

Cost and Benefit Analysis

C-Sub

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- Benefit Item
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Estimation Process

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Cash Flow



1 Item Identification

Cost item

Purchase

M & O

Others

1 Item Identification

Cost item

Purchase

(per year)

Why 8?

- Quarter subscription fee
- Eight delivery per year



Lip product (lip product unit price * User * 8)

Average prices from our investigate in Olive Young, Hwaha, Zamface = ₩ 11,118.25 per product

Olive Young's commission ratio = 45% (<http://theviewers.co.kr/View.aspx?No=1628494>)

8 products per year, then total price = ₩ 11,118.25 * 8 = ₩ 88,946

Sum vendor take = ₩ 88,946 * (1 - 45%) = ₩ 48,920.3

'Cosub' need to pay more than Olive Young to vendors to have advantages!

So, we decided to pay them ₩ 50,000 per a year, ₩ 6,250 per product.

[cf\) slide #12](#)

1 Item Identification

Cost item

Purchase

(per year)



Package material (Package unit price * User * 8)

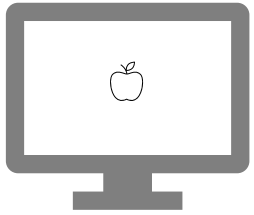
* Package unit price = ~~¥~~ 217

1 Item Identification

Cost item

M & O

(per year)



Hardware (iMac * 6 + NAS storage)
 $= 5,780,000 * 6 + 13,100,000 = 47,780,000$



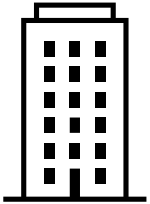
Data (Tip of personal color expert + provider)
 $= (10,000 + 10,000) * 10,000$
 $= 200,000,000$

1 Item Identification

Cost item

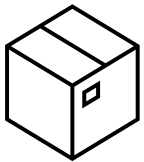
M & O

(per year)



Facility (Deposit 25,000,000, Monthly rent 2,280,000)

* Gangnam-gu, Seoul



Delivery charge (2,500 * User * 8)

1 Item Identification

Cost item

M & O

(per year)



Developer 4 person



Manager 2 person



Salaries $(70,000,000 * 6 \text{ person}) = 360,000,000$

Marketing Cost (Total of commission from vendor * 0.15)

1 Item Identification

Cost item

[가격 계산기 | Microsoft Azure](#)

M & O

(per year)

SW Operating (Virtual machine, Database, App service, Git)

| | |
|--------------------|-----------|
| Virtual Machine | 219,693 |
| Azure SQL Database | 537,059 |
| App Service | 78,837 |
| Git | 166,608 |
| Total(Month) | 1,002,197 |



Total (year)
: 12,026,364

1 Item Identification

Cost item

Others

(per year)

* Woori Bank : 3.41%

Interest (Debt * Debt interest rate)

Internet, Electricity = 200,000 + 300,000 = 500,000

Tax (Taxable income * Progressive tax rate)

(* Taxable income = GI – OE – D)

1 Item Identification

Benefit Item

Vendor Commission

Subscription Fee

1 Item Identification

Benefit Item

Vendor Commission

(per year)



Subscription Fee - Delivery Fee – Packaging - Purchasing product

1 Item Identification

Benefit Item

Vendor Commission

(per year)



| | |
|------------------------------------|---|
| Cosmetics price from vendor | ¥ 50,000 |
| Delivery cost (twice in a quarter) | ¥ (2,500 * 8) = 10,000 |
| Package cost | ¥ (217 * 8) = 1,736 |
| Subscription fee per quarter | ¥ 17,000 |
| Subscription fee per year | ¥ (17,000 * 4) = 68,000 |
| Cosub profit | ¥ 6,284 = (68,000 – 50,000 – 10,000 – 1,746) |
| Cosub profit ratio | 6,264 / 68,000 = 9.21% |

1 Item Identification

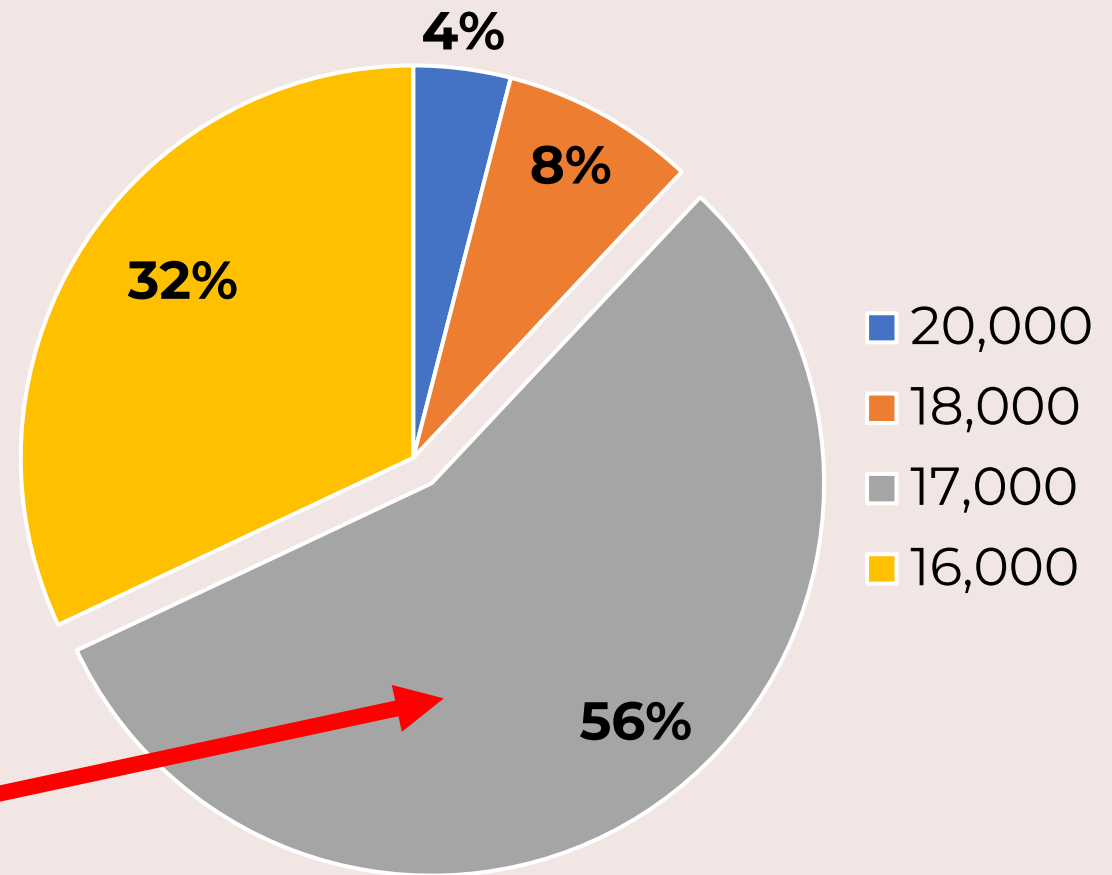
Benefit Item

< Subscription Fee >

* CVM (Contingent Valuation Method)

Q, AI 기술로 퍼스널 컬러를 진단 받고, 이를 바탕으로 추천 받은 립 제품들을 체험해볼 수 있는 화장품 구독 서비스가 출시되었습니다. 45일에 1개의 립 제품을 제공해, 1회 구독 시 90일 동안 2개의 립 제품을 제공해드립니다. 해당 서비스를 위해 얼마의 구독료를 지불하고 싶나요?

~~₩~~₩17,000



1 Item Identification

Benefit Item

Subscription Fee

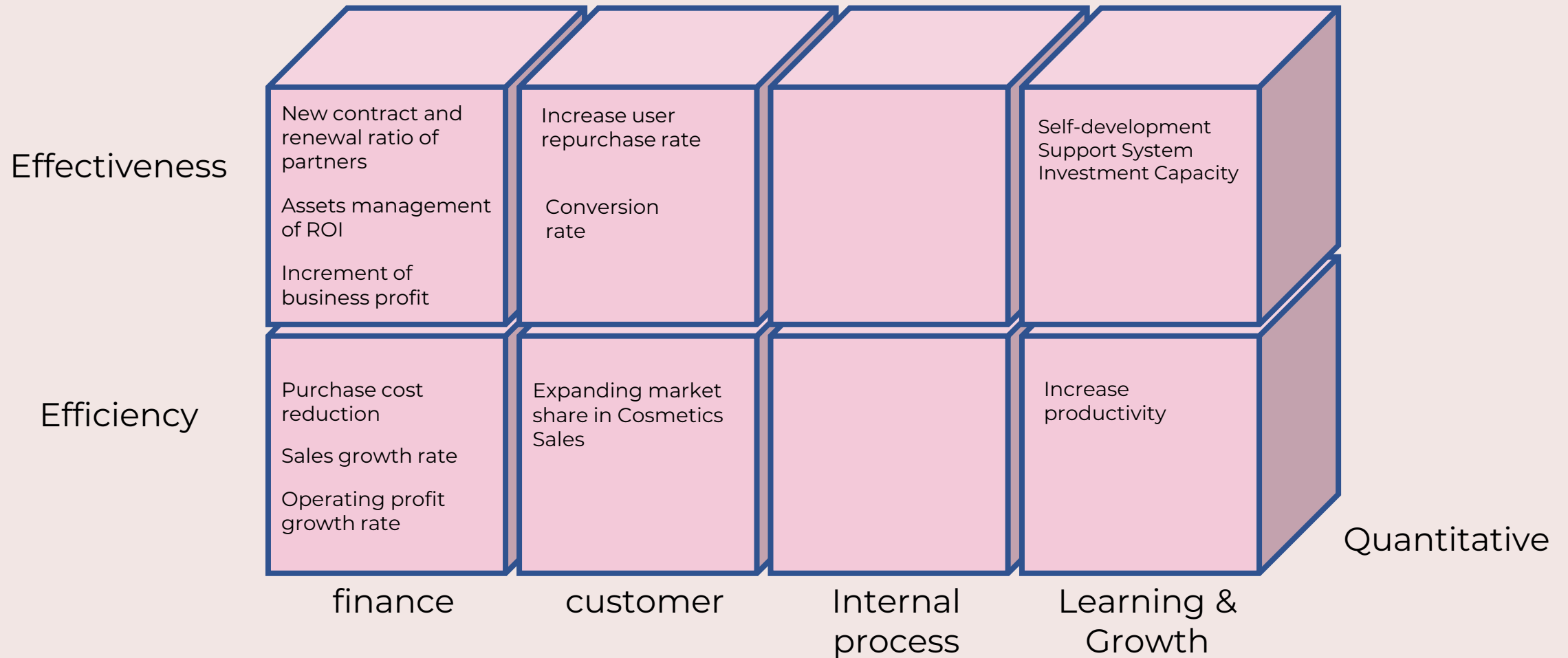
(per year)



1 User = (Quarterly charge) * (12 month / quarter)
= 17,000 (Won) * 4 = 68,000 (Won)

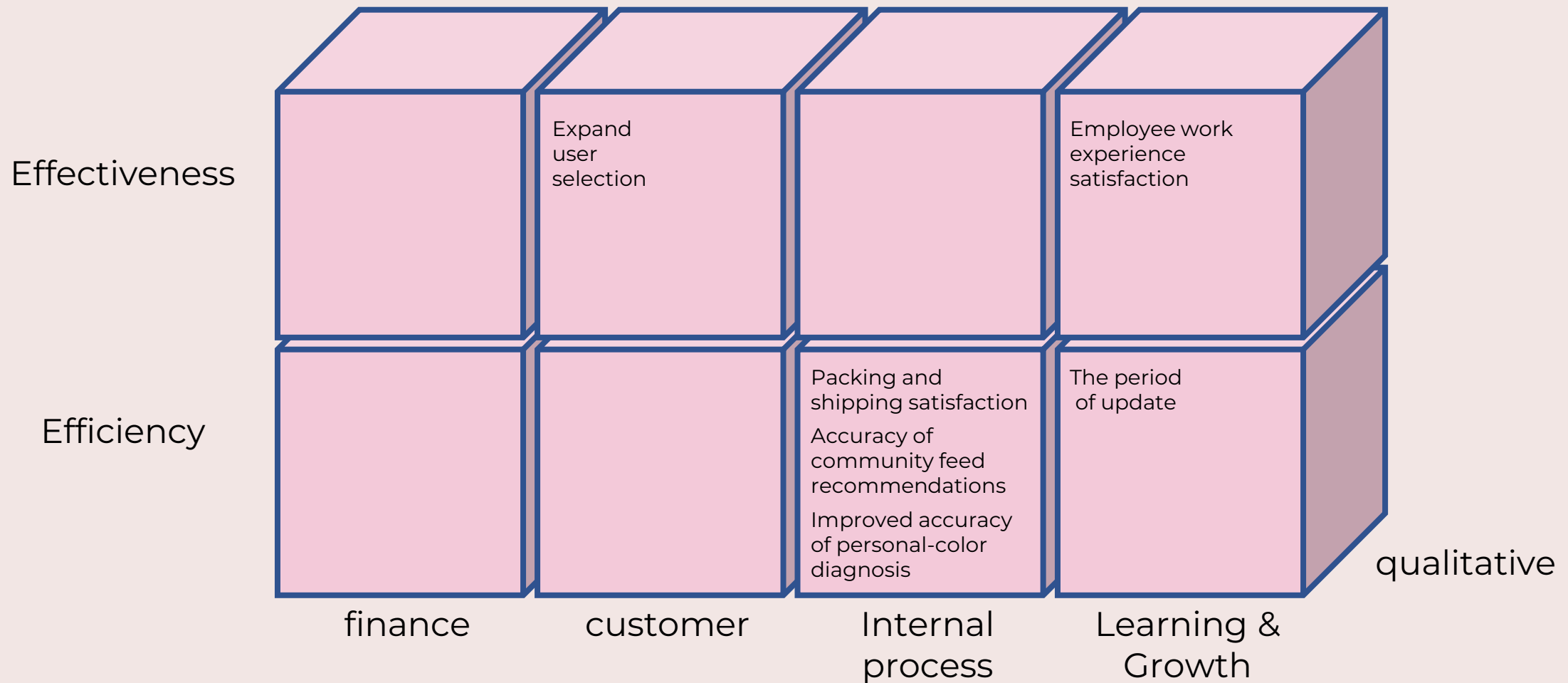
1 Item Identification

IT Performance Framework



1 Item Identification

IT Performance Framework



1 Item Identification

Estimated Income Statement

► **First cost** ◀

| | |
|----------------------|-------------|
| iMac | 34,680,000 |
| Nas Storage | 13,100,000 |
| Internet Registering | 200,000 |
| Data | 200,000,000 |

Total : 247,980,000

1 Item Identification

Estimated Income Statement

► Depreciation item ◀

| | |
|-------------|------------|
| iMac | 34,680,000 |
| Nas Storage | 13,100,000 |

Using Straight Line function
Period : 10 year

1

Item Identification

Estimated Income Statement

► Debt ◄

| | |
|------------------|-------------|
| First cost | 247,980,000 |
| Rate | 3.41% |
| Year | 10 year |
| Repayment period | 1 year |

1 Item Identification

Estimated Income Statement

► Growth rate - Subscribers ◀

► Why the number of subscribers is **629,191** in year 6?

N = Percentage of people who **have Not received personal color diagnostic** experience

F = Percentage of people **who have Failed to experience** buy cosmetic in online shop

A = Number of **downloads of Amore Pacific application** in 2021

$$\mathbf{N \times F \times A = 629,191}$$

► Why did we refer to **AmorePacific's** number of downloads?

: **AmorePacific is the company that has the largest share** of the cosmetics market

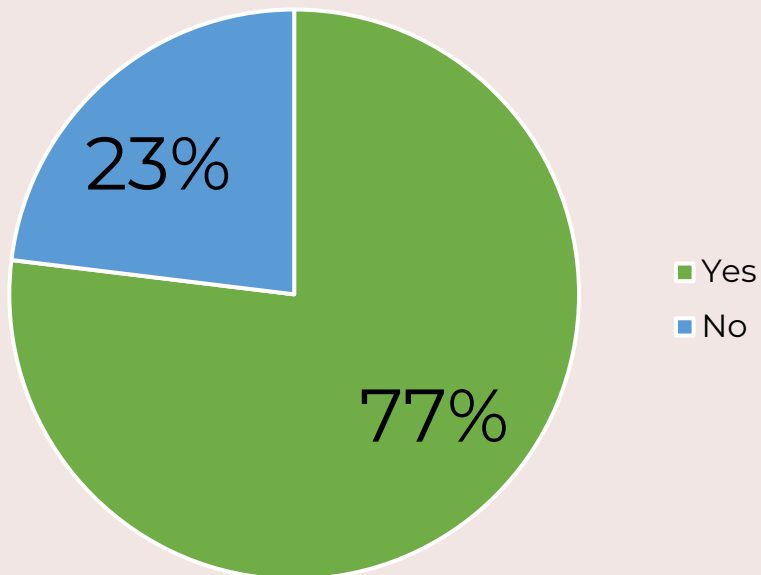
► Except for six years, the number of subscribers in other years reflected **Cosub's growth rate**.

1

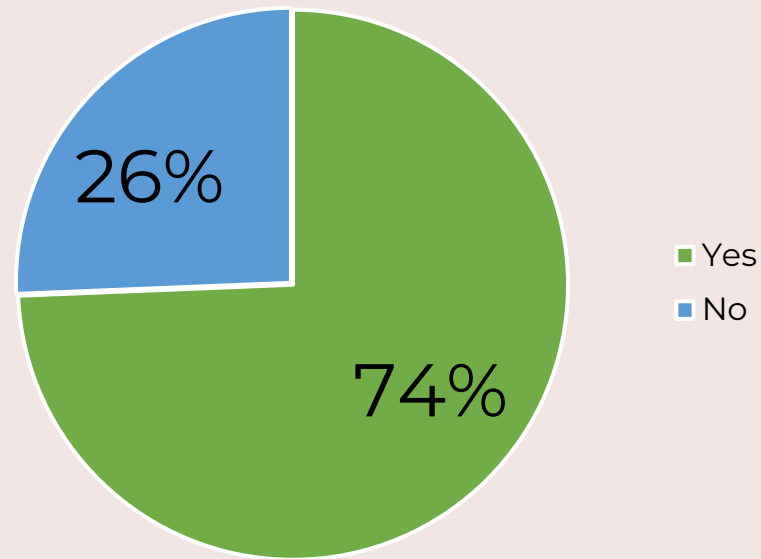
Item Identification

N

Q1. 퍼스널 컬러를 진단 받아본 경험이 있나요?

**F**

Q2. 온라인에서 색조 화장품을 구매했을때,
예상과 다른 색상을 구입한 적이 있으신가요?
(ex : 예상한 것보다 채도가 더 낮았던 경험, 사진으로 본 것보다 매
트한 촉감이었던 경험, 기대한 것 이상으로 밝은 색이었던 경험 등)



Item Identification

► Growth rate - affiliated cosmetics company ◀

- ▶ Number of **affiliated cosmetics company** in Year 0
: 500
- ▶ Why is the growth rate of cosmetics companies affiliated with COSUB decreasing from the 6th year?
: Because it is close to **4,750**,
the largest number of cosmetics companies affiliated with COSUB.
- ▶ Why is the maximum number of affiliated cosmetics companies 4,750?
: The **total number of brands in Olive Young is 4,750.**

1

Item Identification

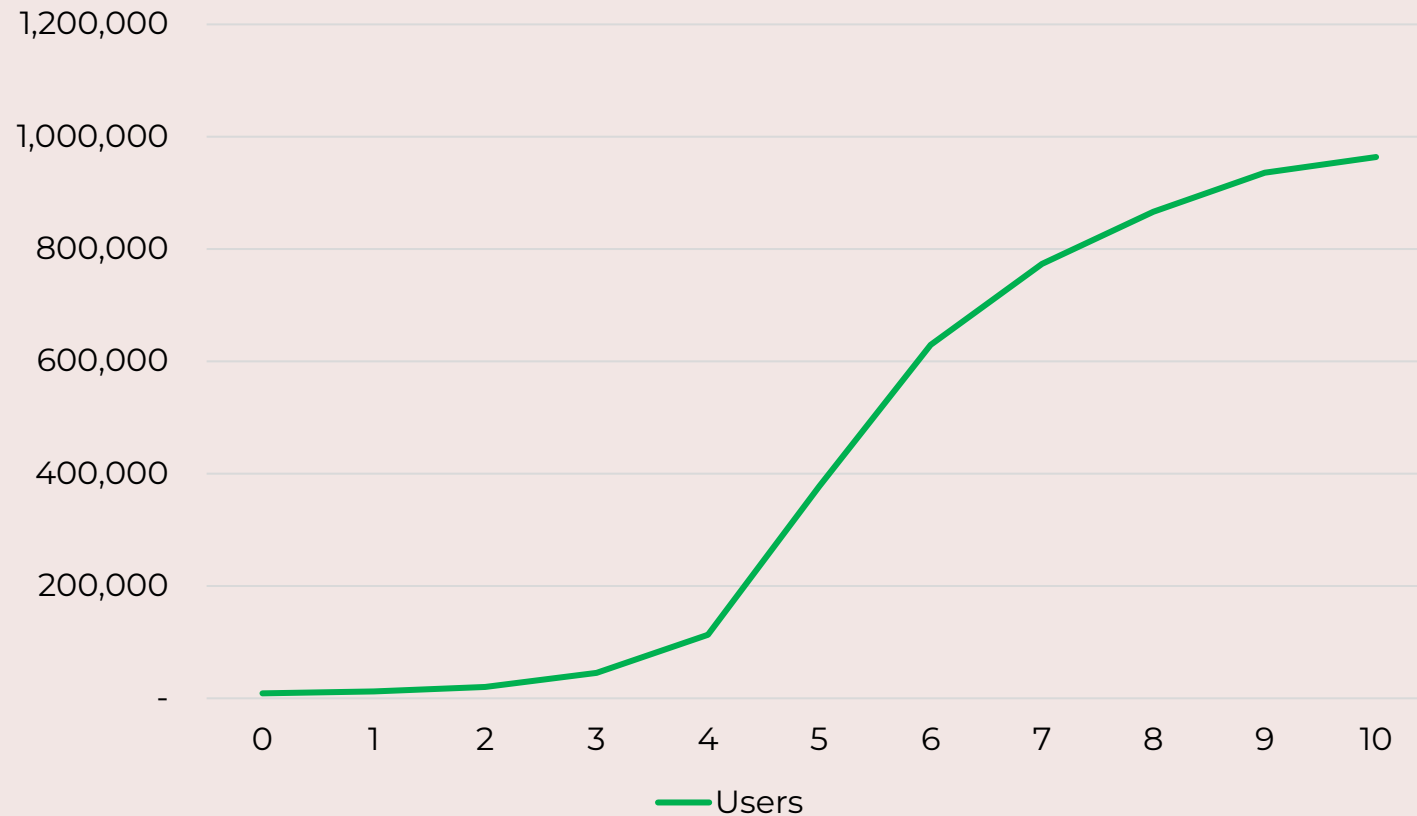
► Growth rate - affiliated cosmetics company ◀

- Why is the number of brands of cosmetics in Olive Young based on?
: Because **Olive Young is the company that occupies the largest share of the cosmetics brokerage industry.**
- Except for 0 year, the number of affiliated cosmetics company in other years reflected **Cosub's growth rate.**

1 Item Identification

Estimated Income Statement

► Number of User ◀



1

Item Identification

Estimated Income Statement

Year 2

| Income Statement | | | |
|--------------------------------------|---------------------------------|---------------|---------------|
| Cosub, Inc. | | | |
| For the year ended December 31, 20XX | | | |
| Net Sales | | 1,386,233,611 | |
| Cost of goods sold : | | | |
| | Software developing | 12,026,364 | |
| | Lip Products | 1,019,289,420 | |
| | Package Material | 35,389,729 | |
| | Delivery | 407,715,768 | |
| | Total cost of goods sold | | 1,474,421,281 |
| | Gross Profit | - | 88,187,669 |
| Operating Revenue : | | | |
| | Commision from vendor | 127,696,579 | |
| Expense : | | | |
| | Interest | 7,610,506 | |
| | Salaries | 360,000,000 | |
| | Marketing | 19,154,487 | |
| | Facility | 27,360,000 | |
| | Internet, electricity bill | 500,000 | |
| | Depriciation | 23,824,000 | |
| | Total Expense | | 438,448,993 |
| Income before tax | - | 398,940,084 | |
| Income tax expense | | - | |
| | Net income | - | 398,940,084 |

1

Item Identification

Estimated Income Statement

Year 4

| Income Statement | | | |
|--------------------------------------|---------------------------------|---------------|---------------|
| Cosub, Inc. | | | |
| For the year ended December 31, 20XX | | | |
| Net Sales(구독료) | | 7,701,297,840 | |
| Cost of goods sold : | | | |
| | Software developing | 12,026,364 | |
| | Lip Products | 5,662,719,000 | |
| | Package Material | 196,609,604 | |
| | Delivery | 2,265,087,600 | |
| | Total cost of goods sold | | 8,136,442,568 |
| | Gross Profit | - | 435,144,728 |
| Operating Revenue : | | | |
| | Commision from vendor | 709,425,436 | |
| Expense : | | | |
| | Interest | 5,919,283 | |
| | Salaries | 360,000,000 | |
| | Marketing | 106,413,815 | |
| | Facility | 27,360,000 | |
| | Internet, electricity bill | 500,000 | |
| | Depreciation | 17,868,000 | |
| | Total Expense | | 518,061,098 |
| Income before tax | - | 243,780,389 | |
| Income tax expense | | - | |
| | Net income | - | 243,780,389 |

1

Item Identification

Estimated Income Statement

Year 6

| Income Statement | | | |
|--------------------------------------|---------------------------------|----------------|----------------|
| Cosub, Inc. | | | |
| For the year ended December 31, 20XX | | | |
| Net Sales(구독료) | | 42,784,988,000 | |
| Cost of goods sold : | | | |
| | Software developing | 12,026,364 | |
| | Lip Products | 31,459,550,000 | |
| | Package Material | 1,092,275,576 | |
| | Delivery | 12,583,820,000 | |
| | Total cost of goods sold | | 45,147,671,940 |
| | Gross Profit | - | 2,362,683,940 |
| Operating Revenue : | | | |
| | Commision from vendor | 3,941,252,424 | |
| Expense : | | | |
| | Interest | 4,228,059 | |
| | Salaries | 360,000,000 | |
| | Marketing | 591,187,864 | |
| | Facility | 27,360,000 | |
| | Internet, electricity bill | 500,000 | |
| | Depriciation | 11,912,000 | |
| | Total Expense | | 995,187,923 |
| Income before tax | | 583,380,561 | |
| Income tax expense | | 57,146,856 | |
| | Net income | | 526,233,705 |

1

Item Identification

Estimated Income Statement

Year 8

| Income Statement | | | |
|--------------------------------------|---------------------------------|----------------|----------------|
| Cosub, Inc. | | | |
| For the year ended December 31, 20XX | | | |
| Net Sales(구독료) | | 58,940,599,469 | |
| Cost of goods sold : | | | |
| | Software developing | 12,026,364 | |
| | Lip Products | 43,338,676,080 | |
| | Package Material | 1,504,718,833 | |
| | Delivery | 17,335,470,432 | |
| | Total cost of goods sold | | 62,190,891,709 |
| | Gross Profit | - | 3,250,292,241 |
| Operating Revenue : | | | |
| | Commision from vendor | 5,429,469,339 | |
| Expense : | | | |
| | Interest | 2,536,835 | |
| | Salaries | 360,000,000 | |
| | Marketing | 814,420,401 | |
| | Facility | 27,360,000 | |
| | Internet, electricity bill | 500,000 | |
| | Depriciation | 5,956,000 | |
| | Total Expense | | 1,210,773,236 |
| Income before tax | | 968,403,862 | |
| Income tax expense | | 96,244,786 | |
| | Net income | | 872,159,076 |

1

Item Identification

Estimated Income Statement

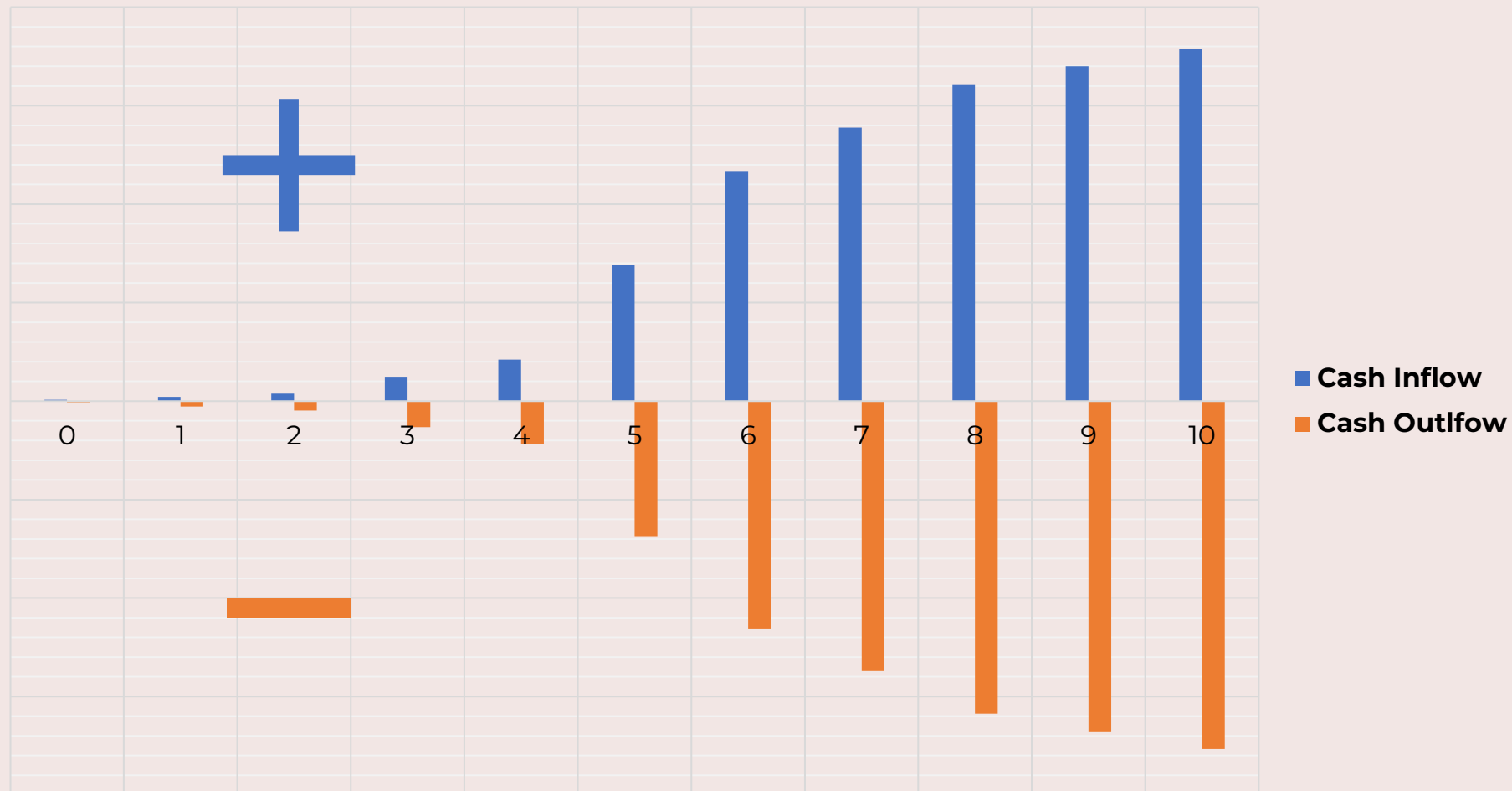
Year 10

| Income Statement | | | |
|--------------------------------------|---------------------------------|----------------|----------------|
| Cosub, Inc. | | | |
| For the year ended December 31, 20XX | | | |
| Net Sales(구독료) | | 65,565,522,849 | |
| Cost of goods sold : | | | |
| | Software developing | 12,026,364 | |
| | Lip Products | 48,209,943,271 | |
| | Package Material | 1,673,849,230 | |
| | Delivery | 19,283,977,309 | |
| | Total cost of goods sold | | 69,179,796,174 |
| | Gross Profit | - | 3,614,273,325 |
| Operating Revenue : | | | |
| | Commision from vendor | 6,039,741,693 | |
| Expense : | | | |
| | Interest | 845,612 | |
| | Salaries | 360,000,000 | |
| | Marketing | 905,961,254 | |
| | Facility | 27,360,000 | |
| | Internet, electricity bill | 500,000 | |
| | Depriciation | - | |
| | Total Expense | | 1,294,666,866 |
| Income before tax | | 1,130,801,502 | |
| Income tax expense | | 176,160,300 | |
| | Net income | | 954,641,202 |

3

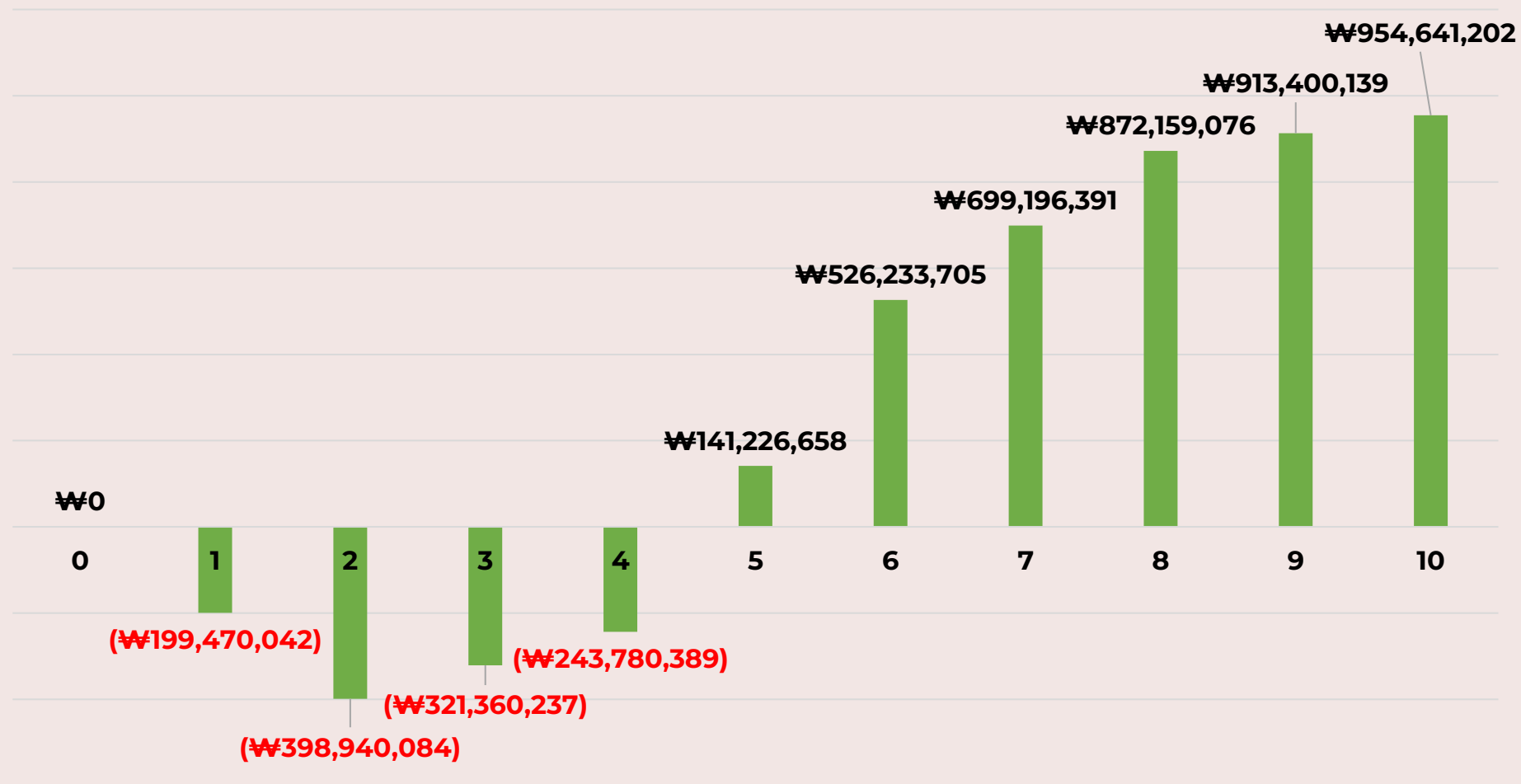
Cash Flow

Cash In & Out Flow



3 Cash Flow

Net Cash Flow, NPV



NPV
= W1,557,082,184

$i = 3.41\%$
 $f = 2.50\%$
 $i_f = 6.00\%$

3

Cash Flow

B/C Ratio, IRR

| | | |
|----------------------------|----------------------------|-------|
| NPV (Net present value) | ₩ 1,192,125,244 | |
| First Cost | ₩ 247,980,000 | |
| B/C Ratio | NPV / first cost = 4.807 | > 1 |
| IRR | 17% | > 10% |

Cosub has good profitability

It satisfied with our goal IRR

Thank you

Co-Sub