

Business Analysis Report

1. Overview and Recommended Strategy Positioning
 - Local Cost Leadership
 - Concentric Diversification
 - Competitive Advantage Analysis
 - KPI and Compensation
2. Segment Evaluation and Quantitative Modeling
 - Segment Opportunity
 - Inventory Optimization
 - Predictive Modeling
 - Association Analysis
 - Marketing: Bundle-Sale, Cross-Sale, Trendy products
3. Growth Opportunity based on SWOT and PEST Analysis
 - Branding
 - Customer Satisfaction
 - Team Performance
 - Underlying Addressable Market
 - Expansion

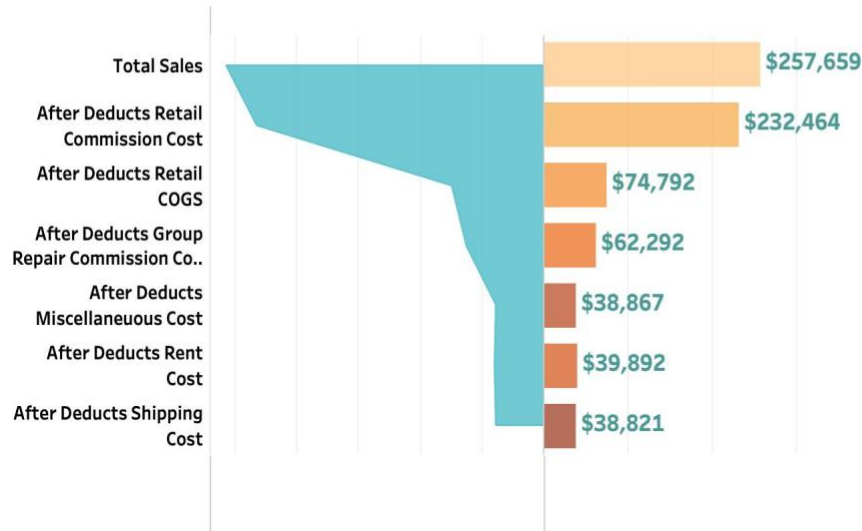


Overview and Strategy Positioning

Net Shareholder Equity via Funnel-Bar Chart

Final Net Income to Business Owners: \$38,821

NOI 15.07%



Segment Profit Ranking

Category	2022	
Wireless Service	\$11,838	
Device Repair	\$7,463	
Refurbished Phone	\$7,299	
Tech Accessories	\$4,264	
Brand New Phone	\$4,040	
Software Service	\$1,482	
TV Box	\$1,263	

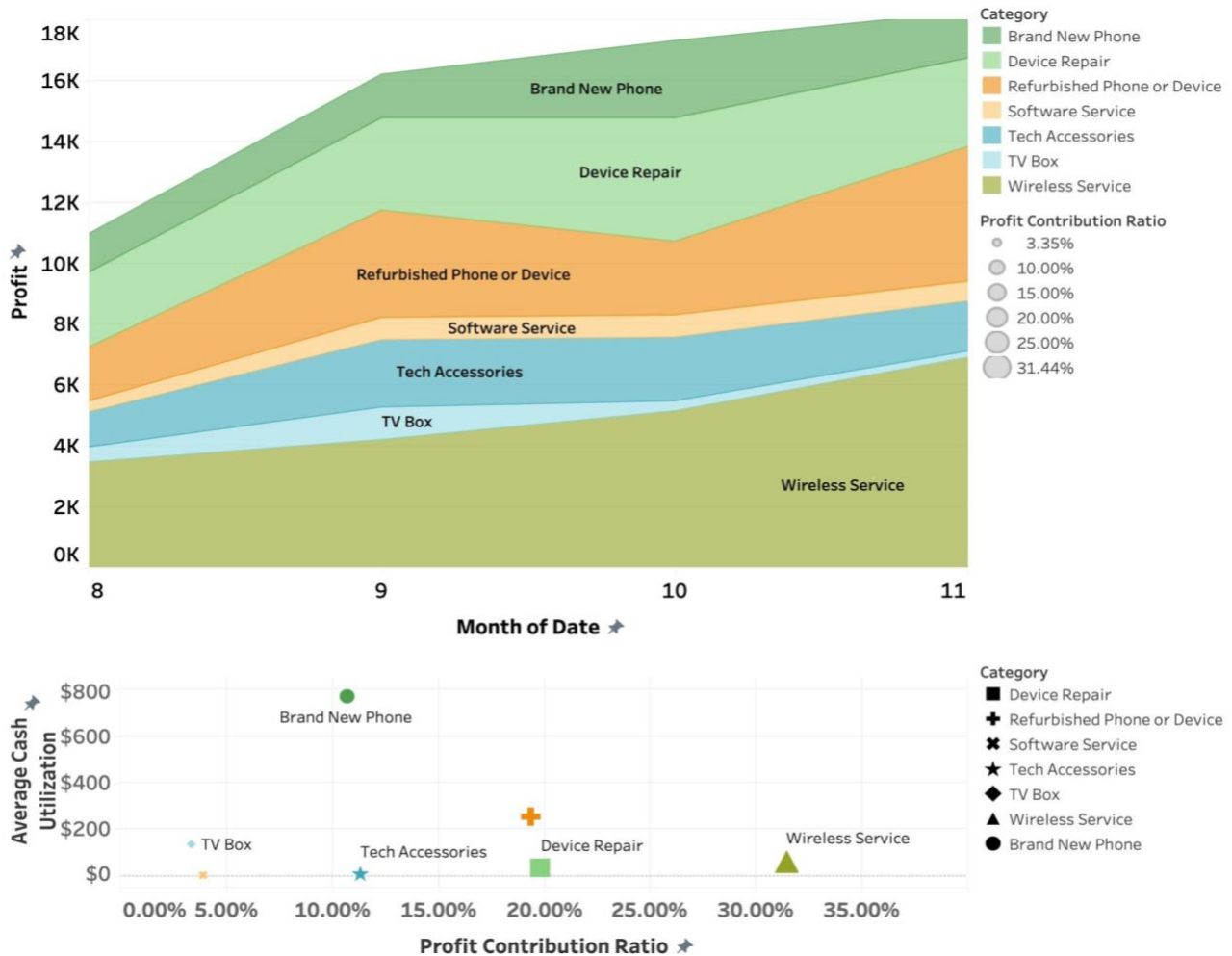
Monthly Sales Performance



Monthly Profit Trend by Segment



Executive Overview Dashboard 1-1



Executive Overview Dashboard 1-2

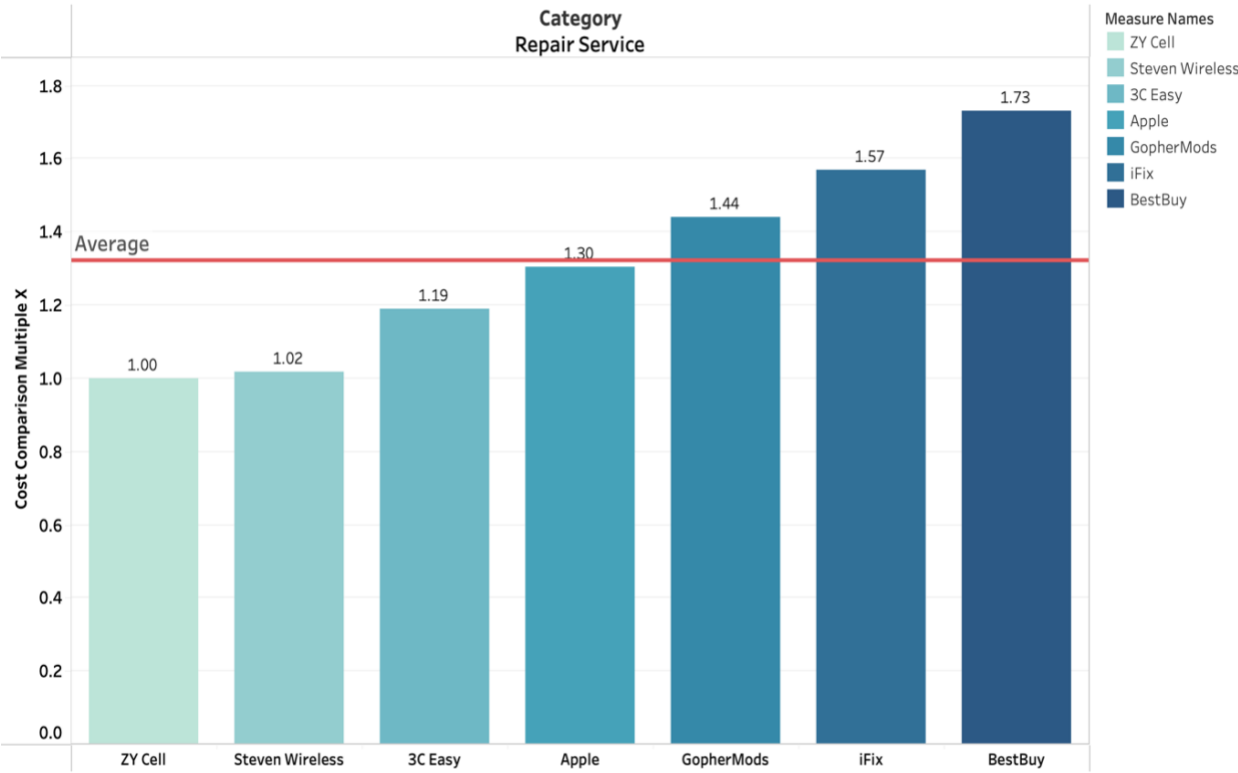
The client's company is engaged in wireless service industry, and it adopts a full-service business model: it generates revenue primarily from two categories of service, which are retailing business and repair service. Under the category of retailing, the subcategories are wireless service, digital accessories, brand new phones, refurbished phones, TV Box, and software service.

During the selected time window, client achieved a total of \$257,659 sales revenue in observed branch office and such results outperformed industry peers. After excluding cost of goods sold, SG&A and miscellaneous expenses, the net income was \$38,821, which is 15.07%. The decent NOI proved that the full-service model was effective but there are multifaceted

aspects that should be improved or optimized for competitive advantage and higher profitability. Among all product and service segments, wireless service, device repair and sales of refurbished phones contribute the most net profits. By analyzing the costs of product and service that client offers in August, we conducted comparable price analysis to identify potential strategy positioning that suit for client's company. **Based on the competitor price ratio bar plot shown as below, BCR suggests that client should implement local-cost-leadership strategy for growing market share, because such competitive advantage is built upon client's long-term cost-effectiveness of its in-house developed products.**

Meanwhile, Management should consider redesign the KPIs as incentive initiatives to ensure inventory turnover and sales quantity can be maintained on ideal level to maximize profits. 20% - 30% sales commission is a widely adopted industry standard for incentivizing sales performance and thus client's company is encouraged to wisely redesign KPI and compensation structure to match or even outperform industry standards.

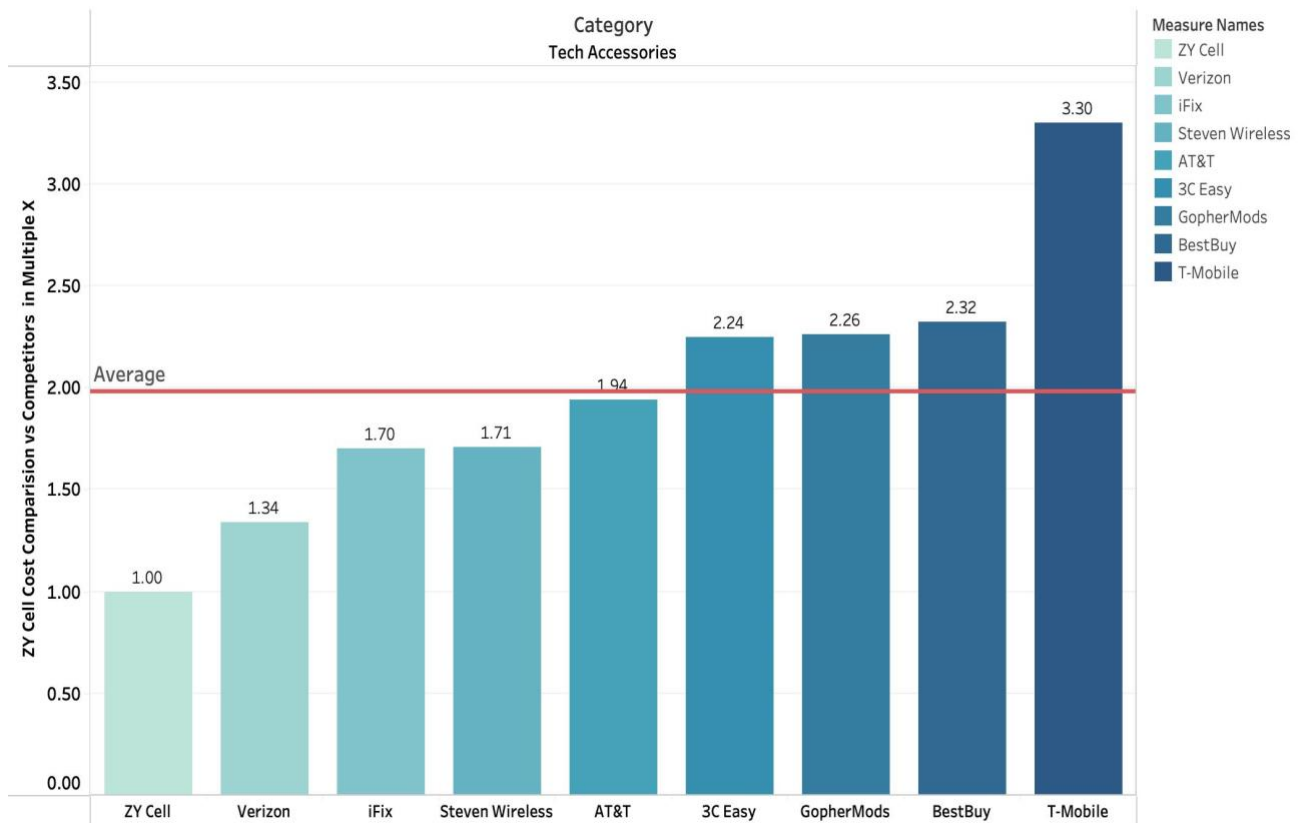
Strategy Positioning - Repair Service - Cost Leadership



3C Easy, Apple, BestBuy, GopherMods, Steven Wireless, ZY Cell and iFix for each Category. Color shows details about 3C Easy, Apple, BestBuy, GopherMods, Steven Wireless, ZY Cell and iFix. The view is filtered on Category, which keeps Repair Service.

Repair Service Price Ratio Bar plot sorted in Ascending Order 2-1

Tech Accessories - Strategy Positioning- Cost Leadership

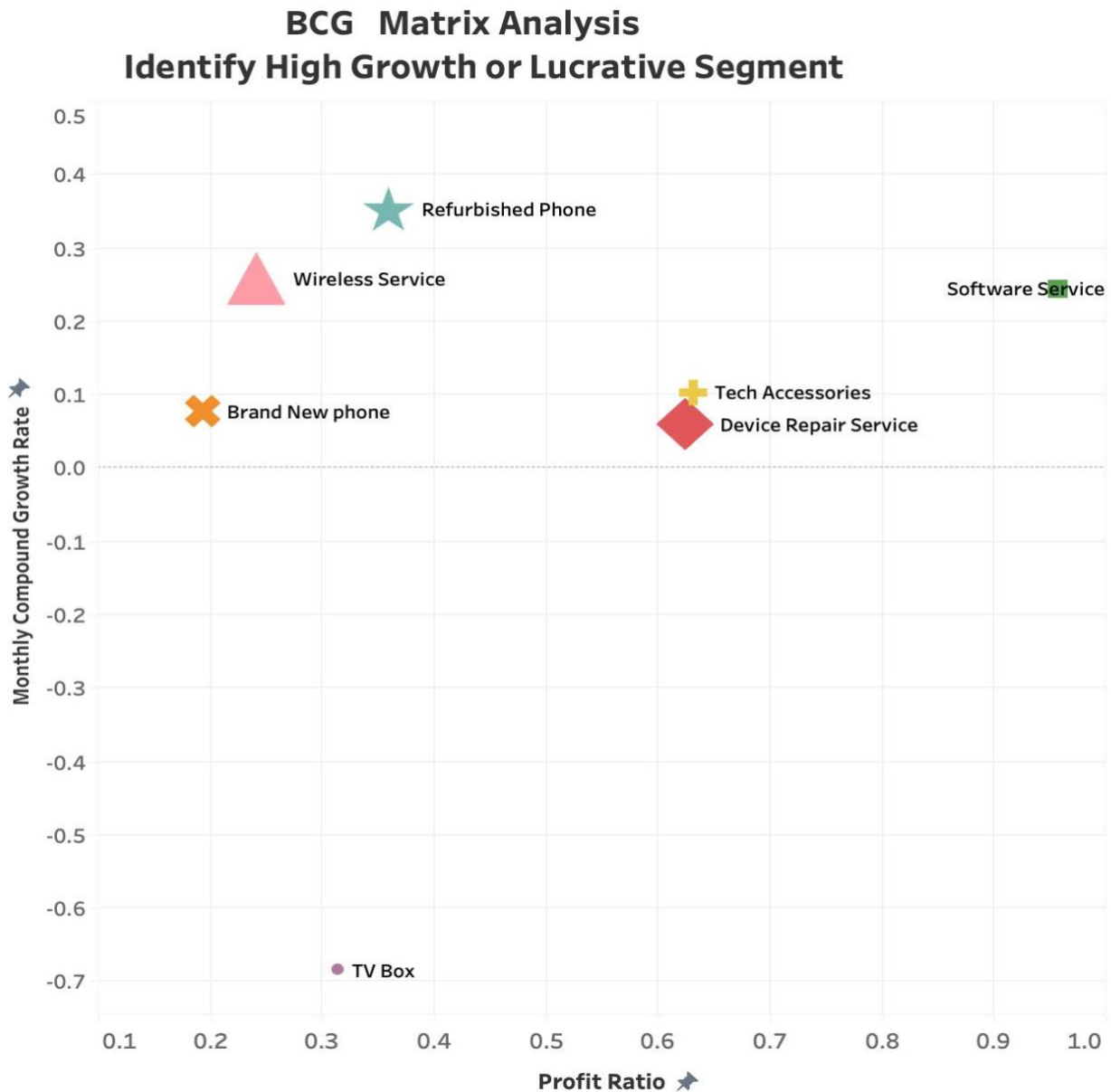


3C Easy, AT&T, BestBuy, GopherMods, Steven Wireless, T-Mobile, Verizon, ZY Cell and iFix for each Category. Color shows details about 3C Easy, AT&T, BestBuy, GopherMods, Steven Wireless, T-Mobile, Verizon, ZY Cell and iFix. The view is filtered on Category, which keeps Tech Accessories.

Digital Accessories Produce Price Ratio Bar Plot in Ascending Order 2-2

By grouping consulting client's selling price for its service and products by category, we can see that the price of digital accessories and repair service are consistently the lowest among local competitors; this allows us to identify the feasibility to implement and further insist on local cost-leadership strategy that aligns with my client's reality for growing market share. By combining a more reasonable sales KPIs metrics and local cost-leadership, we expect to see client's expanding market share from September to November 2022.

Business Model and Segment Evaluation



BCG Matrix for Segment Performance 3-1

Based on the matrix evaluation, we found underperforming products and service are software service, brand new phone, and TV box.

The evaluation metric encompassed 3 aspects:

- 1) profit contribution ratio
- 2) monthly growth rate
- 3) segment profit margin.

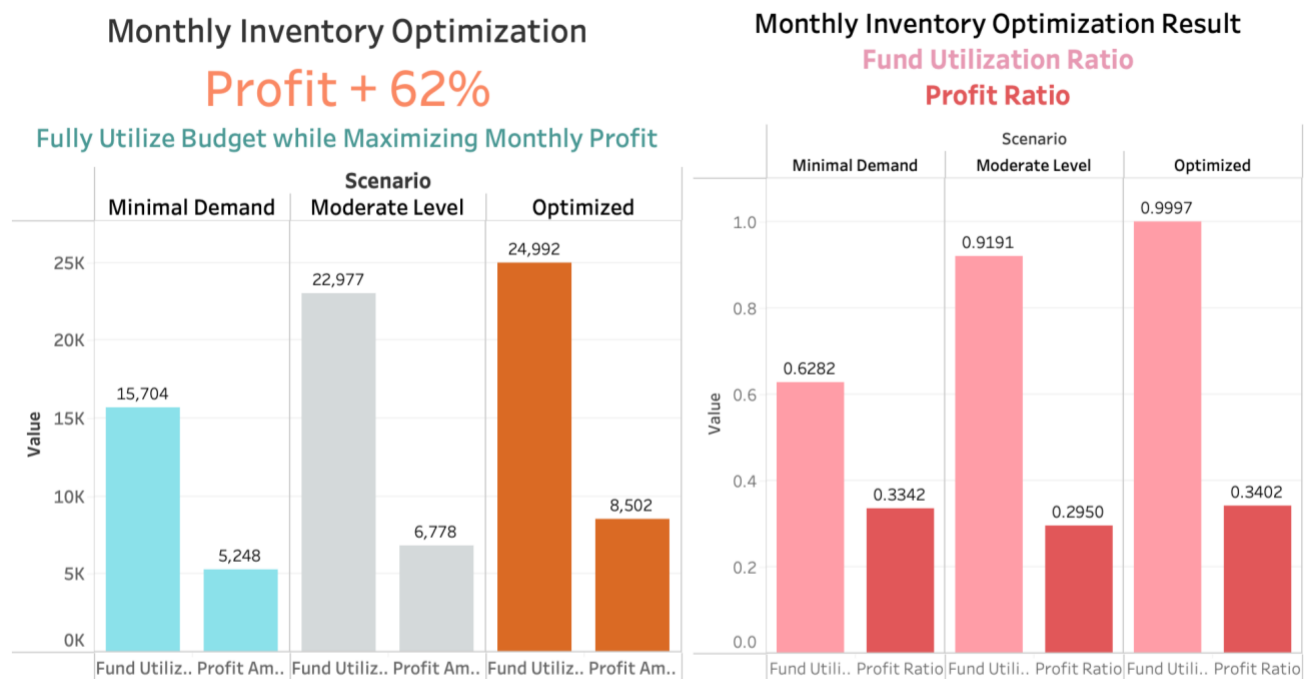
The problem of software service is in profit contribution. Although it demonstrates high net profit with 96% average and moderate growth rate at around 25%, the sales volume of software service is only 4%. To optimize this segment, we recommend the concentric diversification of software service by rolling out music or movie related service, IT knowledge session, system file download and Photoshop service, etc.

The problem with brand new phone selling is that the cash utilization is high whereas the profit contribution ratio is low. This sheds light on an underlying opportunity to implement cross-sale or bundle-sale to increase net profit per transaction; or client should consider optimize the monthly inventory purchase schedule based on cash at hand.

For TV box, we can see that both profit contribution and monthly growth rate are lowest among all segments. Firstly, this is partially because clients' customer base is primarily 'late majority' or 'Laggards' type when it comes to TV Box adoption. Secondly, the frequently iterated nature of the TV Box Model and incoming release of new generation persuades customers from buying current model, which causes slow liquidity and low demand. Three possible business actions to take based on the situation:

- 1) Further increase marketing spending to display and promote TV box products to attract the conservative customer base.
- 2) Get in alternative TV BOX products with low price and minimize the price concern
- 3) Drop the TV Box product segment to reinvest money into refurbished cellphone or software service

By utilizing limited funds to purchase a basket of products that can generate most net profit. A simplex-LP model is implemented to simulate inventory purchase and the visualization is shown below. Key quantitative input considerations are monthly projected demand, segment monthly compound growth rate, product cost, product profit and fund budget. Three levels of scenarios are visualized to show the profit level.

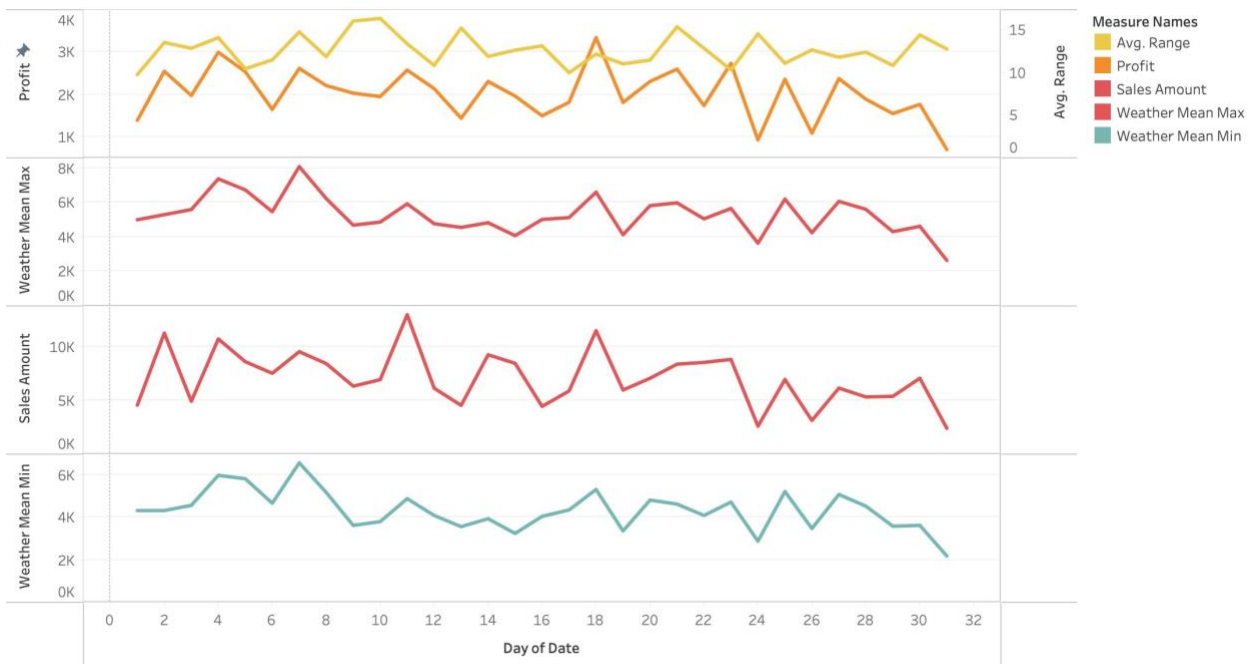


Inventory Combination Optimized								
Inventory Scenario	Prepaid Lyca							
	Phone Case	Unlimited Card	iphone 8 Used	13 Pro Max Used	13 256 GB	SE 2 Used	Lyca 12 GB	iphone14 Plus
Minimal	30	15	12	6	7	5	16	2
Moderate	80	10	12	12	10	6	10	3
Optimized	55	18	16	14	8	14	20	3

Inventory Optimization Table and Scenario Visualization 4-1

Based on model results, the optimized inventory combination is shown in the table with potential profit increase of 62%. Fund utilization is projected to increase to 99.9%, which indicates that the client can minimize fund waste for support business operation activities.

Daily Temperature and Sales Performance

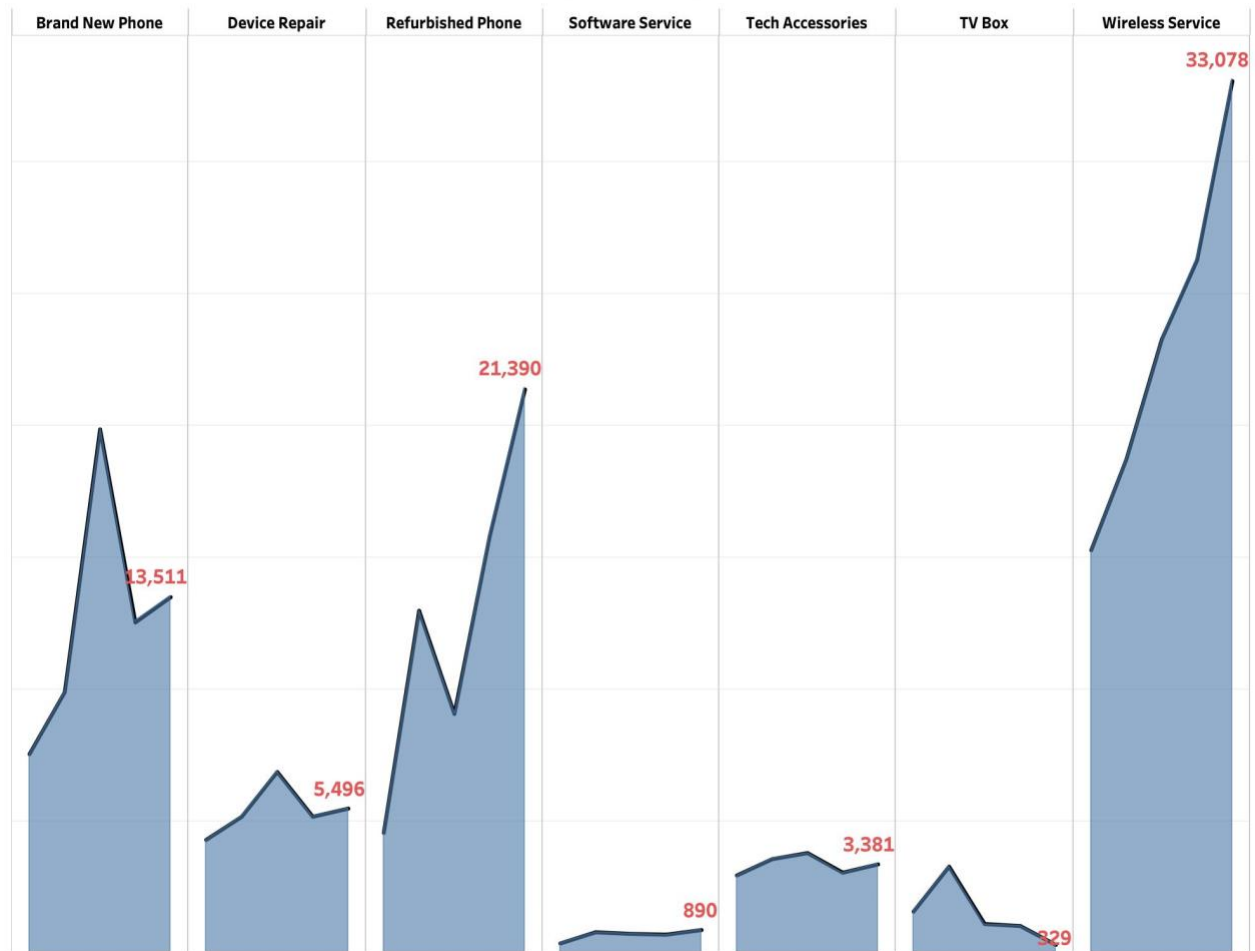


Predictive Modeling Daily Temperature vs Profit Trend 5-1

By running simple linear regression and examining modeling result, we found that the daily weather temperate is statistically significant for predicting client's daily profit level. Significant positive relationship in linear models are:

- 1) Daily Max Temperature (independent) vs Daily Profit Level (Predictive)
- 2) Daily Min Temperature (independent) vs Daily Profit Level (Predictive)
- 3) Daily Temperature Range (independent) vs Daily Profit Level (Predictive)

**Sales Monthly Forecast of December 2022
based on Compound Monthly Growth Rate**

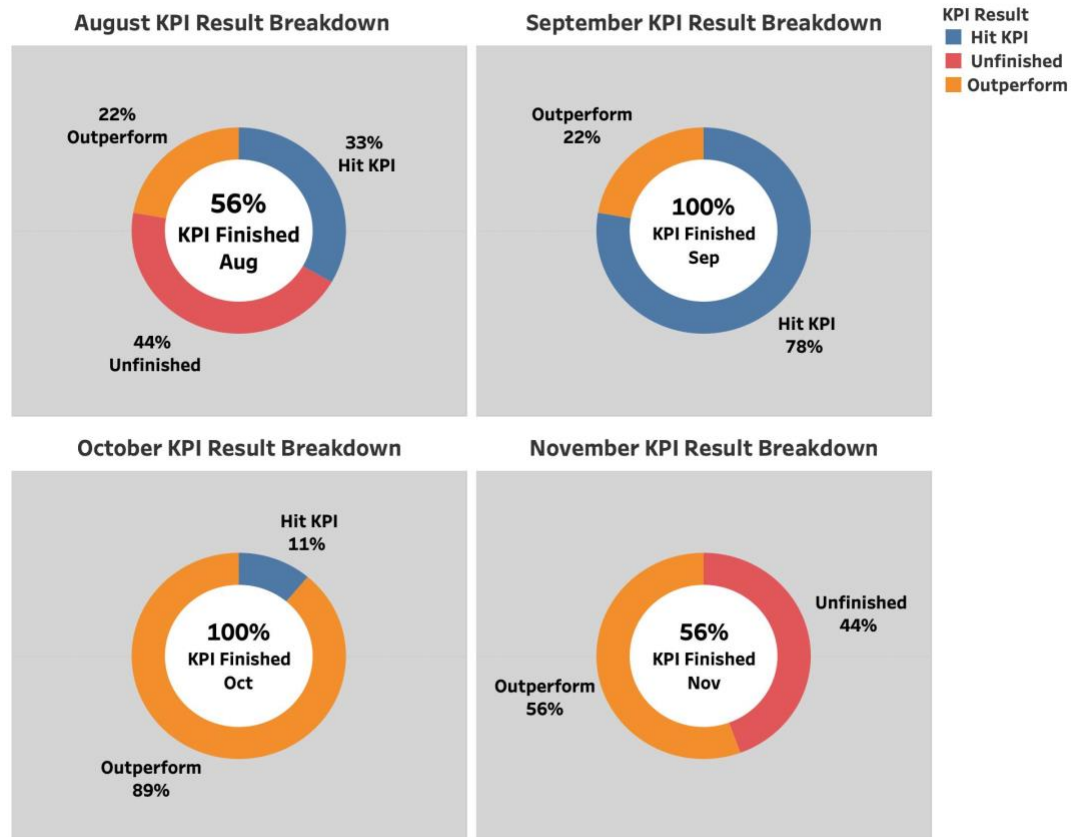


Monthly Sales Forecast by Segment Based on CAGR for Next Month 6-1

Segment performance forecasting line chart indicates that the sales of wireless service, brand new phone and refurbished phone continuously strong in December with expected sales amount of \$33,078, \$13,511 and \$21,390 respectively. The TV Box segment is the only segment that can foreseeably decrease. Client should adjust its current operating strategy for TV Box segment.

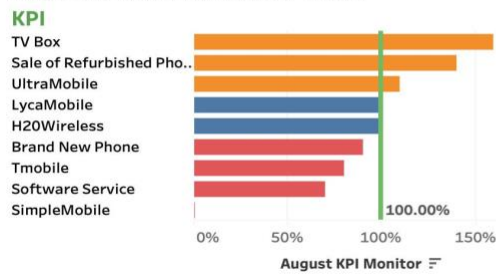
Finally, we analyze all available transaction records and identify several marketing opportunities:

- (1) Cross Sale: Phone case & Protective glass, Charger and Cable, Brand New Phone and Charger and Earphones
- (2) Bundle Sale: iPhone 8/SE and Phone Case, 4 Month Prepaid Card
- (3) Trendy Products: iPhone 8 and iPhone SE II, iPhone 13 (256 GB)

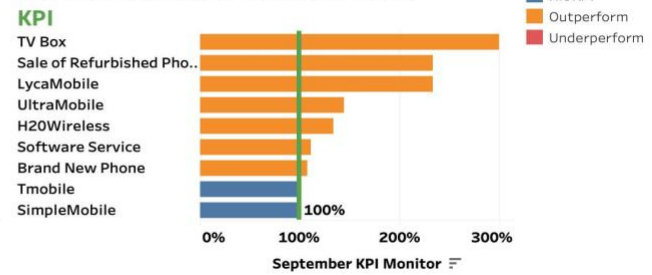


Growth Opportunity based on SWOT and PEST Analysis
KPI Donut Chart 7-1

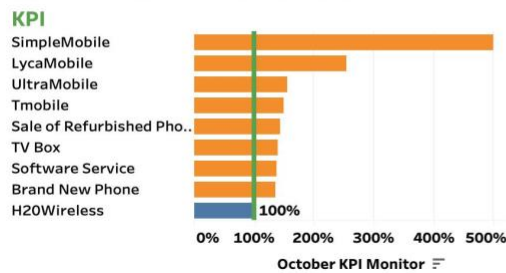
August Retail KPI Monitor Chart



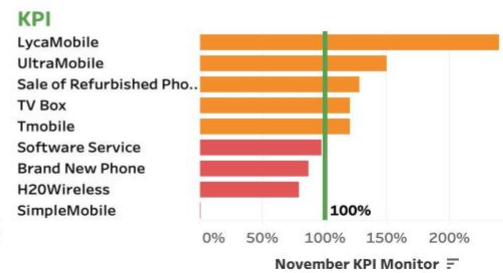
September Retail KPI Monitor Chart



October Retail KPI Monitor Chart



November Retail KPI Monitor Chart



KPI Segment Performance Analysis 7-2

Based on KPI donut chart visualization and segment performance, we recommend sales team focus on improving the performance of H20 wireless service Activision, sales of brand-new phone, software service and Simple Mobile Activision. This will enhance team performance, increase company profits and strengthen collaborative business relationships with third party suppliers.

Avg. Cost to Profit Ratio

0.115 6.983

Profit Contribution Ratio

0.02% 33.13%

Cost to Profit Ratio

Company	Date	
	2022	
SimpleMobile		6.983
UltraMobile		6.563
LycaMobile		5.720
3rd Retailer		5.107
H20		4.716
Apple		3.390
HomeX		3.160
Unblock		2.809
Fun TV		1.571
Tmobile		1.540
H20		1.326
Samsung		1.262
Motorola		1.235
SanDisk		1.196
TCL		0.955
InCell		0.823
Huawei		0.748
Kiko Wireless		0.590
Chris Retail		0.580
I&H Group INC		0.566
Shein		0.419
XiaoMi		0.250
ZY Cell		0.115

Profit Contribution Ranking by Company

	2022
Apple	33.13%
LycaMobile	16.03%
InCell	11.77%
UltraMobile	7.48%
I&H Group INC	6.96%
ZY Cell	5.35%
Samsung	5.01%
H20	3.36%
Tmobile	2.59%
Unblock	2.11%
Kiko Wireless	1.79%
HomeX	1.27%
SimpleMobile	0.84%
Huawei	0.66%
TCL	0.45%
SanDisk	0.27%
Motorola	0.26%
Chris Retail	0.21%
3rd Retailer	0.12%
Fun TV	0.11%
H20	0.07%
XiaoMi	0.06%
Shein	0.02%

Cost-to-Profit Ratio Analysis by Supplier and Profit Contribution Ranking 8-1

The objective of this analysis is to identify high cost - low profit service or product, and spot chances to trim service offerings or double down in certain areas. On supplier side, it worth considering further strength business relationship or terminate contracts.

Based on cost-effectiveness evaluation, wireless service's ratio is generally high due to low discount promotion provided by suppliers, which is acceptable. However, SimpleMobile is considered far less desirable due to high cost but low profit, and thus client should consider drop simple mobile service. H20 and T-mobile wireless service plan deserve further promotion due to high profit potential. TV Boxes including HomeX, Unblock and Fun TV demonstrate high cost-to-profit ratio, which reinforce the prior viewpoints that TV Box business should be re-examined.

InCell, Kiko wirereless and I&H Group Inc are lucrative suppliers that deserve further collaboration. Due to low profit contribution, TCL, SanDisk,

Motorola, Chris Retail, Fun TV, H2O, Xiaomi and Shein brand phone cases should be terminated for better cost-to-profit structure.

To further grow market share, client's company is encouraged to further capitalize on senior-citizen group, which is considered an underserved community for tech services.

To enhance brand recognition and achieve organic sales growth, team performance should be sustained on ideal level with combined efforts of KPI incentive and compensation design. Company working uniform and website design can be implemented to enhance market recognition.