906	\$809,003	53%	\$310,608	\$662,005	\$692,418	\$30,412
Chemical E	90%	\$44,498	\$424,319	89%	\$47,309	\$447,304	\$451,126	\$3,823
Chemical F	66%	\$399,834	\$1,172,707	58%	\$186,204	\$443,692	\$546,132	\$102,440
Chemical G	65%	\$158,833	\$457,976	63%	\$209,819	\$569,314	\$604,989	\$35,675
Chemical H	76%	\$1,811	\$7,535	85%	\$2,114	\$14,391	\$8,794	(\$5,597)
Chemical I	57%	\$46,446	\$109,031	60%	\$1,873	\$4,727	\$4,397	(\$329)
Chemical J	72%	\$146,338	\$521,050	58%	\$29,395	\$70,337	\$104,664	\$34,327
Chemical K	87%	\$14	\$109	56%	\$8	\$18	\$61	\$43
Total							\$3,889,282	\$483,154

If all Pharmaceuticals costs spend on Chemical E in Marchinery and Industrial Goods

**\$9,526,665**

- Disadvantage:
1. Too risky for putting all reinvestments in one product.
  2. Might exceeds current Chemical E production capacity resulting in extra costs in machine purchases, labor or maintanance.

# Conclusion:

## Markets/Industries:

1. **Paper and Packaging** has the most revenue (\$21.4M) and gross profit (\$12.0M) while having the smallest gross profit margin (56%).
2. **Pharmaceuticals** has the least revenue (\$3.4M) and gross profit (\$2.1M) while its gross profit margin (60%) ranks 4th among the 6 industries.
3. **Machinery and Industrial Goods** has the third most revenue (\$4.7M) and second most gross profit (\$3.1M) while its gross profit margin ranks 1st (66%).

## Products:

1. **chemical K** has the most revenue (\$9.7M) and gross profit (\$5.8M).
2. **chemical E** has the highest profit margin (88%).
3. **chemical A** ranks the last for revenue (\$0.8M), gross profit (\$0.3M) and gross margin (32%).

## Divestment:

1. Since **chemical A** and **Pharmaceuticals** performed the worst in product and industry respectively, we should consider divest them and put the money saved in **Machinery and Industrial Goods** which has the highest gross profit margin and most business (potential customers) in the market as well as in **chemical E** which has the highest gross profit margin.
2. If we clean up **chemical A** in 2016 and spend the money saved on **chemical E**, it will bring us additional **\$4 million** revenue. At the same time, If we clean up industry **Pharmaceuticals** and spend the money saved on **Machinery and Industrial Goods** (proportionately on each related products except A), we will have another **half million** as additional revenue, assuming 2016 sales are consistent with 2015 with chemical E and industry Machinery and industrial Goods demand are not saturated.