NA0449

Bubble & Bee Organic: The Need for Pro Forma Financial Modeling

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Stephanie Greenwood, founder and co-owner of Bubble & Bee Organic (B&B), looked around her increasingly crowded production facilities, noting the inventory of high-quality, organic skin care products with intriguing names such as "Lemongrass Pit Putty", Splash of Lime Toning Mist," and "Chai for the Guy Lotion Stick." It was early 2015 – was it only 10 years ago when she was making chemical-free products just for her own use?

She was proud of the company's growth, and that she and partner Steve Thomas had financed all the growth from operating cash flow with very small and limited periods of debt financing.

But, they were at a crossroads. She knew that to continue to grow, they would need an infusion of capital. She was passionate about maintaining control of her business and the quality of her products, so bringing in an outside investor had little appeal. So, it seemed a loan was in order. But…would they qualify for a loan in an amount sufficient to support their growth? What should that growth entail? Should they consolidate their operations by purchasing a building, or should they just rent additional space? They could predict their growth potential, but what if they were wrong?

Greenwood noticed a stack of papers and a calculator on a nearby desk, and muttered to herself,

> I'm a chemist, not some desk jockey with an MBA! How do we determine the best way to support and finance B&B's growth?

BACKGROUND AND HISTORY

Greenwood was a chemistry whiz kid, working in a biology lab at age 14 and taking university chemistry classes at age 16. In her 20's she became aware that the chemicals in the personal care products she was using were likely causing some of her personal health challenges. In 2005, determined and enthusiastic to find solutions and safer alternatives, she decided to make her own products using simple organic ingredients.

It was slow-going at first. She got a good start by reading the labels on her favorite organic products, taking a little bit here and there from recipes, and drawing upon her own chemistry background to conduct tests. Initially there was a lot of trial and error. (She remembered the conditioner that didn't rinse out for a week!) She enlisted the help

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of a chemist friend to help her refine her formulas, and a year and a half later was making soaps, shampoos, lip balms and deodorants for the entire family in her home kitchen in Bountiful, Utah. They loved her products, and she realized that this could be a bigger endeavor than she had ever thought.

She next enlisted the help of her long-time friend and video production business partner, Thomas. Thomas took some convincing--he had never used organic anything before. She persisted and it paid off. With much deliberation and creative planning, Bubble & Bee Organic (B&B) was born as a Utah LLC in March 2007. Bringing his business marketing and product design prowess to the table, Thomas was able to make dynamic packaging for Greenwood's products.

Greenwood recalled,

> I really wanted these products to be fun. I was hooked the first time I made my own deodorant. I knew exactly what was in it. How cool!

Greenwood and Thomas soon grew the business from a simple table at a farmer's market to a company that created much "buzz" and was poised to gain the attention of the media. In 2008 and 2009 B&B appeared in local TV news programs and its products were featured on the Today Show (Refer to Exhibit 1 for a link to YouTube videos). Their dream of selling fine quality, organic personal care products to people all around the country became a reality when they launched bubbleandbee.com. Their customer base consisted of consumers looking for chemical-free body care products. Ninety-five percent were women, ages 24-55, 75% married, from the United States. B&B's five top products in terms of sales were Women's Face Cream, Three Soap Pack, Cool Cucumber Facial Cleanser, Pineapple Facial Cleanser, and Orange Vanilla Pit Putty Cream. (Refer to Exhibit 2 for a list and image of B&B's certified organic products).

In early 2008, Whole Foods, (a world leader in natural & organic foods, with more than 400 stores in the U.S.) approached Bubble & Bee Organic about its local vendor program. Greenwood and Thomas were invited to Colorado to present their products. In July of 2008 B&B entered the wholesale market via Whole Foods Rocky Mountain Region. B&B's wholesale sales, which also included a few regional groceries and smaller retailers, constituted approximately 10% of B&B's overall product sales.

NATURAL SKIN CARE INDUSTRY

Natural skin products were used since the days of the pharaohs in Egypt, several millennia B.C. In modern times, natural ingredients such as beeswax had been determined to possess attributes that included softening, soothing, protecting and retaining moisture in the skin. Burt's Bees, a company begun in 1991 with a beeswax lip balm, became well known as a leader in using beeswax in its skin care products. In 2007, The Clorox Company purchased Burt's Bees for $925 million.

Along with Burt's Bees, there were a number of smaller private companies that contributed to the market growth of natural skin care products. The public's growing awareness of the harm chemicals could do to the skin, and general green consciousness, also helped drive growth. According to a report published by Transparency Market Research[1] the global organic personal care products market was expected to expand at a healthy compound annual growth rate of 9.3% from 2014 to 2020. The report also stated that the global organic personal care products market would grow from US$8,360.5 million in 2013 to US$15,693.7 million in 2020 and that 34.9% of this market in 2013 was in North America. The North America market in 2013 was about $2,918 million.

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Regulation of Skin Care Products

The Federal Food, Drug and Cosmetics Act (FD&C Act) recently called for stricter regulation of cosmetic companies. B&B's products (except for soap) fell under the "cosmetics" term used by the FDA. According the U.S. Code title 21, section 301, a cosmetic was any product that was "intended to be rubbed, poured, sprinkled, or sprayed on, introduced to, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance." New regulations of the FDA resulted in increased fees and additional documentation-related costs due to required itemized lists of every ingredient contained within every product.

The National Organic Program (NOP) was a regulatory program within the parameters of the USDA Agricultural Marketing Service. The NOP was responsible for developing standards that organizations producing organic agricultural products were required to follow, and granted authority for products that adhered to the standards to include the USDA organic seal on their product labels, which assured that the products produced used acceptable cultural, biological and mechanical practices. This meant that the production operations maintained or enhanced soil and water quality, as well as the conservation of ecosystems like wetlands and other natural habitats for wildlife. Organizations that wanted to become organically certified had to follow the organic process all the way through the production cycle, from the growing and cultivation of ingredients, to the packaging of the end consumer-ready product.

MISSION AND PHILOSOPHY OF BUBBLE & BEE ORGANIC

B&B's mission and philosophy were based on more than just selling products. Greenwood was dedicated to educating others about the importance of staying away from the dangerous chemicals "in our world of fancy products with entrancing colors and fragrances." In addition to making and selling products, they informed people of the hazards of chemicals in personal care products. Greenwood's passion for chemical-free products was reflected in her "Chemical of the Day" and "Grounded Organic" Blogs, which were designed to give accurate and concise information regarding cosmetic chemicals. Based on her research of on-line forums, she knew that controversy increased traffic.

She explained,

> There are these websites that get an incredible amount of traffic on them, but what they are saying is not based in fact or any kind of science or research. You see these websites that say you can cure cancer with baking soda or by eating a lemon every day. Our new blog Grounded Organic is taking those health myths and saying what is the actual science. What does science say about these topics? I've tried to establish myself as someone people can go to amidst a controversy. Is this ingredient bad or is this ingredient OK – what does Greenwood say? I'm expanding myself into diet, foods, herbs, and essential oils to expand my presence to remain relevant.

Greenwood also believed that pointing out different controversies provided a competitive advantage by increasing trust in B&B and their products. She elaborated,

> For example, I'll see a competitor's bubble bath that has no type of detergent listed as an ingredient. They will list coconut oil, and some extracts as ingredients. If these were the only ingredients, it would look like salad dressing – you'd have water and oil. Throughout the years, I've pointed out so many of those things that I have gained the trust of people. At face value, it looks like a really clean ingredients list that looks like it's healthy. When people realize you can't trust the

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> ingredients list, they look to me and say, "OK, Greenwood knows what she's talking about and I should ask her."

Greenwood thought it essential that they maintained full control of their processing and ingredient decisions so that they could guarantee their products were of the highest quality and adhered to all FDC and NOP regulations.

B&B's philosophy was that organic products shouldn't be just for those who can afford them, but for everyone who wanted to live in a safer, more natural world. Their vision was for B&B to be America's most trusted organic brand while providing the internet with the single best source of organic body care products and knowledge.

ORGANIZATIONAL AND OPERATIONAL STRUCTURES

B&B had a simple organization structure. Greenwood ran the day to day operations and was also responsible for the website, ordering, and financial controls. Thomas's main responsibility was marketing, including sales and product labeling/packaging design. Additionally there was an operations manager and a shipping/receiving/ labeling manager who reported directly to Greenwood. Six to ten other employees were required depending on seasonal demand.

A primary operational concern was maintaining the USDA organic seal. Having the seal was expensive and operationally complex, but it separated B&B from many of its competitors who were not willing to go through the rigor and expense of the certification process. It also verified to Bubble and Bee Organic's customers that B&B products were truly organic. In addition to the peace of mind that came from knowing that there were no harmful synthetics and feeling good that it was better for your body and the environment, organic certification ensured that what was *on* the label matched what was *in* the product. This built trust in the marketplace for B&B products. The organic certification required a number of different steps.

Greenwood described the process as,

> First there is an annual packet that I submit; this contains a description of our operations and how they adhere to organic regulations. The packet contains a formula sheet for each product, all of the ingredients used and their organic certificates, and the annual fee. In production we have to keep a batch record of each batch made. We record how much of each ingredient was used, where that ingredient came from, and notate the invoice information so it's linked to the batch. The products are marked with batch codes that link back to the production record. Any time there's an audit trail for the organic product, we have a record of where each ingredient came from and who certified them as organic.

When asked what contributed to the success of the company's operations, Greenwood said,

> First of all, we have a great team. I have a great production team, and the labeling and shipping departments are really self-sustaining. This allows me the freedom to be able to focus on the blogs, marketing strategies and developing new products. Everything that I write, everything that I research, and everything that I put into the various blogs, are investments and they come back to us. If I follow what I'm truly passionate about, the money will follow. Content is king and the more content you put out there, the more traffic you drive.

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Her partner Thomas respected Greenwood's opinion, but contended,

> We could take additional steps forward if we could relieve Greenwood of certain duties of running the company like dealing with payroll, or meeting with the accountant, or taking care of ordering ingredients.

Greenwood rebutted,

> At the same time, having those other duties keeps things interesting. If I need a break from writing, it gives me something else to do.

THE NEED FOR PRO FORMA FINANCIAL MODELING

In 2008 opportunities to expand into the wholesale market had emerged; the largest being Whole Foods, along with a few regional groceries and retail stores. Not fully understanding the complexities and requirements of supplying larger companies, Bubble and Bee Organic entered the wholesale channel with some apprehension. Over time, B&B questioned the wisdom of entering this market due to in-store and other requirements of a major wholesale customer that conflicted with Greenwood and Thomas's desire to stay in control of their business, their products, and their personal lives. Greenwood and Thomas felt that satisfying a wholesale market client was potentially distancing them from their customers' needs and was making it more difficult to pursue their company mission. They concluded that dealing with this conflict was not worth the 10% of overall sales that were wholesale market based. The gross margins in the wholesale market were also much lower than their online business.

Consequently, in the past few years less effort was focused on building and maintaining the wholesale accounts. This in part resulted in a slowing of revenue growth in 2014. Alarmed at what this could mean for the future of the company, new and focused attention was given to expanding and building their online presence. Greenwood and Thomas were confident that revenue growth of 15% per year would be achievable over the next three years with the renewed focus on the online business.

The expectation of revenue growth would require the expansion of operating facilities. Operations were located in two rented 3,000 square foot facilities. Expansion to a 10,000 square feet facility was estimated to meet anticipated growth over the next three to five years. Two possibilities considered for expansion were renting additional space or buying a 10,000 square foot building to house all B&B operating and office requirements. The finished building would cost roughly $1,100,000.

Financial considerations of the two options included:

1. Additional Rental Space - Rent an additional 4,000 square foot facility. This would add $30,000 of annual rent cost to the existing annual rent cost of $45,000.

2. Building Purchase - Borrow $990,000 for the building for 20 years at a 5% all fee included interest rate. Greenwood as a woman entrepreneur could apply for an SBA 504 loan at a fixed rate of 5% with a 90% loan to value ratio. This loan would require personal guarantees on the entire $990,000 amount for both Greenwood and Thomas. The difference between the building cost and loan amount would be paid from operating cash in 2015. For financial modeling purposes, the annualized total loan payments (principal and interest) would be $79,440. Interest and principal payments would be as follows:

	2015	2016	2017
Interest	$49,500	$48,003	$46,431
Principal	$29,940	$31,437	$33,009

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Through 2014, B&B financed all business growth from operating cash flow with very small and limited periods of debt financing. Both Greenwood and Thomas were more willing to take out a loan rather than find an investor. This was mainly due to concerns about an investor influencing the direction, values and mission of B&B.

To analyze its two options and to prepare the required lender documents, B&B needed pro forma financial statements for the next three years (2015, 2016, and 2017). Refer to Exhibit 3 for 2013 and 2014 Balance Sheets, and 2014 Income Statements and Cash Flow Statements. The Balance Sheet, Income Statement and Cash Flow pro forma financial modeling templates can be found in Exhibit 4.

Other assumptions used to enable building of pro forma financial statements were:

- Revenue – The base scenario was revenue growth of 15% for the next three years. Both unit demand and average price were used to calculate the 15% growth. A second scenario of no growth in unit demand was also needed for internal use and comparison purposes.

Revenue growth of 15%	2015	2016	2017
Unit Demand	143,339	161,999	183,141
Average Price	$14.25	$14.50	$14.75

No Growth in Unit Demand	2015	2016	2017
Unit Demand	126,869	126,869	126,869
Average Price	$14.25	$14.50	$14.75

- Cost of Goods Sold as a percent of sales: 20% of sales in 2015 and 21% in 2016 and 2017.
- Selling expense as a percent of sales: 25% in 2015, 26% in 2016, and 27% in 2017.
- General and Administrative Expenses:
  - Variable expenses as percent of sales: 5% for all three years
  - Fixed expenses in both the rent and buy options increasing $50,000 each year due to additional employee related costs

	2015	2016	2017
Rent Option	$675,000	$725,000	$775,000
Buy Option	$600,000	$650,000	$700,000

- Depreciation:

	2015	2016	2017
Existing Equipment	$95,221	$95,221	$95,221
Building (Buy Option)*	$36,667	$36,667	$36,667
New Equipment		$10,000	$10,000

*The building would be depreciated over 30 years on a straight line basis.

- Corporate Taxes were not applicable due to LLC status
- Ending receivables balance as a percent of sales: 2% for each year
- Ending Inventory balance as a percent sales: 8% for each year
- Ending accounts payable as a percent of sales: 4% for each year
- $100,000 PP&E investment at the beginning of 2016 to finance the new equipment. This would be depreciated over 10 years at $10,000 per year
- Payback of the Bank Loan in Current Liabilities at the beginning of 2015
- Owner Draws (dividends) of $175,000 each year if after the draw the ending cash balance will remain over $50,000

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These assumptions would allow B&B to prepare four financial modeling scenarios:

1. Additional Rental Space with 15% Revenue Growth
2. Additional Rental Space with No Growth in Unit Demand
3. Purchase Building with 15% Revenue Growth
4. Purchase Building with No Growth in Unit Demand

RATIO ANALYSIS TO ACCOMPANY PRO FORMA FINANCIAL MODELING

Financial ratio analysis was considered to be a helpful tool to understand the financial condition of B&B under the four modeling scenarios. Comparisons of the ratios and the ratio trends over the three year forecast would provide insights into the potential financial impacts of the options being considered. Operating and financial attributes could be examined by breaking down the ratios into measures of liquidity (ability to pay short term obligations), cash conversion cycle (period of time to convert certain assets to cash), leverage (using debt and capital structure impacts), profitability (margin as % of net sales), operating efficiency (sales per dollar of assets) and investment return (for both equity and assets). (Refer to Exhibit 5 for a list of the ratios and the calculation formulas).

LOOKING FORWARD…

Greenwood remained passionate about retaining control of her products and operations, but realized that her company's mission and her own personal philosophy and values impacted decisions on how to grow and finance the business. She and Thomas had decided to move away from the wholesale market, and were reluctant to bring in an outside investor to support their renewed focus on online growth. So…that left them in control...but also meant that they shouldered all the risk. Should they rent additional space… or purchase a larger facility? Could they even qualify for a loan in an amount sufficient to support their growth? They'd had to make a number of assumptions about their growth potential. What if some of the assumptions were incorrect?

CONCLUSION

Greenwood was proud of having have been able to create a large loyal customer base and a reputation of trust in the marketplace. For example, back in 2009 (when she was personally answering all the phone calls), she recalled:

> I spent several hours with one customer trying to answer her questions. I knew that if I invested the time and gained her trust, she would be a loyal customer. To this day, she is one of our top customers.

She knew that not many other companies would have the patience to answer in-depth questions. Greenwood saw this as investing in those customers because they would end up turning into long term supporters. In addition to loyal, repeat customers, she was confident of gaining new customers, resulting in the continued growth of Bubble & Bee Organic. But, growth required capital investment. Greenwood said to Thomas,

> We need to grow! But…I don't want to lose control of our products or processes. We could rent…or we could purchase. How do we decide what's the best option for us?

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Exhibit 1: Media Coverage of Bubble and Bee Organic

- On Studio 5 (KSL), 3/31/08 - https://www.youtube.com/watch?v=P3hHPeP5cws
- Fox 13, 5/6/08 - https://www.youtube.com/watch?v=fI_HK7agbzk
- The Today Show, n-d/09 - https://www.youtube.com/watch?v=SZy05-i7fW0

Exhibit 2: Bubble and Bee Organic Certified Organic Products

Almond Coconut Pit Putty Cream	Jasmint Pit Putty Deodorant Stick	Orange Bath Salt (4 oz., 10 oz.)
Almond Coconut Pit Putty Deodorant Stick	Lavender & Chamomile Bath Salt (4 oz., 10 oz.)	Orange Lip Balm
Belly Balm	Lavender & Orange Blossom Lotion Stick	Orange Vanilla Pit Putty Cream
Bug Spray	Lavender Vanilla Body Butter (4 oz., 8 oz.)	Orange Vanilla Pit Putty Deodorant Stick
Chai For The Guy Lotion Stick	Lavender Vanilla Pit Putty Cream	Peppermint & Cocoa Lip Balm
Coconut & Lime Bath Salt (4 oz., 10 oz.)	Lavender Vanilla Pit Putty Deodorant Stick	Pit Primer
Coconut & Lime Body Butter (4 oz., 8 oz.)	Lemon & Clove Pit Putty Cream	Pomegranate Kiss Lip Balm
Coconut & Lime Lip Balm	Lemon & Clove Pit Putty Deodorant Stick	Pomegranate Kiss Lotion Stick
Coconut Lime Lotion Stick	Lemon & Clove Pit Putty with Baking Soda	Raspberry & Vanilla Body Butter (4 oz., 8 oz.)
Face Cream For The Man's Skin	Lemongrass & Ginger Bath Salt (4 oz., 10 oz.)	Rude Raspberry Lip Balm
Face Cream For The Woman's Skin	Lemongrass Pit Putty	Rude Raspberry Lotion Stick
Geranium & Lime Pit Putty Cream	Lemongrass Pit Putty Cream	Soapnuts
Geranium & Lime Pit Putty Deodorant Stick	Odor Bee Gone Lemongrass & Rosemary	Spearmint & Tea Tree Pit Putty Cream
Geranium & Lime Pit Putty With Baking Soda	Odor Bee Gone Truly Herbal	Spearmint & Tea Tree Pit Putty Deodorant Stick
Jasmint Pit Putty Cream	Orange & Vanilla Body Butter (4 oz., 10 oz.)	Splash of Lime Toning Mist
Sunflower Lotion Bar	Super Pit Putty Deodorant Stick (Lemon & Clove + Patchouli	Unscented Lip Balm
Sunflower Lotion Stick	Sweet Jasmine Body Butter (4 oz., 8 oz.)	Unscented Lotion Stick
Super Pit Putty Cream	Unscented Body Butter (4 oz., 8 oz.)	Witch Hazel

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Exhibit 2: Bubble and Bee Organic Certified Organic Products (continued)

Source: www.bubbleandbee.com, used with permission

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Exhibit 3: Bubble and Bee Organic Financial Statements

Balance Sheet

	2013	2014
Assets		
Current Assets		
Cash	25,567	43,008
Receivables	32,375	35,525
Inventories	131,250	143,937
Total Current Assets	189,192	222,470
Fixed Assets		
PP&E	395,785	470,185
Less Depreciation	120,221	207,442
Total Fixed Assets	275,564	262,743
Total Assets	464,756	485,213
Liabilities & Shareholder's Equity		
Current Liabilities		
Accounts Payable	44,625	53,286
Accrued Liabilities	-	-
Bank Loan	201,796	159,579
Total Current Liabilities	246,421	212,865
Long Term Liabilities	-	-
Total Liabilities	246,421	212,865
Shareholder's Equity		
Member's Equity	150,000	150,000
Retained Earnings	68,335	122,348
Total Shareholder's Equity	218,335	272,348
Total Liabilities and Shareholder's Equity	464,756	485,213

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Exhibit 3: Bubble and Bee Organic Financial Statements (continued)

Income Statement

	2014
Revenues	1,776,168
Cost of Goods Sold	357,597
Gross Margin	1,418,571
Expenses	
Selling	439,512
General & Administrative Variable	82,514
General & Administrative Fixed	572,776
Depreciation	87,221
Total Expenses	1,182,023
EBIT	236,548
Net Interest Expense	7,535
Taxable Income	229,013
Taxes	-
Net Income	229,013

Cash Flow Statement

Cash Provided (used) by Operations	
Net Income	229,013
Plus Depreciation	87,221
Change in Working Capital	
Decrease (increase) in Receivables	(3,150)
Decrease (increase) in Inventory	(12,687)
Increase (decrease) in Accts. Payable	8,661
Increase (decrease) in Accrued Liabilities	-
Cash Provided (used) by Operations	309,058
Cash Provided (used) by Investments	
Additions to PP&E	(74,400)
Other Investments	-
Cash Provided (used) by Investments	(74,400)
Cash Provided (used) by Financing Activities	
Additions (reductions) to Debt	(42,217)
Net issues of Stock	-
(Dividends - Owner Draws)	(175,000)
Cash Provided (used) by Financing Activities	(217,217)
Net increase (decrease) in cash	17,441

Source: Bubble and Bee Organic financial records, used with permission. Actual financial figures have been disguised to protect confidentiality. Ratios have been maintained.

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Exhibit 4: Pro Forma Income Statement and Cash Flow Modeling Template

Balance Sheet

	2013	2014	2015	2016	2017
Assets					
Current Assets					
Cash	25,567	43,008			
Receivables	32,375	35,525			
Inventories	131,250	143,937			
Total Current Assets	189,192	222,470			
Fixed Assets					
PP&E	395,785	470,185			
Less Depreciation	120,221	207,442			
Total Fixed Assets	275,564	262,743			
Total Assets	464,756	485,213			
Liabilities & Shareholder's Equity					
Current Liabilities					
Accounts Payable	44,625	53,286			
Accrued Liabilities	-	-			
Bank Loan	201,796	159,579			
Total Current Liabilities	246,421	212,865			
Long Term Liabilities	-	-			
Total Liabilities	246,421	212,865			
Shareholder's Equity					
Member's Equity	150,000	150,000			
Retained Earnings	68,335	122,348			
Total Shareholder's Equity	218,335	272,348			
Total Liabilities and Shareholder's Equity	464,756	485,213			

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Exhibit 4: Pro Forma Modeling Template (continued)

Income Statement

	2014	2015	2016	2017
Revenues	1,776,168			
Cost of Goods Sold	357,597			
Gross Margin	1,418,571			
Expenses				
Selling	439,512			
General & Administrative Variable	82,514			
General & Administrative Fixed	572,776			
Depreciation	87,221			
Total Expenses	1,182,023			
EBIT	236,548			
Net Interest Expense	7,535			
Taxable Income	229,013			
Taxes	-			
Net Income	229,013			
Cash Flow Statement				
Cash Provided (used) by Operations				
Net Income	229,013			
Plus Depreciation	87,221			
Change in Working Capital				
Decrease (increase) in Receivables	(3,150)			
Decrease (increase) in Inventory	(12,687)			
Increase (decrease) in Accts. Payable	8,661			
Increase (decrease) in Accrued Liabilities	-			
Cash Provided (used) by Operations	309,058			
Cash Provided (used) by Investments				
Additions to PP&E	(74,400)			
Other Investments	-			
Cash Provided (used) by Investments	(74,400)			
Cash Provided (used) by Financing Activities				
Additions (reductions) to Debt	(42,217)			
Net issues of Stock	-			
(Dividends - Owner Draws)	(175,000)			
Cash Provided (used) by Financing Activities	(217,217)			
Net increase (decrease) in cash	17,441			

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Exhibit 4: Pro Forma Modeling Template (continued)

Assumptions	2014	2015	2016	2017
Revenue Growth of about 15% per year				
Unit Demand	126,869			
Average Selling Price	$ 14.00			
COGS % as a % of Revenues				
Selling Expense as a % of Revenues				
General and Administrative Expense				
Variable G&A as a % of Revenue				
Fixed G&A Expense				
Depreciation Expense				
Existing Equipment	87,221			
Building - 30 years				
New Equipment	-			
Total	87,221			
Net Interest Expense				
Tax Rate NA due to LLC				
Receivables as a % of Revenues				
Inventory as a % of Revenues				
Accounts Payable as a % Revenues				
Accrued Liabilities % of Revenues				
Additions to PP&E				
Debt				
Additions to Debt - Bank Loan				
(Reductions) to Debt - Bank Loan				
Additions to Debt - Long Term Debt				
(Reductions) to Debt - Long Term Debt				
Equity only financing				
Dividends - Owner Draws				

Source: Constructed by authors based on company records

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Exhibit 5: Financial Ratios and Calculations

Liquidity:

Current Ratio = Avg. Current Assets/Avg. Current Liabilities
Quick Ratio = (Avg. Current Assets- Avg. Inventories)/
(Avg. Current Liabilities-Avg. Inventories)

Cash Conversion Cycle:

Inventory to Sale = Avg. Inventories/ (COGS/365)
Sale to Cash = Avg. Receivables/(Sales/365)
Purchase to Payment = (Avg. Payables + Avg. Accrued Liabilities)/(COGS/365)
Cash Conversion Cycle = Inventory to Sale + Sale to Cash – Purchase to Payment

Leverage Ratios

Total Debt to Assets = Avg. Total Debt/Avg. Total Asset
Interest Coverage = EBITDA/Interest Expense

Profitability Ratios

Gross Profit Margin = (Net Sales-COGS)/Sales
Operating Profit Margin = EBIT/Sales
Net Profit Margin = Net Income/Sales
NOPAT Margin=Net Profit Margin = EBIT*(1-tax rate)/Sales

Efficiency and Return Measures

Sales to Total Assets Ratio = Sales/Avg. Total Assets
Operating Return on Assets = EBIT/Avg. Total Assets
Return on Assets = Net Income/Avg. Total Assets
Return on Equity = Net Income/Avg. Equity

Source: Leach & Melicher (2015) *Entrepreneurial Finance*[2]

NOTES

[1] "Organic Personal Care Products Market – Global Industry Analysis, Size, Share, Growth, Trends and Forecast, 2014-2020." *Transparency Market Research*. Press release July 26, 2015.

[2] Leach J, and Melicher, R., (2015). *Entrepreneurial Finance*, 5th edition. Stamford, CT: Cengage Learning.

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