Somerville Academy

The Technology School For Women

Problem:

There are twice as many men working in tech as women

Who cares?

- Tech companies
  - 1.1M skilled worker shortage = unrealized output of $112 billion in 2020
- Robots
  - Unconscious bias in emerging tech
- Parents
  - 43% of US women change careers after having kids
  - Average household income for single income families: $55,000
  - Most moms must work, but they need more flexibility
  - Tuition, course schedules, and campus-based learning exclude women

Solution:

A technology school for women

Who benefits?

- Tech companies
  - Can hire digital marketers, product managers, ux designers, and data scientists in 2019, not 2025
- Robots
  - More diversity = better tech AI
  - Scholarships and financial aid prioritize diversity in future tech teams
- Parents
  - Double household income without sacrificing flexibility
  - Average starting salary: $60,000
  - Attend classes remotely on their own schedule

Market Validation:

Post-Graduate Job Market

- IT unemployment rate: 2.8%
- Number of open job listings in the US for technical roles:
  - Digital Marketing: 50,042
  - Product Management: 65,083
  - User Experience Design: 149,942
  - Data Analytics: 84,463

Potential Students

- ⅔ of US families have working moms
- The percentage of dual income families in the US has increased 50% since 1970
- US Family Household Income:
  - Single income family: $55,000
  - Dual income family: $102,000
- Cost of kids:
  - $13,741* per kid per year
    - *Excludes college savings

Market Opportunity:

54% of tech companies are understaffed

- 2020:
  - 1.1 million unfilled positions
  - $112 billion in unrealized output
- 2025:
  - 2.1 million unfilled positions
  - $213 billion in unrealized output
- 2030:
  - 4.3 million unfilled positions
  - $449 billion in unrealized output

43% of women change careers after having children

- US birth rate:
  - 4 million births per year
  - 2 million new moms per year
- Stay at home moms in the US
  - 11 million

Total Addressable Market: $5.6 billion

Market Size:

Total Addressable Market: $5.6 billion

- New moms changing careers in the US each year

Serviceable Addressable Market: $4.5 billion

- New moms changing careers in the US each year
- Live in major cities

Serviceable Obtainable Market: $3.4 billion

- New moms changing careers in the US each year
- Live in major cities
- College educated

Program Pillars:

- Flexible learning environment
  - Recorded lectures
  - Livestream and recorded seminars
  - Collaborative work in small groups of four
- Applied technical skills
  - Quarterly curriculum reviews by professional advisory board

- Industry experience
  - Community partner program pairs students with real businesses
- Career support
  - 2 week career launch intensive
  - 6 months alumni support

Business Model:

16 week career launch programs: $9,000

- Moms
- Career changers
- Recent graduates

12 week career development programs: $4,000

- Small business owners
- Startup founders
- Employees
- Somerville alumni

Scholarships available for:

- Single moms
- All women of colour
- Self-identified women in the LGBTQ community
- Women with disabilities & chronic diseases
- Domestic violence & sexual assault survivors

Financial aid available for:

- Household incomes of less than $40,000 USD

Market Adoption:

Women's Groups

$1,000 referral bonus

- New mom groups
- MLM networks

Social Media

- Facebook groups
- Weekly livestream open classes
- #MentorMondays

Community Partners

- Recruit community partners for students
- Upsell career development programs

Competition:

	Online Option	Female Founder	Quarterly Curriculum Reviews	Alumni Career Support	Rolling Admission	Community Partner Program	Full Time Programs		Part Time Programs	
							Tuition	Program Length	Tuition	Program Length
General Assembly	Yes	-	-	-	-	-	$13,950 USD	13 weeks	$3,950 USD	10 weeks
Brainstation	Yes	-	-	-	-	-	-	-	$2,900 USD	10 weeks
RED Academy	-	-	Yes	-	-	Yes	$10,500 CAD	12 weeks	$2,450 CAD	10 weeks
Product School	Yes	-	-	-	-	-	-	-	$3,999 USD	8 weeks
Somerville Academy	Yes	Yes	Yes	Yes	Yes	Yes	$9,000 USD	16 weeks	$3,500 USD	12 weeks

Competitive Advantages:

- Rolling admission
  - Students can start when they are ready
  - No waiting for next semester
- 6 months of post-graduate career support
  - Alumni can attend weekly seminars
  - Alumni retain access to course materials
- Women focused
  - Built in contingency plans
  - Job application coaching
  - Overcoming unconscious bias

- Community partner program
  - Build a portfolio of work with real businesses
  - Graduate with four professional references
- Quarterly curriculum reviews
  - Professional advisory board keeps curriculum on the cutting edge of the industry
- Online programming
  - Video lectures allow for scheduling flexibility
  - Livestream seminars incorporate peer learning
  - Small classes of 4 students per cohort

Somerville Academy:

School Values

1. Inclusion
2. Courage
3. Community
4. Compassion
5. Respect

Launch Phase (Sept '18 – Feb '19):

Ad Spend & Revenue

- Advertising investment
  - $13,883.04
- Revenue generated
  - $72,900
- Revenue received
  - alumni, current students & program deposits
  - $26,490
- Expected revenue
  - future students & payment plans
  - $46,410

Key Metrics

- Cost to acquire one student (CPA)
  - $1,067.93
- Average revenue per student
  - $5,607
- Return on ad spend (ROAS)
  - 5.25

Key Learnings:

- **Sales cycle:** 3 months
- **Cost to acquire one student:** $1,067
- **Average revenue per student:** $5,067
- **ROAS:** 5.25
- **Influence:** Student support network / key influencers
  - Partners
  - Parents
  - Children
- **Investment:** Scholarships & financial aid increase accessibility
  - Scholarships
  - Financial aid
    - Payment plans available for household incomes under $40,000 USD

Cash Flow Projections (Q2–Q4 2019):

|	Overhead	Ad investment	Revenue	Cash Flow	New Students	New Programs
April	$ 9,000.00	$ 12,000.00	$ 22,428.00	$1,428	4	
May	$ 19,200.00	$ 16,000.00	$ 44,856.00	$9,656	8	Product Management
June	$ 23,800.00	$ 16,000.00	$ 67,284.00	$27,484	12	
July	$ 32,400.00	$ 20,000.00	$ 89,712.00	$37,312	16	
August	$ 32,400.00	$ 24,000.00	$ 89,712.00	$33,312	16	UX Design
September	$ 43,000.00	$ 28,000.00	$ 112,140.00	$41,140	20	
October	$ 45,600.00	$ 28,000.00	$ 134,568.00	$60,968	24	
November	$ 44,000.00	$ 32,000.00	$ 156,996.00	$80,996	28	Launch Data Science
December	$ 44,000.00	$ 32,000.00	$ 156,996.00	$80,996	28	
Total	**$ 293,400.00**	**$ 208,000.00**	**$ 874,692.00**	**$ 269,292.00**	**156**	

Setting The Foundation:

Key metrics

- CPA - $1,000
- Sales cycle - 90 days
- Revenue/student - $5,607

Key program milestones

- Product Management (May)
- UX Design (August)
- Data Science (November)

Projected Revenue Q2-Q4 2019
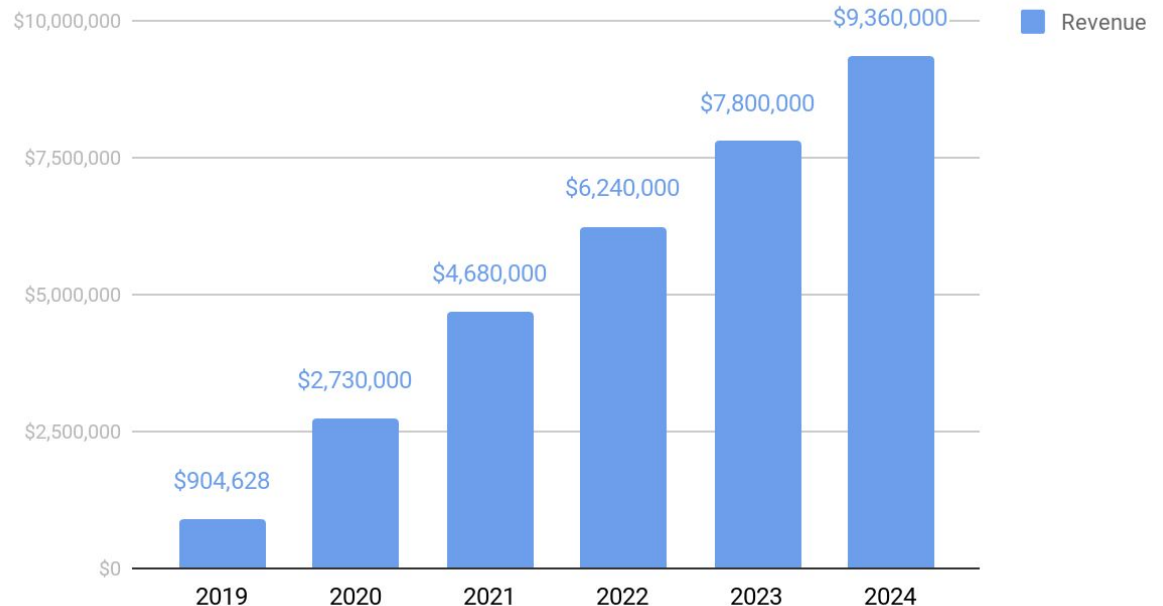

Legend: Expenses, Revenue
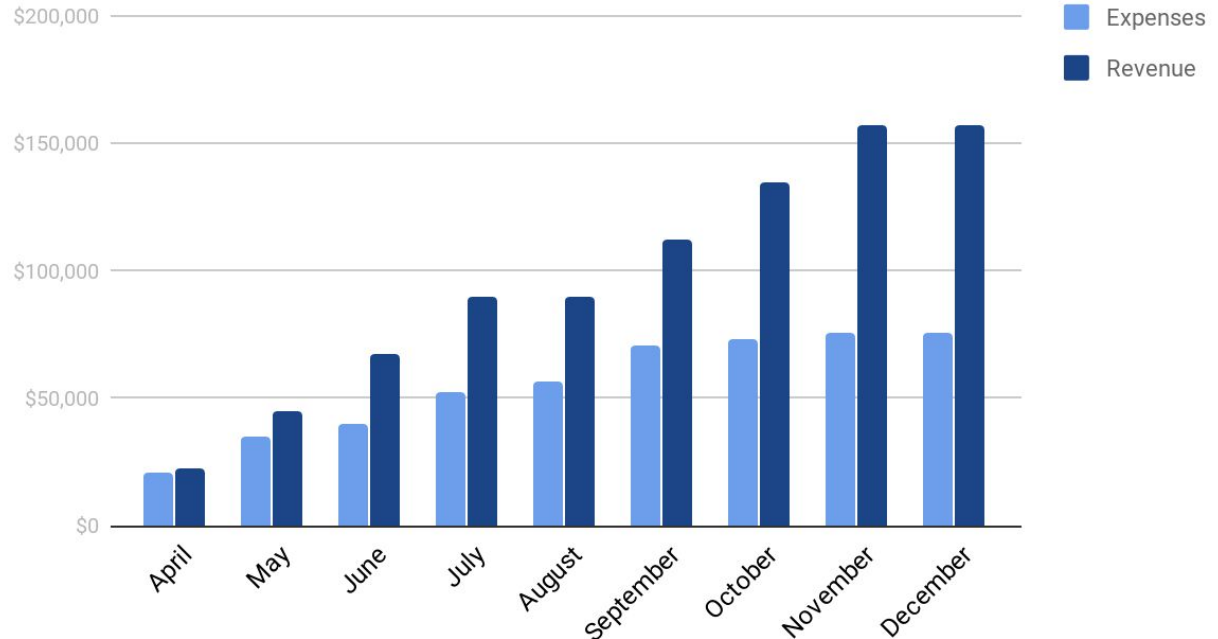
Year On Year Growth

Key metrics

- CPA - $1,000
- Sales cycle - 90 days
- Revenue/student - $6,500

Key program milestones

- Product Management (2019)
- UX Design (2019)
- Data Science (2019)
- Visual Design (2020)
- App Development (2021)

Projected Annual Revenue

2019 Key Investments

- Streamline the sales process
  - Building out the sales team
  - Shorten sales cycle to 2 months
  - Increase revenue/student to $6,500
- Marketing
  - Invest 3 months ahead in revenue
- Product Management, UX Design, and Data Science launch
  - Launch additional programs to increase career options for students
  - Keep classes small

Katie Jeanes, Founder

- 10 years working in tech
  - Startups
    - Digital media
    - Ecommerce
  - Accelerators
  - Social impact
  - Software
  - Digital media
  - Tech education
- 5 years teaching tech
  - General Assembly
  - University of Sydney
  - British Columbia Institute of Technology
  - RED Academy

The Somerville Team

Current Team   Future Hires

Patty Wong
Digital Marketing
Manager,
Telus

Kathleen Binns
Community Manager,
Somerville Academy

Basimah Syed
Product Manager,
ACL

Amy Dittmar
Senior Designer,
Atlassian

Laura Fedoruk
Grid Services
Analytics Manager,
Sunrun

Thank you

References:

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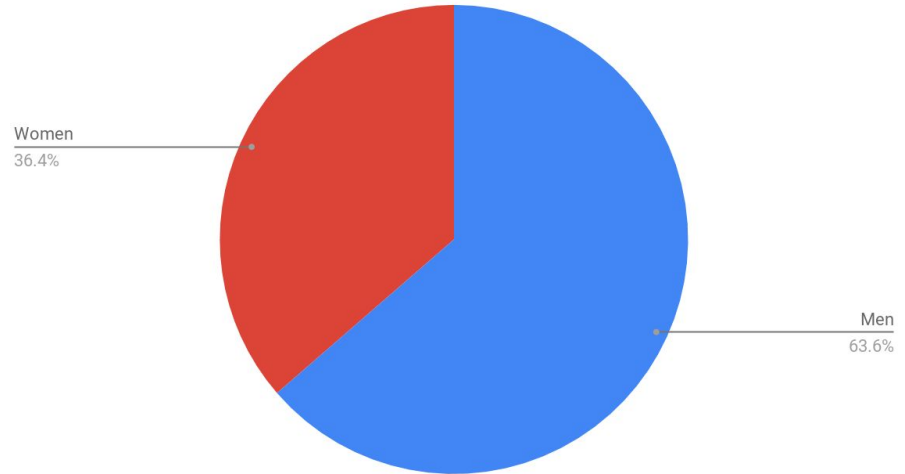
Appendix

Gender diversity in tech:

Women make up 51% of the US population, but just 36% of employees in top tech companies

- Highest: 54%
  - Etsy
  - Yelp
- Median: 37%
  - Tumblr
  - Flickr
  - Yahoo
  - HP
- Lowest: 26%
  - Intel
  - Microsoft

Gender balance across the top 25 US tech companies
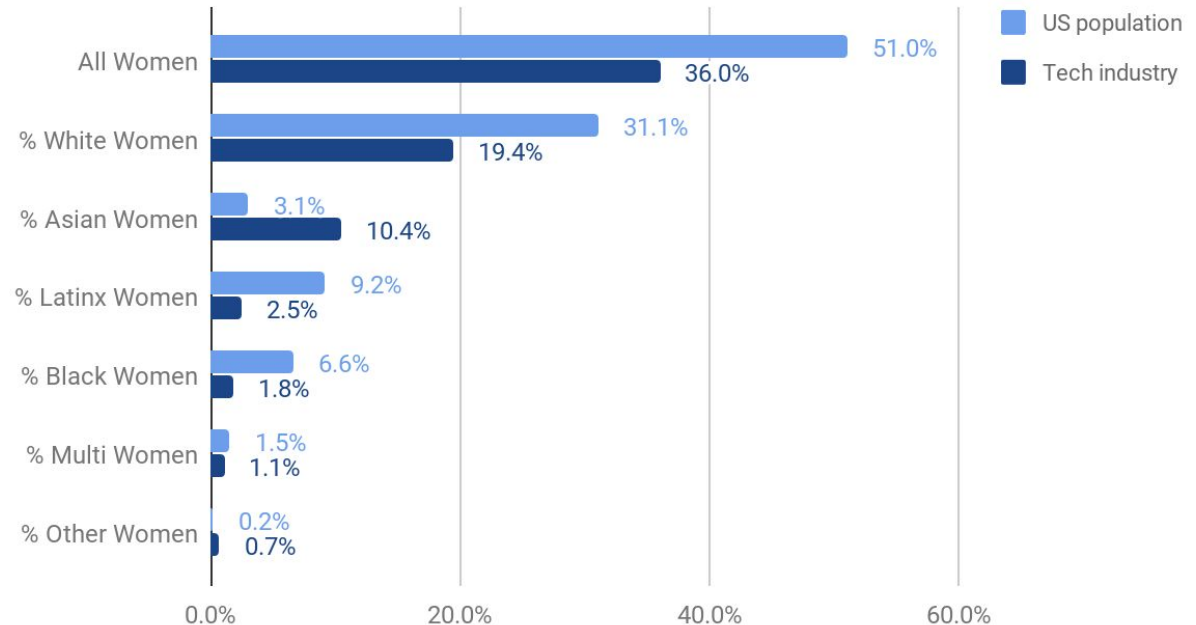

Women 36.4%

Men 63.6%

Racial underrepresentation in tech:

Compared to US population demographics, Black and Latinx women are the most underrepresented minority groups in tech

- Latinx women: 72.8%
- Black women: 72.7%

Women In The US vs Women Working In Tech

Legend:
- US population
- Tech industry

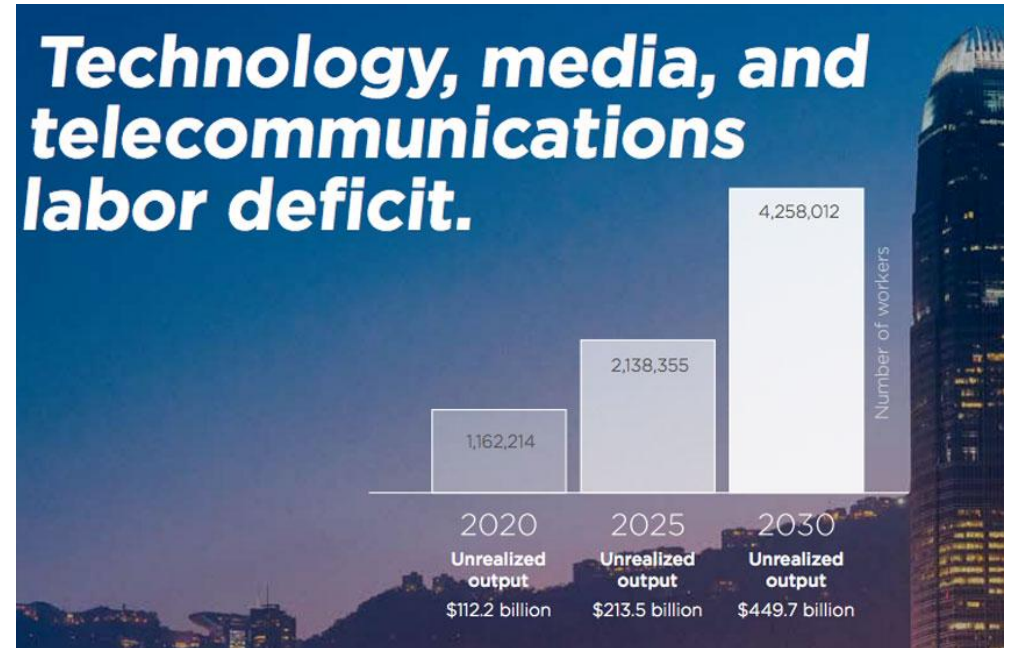| Category	US population	Tech industry
All Women	51.0%	36.0%
% White Women	31.1%	19.4%
% Asian Women	3.1%	10.4%
% Latinx Women	9.2%	2.5%
% Black Women	6.6%	1.8%
% Multi Women	1.5%	1.1%
% Other Women	0.2%	0.7%

Market Size:

Research from the Korn Ferry Institute forecasts the impact of the digital skills shortage over time.

- A 400% increase in unrealized output over the next ten years

Technology, media, and telecommunications labor deficit.

Number of workers

4,258,012

2,138,355

1,162,214

2020	2025	2030
Unrealized output	Unrealized output	Unrealized output
$112.2 billion	$213.5 billion	$449.7 billion

Market Size:

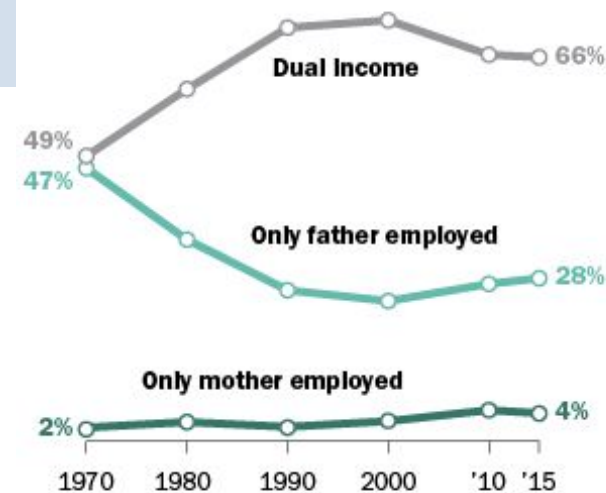⅔ of US families have working moms

- 4 million births in 2015 ~ 2 million new moms
- The percentage of dual income families in the US has increased 50% since 1970
- 43% of women change careers after having children

Total Addressable Market: $5.6 billion

- US moms changing careers annually: 860,000
- Average revenue per student: $6,500

The rise in dual-income families

% of couples with children under 18

Dual Income 49% → 66%

Only father employed 47% → 28%

Only mother employed 2% → 4%

1970 1980 1990 2000 '10 '15

Note: Based on employment status in the prior year among male/female married couples with at least one child younger than 18 in the household. Both married and cohabiting couples included since 2010. Data regarding cohabiting couples unavailable for earlier years. Other work arrangements not shown. Same-sex couples are excluded. Source: Pew Research Center analysis of March Current Population Surveys Integrated Public Use Microdata Series (IPUMS-CPS), 1970-2015.

PEW RESEARCH CENTER

Financial benefit of diversity:

Diversity in tech can generate an extra $400 billion in revenue each year.

- A one percentage point move toward representative diversity leads to a three-point increase in revenue
- Companies in the top quartile for ethnic and gender diversity are more likely to surpass industry norms for revenue and operating margin
- Companies in the bottom quartile for diversity aren't just lagging behind, they are rapidly losing ground

Likelihood of financial performance[1] above national industry median, %

Executive gender diversity by quartile
2014[2]   2017[3]

15%   21%

54   47   55   45
Top   Bottom   Top   Bottom

Average of 13% women in sample
Average of 14% women in sample

Executive ethnic diversity by quartile
2014[2]   2017[3]

35%   33%

58   43   59   44
Top   Bottom   Top   Bottom

Average of 12% minority in sample
Average of 12% minority in sample

[1] Average earnings-before-interest-and-taxes (EBIT) margin, 2010–13 in Diversity Matters I and 2011–15 in Diversity Matters II.
[2] Results are statistically significant at p-value <0.10.
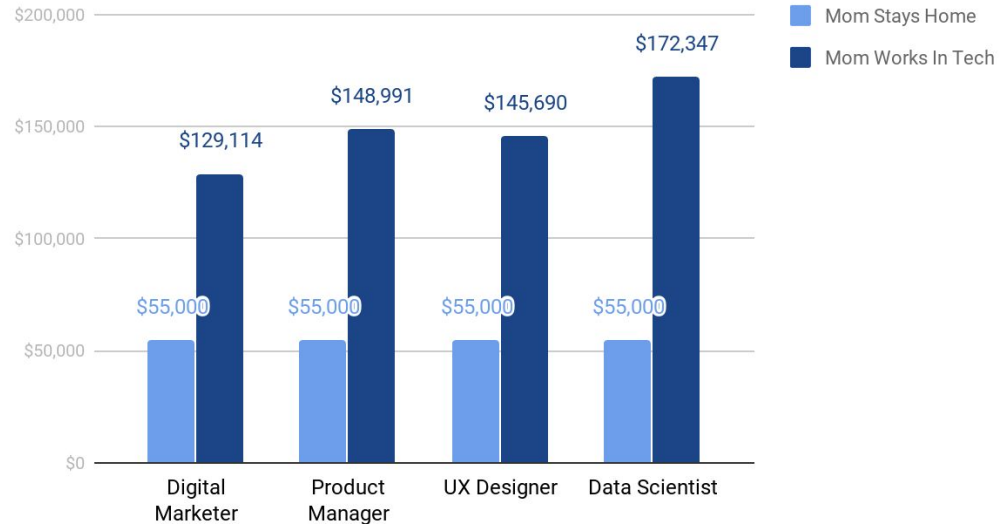[3] Results are statistically significant at p-value <0.05.

Average salaries and household income:

Average annual salaries in USD

- Digital Marketing Manager
  - $74,114
- Product Manager
  - $93,991
- UX Designer
  - $90,690
- Data Scientist
  - $117,347
- Average annual cost of childcare
  - $10,339

Change In Household Income (USD)

Mom Stays Home
Mom Works In Tech

	Mom Stays Home	Mom Works In Tech
Digital Marketer	$55,000	$129,114
Product Manager	$55,000	$148,991
UX Designer	$55,000	$145,690
Data Scientist	$55,000	$172,347

2019 Major Expenses

- Sales team
  - 100% commission, no base
  - Commission = 10%
- Online advertising
  - $1,000 per student
- Administration
  - Community Manager: $72,000
  - Accountant: $24,000
- Instructors
  - 4 x Lead Instructors: $72,000
  - 4 x Teaching assistants: $24,000 ($30/hr)
- Software
  - Marketing automation / CRM: $4,000
  - Learning management system: $1,500
  - Tools and resources: $3,500