The Inventory Management
—The Case of Fun Sports

THE 4 : Leancy Alita Jennifer Morgan

content

Solution Strategy

—— Question1

—— Question2

PART 1

Question1




Q1:

It can be seen from Appendix 6 that the unit purchase cost of the detachable large-size slide increases significantly during the peak sales season. Could you please explain why the unit purchase cost will increase in May and October? Zhang Ying said, "It might be more beneficial to the company if these orders exceeding the normal purchase volume can be produced in advance," do you think she is right? Please re-compile the purchase budget according to her ideas, and then calculate the increased revenue for the company according to the re-compiled procurement budget. (Assuming that the company’s capital cost is 10%, the unit product cost under normal circumstances is RMB1,628.)

Why the unit purchase cost will increase in May and October?

Detachable large-size slide	
Production cost	RMB1628 / piece
Additional emergency cost	RMB 200 / piece
Normal capacity	400 piece

Due to the production capacity of the foundry is limited.

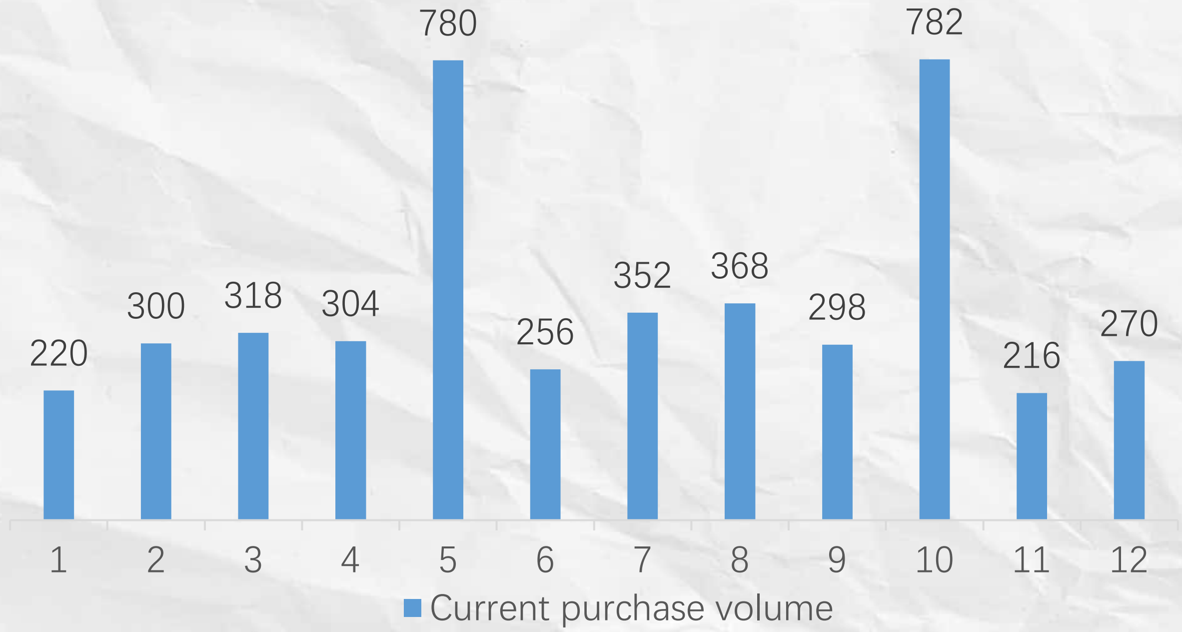
Suppose the purchase quantity is X pieces, and the unit purchase cost is Y yuan:

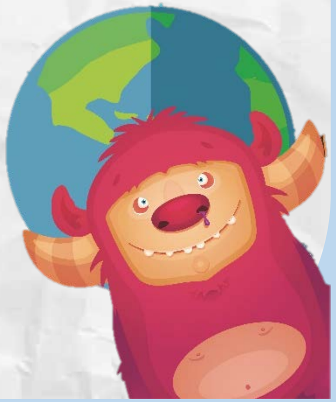
① if $0 \le X \le 400$， $Y=1{,}628$；

② if $X>400$， $Y=\frac{1628X+200*(X-400)}{X}=1{,}828-\frac{80{,}000}{X}$；

This unit purchase cost is bound to be higher than 1,628 yuan. As the output increases, the unit purchase cost also increases.

The current procurement volume in May and October was 780 pieces and 782 pieces respectively, which exceeded the normal output. It required additional fees, resulting in an increase in unit procurement costs.



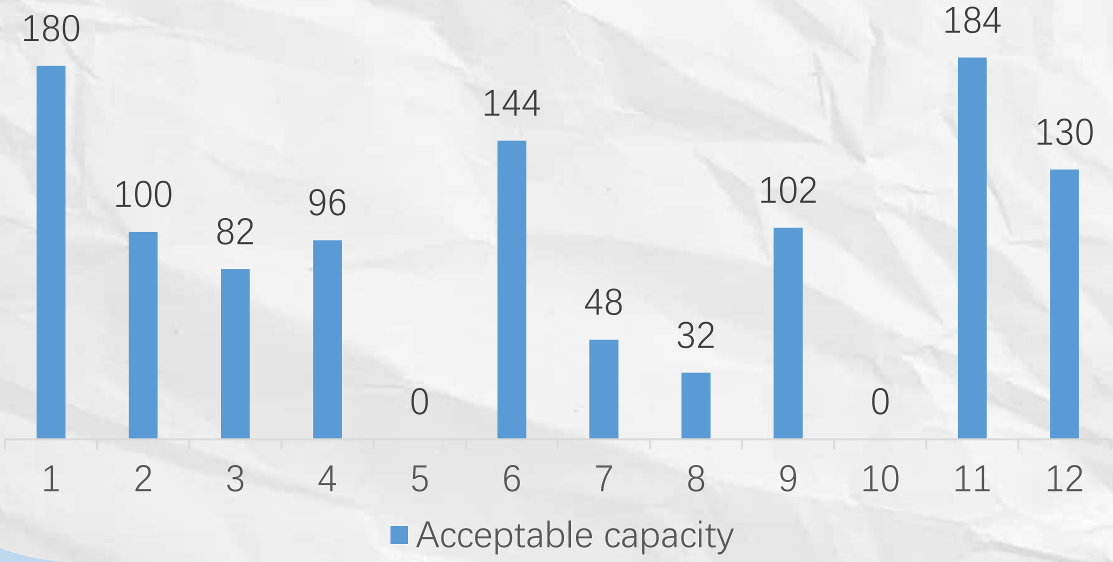


Is it might more beneficial to the company if these orders exceeding the normal purchase volume can be produced in advance?

Detachable large-size slide	
inventory cost	RMB 30 yuan/piece/month
capital cost	10%
	13.57 yuan/piece/month（1628*10%/12）

The multiples of the extra payment cost of single excellent and the cost of single item inventory and capital are:

200/(30+13.57)=4.59



The part exceeding the normal purchase volume of the contract will be apportioned to the additional production volume within the first 4 months (including the 4th month).

Changes in earnings

- The normal purchase volume exceeding the contract before May is 780-400=380, and the advance production is arranged according to the amount exceeding the current purchase volume from January to April:

Month	1	2	3	4	Total quantity
Quantity	102	100	82	96	380

Total cost before volume adjustment for May:

1628*780+200*（780-400）=1,345,840

Volume-adjusted total cost for May:

102*4*43.57+100*3*43.57+82*2*43.57+96*43.57+780*1628=1,312,013

Changes in earnings

- From June to October, the normal purchase volume exceeding the contract is 782-400=382, and 326 pieces can be produced in advance within June-September :

Month	6	7	8	9	Total quantity
Quantity	144	48	32	102	326

Total cost before volume adjustment for October:

1628*782+200*（782-400）=1,349,496

Volume-adjusted total cost for October:

144*4*43.57+48*3*43.57+32*2*43.57+102*43.57+782*1628+200*56=1,322,896

(56 of them are the difference between 782 and 726, and the quantity could not be arranged in advance)

Changes in earnings

The increased earnings from January to October are:

1,345,840+1,349,496-1,312,012-1,322,896=60,427

Therefore, Zhang Ying's statement is correct. And it can increase the income of the enterprise by 60,427 yuan.

The adjusted procurement budget table is as follows:

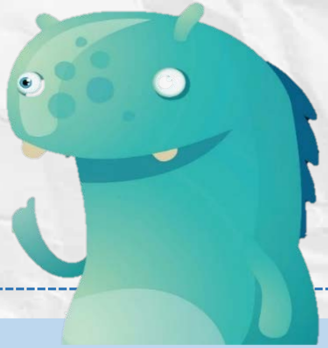
Procurement Budget Sheet

Month	1	2	3	4	5	6	7	8	9	10	11	12	Sum
Forecast sales	220	260	310	320	300	720	320	360	370	280	726	270	4456
Beginning inventory	208	208	248	256	240	720	256	288	296	224	726	216	3886
Ending inventory	208	248	256	240	720	256	288	296	224	726	216	216	3894
Current purchase volume	322	400	400	400	400	400	400	400	400	456	216	270	4464
Unit cost (yuan)	1628	1628	1628	1628	1628	1628	1628	1628	1628	1652.56	1628	1628	1630.51
Purchase amount (×10,000RMB)	52.42	65.12	65.12	65.12	65.12	65.12	65.12	65.12	65.12	75.36	35.16	43.96	727.86

PART 2

Question2



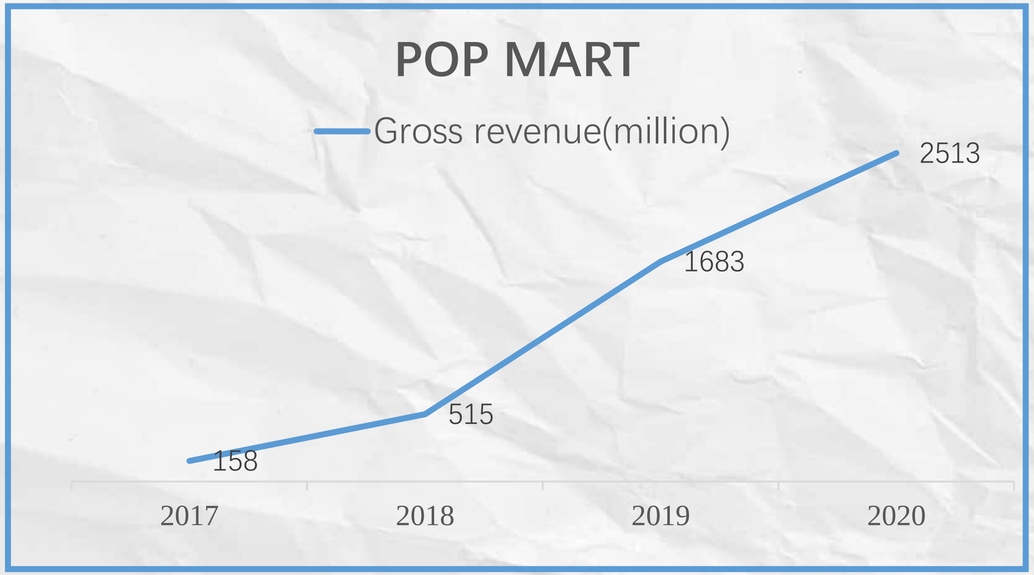



Q2:

According to your experience and the information in this case, please analyze the advantages and disadvantages of production outsourcing. If the company still chooses production outsourcing, please use the case data or collect successful cases from other companies to help FS propose a plan to improve the issues in production outsourcing.

Blind Box First Strand" POP MART

Founded in 2010, POP MART is one of the largest and fastest growing trendy toy companies in China. Within a short period of ten years, the gross profit and sales of POP MART are growing at an incredible speed.



POP MART‘s operating costs
Cost of goods from third-party manufacturers
Purchase cost of third-party products
Design and licensing fees, taxes and surcharges paid to artists and IP suppliers

With intellectual capital as the core, through production outsourcing, POP MART makes full use of external resources to achieve maximum benefits with less investment.

The reasons for the success of POP MART

- IP incubation and operation
- Thinking highly of user experience and focusing on details
- Production model of sales forecast
- Long-term relationship with OEM

small and medium-sized enterprises:

- employee sharing
- “renting and purchasing” office equipment
- human resources outsourcing
- network marketing business outsourcing
  - …

asset-light operation models:

- advantages - production costs; asset and income structure; core competitiveness
- disadvantages - product quality; dependence on outsourcers; potential competitors

the production outsourcing of FS

resource utilization

core competitiveness

overall profitability

Insufficient capacity of outsourcers → unit cost rising

Incomplete process management → product quality problem

Decreasing in gross profit margin

Improvement plan

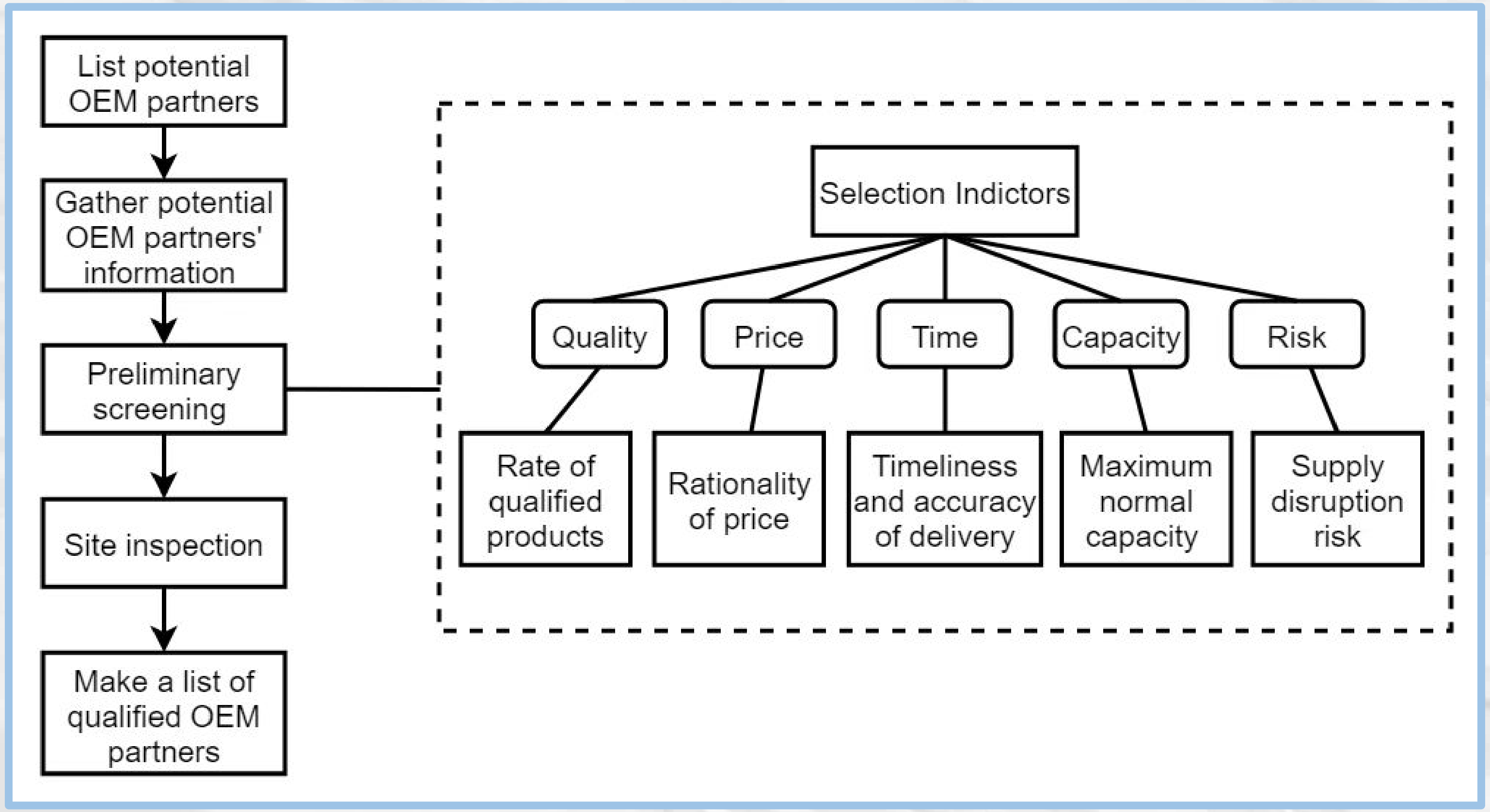
sound organizational structure

- ERP system.
- outsourcing management system

outsourcer management

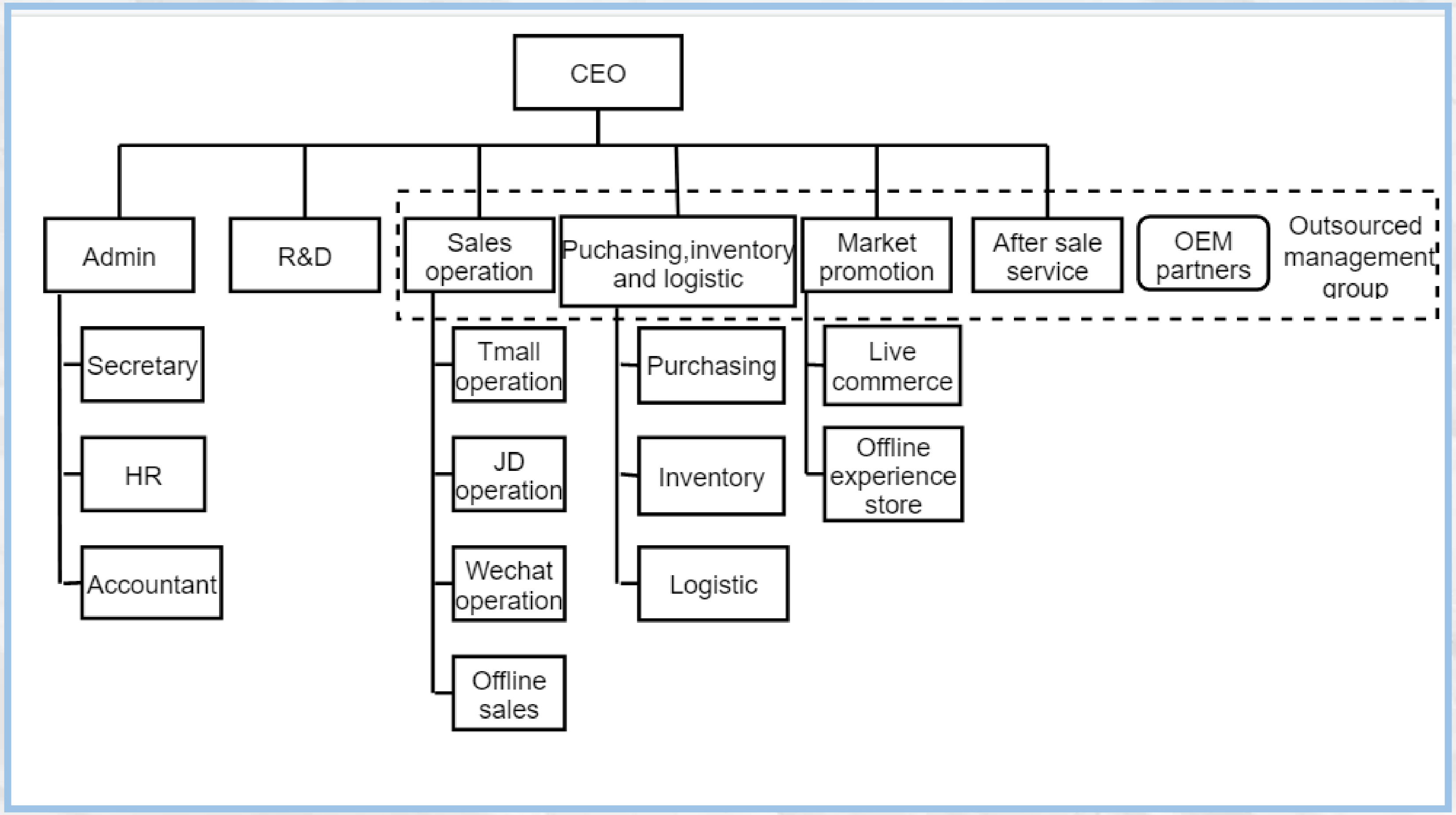
- outsourcer selection
- incentive mechanism
- outsourcer performance appraisal

Outsourcer selection indicators and flowchart

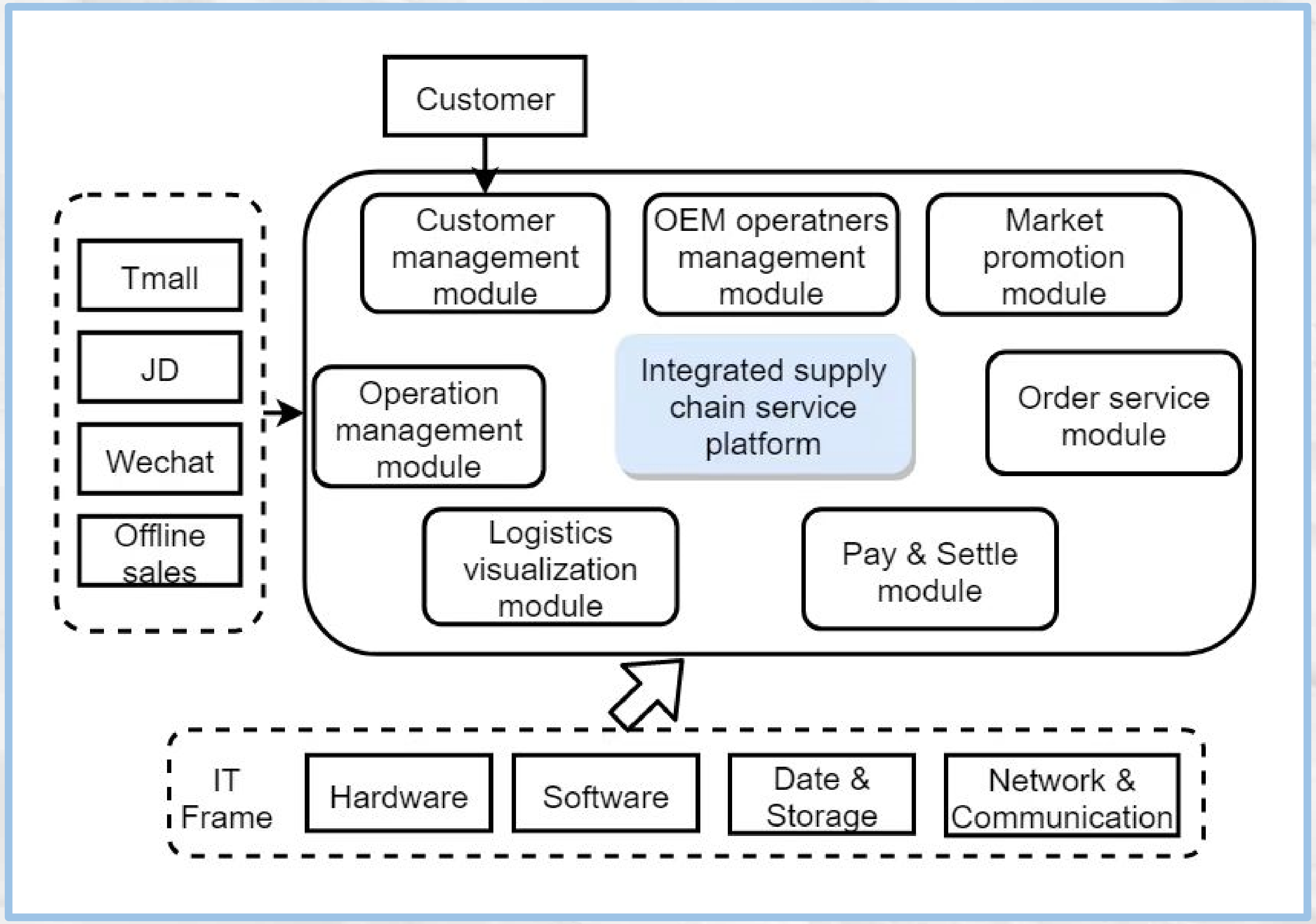


We choose 5 indictors to choose the right company.

new organizational structure



Setting up an ERP system for comprehensive quality control and logistics tracking.



Recommendation for Fun Sports

01 Increasing R&D investment and strengthening core competitiveness.

02 Promoting and designing products based on consumer experience

03 Diversified omni-channel sales network to enhance consumer reach.

04 Strengthening supply chain management to optimize overall benefits.

THANKS！