

Case study – Monic

About Monic:

Monic is an online organic clothing brand based in Phoenix, Arizona. The company was established in 2015 by a young entrepreneur, Marvis Carson, and the business has been growing rapidly in past few years.

The company uses fabrics 100% made from Global Organic Textile Standard (GOTS) certified organic cotton sourced from a local cotton farm. All of Monic's branding pieces on the clothing including woven labels, printed labels and hang tags are made of recycled materials. The whole process of fiber manufacturing, spinning, weaving, knitting, dyeing and product finishing is completed in U.S., where the workers are fairly paid and ensured a healthy and safe work environment.

Monic's products include T-shirts, sweaters and cardigans. Their prices range between \$30 to \$60.

Vision

To become one of the top online organic fashion brands

Mission

To provide premium U.S.-made organic apparel for anyone in the world

Values

- Quality We believe our organic cotton products present high standard of quality to consumers
- Eco-friendly We believe everyone has a responsibility to contribute to a greener planet
- Ethical We believe being ethical is the key to success of our business



Monic's Income Statement

Income Statement						
US \$	2015	2016	2017			
Sales	5,600	18,680	33,356			
Cost of goods sold	(2,850)	(6,775)	(11,710)			
Gross profit	2,750	11,905	21,646			
Gross margin	49.1%	63.7%	64.9%			
Selling and administrative expenses	(1,067)	(2,425)	(3,060)			
Marketing expenses	0	(369)	(408)			
Depreciation expenses	(1,050)	(1,050)	(1,903)			
Operating profit	636	8,061	16,275			
Operating margin	11.3%	43.2%	48.8%			
Interest expense	(896)	(1,098)	(1,655)			
Earnings before tax	(260)	6,963	14,620			
Tax	-	(1,044)	(2,193)			
Net income	(260)	5,919	12,427			



Monic's Balance Sheet

Balance Sheet							
US \$	2015	2016	2017				
Assets							
Current Assets							
Cash	7,438	15,402	31,460				
Accounts receivable	940	5,600	14,790				
Inventories	1,300	1,559	1,998				
Total Current Assets	9,678	22,561	48,248				
Fixed Assets							
Equipment	10,500	9,650	12,305				
Capital expenditures	19,722	28,993	27,112				
Total Fixed Assets	30,222	38,643	39,417				
Total Assets	39,900	61,204	87,665				

Balance Sheet						
US \$	2015	2016	2017			
Liabilities						
Current Liabilities						
Accounts payable	2,205	4,190	6,960			
Accrued expenses	638	1,688	3,883			
Interests	560	1,070	3,395			
Total Current Liabilities	3,403	6,948	14,238			
Long-term debt	10,256	22,356	29,100			
Total Liabilities	13,659	29,304	43,338			
Owner's Equity						
Capital contributions	26,241	31,900	44,327			
Total Liabilities and Owner's Equity	39,900	61,204	87,665			



Monic's Cash Flow Statement

Cash Flow Statement							
US \$	2015	2016	2017				
Operating Cash Flow							
Net Income	(260)	5,919	12,427				
Plus: Depreciation & Amortization	1,050	1,050	1,336				
Less: Changes in Working Capital	(1,163)	1,374	2,339				
Cash from Operations	1,950	5,595	11,991				
Investing Cash Flow							
Investments in Property & Equipment	(31,012) (3		3) (2,855)				
Cash from Investing	(31,012) (353)		(2,855)				
Financing Cash Flow							
Owner's Capital Contribution	26,241	5,659	12,427				
Changes in Long-Term Debt	10,259	(2,934)	(5,508)				
Cash from Financing	36,497	1,559	7,700				
Net Increase (decrease) in Cash	7,438	7,964	16,058				
Opening Cash Balance	-	7,438	15,402				
Closing Cash Balance	7,438	15,402	31,460				



Monic's operations metrics and financial ratios

Operations Metrics							
US \$	2015	2016	2017				
Number of products sold	102	460	782				
Average order value	\$38.6	\$40.6	\$42.7				
Material cost	\$890	\$1,959	\$3,206				
Labor cost	\$1,670	\$4,040	\$6,538				
Shipping cost	\$290	\$776	\$1,966				
Total variable cost	\$2,850	\$6,775	\$11,710				
Material cost/unit	\$8.7	\$4.3	\$4.1				
Labor cost/unit	\$16.4	\$8.8	\$8.4				
Shipping cost/unit	\$2.8	\$1.7	\$2.5				
Variable cost/unit	\$27.9	\$14.7	\$15.0				
Warehouse rent	\$400	\$400	\$460				
Salaries and benefits	\$667	\$2,025	\$2,600				
Marketing expenses	-	\$369	\$408				
Total fixed cost	\$1,067	\$2,794	\$3,468				

Financial Ratios							
	2015	2016	2017				
Liquidity ratios							
Current ratio	2.84	3.25	3.39				
Acid-test ratio	2.46	3.02	3.25				
Leverage ratios							
Debt ratio	34.2%	47.9%	49.4%				
Debt to equity ratio	52.1%	91.9%	97.8%				
Efficiency ratios							
Asset turnover ratio	0.14	0.31	0.38				
Inventory turnover ratio	2.19	4.35	5.86				
Receivables turnover ratio	5.24	2.94	1.98				
Days sales in inventory	166	84	62				
Profitability ratios							
Return on assets ratio	-0.7%	9.7%	14.2%				
Return on equity ratio	-1.0%	18.6%	28.0%				
Labor cost ratio	29.8%	21.6%	19.6%				
Material cost ratio	15.9%	10.5%	9.6%				



Online organic clothing industry outlook

Industry Overview

The online organic clothing industry is growing as a result of increased public awareness of organic and ethical sources of clothing materials.

The number of organic cotton farmers has been rising worldwide, leading to increased global organic cotton production volume (40% growth in 2017). This encourages more online apparel brands to begin producing clothing made of GOTS certified organic fabric or a mix of organic and non-organic materials.

The infographics summarize the important statistics about the online organic clothing sector in 2017.

Raw Material Cost

The average cost of raw organic cotton has been decreasing due to increased global production volume

US\$1.25

per pound of organic cotton in 2016

VS

US\$1.04

per pound of organic cotton in 2017

Market Segmentation

There are two main types of organic clothing businesses: 100% organic and mix of both organic & non-organic





Market Growth

The global online organic clothing market is growing rapidly and consumer demand is also increasing





US\$3.8B

Global organic clothing market sales 2017



+15%

Global organic clothing market sales growth from 2016



+28%

Total number of online organic clothing companies in the top 5 markets

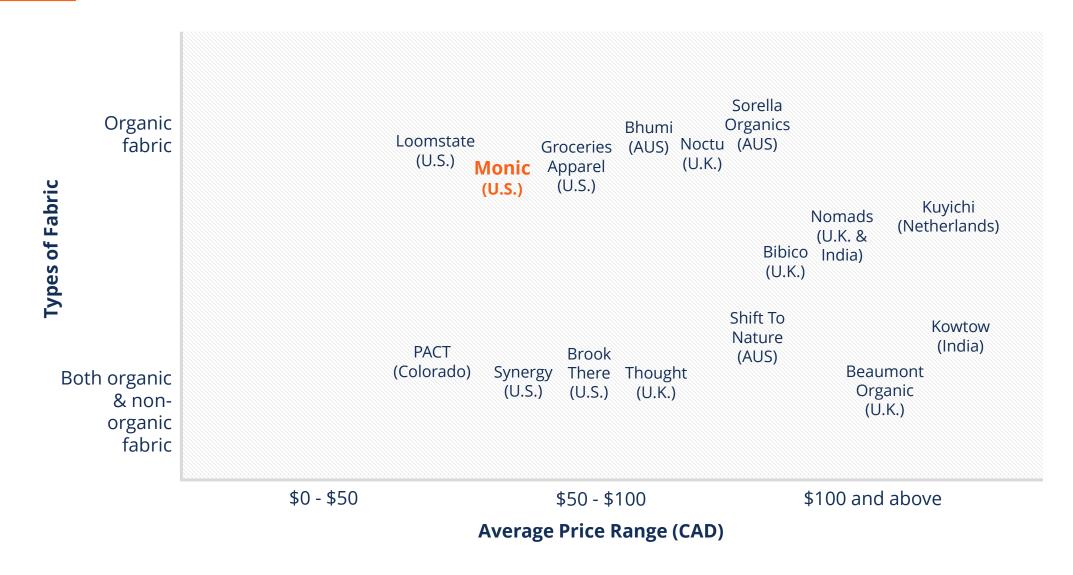


Monic's supply chain





Strategic group map for online organic clothing industry





Competitive forces model

Intensity of industry rivalry

- Low concentration of rivals in the online organic clothing industry
- Low switching costs for customers
- Variety of organic apparel offerings

Power of complementary good/service providers

 Availability of other clothing products made of organic cotton such as pants, socks and hats might have an impact on the sales of organic cotton tops

Threat of substitute goods/services

 Small number of online organic clothing substitutes in the market, but switching costs are low for customers



Threat of potential entrants

- Low barriers to entry
- Sourcing organic and ethical cotton farmers could be a challenge to entrants
- No significant fixed costs or investment
- · Low market penetration

Bargaining power of buyers

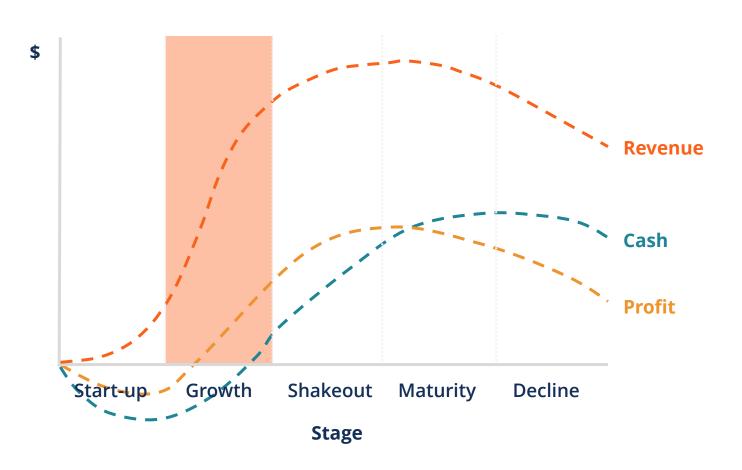
- Low to medium buyers' price sensitivity
- Organic fabric are perceived as better product than non-organic fabric, thus allows companies to charge higher prices

Bargaining power of suppliers

- High suppliers' bargaining power because of limited supply of organic cotton
- GOTS implies high cotton quality, therefore allows suppliers to set higher costs



Industry life-cycle



The online organic clothing industry is at the growth stage where the demand for ethically and organically made apparel is rapidly increasing. Monic is expected to face low threat from potential competitors due to low market penetration and excess production capacity.

As we can see from Monic's financial statements, the company has been earning low profits in the past three years and has low cash balances on its account. This is due to the amount of capital initially invested in the business, including the cost of purchasing equipment, finding an ethical and organic cotton source, production costs, etc.

The revenue for Monic has grown dramatically, increasing by 234% and 79% in 2016 and 2017 respectively. This is a typical scenario for company in a growing industry since there are many opportunities to expand its business.



Broad factors analysis (PEST)

Political

 Low international trade barriers allows shipping of online purchases to anywhere in the world

Economic

 High currency exchange rates might raise relative prices of products, which influences customers' demand

PEST Analysis

Technological

 Technological advancement allow mass production of organic cotton, thus increases supply and lowers costs for businesses

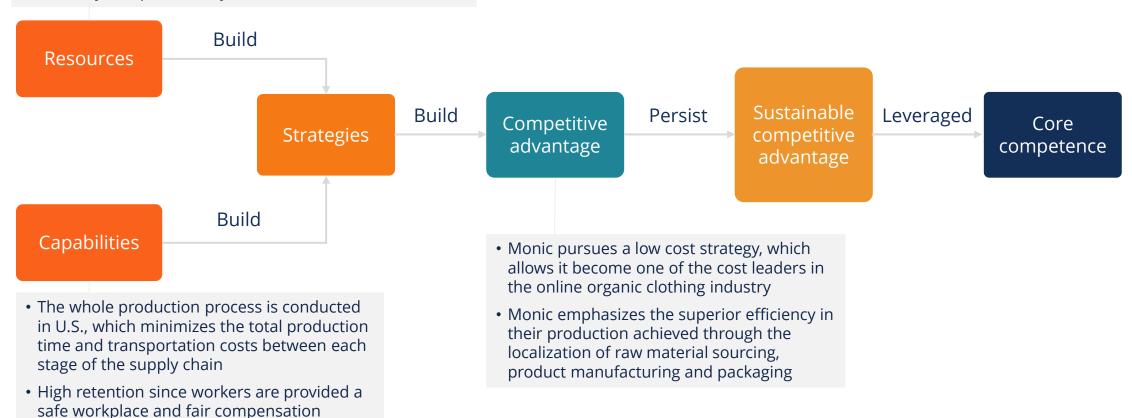
Socio-demographic

 The society becomes more concerned about environmental impact of products and ethical business practices



Monic's competitive advantage

- Monic has a secured source of organic cotton provided by a local farm
- Monic hires workers who have over ten years of experience in manufacturing cotton apparel, enhancing efficiency and productivity





Monic's value chain example

Firm Infrastructure

Financial Management

Human Resource Management

> Technology Development

Procurement

Smooth supply chain flow from cotton sourcing to product finishing, close product quality control

Localization of production process minimizes transportation and control costs

Employees are guaranteed fair compensations along with a safe and healthy work environment

Exploring technology to improve production efficiency while maintaining superior output quality

Local organic cotton farmers for secured provision of fabric materials

Local farm supply of organic cotton

Manufacturing and packaging done locally in U.S.

Online clothing brand selling GOTS certified cotton apparel which are locally and ethically made

Ships to anywhere in the world

Emphasizes
Monic's value of
being eco-friendly
and ethical
provider of highquality clothing

Collects customer feedback on product quality and delivery efficiency

Inbound Logistics

Operations

Outbound Logistics

Marketing & Sales

Service



Product-market segments

Customer

	General public	Awareness of purchasing organic clothing	Organic clothing supporters
T-shirts, sweaters and cardigans	√	✓	√
Bottoms			
Footwear			
Hats, caps and beanies			

Monic's current focus is selling organic cotton tops including T-shirts, sweaters and cardigans. It targets a broad customer segment and sells to anyone who are generally interested in fashion or organic products.

In response to the growing market size of the industry and increasing customer demand, Monic plans to enter into selling of other organic cotton products such as pants, socks, hats and beanies. These products are expected to attract increasing number of customers, comprised of mainly organic clothing supporters or consumers who would prefer to purchase organic clothing if available.

Monic's closer focus in these market segments will allow the company to produce superior clothing matched to the needs of these customers.



Monic's current strategies

Corporate-level

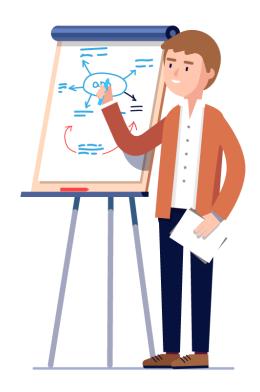
Single line of business

Business-level

Product-focused strategy: focus on providing low-cost organic cotton clothing to the target market of organic clothing supporters or customers with awareness

Functional-level

- Achieving superior efficiency through localization of production process
- Enhancing clothing quality through sourcing ethical and organic materials



Strategic alternatives

After performing the external and internal analysis and reviewing its current strategies, Monic is considering these three strategic alternatives to expand its product collections and attract more customers:

- A. Selling organic cotton pants
- **B.** Selling organic cotton beanies
- C. Selling organic cotton shoes

The table on the right summarizes the production capacity and financial details of each of the alternatives.

Strategic alternatives	A. Selling organic cotton pants	B. Selling organic cotton beanies	C. Selling organic cotton shoes
Sizes	S, M, L	One size	Size 5 – 10
Annual production	600	520	300
Expected units of sale	550	360	320
Average product price	\$55	\$30	\$76
Revenue	\$30,250	\$10,800	\$24,320
Material cost/unit	\$5.7	\$2.4	\$6.8
Labor cost/unit	\$10.2	\$5.5	\$12.5
Shipping cost/unit	\$2.8	\$1.1	\$3.1
Variable cost/unit	\$18.7	\$9.0	\$22.4
Total variable cost	\$10,285	\$3,240	\$7,168
Inventory storage cost	\$560	\$180	\$600
Additional workers	2	1	2
Salaries and benefits	\$7,000	\$3,100	\$8,600
Marketing expenses	\$1,000	\$1,000	\$1,000
Total fixed cost	\$8,560	\$4,280	\$10,200
Operating profit	\$11,405	\$3,280	\$6,952
Operating margin	37.7%	30.4%	28.6%
Capex (one-time expense)	\$10,000	\$5,000	\$16,000
Product durability (out of 5)	4	3.5	5

Multi-criteria analysis (criteria)

To determine the optimal strategic alternative, Monic uses the following scorecard to evaluate the attractiveness of each alternative:

			Score		
Pillar	Attributes	Attractive	Moderate	Unattractive	Weight
	Revenue	>\$30,000	>\$20,000	<\$20,000	+2
Financial	Operating margin	>30.0%	>25.0%	<25.0%	+1
	Labor cost ratio	<18.3%	<18.5%	>18.5%	+1
Customors	Product durability	5/5	>4/5	<4/5	+2
Customers	Demand	>400	>300	<300	+1
Operations	Annual production	>500	>400	<300	+1
Operations	# product size	1	2 – 3	>3	+1
Human Resources	Additional workers	1 or less	2	>2	+1



Multi-criteria analysis (results)

		A. Selling	B. Selling	C. Selling	Score	
Pillar	Attributes	organic cotton pants	organic cotton beanies	organic cotton shoes	Winner	Weight
	Revenue	\$30,250	\$10,800	\$24,320	A	+2
Financial	Operating margin	37.7%	30.4%	28.6%	A	+1
	Labor cost ratio	18.5%	18.3%	16.4%	С	+1
Customors	Product durability	4/5	3.5/5	5/5	С	+2
Customers	Demand (Based on survey results)	486	452	270	A	+1
Operations	Annual production	600	520	300	A	+1
Operations	# product sizes	3	1	6	В	+1
Human Resources	Additional workers	2	1	2	В	+1
Total Points Scored		5	2	3	Α	

Based on the result of the multi-criteria analysis, Monic should ideally pursue the strategy of **selling organic cotton pants** in addition to its existing products. This will allow Monic to increase both revenue, operating margin and annual production.



DCF analysis

Case Study - Monic	2015	2016	201	7	2018		2019	20	20	202	1	2022
DCF Valuation (A. Selling Organic Cotton Pants)												
Free Cash Flow												
EBIT					11,405	13	3,116	15,0	083	17,34	6	19,947
Less Taxes					1,711		1,967	2,2	262	2,60	2	2,992
Less Capex					10,000		-		-			-
Plus Depreciation					1,800		1,800	1,8	300	1,80	0	1,800
Less Changes in Working Capital					500		550	(505	66	6	732
Unlevered Free Cash Flow					994	1:	2,398	14,0)16	15,87	8	18,023
Total FCF (Current Operation + Alternative A)	(28,166)	6,340	10,79	1	16,822	3	1,289	36,6	507	42,93	9	50,479
DCF Valuation												
NPV	122,767							Cash Flo				
Cost of Capital	15%				(A. Sei	ling Or	ganic C	otton F	ants)			
Perpetual Growth Rate	2%			Current	Operation	■ A.	Selling Or	ganic Cot	ton Pants	s Tot	al	
Terminal Value	396,067		*60.000				0					
NPV of Terminal Value	171,230		\$60,000							42,939	50,479	
Total Enterprise Value	\$293,997		\$40,000					31,289	36,607	42,555		
			\$20,000		6,340	10,791	16,822					
			\$0									_
			(\$20,000)									
			(\$40,000)	(28,166) 2015	2016	2017	2018	2019	2020	2021	2022	

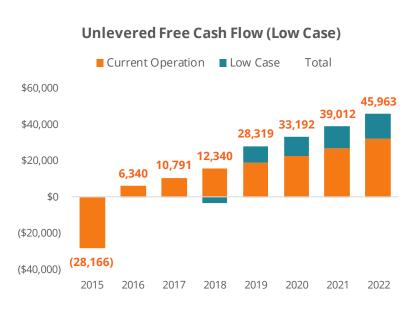


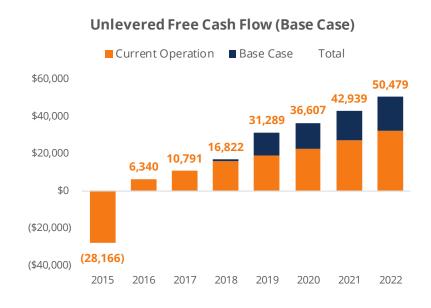
Forecast scenarios for strategic alternative

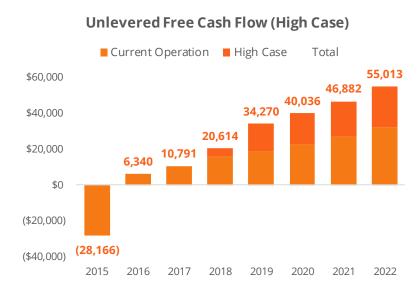
Scenario Analysis	Alternative A. Selling organic cotton pants						
	Fo	recast Scenarios					
	Low Case	Base Case	High Case				
Expected units of sale	470	550	630				
Average product price	\$55	\$55	\$55				
Revenue	\$25,850	\$30,250	\$34,650				
Material cost/unit	\$5.8	\$5.7	\$5.6				
Labor cost/unit	\$10.2	\$10.2	\$10.2				
Shipping cost/unit	\$2.9	\$2.8	\$2.7				
Variable cost/unit	\$18.9	\$18.7	\$18.5				
Total variable cost	\$8,883	\$10,285	\$11,655				
Inventory storage cost	\$600	\$560	\$540				
Additional workers	2	2	2				
Salaries and benefits	\$7,000	\$7,000	\$7,000				
Marketing expenses	\$1,000	\$1,000	\$1,000				
Total fixed cost	\$8,600	\$8,560	\$8,540				
Operating profit	\$8,367	\$11,405	\$14,455				
Operating margin	32.4%	37.7%	41.7%				
Capex (one-time expense)	\$11,900	\$10,000	\$8,800				



Forecast scenarios - DCF analysis









Monic's strategic pillars

Vision

To become one of the top online organic fashion brands

Mission

To provide premium U.S.-made organic apparel for anyone in the world

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- Achieve high revenue and operating margin
- Minimize production costs while maintaining product quality

Customers

Ensure customers are satisfied with the quality of product and that the standard matched to customers' needs

Operations

- Secure source of ethical and organic cotton
- Produce products in the most efficient and ethical way

Human Resources

- Achieve high employee retention rate
- Build a great team to achieve better product efficiency and quality

Strategies

- Optimize supply chain management to reduce transportation costs between each stage
- Increase product offerings (organic cotton bottoms) to boost sales

Strategies

- Conduct online survey regularly to collect customer feedback on product quality and delivery efficiency
- Expand production collection based on customer demand

Strategies

- Localize the whole production process to minimize time and costs
- Sign long-term contracts with local organic cotton farmers

Strategies

- Provide workers with fair compensation and a safe work environment
- Hire workers with 10+ years of experience in the industry

- Current strategies
- Strategic alternatives

