

Running Head: Open-to-Buy Project

Morelia Pena

Merchandising Planning and Buying

BUF 2255 OL25

Open-to-Buy Project

Dr. Alyssa Adomaitis

New York City College of Technology

Values given:

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
February	\$300,000	\$125,000	2%	\$8,000	2%	\$200,000	\$160,000
March	\$200,000	\$15,000	3%	\$12,000	4%	\$80,000	\$200,000
April	\$300,000	\$145,000	4%	\$4,000	5%	\$110,000	\$80,000
May	\$200,000	\$35,000	0%	\$3,000	7%	\$90,000	\$110,000
June	\$400,000	\$170,000	5%	\$18,000	2%	\$210,000	\$90,000
July	\$200,000	\$23,000	7%	\$25,000	3%	\$70,000	\$210,000

Values found:

FORMULA	February	March	April	May	June	July
Planned sales	\$300,000	\$200,000	\$300,000	\$200,000	\$400,000	\$200,000
+ Planned reductions	\$26,000	\$26,000	\$31,000	\$17,000	\$46,000	\$45,000
+ Planned EOM stock	\$200,000	\$80,000	\$110,000	\$90,000	\$210,000	\$70,000
= Total monthly needs	\$526,000	306,000	441,000	307,000	656,000	315,000
-BOM Stock	\$160,000	\$200,000	\$80,000	\$110,000	\$90,000	\$210,000
= Planned Purchases	\$366,000	\$106,000	\$361,000	\$197,000	\$566,000	\$105,000
-Merchandising on order	\$125,000	\$15,000	\$145,000	\$35,000	\$170,000	\$23,000
A. = Open to buy (at retail)	\$235,000	\$91,000	\$216,000	\$162,000	\$396,000	\$82,000
= Open to buy (at cost)	\$117,500	\$45,500	\$108,000	\$81,000	\$198,000	\$41,000

Part B

1. Open to buy (R/C) for each month.

FEBRUARY

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
February	\$300,000	\$125,000	2%	\$8,000	2%	\$200,000	\$160,000

FORMULA	February
Planned sales	\$300,000
+ Planned reductions	\$20,000
+ Planned EOM stock	\$200,000
= Total monthly needs	\$526,000
-BOM Stock	\$160,000
= Planned Purchases	\$366,000
-Merchandising on order	\$125,000
A. = Open to buy (at retail)	\$241,000
= Open to buy (at cost)	\$117,500

February calculations:**Planned reductions**

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (2\% + \$8,000 + 2\%) \quad 300,000 \times 0.02 = \$6,000 \\
 &= \$6,000 + \$8,000 + \$6,000 \quad 300,000 \times 0.02 = \$6,000 \\
 &= \$20,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (300,000 + 20,000 + 200,000) \\
 &= \$520,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$520,000 - \$160,000 \\
 &= \$360,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$360,000 - \$125,000 \\
 &= \$235,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$235,000 \times 0.50 \\
 &= \$117,500
 \end{aligned}$$

MARCH

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
March	\$200,000	\$15,000	3%	\$12,000	4%	\$80,000	\$200,000

FORMULA	March
Planned sales	\$200,000
+ Planned reductions	\$26,000
+ Planned EOM stock	\$80,000
= Total monthly needs	306,000
-BOM Stock	\$200,000
= Planned Purchases	\$106,000
-Merchandising on order	\$15,000
A. = Open to buy (at retail)	\$91,000
= Open to buy (at cost)	\$45,500

March Calculations:**Planned reductions**

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (3\% + \$12,000 + 4\%) \quad 200,000 \times 0.03 = \$6,000 \\
 &= \$6,000 + \$12,000 + \$8,000 \quad 200,000 \times 0.04 = \$8,000 \\
 &= \$26,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (200,000 + 26,000 + 80,000) \\
 &= \$306,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$306,000 - \$200,000 \\
 &= \$106,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$106,000 - \$15,000 \\
 &= \$91,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$91,000 \times 0.50 \\
 &= \$45,500
 \end{aligned}$$

APRIL

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
April	\$300,000	\$145,000	4%	\$4,000	5%	\$110,000	\$80,000

FORMULA	April
Planned sales	\$300,000
+ Planned reductions	\$31,000
+ Planned EOM stock	\$110,000
= Total monthly needs	441,000
-BOM Stock	\$80,000
= Planned Purchases	\$361,000
-Merchandising on order	\$145,000
A. = Open to buy (at retail)	\$216,000
= Open to buy (at cost)	\$108,000

April Calculation**Planned reductions**

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (4\% + \$4,000 + 5\%) \quad 300,000 \times 0.04 = \$12,000 \\
 &= 12,000 + 4,000 + 15,000 \quad 300,000 \times 0.05 = \$15,000 \\
 &= \$31,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (300,000 + 31,000 + 110,000) \\
 &= \$441,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$441,000 - \$80,000 \\
 &= \$361,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$361,000 - \$145,000 \\
 &= \$216,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$216,000 \times 0.50 \\
 &= \$108,000
 \end{aligned}$$

MAY

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
May	\$200,000	\$35,000	0%	\$3,000	7%	\$90,000	\$110,000

FORMULA	May
Planned sales	\$200,000
+ Planned reductions	\$17,000
+ Planned EOM stock	\$90,000
= Total monthly needs	307,000
-BOM Stock	\$110,000
= Planned Purchases	\$197,000
-Merchandising on order	\$35,000
A. = Open to buy (at retail)	\$162,000
= Open to buy (at cost)	\$81,000

May Calculations:

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (0\% + \$3,000 + 7\%) \quad 200,000 \times 0.07 = \$14,000 \\
 &= 0 + 3,000 + 14,000 \\
 &= \$17,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (200,000 + 17,000 + 90,000) \\
 &= \$307,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$307,000 - \$110,000 \\
 &= \$197,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$197,000 - \$35,000 \\
 &= \$162,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$162,000 \times 0.50 \\
 &= \$81,000
 \end{aligned}$$

JUNE

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
June	\$400,000	\$170,000	5%	\$18,000	2%	\$210,000	\$90,000

FORMULA	June
Planned sales	\$400,000
+ Planned reductions	\$46,000
+ Planned EOM stock	\$210,000
= Total monthly needs	656,000
-BOM Stock	\$90,000
= Planned Purchases	\$566,000
-Merchandising on order	\$170,000
A. = Open to buy (at retail)	\$396,000
= Open to buy (at cost)	\$198,000

June Calculations**Planned reductions**

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (5\% + \$18,000 + 2\%) \quad 400,000 \times 0.05 = \$20,000 \\
 &= 20,000 + 18,000 + 8,000 \quad 400,000 \times 0.02 = \$8,000 \\
 &= \$46,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (400,000 + 46,000 + 210,000) \\
 &= \$656,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$656,000 - \$90,000 \\
 &= \$566,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$566,000 - \$170,000 \\
 &= \$396,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$396,000 \times 0.50 \\
 &= \$198,000
 \end{aligned}$$

JULY

Month	Planned Sales	On order	Employee Discount	MD\$	Shortages	EOM	BOM
July	\$200,000	\$23,000	7%	\$25,000	3%	\$70,000	\$210,000

FORMULA	July
Planned sales	\$200,000
+ Planned reductions	\$45,000
+ Planned EOM stock	\$70,000
= Total monthly needs	315,000
-BOM Stock	\$210,000
= Planned Purchases	\$105,000
-Merchandising on order	\$23,000
A. = Open to buy (at retail)	\$82,000
= Open to buy (at cost)	\$41,000

July Calculations**Planned reductions**

$$\begin{aligned}
 \text{Planned reductions} &= (\text{Employee discount} + \text{Markdown} + \text{Shortages}) \\
 &= (7\% + \$25,000 + 3\%) \quad 200,000 \times 0.07 = \$14,000 \\
 &= 14,000 + 25,000 + 6,000 \quad 200,000 \times 0.03 = \$6,000 \\
 &= \$45,000
 \end{aligned}$$

Total monthly needs

$$\begin{aligned}
 \text{Total monthly needs} &= (\text{planned sales} + \text{planned reductions} + \text{planned EOM stock}) \\
 &= (200,000 + 45,000 + 70,000) \\
 &= \$315,000
 \end{aligned}$$

Planned Purchases

$$\begin{aligned}
 \text{Planned purchases} &= (\text{total monthly needs} - \text{BOM stock}) \\
 &= \$315,000 - \$210,000 \\
 &= \$105,000
 \end{aligned}$$

Open to buy (at retail)

$$\begin{aligned}
 \text{Open to buy (at retail)} &= \text{planned purchases} - \text{merchandising on order} \\
 &= \$105,000 - \$23,000 \\
 &= \$82,000
 \end{aligned}$$

Open to buy (at cost)

$$\begin{aligned}
 \text{Open to buy (at cost)} &= \text{open retail} \times (50\% \text{ MU}) \\
 &= \$82,000 \times 0.50 \\
 &= \$41,000
 \end{aligned}$$

2. Average monthly sales.

Month	Planned Sales
February	\$300,000
March	\$200,000
April	\$300,000
May	\$200,000
June	\$400,000
July	\$200,000

Average monthly sales = all planned sales amounts / 6 months

$$\begin{aligned}
 &= (\$300,000 + \$200,000 + \$300,000 + \$200,000 + \$400,000 + \$200,000) \\
 &= 1,600,000 / 6 \\
 &= \$266,666.67
 \end{aligned}$$

3. Average monthly on order.

Month	On order
February	\$125,000
March	\$15,000
April	\$145,000
May	\$35,000
June	\$170,000
July	\$23,000

Average monthly on order = all on order amounts / 6 months

$$\begin{aligned}
 &= \$125,000 + \$15,000 + \$145,000 + \$35,000 + \$170,000 + \$23,000 \\
 &= \$513,000 / 6 \\
 &= \$85,500
 \end{aligned}$$

4. Mark down % for each month.

Mark down % for each month = MD\$ / planned sales

Month	MD\$	Planned Sales	MD%
February	\$8,000	\$300,000	2.7%
March	\$12,000	\$200,000	6%
April	\$4,000	\$300,000	1.33%
May	\$3,000	\$200,000	1.5%
June	\$18,000	\$400,000	4.5%
July	\$25,000	\$200,000	12.5%

Calculations**February**

Mark down % for each month = MD\$ / planned sales
 =8,000 / 300,000
 =0.0266 or 2.7%

March

Mark down % for each month = MD\$ / planned sales
 =12,000 / 200,000
 =0.06 or 6%

April

Mark down % for each month = MD\$ / planned sales
 =4,000 / 300,000
 =0.0133 or 1.33%

May

Mark down % for each month = MD\$ / planned sales
 =3,000 / 200,000
 =0.015 or 1.5%

June

Mark down % for each month = MD\$ / planned sales
 =18,000 / 400,000
 =0.045 or 4.5%

July

Mark down % for each month = MD\$ / planned sales
 =25,000 / 200,000
 =0.125 or 12.5%

The dollar decreased for the sales period.

Reasons for a Decrease in Retailing Sales (Fashion Industry)

Inflation

Recent news accounts have shown the United States' dire struggle against inflation. In reality, July's inflation rate was 9.1 percent, the largest annual rise in excess of 40 years.

Consumers across all economic sectors, including the clothing business, have been hit hard by this extraordinary price increase, and there are no signs of relief in sight (Peters et al., 2021).

The impact of inflation on the supply chain in the apparel industry can be substantial. During inflationary periods, the expenses associated with clothing production, such as labor, transportation, and energy costs, may experience a notable increase, leading to a surge in the overall cost of production (Peters et al., 2021). The escalation of inflation in supply chain can have a substantial influence on the strategies adopted by apparel enterprises in managing their operations within the sector.

Regrettably, sudden increases in inflation may result in elevated costs for consumers and reduced profits for fashion enterprises. Furthermore, inflation has the potential to impact the purchasing power of consumers, prompting them to consider more cost-effective options or postpone their buying decisions (Peters et al., 2021). In order to address these obstacles, fashion brands are advised to adopt various strategies, including the implementation of effective inventory management systems and the application of cost control measures, all while ensuring that quality standards are upheld (Peters et al., 2021). It is imperative for apparel industry enterprises to remain cognizant of inflation patterns and take preemptive measures in adjusting their supply chain management approaches.

Conscious Customers

The most significant transformation in the retail industry has not been the transition from brick-and-mortar stores to e-commerce platforms, but rather a change in the consumer's buying behavior. The paradigm of the fashion industry has shifted, as clients are now characterized as astute shoppers rather than passive consumers (Chakraborty & Biswas, 2020). Consumers engage in price comparison and make purchases across various channels such as physical retail stores, online department stores, designer websites, boutiques, and third-party vendors, all within a short span of time (Chakraborty & Biswas, 2020). The provision of distinctive access has engendered a cohort of knowledgeable consumers who possess the ability to discern the optimal timing and method for procuring garments and accompanying articles at a favorable price point.

The decline of the middle class

The onset of the previous decade was characterized by the Great Recession, while the current decade is anticipated to be shaped by the ongoing pandemic. The exacerbation of the wealth gap was facilitated by the economic crisis. In 2012, a mere 42.2% of households in the United States garnered earnings that fell within the 50% range of the median income, which is a decline from slightly over 50% in 1970 (Repp et al., 2021). Over the course of several years, it has become customary for individuals to rely on two sources of income in order to attain that particular level of income. According to a report by Deloitte in 2019, there was a significant difference in income growth between individuals with mean annual household earnings of over \$100,000 and those with less than \$50,000 between 2007 and 2017 in the United States (Repp et al., 2021).. The former group experienced a remarkable increase of 1,305% in their income growth.

References

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