

SOPHIA





GRAPHIC DESIGNER

HELLO my name is

BEN

PRODUCT 💝

Sophia: Personal Opportunities & Challenges

Sophia is a busy mother of two with a big dream of owning her own bakery. A whiz in the kitchen, she greatly enjoys making special treats for her friends and family. Sophia appreciates hearing that her desserts taste better than the local bakery's cakes and are just as pretty. She used to think that her friends were just being polite, but lately Sophia wonders if she could actually turn her hobby into a business.

Despite her desire to open a bakery, it seems impossible at this stage of her life. She's never run a business or had any formal training, and she doesn't know where she'll find the time. In addition to working part-time at her children's elementary school, she spends much of her day shuttling her kids to and from gymnastics, soccer, music lessons, and a host of other extra-curricular activities.

Moreover, she has no idea where she'll get the money to start a business. She and her husband have a mortgage of \$1,000 a month on the house and owe about \$5,000 on their credit cards. Although her husband's truck is paid off, the payments on Sophia's car are \$400 a month. From time to time, they pay down their credit cards. Just as financial stability seems achievable, though, some unexpected expense pops up or the holidays roll around, and the balance goes back up again. Sophia's family doesn't live extravagantly, but they do enjoy a weekly Friday night date at their favorite restaurant and their annual two-week family trip to the beach.

Sophia fears that starting a business will make her give up time with her family and risk their financial future. She loves the idea of being her own boss, but is it really possible to have it all?

SERVICE 🛋

Ben: Customer, Problem, Alternatives

After graduating from college with a degree in graphic design, Ben spends six months trying to get a job with a design firm. With no prospects in sight, he resigns himself to waiting tables. At the restaurant one day, he overhears his boss mention that they would like to "freshen up" the restaurant's image—a new logo, a new menu, and a new website. However, all the quotes he's received from local firms are out of his price range.

Ben realizes that he might be able to help. Even though none of the firms in town were hiring, he has a strong portfolio he developed through internships and school work. Perhaps he doesn't have to give up his dream; he can start his own business. Lots of small businesses need help but can't afford the prices of large firms. They can try to do it themselves or hire an online service, but those often lack the professionalism or personal touch needed to help a small business succeed.

All he really needs to get started is a computer, software, and a client. He already has the computer and the software and it looks like a potential client has just come his way.

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Sophia: Solution, Benefit, Advantage

Even with all the obstacles in her way, Sophia keeps thinking about the bakery. Her husband is supportive, but a little worried about the financial risks involved. Still, people keep coming to her requesting her desserts for their special days—even people she doesn't know!

Because baking is more of a hobby at the moment than a business, Sophia often refers people to the upscale bakery not far from her house. However, people usually complain about the high price tags attached to their beautiful desserts. The other alternative to avoiding the hassle of baking is the supermarket bakery. While it's more affordable, the cakes just aren't very good.

Although Sophia lacks experience running her own business, she does have a lot of experience baking, an amazing cake recipe, and a huge network of support to help her succeed.

From what Sophia can tell, current prospects are slim if you want to make your special day perfect with something delicious and affordable. Someone needs to offer tasty desserts at reasonable prices. Maybe, just maybe, it should be Sophia.

CASE STUDY | Sophia: Starting Small

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In the rare quiet moments of the day, Sophia daydreams about her bakery. She envisions a warm, comfortable room with wooden tables and cushy chairs where customers enjoy her goods. In one corner, a children's area keeps little ones entertained with toys and books while their parents visit. On the other side of the room is a beautiful display case stocked with a variety of cakes, pastries, and desserts—each a token of the love and care she feels for her craft. In addition to desserts, she'll offer tea and specialty coffees as the perfect complement to something sweet. She'd also like to offer a small selection of breakfast and lunch items to keep customers coming back throughout the day. The kitchen will remain busy, supplying the café as well as providing catering services to the many hosts wanting one of her fantastic cakes...

However, bakeries like that cost a lot of money—money she doesn't have. It seems like her dream may never become a reality. "Surely," she thinks, "there's got to be a simpler way."

CASE STUDY |

SERVICE 📥

Ben: Keeping & Growing Customers

Ben decides to go for it. He really loves helping small businesses with their design needs and sees an amazing opportunity to work for himself.

Although he's planning on approaching his boss at the restuarant about his services, Ben's not sure how to best get the word out about what he offers to others. So many strategies are possible. How will he know what's the best one? It all feels a little overwhelming.

CASE STUDY | Sophia: Distribution

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Despite her big dream, Sophia decides it's best to start small. Really, all she needs to bake a cake are ingredients, pans, and an oven. She already has everything she needs at home, so why wait? Working from home also gives her the flexibility her busy schedule and kids demand.

While it seems like a pretty simple model—bake cakes and sell them—Sophia realizes quite a few options exist for getting her cakes to her customers.

One way is to sell directly to her customers herself. This means she'll need to find the customers, take their orders, bake the cakes, and then deliver them. The challenge with this approach, though, is that she'll have to find all the customers herself.

Another option is to target places where people already go—local restaurants. Last time she was at her favorite restaurant, she noticed that the desserts weren't very good. She could approach the owner and ask to supply the restaurant with her cakes. In selling through the restaurant, she would probably sell more cakes and wouldn't have to find customers herself. However, her prices would need to be lowered to allow the restaurant to make some money and she isn't sure she'll have enough time to bake as many cakes as a restaurant will require.

After mulling it over for a few days, Sophia decides that the flexibility and freedom of selling directly to customers is the best choice for right now. She can always approach restaurants later, right? But to start out, she's going to go with the less complicated and less demanding option.

CASE STUDY | Ben: Unit of Sale

SERVICE 📥

After days of waiting for the timing to be right, Ben works up the courage to approach his boss. With portfolio in hand, he explains that his reasonably-priced designs are the solution to the restaurant's need for a new image. Ben's boss is quiet for a moment, and his heart sinks. "Maybe this wasn't such a good idea after all," Ben thinks. After a long pause, the boss responds that he's interested. But, he needs a proposal and a price before making any final decisions.

Promising to have a proposal to his boss in a few days, Ben goes to work. The first part is easy. He knows what the restaurant needs—a new logo, a new menu design, and a new website. The second part is more challenging. How does he figure out the price? The three things the restaurant needs each require different amounts of effort. The logo will take the most time and the website almost as much, but the menu shouldn't be too difficult. His prices now will also affect how he charges customers in the future. Each project will differ in complexity, so a flat rate doesn't seem like the best way to go.

Ben scratched is head. What is he really selling?

CASE STUDY | Sophia: Pricing

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Sophia is so excited she can hardly stand it. Her first sale! A friend called wanting a cake for a bridal shower, and when Sophia told her about the new business, she was relieved her friend was happy to buy the cake. "How much will it cost?" she asked. Having never sold her cakes, Sophia asked for a day to get the numbers together.

First, Sophia asks a few close friends what they'd be willing to pay. To make sure her product is fresh in their minds, she invites them over and makes a cake to serve. Scraping their plates clean, she finds they'd gladly pay \$45–\$60 for a cake to make a special day perfect.

Next, Sophia looks at what other bakeries in the area charge. With a little investigative work, she discovers that a cake at the boutique bakery costs about \$70. The supermarket is far more affordable at \$35. Making a cake at home costs about \$6 in ingredients but entails the hassle of baking. She remembers that most people think the boutique is too costly and the supermarket lacking taste. Since her customers want something affordable, hassle-free, and delicious, she must meet all their needs.

Lastly, Sophia figures out her costs. From what she can tell from a quick stroll down the grocery aisle, it'll cost her about \$6 worth of ingredients to bake the cake, 2.5 hours of her time, and delivery costs.

With all the information in hand, Sophia is ready to figure out her price.

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Sophia: Legal Considerations

Sophia decides to talk with a lawyer about her business concept. Through their conversation, she discovers many legal issues she'd failed to consider.

First, Sophia realizes it would be best if her venture were an independent organization, separate from herself. If something horrible happens, he doesn't want to risk her family's financial future. Because the business will be pretty simple and she doesn't have any partners, a business structure with minimum personal liability makes the most sense. To become a legally recognized business, Sophia meets with a lawyer and files the appropriate paperwork, including registering his business name as "Sophia's Sweets."

Next, Sophia gets a business identification number from the national government. According to the lawyer she met with, she needs this number to file her business taxes alongside her own.

At the local level, a county official tells her to file business licenses with the county and the city. They also refer her to the local Health Department where she discovers some alarming information. Apparently, she can't bake and sell cakes from her house unless her kitchen is certified as a commercial kitchen. In order to be certified, she has to comply with a list of requirements and undergo several inspections. Moreover, she can only sell certain types of baked goods from her home according to local laws, and she must file for food-related permits with the Health Department.

At her lawyer's encouragement, Sophia also talks with an insurance agent to acquire a standard liability insurance policy and product liability policy. These policies protect Sophia's Sweets in the rare instance someone gets sick from the cakes she serves and decides to sue. "Better safe than sorry," the lawyer reasoned with her.

Lastly, the lawyer advises Sophia that any recipes she creates are trade secrets. To protect herself from intellectual property theft, Sophia should be careful with how she documents and shares her recipes.

Sophia is really glad she talked with a lawyer. Failure to do so could have been catastrophic for her business.

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Sophia: Startup & Ongoing Costs

Sophia realizes that there are several things she needs to get her bakery started. She sits down and makes a list:

Ingredients

Decorating tools

Pans

Oven

Mixer

Refrigerator

Cooking utensils

Cake boxes

That should be everything it takes to bake a cake. What about the more "business-like" things? She continues writing:

A cell phone

Office supplies

A computer

Advertising

A delivery vehicle

Business licenses & permits

Logo design

Insurance

Website

Taxes

Business cards

Utilities

She'll also need to devote quite a bit of time to baking, which means quitting her job at the school. Her husband needs to be on board and help with the children. Sophia also needs to perfect her baking process and the recipes for her first selection of cakes. It'd be helpful to replace her mixer with an industrial grade one and to find a delivery person willing to use her own car.

Looking back over her list, Sophia realizes that starting a business is much more complicated than she originally thought and thrilling at the same time.

CASE STUDY | Ben: Fixed Costs

SERVICE 🛋

Ben plans to charge an hourly rate for his graphic design work. In order to figure out how much to charge per hour, Ben realizes he needs to know his fixed costs.

High-speed internet is a must because design files are large. Although he's already designed his website, he still has a monthly web hosting fee. He also joined the local design association which has dues of \$120 a year, breaking down to \$10 a month. Liability insurance costs \$30 a month and his three design magazine subscriptions (to make sure he's up to date on the latest designs) cost \$45 a month. Also, he needs to pay himself. The starting salary in his town for a graphic designer of his educational background and expertise is \$30,000. While this might be ambitious at the start, he wants to eventually quit his job at the restaurant and make graphic design a full-time gig. The salary breaks down to \$2,500 per month. He decides to make a list.

Fixed Costs: Item Description	Cost
High-speed internet	\$75
Web hosting	\$10
Design association dues	\$10
Liability insurance	\$30
Magazine subscriptions	\$45
Salary	\$2,500
Total:	\$2,670

If his math is right, he'll need \$2,670 a month in order to be a full-time graphic designer.

CASE STUDY | Sophia: Variable Costs

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Sophia needs to figure out how much it will cost her to sell one cake. Besides ingredients, the biggest cost is her time. Although she'd prefer to pay herself a salary, it seems to make sense to tie the labor costs to each cake instead, using an hourly wage. That way, if she ever hires someone else to help her, she already knows her costs. Sophia estimates it will take 2.5 hours to finish a cake.

Because she'll be busy baking, Sophia hires a neighbor to help with deliveries. The neighbor, retired and always happy for an opportunity to get out of the house, is willing to use her own car and pay for gas. In exchange, Sophia will pay her \$12 per hour for deliveries with an average delivery taking 30 minutes. Sophia lists out her variable costs:

Variable Costs for One Cake

Variable Costs: Item Description	Cost
Flour	\$0.20
Eggs	\$0.80
Sugar	\$0.70
Milk	\$0.25
Oil	\$0.15
Baking powder	\$0.10
Baking soda	\$0.05
Vanilla	\$0.08
Salt	\$0.03
Confectioner's sugar	\$1.50
Butter	\$1.25
Cream	\$0.10
Food coloring	\$0.18
Cake box	\$0.25
Delivery costs	\$6.00
Labor in preparing and decorating the cake	\$25.00
Payment processing fees (3%)	\$1.03
Total Variable Costs:	\$37.67

Now that she knows her variable costs, she subtracts them from the selling price (\$50) to determine her gross profit, \$12.33 per cake. To keep everything in one place, Sophia finds it helpful to look at her information in a table:

Typical Sale	One Cake
Price	\$50.00
Variable Costs	\$37.67
Gross Profit	\$12.33

CASE STUDY | Sophia: Break-Even Point | PRODUCT |

In order to calculate her break-even point, Sophia needs to get all her numbers together in one place. Sophia has determined that her fixed costs are:

Fixed Costs: Item Description	Cost
High-speed internet	\$55
Cell phone	\$80
Insurance	\$75
Taxes	\$110
Web hosting	\$10
Advertising	\$100
Licenses and permits	\$30
Salary	\$500
Total Fixed Costs:	\$960

The salary seems a stretch, but she wants to compensate herself for time spent finding customers and doing paperwork. Sophia adds her fixed costs to her chart.

Typical Sale	One cake
Price	\$50.00
Variable Costs	\$37.67
Gross Profit	\$12.33
Fixed Costs	\$960.00

Sophia worries she won't meet her minimum goal. Selling more than two cakes every day, even weekends, seems like too much. She experiments with the numbers to see if she can find a better situation.

- Scenario #1: \$50 per cake, salary at \$500 per month
- Scenario #2: \$60 per cake, salary at \$500 per month She learns that by raising her price to \$60, her breakeven point drops to 43 cakes per month.
- Scenario #3: \$50 per cake, no hourly wage, no salary Because she doesn't think her customers will pay that much, she tries lowering her costs. If she receives no compensation (salary or hourly), her break-even point drops to 13 cakes.
- Scenario #4: \$50 per cake, no salary
 However, she wants to get paid. With an hourly wage and no salary, she needs to make 38 cakes a month.

• Scenario #5: \$55 per cake, no advertising, salary at \$300 a month She tries lowering the costs of ingredients, but the outcome isn't significant enough to risk sacrificing the quality of her cakes. She finds that eliminating her advertising budget, reducing her salary to \$300 a month, and raising her price to \$55 a cake results in a break-even point of 38 cakes per month.

This scenario is the most realistic one, in her opinion. It might be a while before she actually gets the salary she desires, and she can use free forms of advertising to begin.

• Scenario #6: \$55 per cake, no advertising, no salary
In fact, if she foregoes her salary and only pays herself an hourly
wage, her break-even point drops to 21 cakes (scenario #6).

	#1	#2	#3	#4	#5	\$6
Typical Sale	One cake	One cake	One cake	One cake	One cake	One cake
Price	\$50.00	\$60.00	\$50.00	\$50.00	\$55.00	\$55.00
Variable Costs	\$37.67	\$37.67	\$12.67	\$37.67	\$37.67	\$37.67
Gross Profit	\$12.33	\$22.33	\$37.33	\$12.33	\$17.33	\$17.33
Fixed Costs	\$960.00	\$960.00	\$460.00	\$460.00	\$660.00	\$360.00
Break-even	78 cakes	43 cakes	13 cakes	38 cakes	38 cakes	21 cakes
Days open/Mo	20 days	20 days	20 days	20 days	20 days	20 days
Cakes per Day	3.9 cakes	2.15 cakes	.65 cakes	1.9 cakes	1.9 cakes	1.05 cakes

CASE STUDY | Ben: Break-Even Point

SERVICE 📥

Based on Ben's estimates, he will need \$2,670 a month to become a full-time designer. Every month, he'll need to pay for:

Fixed Costs: Item Description	Cost
High-speed internet	\$75
Web hosting	\$10
Design association dues	\$10
Liability insurance	\$30
Magazine subscriptions	\$45
Salary	\$2,500
Total:	\$2,670

Because Ben's costs stay the same no matter how many designs he does, he has no variable costs. From what he knows about his competition and the needs of his customers, Ben sets his price at \$45 an hour and lists out his numbers.

Typical Sale	One hour
Price	\$45.00
Variable Costs	\$0
Gross Profit	\$45.00
Fixed Costs	\$2,670.00

To make his target salary of \$2,500 a month, Ben needs to take jobs amounting to 60 billable hours a month—about 15 hours a week. Since much of his time will be spent meeting with prospective clients, taking care of bookkeeping, and other mundane office tasks, 15 hours a week of billable design sounds reasonable (scenario #1).

Ben discovers that by discounting his price to \$35 an hour, he'll need to bill 77 hours a month, or approximately 20 hours a week to break even (scenario #2).

Maybe Ben will be able to quit his job at the restaurant sooner than he thought!

	#1	#2
Typical Sale	One hour	One hour
Price	\$45.00	\$35.00
Variable Costs	\$0	\$0
Gross Profit	\$45.00	\$35.00
Fixed Costs	\$2,670.00	\$2,670.00
Break-even Point	60 hours	77 hours
Work Weeks per Month	4 weeks	4 weeks
Hours per Week	15 hours	20 hours

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Sophia: Multiple Break-Even Points

In addition to selling 14" layered cakes for \$55, Sophia also plans to sell wedding cakes for \$300. If she sells both types of cakes, how many of each does she need to sell to break even?

First, she has to figure out her costs and gross profit for each type of cake. Fortunately, she's already done the work on the 14" cake. For the wedding cake, she estimates 7 hours of baking (\$10 an hour = \$70), an hour and a half of delivery time (\$12 an hour = \$18), and approximately \$21.36 in ingredients, making the variable costs for a wedding cake \$109.36. If she charges \$300 for a wedding cake, her gross profit is \$190.64.

It seems that her fixed costs apply equally to both types of sales. However, she expects to spend about 60% of her time and resources making 14" cakes and only 40% on wedding cakes. Using these percentages, she figures out how much of the \$660 in fixed costs would go toward each typical sale. Then she calculates her breakeven point for each.

Typical Sale	One 14" cake	One wedding cake
Price	\$55.00	\$300
Variable Costs	\$37.67	\$109.36
Gross Profit	\$17.33	\$190.64
% Fixed Costs dedicated to typical sale	60%	40%
Fixed Costs (based on percentage)	\$396.00	\$264.00
Break-even Point	23 cakes	2 wedding cakes
Work Days per Month	20 days	20 days
Typical Sales per Day	1.15 cakes	0.1 wedding cake

With these estimates, Sophia finds that instead of needing to sell 38 cakes each month, she'll need to sell 23 regular cakes and 2 wedding cakes.

Sophia realizes that if she focuses more effort on selling wedding cakes, she'll need to sell fewer cakes total. For example, if she focuses 70% of her business on wedding cakes and 30% on the 14" cakes, she'll only need to sell 3 wedding cakes and 12 regular cakes a month.

Typical Sale	One 14" cake	One wedding cake
Price	\$55.00	\$300
Variable Costs	\$37.67	\$109.36
Gross Profit	\$17.33	\$190.64
% Fixed Costs dedicated to typical sale	30%	70%
Fixed Costs (based on percentage)	\$198.00	\$462.00
Break-even Point	12 cakes	3 wedding cakes

CASE STUDY | Sophia: Estimate Sales

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Knowing her break-even point, Sophia wonders how long it will take her business to get there. Sales will most likely be slow at first and grow gradually. After looking at the calendar and thinking about her marketing plans, she writes down everything that will contribute to her sales growth for the coming months and estimates her sales.

She uses a chart to organize her thoughts.

Month	Feb.	March	April	May	June	July
Notes: (What's driving sales each month?)	Has 5 orders for cakes, hopes to get 1-2 more.	Expects to get at least 8 more sales from calls to 25 friends who asked for cakes in the past.	Making 10 cakes for a big event but at discounted rate of \$45 each. Expects some friends she called last month to order.	Wedding season begins		
Estimated units sold	6	8	14	20	26	30

Month	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Notes	Slow	Add restaurant sales?		Thanksgiving	Christmas! Sales should be up.	Slow
Estimated units sold	15	35	40	60	70	30

CASE STUDY | Sophia: Sales Projections | PRODUCT |

Using her projections of future sales, Sophia calculates how long it will take her business to break even.

She'll start with \$500 in her business's bank account and will cut her salary for the first few months until sales can support it. She also needs to purchase a used industrial mixer to improve her efficiency. Since the mixer is a special expense not related to her fixed or variable costs, she lists the mixer as a unique one-time expense.

Then, Sophia makes calculations using these formulas:

- Estimated Sales = units sold x price per unit
- Total Variable Costs = units sold x variable costs per unit
- Total Expenses = fixed costs + total variable costs + special expenses
- Gain or Loss for Month = estimated sales total expenses
- Balance = cash balance at month's start + gain/loss for month

(continued...)

Month	February	March	April	May	June	July
Cash Balance at Month's Start	\$500	\$244	-\$228	-\$446	-\$460	-\$370
Notes: (What's driving sales each month?)	Has 5 orders for cakes, hopes to get 1–2 more.	Expects to get at least 8 more sales from calls to 25 friends who asked for cakes in the past.	Making 10 cakes for a big event but at discounted rate of \$45 each. Expects some friends she called last week to order.	Wedding shower season begins		
Estimated Units Sold	6	8	14	20	26	30
Estimated Sales (cash in)	\$330	\$440	\$670	\$1,100	\$1,430	\$1,650
Total Variable Costs (\$37.67)	\$226	\$302	\$528	\$754	\$980	\$1,130
Fixed Costs	\$360	\$360	\$360	\$360	\$360	\$360
Special Expenses		\$250				
Total Expenses	\$586	\$912	\$888	\$1,114	\$1,340	\$1,490
Gain/Loss	-\$256	-\$472	-\$218	-\$14	\$90	\$160
Balance	\$244	-\$228	-\$446	-\$460	-\$370	-\$210

If Sophia's predictions are correct, it will take her 10 months to break even. During this time, she'll have close to \$1,000 of losses. While she can give up her salary for 7 months, she can't cover the losses, as well. She needs to come up with a plan...

Month August Cash Balance at Month's Start Notes: (What's driving sales each month?) Estimated Units Sold Estimated Sales (cash n) Fotal Variable Costs (\$37.67) Fixed Costs Special Expenses Fotal Expenses Fotal Special Expenses Fotal Fixed Costs Fixed Co	-\$310 Add restaurant sales? 35 \$1,925	-\$363 40	-\$329 Thanks-giving	S51 Christmas! Sales should be up.	\$604 Slow	Valentine's
Notes: Slow What's driving sales each month?) Estimated Jnits Sold Estimated Sales (cash n) State Stat	Add restaurant sales? 35 \$1,925	40	Thanks- giving	Christmas! Sales should be up.	Slow	Valentine's Day
Estimated 15 Units Sold Sales (cash n)	35 \$1,925	40	60			
Estimated \$825 Sales (cash n)	\$1,925			70	30	55
otal see		\$2,200	\$3,300	\$3,850	\$1,650	\$3,025
/ariable Costs \$37.67)	\$1,318	\$1,506	\$2,260	\$2,637	\$1,130	\$2,072
Fixed Costs \$360	\$660	\$660	\$660	\$660	\$660	\$660
Special Expenses						
Fotal \$925 Expenses	\$1,978	\$2,166	\$2,920	\$3,297	\$1,790	\$2,732
Gain/Loss -\$100	-\$53	\$34	\$380	\$553	-\$140	\$293
Balance -\$310	-\$363	-\$329	\$51	\$604	\$464	\$757

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CASE STUDY | Sophia: Loans

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To keep up with the increases in orders, Sophia decides she would save money if she purchases an industrial oven. The oven in the commercial kitchen she's using only holds three cake pans, but an industrial one could hold twice as many, allowing her to cut her time working in half. Also, her current oven keeps needing repairs. The new oven will hopefully be maintenance free after the installation fee.

Sophia needs to take out a \$2,100 loan to have enough money to buy the new industrial oven. The loan will have a 9% interest rate and she plans on repaying the loan in one year. This means she'll pay \$189 in interest the first year she uses the new machine.

Is a loan worth it?

	Current Cost per year	Cost Year Machine is Bought	\$ Saved or Lost by Buying Machine*	Cost 2nd Year Using Machine	\$ Saved or Lost 2nd year+
Cost of time (# hours x \$10)	\$6,000	\$3,000			
Maintenance	\$300	\$150			
Machine cost	_	\$2,100			
Loan interest	_	\$189			
Total:	\$6,300	\$5,439			

^{*} current cost per year minus cost year machine is bought

⁺ current cost per year minus cost 2nd year

CASE STUDY | Sophia: Cash Flow

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Sophia's business has now been up and running for about a year and a half. Beginning with that first sale, many customers have sought her help in making their special days perfect.

While Sophia didn't initially intend to sell to restaurants at the start, a local restaurant owner requested her cakes. Looking at the numbers, the restaurant would make her sales goals more achievable, so Sophia took the job. Word got out and she now supplies four restaurants in addition to filling orders for individual customers. To meet the increased demand, she moved into the Business Development Center for its commercial kitchen and leases a used delivery truck. Rent and truck payments increase her fixed costs to \$1,110 per month.

Even though Sophia tracks her expenses and sales each month, she constantly worries about having enough cash on hand when the bills are due. The restaurants pay monthly instead of paying cake by cake, and she has to get the timing right. For example:

IN APRIL:

- She collects \$2,500 through cake sales to individuals.
- She collects \$500 from a restaurant she invoiced last month.
- She sends invoices to 4 restaurants; each owes \$400 (for a total of \$1600). They have 60 days to pay.
- She pays \$720 for ingredients.
- She places an order for 300 cake boxes, to be paid on arrival.
- She pays her monthly fixed costs of \$1,110.
- She pays her delivery person \$620.
- She pays herself \$1,250 for hourly work on cakes.

IN MAY:

- She collects \$2,000 through cake sales to individuals.
- She collects money from 3 of the 4 restaurants, totaling \$1,200.
- She sends invoices to the restaurants in the amount of \$2,000 due within 60 days.
- She sets up a business account with her supplier, and buys \$700 of ingredients to be paid within 60 days.
- She receives the cake boxes and pays \$75 for them.
- She pays her delivery person \$590.
- She pays herself \$1,250 for hourly work on cakes.
- She pays her monthly fixed costs of \$1,110.

IN JUNE:

- She collects \$1,700 through cake sales to individuals.
- Half of the restaurants pay their invoices and Sophia collects \$1,400.
- Sophia invoices the restaurants for \$1,750, due within 60 days.
- She places another order of ingredients with her supplier for \$250 to be paid within 60 days.
- She pays her delivery person \$570.
- She pays herself \$1,000 for hourly work on cakes.
- She pays her monthly fixed costs of \$1,110.

IN JULY:

- Sophia collects \$3,000 through sales of cakes to individuals.
- She receives payment from the restaurants totaling \$1,500.
- She pays her supplier \$700 for ingredients.
- She places an order for \$500 worth of ingredients to be paid within 60 days.
- She invoices the restaurants for \$2,500.
- She pays her delivery person \$650.
- She pays herself \$1,600 in hourly wages.
- She pays her monthly fixed costs of \$1,110.

Sophia tracks her cash flow, along with other important numbers, using a spreadsheet.

Category	April	May	June	July
Starting Cash Balance	\$450	-\$250	-\$75	
Cash In				
Collected from Individuals	\$2,500	\$2,000	\$1,700	
Collected from Restaurants	\$500	\$1,200	\$1,400	
Total Cash In	\$3,000	\$3,200	\$3,100	
Cash Out				
Fixed Costs	\$1,110	\$1,110	\$1,110	
Other Expenses Paid	\$2,590	\$1,915	\$1,570	
Total Cash Out	\$3,700	\$3,025	\$2,680	
Gain/Loss for month	-\$700	\$175	\$420	
End Cash Balance	-\$250	-\$75	\$345	

Non Cash Flow Items Actual Units Sold	109 cakes	106 cakes	92 cakes	146 cakes
Sales Pending (Accounts Receivable)	\$1,600	\$2,400	\$2,350	\$3,350
Expenses Pending (Accounts Payable)		\$700	\$950	\$750