SOLVIS

Keep Construction Clean

Start-Up Business Plan

Moravian Academy

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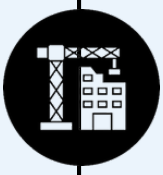
I. Executive Summary

What is Solvis?

Solvis is a company at the forefront of applying AI and machine learning to construction. Through our mobile app and Solvis Pure camera, construction companies and contractors can monitor their environmental impact 24/7. We aim to help corporations and consumers go from environmental degraders to saviors, while avoiding fines instituted by the Environmental Protection Agency (EPA).

Problems	Solutions
Fines Faced by Construction Companies: Total fines equated to $3.8B in 2023 for noncompliance with EPA regulations, with an average fine of $186,000	**Proprietary Runoff Detection Technology:** The Solvis Pure contains a computer with AI and ML technology to detect runoff from construction sites
Increasing Environmental Degradation: Bad construction waste management leads to 50% of climate change and landfill waste, 40% of water pollution	**Data Analysis and Reporting:** Mobile app provides subscribers with real-time environmental runoff and EPA compliance reports
Unfavorable Change Orders: Made by companies after receiving EPA fines, increasing project cost and length by ~5%: dissatisfying customers	**EPA Fine and Environment Protection:** App sends notifications when users near EPA limits, preventing fines and harmful change orders

Customer Segments



Primary Market : Construction Companies
Small to large-sized construction companies are under immense pressure to comply with strict EPA regulations to meet business goals and stay in operation.

Secondary Market : Individual Contractors
Often are not familiar with local environmental regulations. In addition, with limited financial resources, they are most affected by EPA fine institution.

Key Metrics

Customer Retention

Sales Revenue

Monthly Subscriptions

Market Share

Channels

Distribution

Direct Sales, E-commerce, Strategic Partnerships, Retail Distribution

Marketing

PPC Advertising, Social Media, SEO, App Ecosystem, Referrals

Cost Structure

Expense	Year 1	Year 2	Year 3
Customer Aquisition	$53,000	$53,000	$55,500
Distribution	$281,931	$571,706	$1,441,106
Human Resource	$350,000	$490,000	$590,000
Additional Costs	$25,000	$14,000	$14,000
Total Start-Up Costs	**$709,931**	**$1,128,706**	**$2,100,606**

Revenue Streams

Projected Revenue	Year 1	Year 2	Year 3
Solvis Premier Subscription	$259,056	$647,640	$1,813,392
Solvis Pure Sales	$478,800	$1,197,000	$3,351,600
Ad Campaigning	$115,200	$288,000	$806,400
Total Revenue	**$853,056**	**$2,132,640**	**$5,971,392**

Unique Value Proposition

Solvis is the **first solution** that allows construction companies to precisely **manage water and waste runoff through AI and machine learning** integrated technology, mitigating the problems that construction companies, consumers, and the environment face from increased environmental runoff.

Invesment

Solvis is requesting **$525,000 for 10% equity** in the company at a **$5.25M post-money valuation**. This financial capital will be used for software advancement, marketing, manufacturing, and patent costs. By year 3, Solvis expects will produce $8,957,088 in cumulative revenue, with a gross profit margin of circa 65%. Accordingly, your investment will be recovered **by the end of year 2, with an ROI of 31.37%**.

II. Problems

Problem 1: Fines Faced by Construction Companies Due to Improper Waste Management

In the current construction landscape, the methods used to monitor waste and water runoff include passive filtration and manual waste recording, both **reactive solutions**. Thus, many construction companies cannot monitor their waste material, subjecting them to fines instituted by the Environmental Protection Agency in response to waste runoff exceeding the amount allowed as part of the Clean Water Act and other EPA protection Acts. In fact, it is found that firms can be **fined up to $24M each year** for violating these regulations, which led to a total national penalty of **$3.8B** in 2023. In addition, it is shown that the **average EPA fine is $186,000**. This poses a significant financial burden on construction companies, limiting their ability to acquire resources. Further, being environmentally negligent tarnishes their reputation and consumer trust. In fact, in a self-conducted survey of 35 construction companies, Solvis found that **94.3% of companies** reported that they would significantly benefit from a proactive, real-time EPA compliance framework.

Problem 2: Increasing Environmental Degradation

As a result of the implementation of improper waste monitoring methods at construction sites, the magnitude of environmental runoff increases significantly. This leads to land degradation adjacent to construction sites and pollutes the nearby bodies of water. Specifically, the construction sector's poorly managed projects contribute to **50% of climate change, 40% of drinking water pollution, and 50% of landfill waste in the US**. In addition, laborious construction requires prodigious amounts of energy, further releasing harmful greenhouse gases into waste discharged from a construction site and the atmosphere. Findings show that this contaminated runoff exhausts natural resources. When these detriments are coupled, it has been revealed that animal ecosystems are depleted, and human health deteriorates from exposure to polluted waste and water. A more proactive monitoring system is essential in protecting the atmosphere and individuals at risk of environmental pollution.

Problem 3: Implementation of Unfavorable Change Orders

Change orders are proposed changes to a construction project due to unforeseen financial and resource conditions that cause construction firms to change the scope of a project. As construction companies fall subject to EPA fines and regulations, the number of change orders implemented increases significantly due to the need for these entities to allocate funding to pay off fines. Grzymala Law shows that this leads many customers to experience dissatisfaction, given that change orders significantly **impact a construction project's timeline and budget** while **increasing the construction price by an average of 5%**. In addition, Clearstory Construction demonstrates that unfavorable change orders cause contractors' relationships with customers to strain, often leading contractors to call off work and walk off of the project. To this end, it is pivotal that active monitoring solutions are utilized in construction to reduce the likelihood of the institution of change orders and to safeguard customers from experiencing misconduct from contracting companies.

III. Customer Segments

The United States construction market was worth **$2.1T in 2024**. The environmental construction and compliance sector is a critical part of this market worth **$38.3B** and is growing faster than ever due to the increasing amount of EPA penalties. However, the implementation of a robust system is long overdue. Construction entities and individual contractors can no longer afford to fall into legal trouble that costs them a substantial part of their yearly revenue.

Primary Market

Business Size

Small to large-sized construction companies

Psychographics

Concerned about environmental impact, in search of cost-effective compliance tools

Geographic

Throughout the United States

According to IBIS World, the U.S. has **3,776,498 construction companies,** most of which struggle with environmental compliance. In addition, these companies are resource-constrained and face pressure to make services faster and cheaper while meeting environmental standards. According to the AOTC, companies often lack the tools to monitor runoff, resulting in expensive penalties. For instance, Swinerton, a California-based construction company, was fined **$2.3M for a single violation** of the Clean Water Act. In 2023, there were **13,073 companies fined** for non-compliance. Solvis will target these companies, along with other vulnerable construction companies, as the primary customer segment to support them in their struggle with these environmental issues by offering them tools to reach sustainability and budget goals.

Secondary Market

Business Size

Individual builders and contractors with small-scale operations

Psychographics

Less familiar with environmental regulations, financially constrained, and need user-friendly, navigable tools

Geographic

States with high individual construction activity: California and New York

A profuse amount of individual builders are severely affected by issues related to excess runoff at building sites. Most of them have **no clue how to deal** with local environmental regulations and **can't feasibly invest time** to learn how to use complicated mitigation tools. In addition, issues caused by waste runoff can **lead contractors to postpone critical revenue-generating projects**. An environmental inspector noted, "If there was an environmental problem, I'd issue a stop-work order, delaying projects for weeks or even months until compliance was met." Financing is another hurdle, as many of these contractors operate with tight budgets and cannot afford expensive tools requiring extensive training. Solvis addresses these challenges with accessible, easy-to-use solutions that help builders stay compliant with EPA regulations without overwhelming their limited resources.

Market Research

Solvis has completed preliminary market research to validate the scope of its target area. In doing so, the company has established its Total Addressable Market, Serviceable Addressable Market, and Serviceable Obtainable Market which each possess heavy financial opportunity.

Serviceable Obtainable Market (SOM) : Companies that have already been fined by the EPA

Serviceable Addressable Market (SAM): Construction companies with environmental runoff issues

Total Addressable Market (TAM): U.S environmental construction services market