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REED: Developing an Entrepreneurial Solution for Adults with Autism

Mary Conway Dato-on and Allie Wilkerson wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In early 2017, Jill Nadison, chief executive officer of the REED Foundation for Autism (REED Foundation) and executive director of the foundation’s initiatives REED Academy and REED Next, which taken together was referred to as simply REED, was faced with a difficult decision. Nadison needed to select one of three alternatives to support the next venture of the Oakland, New Jersey-based REED Academy. As she sat at her desk with her third cup of coffee, she thought about an earlier conversation with REED’s board of directors. REED Academy’s oldest student, Stephen, would turn 21 in the spring of 2018. This meant that he would no longer be able to attend the academy and would lose many of his government entitlements. In 2009, the board had begun to consider the gap in services faced by adults with autism and, with Nadison at the helm, had formed a brainstorming committee to discuss ways to finance adult services. The need to solve this problem was becoming increasingly urgent.

Nadison believed the organization had a moral obligation to continue to provide services for adults with autism, particularly those who had attended REED Academy in their childhood and teenage years. She and her team sought to provide day and residential programs for adults with autism, but the costs associated with these services were high. Nadison told the committee, “We need to create a ‘widget’ that can generate enough income to fund services for adults.” The committee and the entire board agreed. The idea of a social enterprise—a business that generated profit in order to support a cause—had been running through Nadison’s head since she first heard about this movement in the non-profit community, and she thought this model might provide the solution her group needed. At the same time, a social enterprise would be completely outside of REED Academy’s regular operations and would bring high risk to the organization and to the students with autism, an already vulnerable population. Nadison needed to figure out what this widget would be, assess the risk, and deliver that idea to the board of directors soon enough to enable implementation by May 2018.

Autism in the United States and New Jersey

According to the Centers for Disease Control and Prevention (CDC), autism spectrum disorder (ASD) was a developmental disability that caused significant social, communication, and behavioural challenges. While individuals with ASD did not look any different physically, they processed thoughts, learned, communicated, and interacted with their surroundings in unique ways. ASD individuals ranged from highly gifted to severely challenged and needed varying levels of daily assistance. In fact, 2017 statistics showed that only 28 per cent of individuals with ASD in New Jersey had an intellectual disability, while 45 per cent had above-average intellectual ability.[[1]](#footnote-1)

ASD, usually diagnosed in early childhood, was prevalent in all ethnic groups and backgrounds and was 4.5 times more common in boys than girls. Approximately one in 59 children in the United States was diagnosed with autism between 2010 and 2017. Families with children or teens diagnosed with autism faced significant costs associated with the care and education of these family members with autism. On average, medical expenditures for children and teens with ASD were 4.1 to 6.2 times greater than for those without ASD. The 2011 cost estimate for educating and caring for children with autism across the United States was $11.5 billion[[2]](#footnote-2) to $60.9 billion per year, depending on needs.[[3]](#footnote-3)

New Jersey, where REED Academy operated, showed the highest rates of ASD in the United States. Data collected by the CDC on the health and educational records of eight-year-old children showed that the trend of high ASD diagnoses in New Jersey would continue (see Exhibit 1.) In 2000, one of every 101 children in New Jersey was diagnosed with ASD. When the report was released in 2016, as Nadison was planning for the aging out of REED Academy students, the rate had increased to one in 34 children, or three per cent of eight-year-old children (a 19-per-cent increase from two years earlier). These numbers were nearly double the average among the 11 states surveyed. Within the next four years, estimates predicted that one in 27 children would be identified with ASD in New Jersey.[[4]](#footnote-4) This growth may have been attributed, in part, to better identification and diagnosis of ASD; regardless, the need for REED Academy’s services in New Jersey was clear—and growing.[[5]](#footnote-5)

REED Academy: Introduction

In 2003, REED Academy, a non-profit school for children and young people (aged 3 to 20) with autism, opened its programs in the basement of a small church. From its inception, REED Academy’s mission was to provide innovative, highly individualized education based on the principles of applied behaviour analysis (ABA). In the 13 years since its opening, the academy had blossomed, growing from a small school with a few children into a 2,350-square-metre state-of-the-art permanent building in Oakland, where it served approximately 40 children from Bergen, Passaic, Hudson, Sussex, and Essex counties. Since REED Academy had opened its doors, more than 15 children had graduated and returned to their local public schools. The school served individuals on the lower end of the autism spectrum, which included individuals who suffered from very severe handicaps and exhibited extreme behaviours that were potentially harmful to themselves or others. These individuals required significant ABA therapy and time in order to develop the skills and behaviours necessary to return to more mainstream classrooms—REED Academy’s desired outcome. The academy prided itself in remaining true to the theory and application of ABA in teaching, thereby implementing all aspects of ABA therapy, providing one-on-one services with qualified clinicians to create effective changes in the lives of its students. To support this consistent approach, REED Academy needed resources beyond those provided by government sources. The REED Foundation was developed as a response to this need, to consolidate fundraising activities. Through its operations, the REED Foundation generated funding to support the academy through grants and private donations. The foundation was committed to the values of community, quality, service, innovation, and sustainability. As stated in its mission, the foundation existed to “support people with autism throughout their lifespan to learn, live, work and thrive in the community.”

REED Academy’s Educational Approach

ABA focused on how learning occurred; its techniques emphasized positive reinforcement to increase useful behaviours and decrease harmful ones. ABA could be useful both in classroom learning and in the development of life skills. The U.S. surgeon general and many other federal and state agencies endorsed this form of therapy for ASD. Studies showed that ABA could create improvements in many areas of life, such as employment and social relationships. ABA’s success depended on individualized intervention by skilled therapists. The treatment was found to be effective for all age groups, from toddlers to adults. In order for it to work, it had to be intense; learners participated in ABA programs for 25–40 hours per week for several years. Extensive research confirmed that individuals with autism who participated in ABA within high-quality, certified environments made significant progress and increased their quality of life.[[6]](#footnote-6)

The REED Academy Team

The daily operations of REED Academy required two distinct teams. The more than 10 dedicated clinicians who developed and implemented curriculum and interacted directly with the students made up one team, which was led by the principal. The other team, led by Nadison, focused on the business aspects of the school, including long-term planning and effective management of finances and other resources. Nadison also oversaw operations and strategies for the REED Foundation and anticipated leading the organizational structure that would be developed to expand REED Academy services to adults. REED Academy and the REED Foundation reported to one board of directors. Nadison became known as REED’s executive director.

Nadison had served on REED’s board of directors since 2008. In 2010, she was hired as the development director, and in 2011, she became REED’s executive director. Nadison brought years of corporate experience to REED, including work within the high-tech sector, where she had focused on global event planning and change management. This specialized work meant that Nadison understood the process of creating and managing change across organizations of various sizes. Since her role did not involve the clinical side of REED Academy’s operations, Nadison was able to focus on running REED Academy and REED Foundation with business-like efficiency and strategic direction; she was known for her willingness to take risks. Nadison loved to solve problems and was a true go-getter. She thought innovatively and encouraged creativity and flexibility within her team. At the same time, Nadison enjoyed enabling women with families to succeed while balancing their work and family responsibilities. She knew that a healthy work–life balance would allow her team to thrive. Nadison’s team described her as “willing to take on big challenges.” They commented that “when you work with an executive director like Jill, everyone joins together to attack challenges with full force.” Nadison described her approach by reciting the motto she used in leading her team meetings: “We’re going to stay nimble and flexible to allow for strategic changes as a vision is identified and executed, but we’re not going to wait around for things to happen to us.” The REED business team was small, with two additional key players who were very loyal to Nadison because of the way she balanced this “go-getter” approach with care and concern for REED employees, families, and of course students.

Lisa Goldstein, a tried and true member of the business team, had been a donor to REED Academy since its inception. In 2011, a mutual friend introduced Nadison and Goldstein, telling them they would make a dynamic pair. Nadison agreed, and hired Goldstein as the REED Foundation’s development director. Goldstein had a bachelor of arts in marketing and had previously worked as a buyer for nationally recognized fashion and retail brands. Goldstein was not afraid to ask anyone for anything, which made her effective and creative in her development role. Her positive attitude in the face of challenges made her a perfect partner for Nadison. Goldstein believed in the shared goals of the team and felt a strong camaraderie that energized the team and pushed them through obstacles.

The third team member, Scott Marshall, served as the chair of the board. As a serial entrepreneur, Marshall shared Nadison’s big-picture thinking and risk-taking profile. He focused on the long-term future of REED and repeatedly encouraged the team to “jump in, and then figure out the details”—especially as they sought to create the enterprise that would generate new income needed to serve adults with autism.

This small team worked closely with the entire board of directors, many of whom had children with autism who had attended or were currently attending REED Academy. The board members’ input was valuable to keep the business team grounded in the needs of students and families.

What was next for REED?

Nadison was troubled by the gap in service that occurred when an individual with autism turned 21. On that day, government entitlements ended and all government support was transferred to Medicare, which would not cover the expenses families faced. When she thought of this, Nadison asked herself, “What’s next?” This question led the team to name its solution to addressing the gap REED Next. The team now had to determine a funding source for the solution. Nadison returned to her idea of developing a widget.

The vision for REED Next included day and residential programs for adults with autism. In the day program, individuals would have the opportunity to seek employment, live, and thrive while continuing to work with ABA clinicians. Job training and employment placement would be offered to those participants who were able to work. Having adults with autism work in the community served two purposes: First, employment gave adults with ASD the opportunity to work in jobs they enjoyed, thus enriching their lives and increasing their contribution to society. Second, placing adults with ASD in local businesses increased the knowledge of autism within the community while creating empathy among community members who interacted with REED Next adults. The residential program would consist of full-time care for severely challenged adults, who would live in a community. The residential program enabled ABA therapy to be implemented 24-7, thus increasing the potential for improved socialization and individual growth. It also provided a reprieve for the families of adults with ASD.

To make REED Next a reality, the team had identified five main requirements for success: funding, additional skills for working with adults, continued operation of the academy, quality offerings, and a cutting-edge approach. Funding, the most critical need, would enable the foundation to achieve the remaining benchmarks. The services Nadison envisioned at REED Next would be expensive. The high cost of qualified ABA clinicians combined with severely reduced government funding produced a tremendous financial challenge. At this stage of the program’s development, Nadison anticipated REED Next would need approximately $2.5 million to start and complete its first year of operations. REED Next would also require additional skills that were not needed for the academy’s current operations. For example, it would need clinicians who were specifically trained to interact with adults, staff for the 24-7 residential program, and employees who were qualified to operate a job training and placement program.

While all of this potential growth was exciting, it should not detract from the excellent operations at the academy. Staff could not be borrowed from REED Academy or shared between the academy and REED Next. The parents who served on the board of directors wanted assurances that REED Next would not take focus away from the academy. As Nadison said,

The parents on the board of directors interacted with REED services very personally; the academy was more than just a place to learn. Together the families and staff embodied REED, a comprehensive social service agency, with a desire to offer needed services, create a welcoming atmosphere, and educate the general population on ASD.

The team needed to ensure that the offerings of REED Next were in line with REED Academy’s reputation and brand strength and were of the same quality. Finally, for REED Next to succeed, it had to use a cutting-edge approach to applying ABA in a residential program while ensuring sustainable operations and financial security. The five requirements driving the initiatives increased the likelihood that REED Next would be an innovative solution to the challenges facing adults on the autism spectrum and their families.

Brainstorming

Nadison tasked her team with bringing their expertise and experience to the table to offer suggestions on ways to fund REED Next. Team members presented their ideas during a brainstorming session, keeping in mind that they would need the buy-in of the board of directors for any ideas they developed. After all, the REED Next venture involved great financial and reputational risk.

Goldstein proposed new fundraising options. She strongly believed that fundraising was not yet exhausted and felt her expertise in this area offered REED Academy and REED Next an opportunity for success. Nadison wondered whether an event space would be a good way to generate income and connect with the community while also providing a venue for fundraising. Nadison knew, from living and working in the area for years, that event spaces were hard to secure and extremely expensive. Other concepts offered included a radical idea based on REED’s concern for healthy children and communities: a vertical farm. This idea grew from team members’ frustrations when trying to feed healthy, delicious meals to their own families and REED Academy students, and from previous discussions about starting a traditional soil-based farm. The local community lacked locally sourced, organic greens, and the team saw an opportunity to fill this gap. Clearly, more research was needed on all the ideas. Nadison asked team members to each adopt one idea as their own and to prepare a pitch to convince the others that theirs was the best alternative. Refined pitches could be shared with the board in the upcoming meeting.

Nadison pursued two paths to checking the viability of the brainstormed ideas. First, she participated in a course led by Michael Edelstein, the director of the Institute of Environmental Studies at Ramapo College in Mahwah, New Jersey, which was located near REED Academy. One of the class requirements was for students to conduct an environmental scan and develop preliminary descriptions of product elements for a vertical farm and event space (see Exhibits 2 and 3). Second, REED hired an external consulting firm to conduct a focus group. The firm facilitated conversations about the three ideas—fundraising, an event space, and a vertical farm—to assess the market’s reaction to the Ramapo students’ initial ideas. In general, the focus group results indicated mixed reactions to the event space and general curiosity in the vertical farm and interest in hearing more about it. The students’ work, combined with the focus group results, gave Nadison an idea of potential consumers’ needs and wants. She was now ready to listen to her team members’ more thorough developments of the ideas from the brainstorming session.

Alternatives

Vertical Farming: The Big Stretch

During their research, the team met Dickson Despommier, an emeritus professor at Columbia University who was known as the father of vertical farming. Despommier was happy to contribute his expertise in sustainable farming and even suggested a former student with whom the team might collaborate. Through continued research, the team discovered Metropolis Farms, based in Philadelphia.[[7]](#footnote-7) The team visited the farm and was impressed by its delicious greens and by the incredible, affordable, second-generation vertical farming technology that was being developed there. The founder of Metropolis Farms was clearly interested in helping REED design a vertical farm and had several operational recommendations. Vertical farming provided a means to grow local greens year-round, even during the harsh northern winter, and a farm offered the added potential benefit of providing a place for REED Next’s adult clients to engage in job training. However, the REED team faced a significant learning curve in this industry and would be highly reliant on others to get started. Based on a budget created by the Ramapo students working on REED’s project, the vertical farm would require approximately $400,000 to operate for the first two years. This would cover salaries for a master gardener and assistant, the technology required to operate the farm, and rent for the facility. The vertical farm could be located in almost any available warehouse space, and these seemed plentiful in the local area. Finding the right place at the right price, however, remained a challenge.

Fundraising: Goldstein’s Forte

Goldstein’s previous success in fundraising gave credibility to her claim that more potential existed in this area (see Exhibit 4). In fact, funding for non-profit organizations in New Jersey had increased every year since 2012 (see Exhibit 5). The REED Foundation and REED Academy already benefited from a strong donor network and received money from government sources, private donations, and grants. Goldstein was confident that there were other potential revenue streams. Crowdsourcing was a growing trend in the non-profit world, and with the right campaign, REED Next could raise significant funds. In fact, crowdfunding generated $34 billion in 2015, representing a 113-per-cent increase from 2014.[[8]](#footnote-8) Goldstein also knew that local colleges were teaching courses on crowdfunding, and she believed that REED Next could serve as a project for one of those classes. This would help Goldstein get started with the idea without spending much in terms of financial resources or time. Fundraising could provide a predictable stream of income for REED Next to build on, and the REED Foundation already had a team that excelled in this area.

Not all was rosy in the fundraising world, however. Goldstein’s research suggested that, on the whole, the non-profit environment in the United States was in flux, and donors and the general public were demanding increasing accountability for performance.[[9]](#footnote-9) In fact, a blog Goldstein had read recently noted that non-profit groups were “being faced with a context of political and philanthropic uncertainty that might force dramatic shifts in both program and revenue stability.”[[10]](#footnote-10) Goldstein was confident, but not naïvely optimistic. She was aware of fundraising limitations such as restricted giving but believed that REED had a distinct advantage in its close relationship with parents.

Event Centre: Nadison’s Venue Concept

Finally, Nadison’s idea for an event centre was partially validated by the results of the focus group. The attendees suggested various potential uses for the space, including children’s classes, wine tastings, cooking classes, and catered events such as weddings, bar/bat mitzvahs, and birthday parties. An event centre would meet these needs and provide REED with more ways to connect with its community. At the same time, Nadison knew REED would have to find a fabulous deal through a reputable real estate agent. After all, its New Jersey location was not known for low rents or large land-plot availability. The venue must be in a desirable location that appealed to consumers and offered adequate parking. The costs for starting up and the first two years of operation were estimated at $300,000—less than the costs for the vertical farm. If an event could produce $1,000 in net income, the venue would have to host approximately three events per week for the first two years in order to recoup this initial investment.

Upon returning to her office, Nadison felt further from a decision than ever. She told the board that she would present her decision at the next meeting, in less than a month. Stephen’s 21st birthday seemed to be coming even more quickly. Nadison reminded herself to think beyond immediate needs to the long-term, sustainable income generation upon which REED Next could base its plans. Nadison told herself, “I need to compare the options from strategic and financial perspectives, in a relatively short time. For the board to buy in to my decision, I also need to present an accompanying change management plan to ensure the success of whichever option I recommend.”

Exhibit 1: Autism Spectrum Disorder Prevalence Rates (based on children who were eight years old in year noted)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Nationwide** | | **New Jersey** | |
|  | Prevalence in Children | Prevalence in Boys | Prevalence in Children | Prevalence in Boys |
| 2000 | 1 in 166 |  | 1 in 101 |  |
| 2002 | 1 in 150 |  | 1 in 84 |  |
| 2006\* | 1 in 110 |  |  |  |
| 2008 | 1 in 88 | 1 in 54 | 1 in 49 | 1 in 29 |
| 2010 | 1 in 68 | 1 in 42 | 1 in 45 | 1 in 28 |
| 2012 | 1 in 68 | 1 in 42 | 1 in 41 | 1 in 26 |
| 2014 | 1 in 59 | Not available | 1 in 34 | 1 in 22 |

Note:\*New Jersey was not included in this report.

Source*:* Adapted by case authors from “2018 Autism Prevalence Rates,” Autism New Jersey, accessed August 3, 2018, www.autismnj.org/prevalence-rates.

Exhibit 2: Ramapo Students’ Initial Concept for Vertical Farm

The Farm design will . . .

1. Follow principles of sustainable agriculture
2. Grow food organically, without synthetic pesticides, herbicides
3. Employ Permaculture and Biodynamic principles, which will . . .
   1. govern overall site management and landscaping, as well as food production
   2. reduce water and energy use to maximize efficiency
   3. reduce potential for disease or infestations
4. Implement agro-forestry methods, where appropriate
5. Incorporate edible landscapes and paths into the design
6. Utilize apiculture and animal husbandry for honey and eggs
7. Consider certification in organic and biodynamic farming, with a plan to reach eventual certifications

Source: Company documents.

Exhibit 3: Ramapo Students’ Initial Concept for Event Venue—Sustainable Event Space, Design Objectives

1

2

**Low Impact**

**Utilities**

* Market niche (one-stop shop)
* Garden, school, café
* Efficient lighting
* Non-toxic materials
* Appliances with low water usage
* Adapt different event types
* Expand marketability and generate higher revenue.
* (e.g., shared kitchens)
* 100 attendees or fewer

**Multipurpose Functionality**

**Small**

**Events**

**Support REED Enterprises**

1

4

2

3

Source: Company documents.

Exhibit 4: Revenue from REED’s Annual Fundraising Events (in US$)

|  |  |  |  |
| --- | --- | --- | --- |
| **Event\*** | **2015** | **2016** | **2017** |
| Art Funds | - | 17,000 | - |
| Comedy Night (October) | 108,648 | 97,336 | 115,000 |
| Super Bowl (September through January) | 37,500 | 35,880 | 35,200 |
| Go the Distance Annual Bike Ride | 335,304 | 281,138 | 282,696 |
| End-of-Year Letter | 20,000 | 26,000 | 20,000 |
| Grants | 108,000 | 115,000 | 180,000 |
| Golf Outing (done by another non-profit on REED’s behalf) | - | - | 10,100 |
| **Total** | 609,452 | 572,354 | 642,996 |

Note: Estimated expenses for fundraising events averaged 20-25 per cent.

Source: Company documents.

Exhibit 5: Funding Trends among New Jersey Non-profit organizations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Projected Funding—Upcoming versus Previous Year** | | | | |
|  | **2012** | **2013** | **2014** | **2015** |
| Increased | 39% | 42% | 58% | 57% |
| Decreased | 18% | 19% | 8% | 9% |
| Remained the same | 39% | 34% | 28% | 26% |
| Unknown/not reported | 5% | 5% | 6% | 8% |

Source: Center for Non-Profits, *New Jersey Non-Profits 2015: Trends and Outlooks*, 8, March 2015, accessed December 15, 2017, www.njnonprofits.org/2015AnnualSurveyRpt.pdf.

1. “Autism Prevalence Rate,” Autism New Jersey, accessed December 15, 2017, www.autismnj.org/prevalence-rates. [↑](#footnote-ref-1)
2. All currency amounts are in U.S. dollars unless otherwise specified. [↑](#footnote-ref-2)
3. “Autism Spectrum Disorder (ASD),” Centers for Disease Control and Prevention, accessed September 12, 2018, www.cdc.gov/ncbddd/autism/data.html. [↑](#footnote-ref-3)
4. “Autism Prevalence Rate,” Autism New Jersey, op. cit. [↑](#footnote-ref-4)
5. Ibid. [↑](#footnote-ref-5)
6. “Applied Behavior Analysis (ABA),” Autism Speaks, accessed December 15, 2017, www.autismspeaks.org/what-autism/treatment/applied-behavior-analysis-aba. [↑](#footnote-ref-6)
7. Metropolis Farms homepage, accessed July 24, 2018, www.metropolisfarmsusa.com. [↑](#footnote-ref-7)
8. Chance Barnett, “Trends Show Crowdfunding to Surpass VC in 2016,” *Forbes,* June 9, 2015, accessed December 20, 2017, www.forbes.com/sites/chancebarnett/2015/06/09/trends-show-crowdfunding-to-surpass-vc-in-2016/#191bb0114547. [↑](#footnote-ref-8)
9. Kevin P. Kearns, *Private Sector Strategies for Social Sector Success: The Guide to Strategy and Planning for Public and Nonprofit Organizations* (San Francisco, CA: Jossey-Bass, 2000). [↑](#footnote-ref-9)
10. Mark Fulop, “Five Core Competencies of Nonprofit Organizations,” Facilitation & Process, January 26, 2017, accessed May 7, 2018, http://facilitationprocess.com/core-competencies-nonprofit-organizations/. [↑](#footnote-ref-10)