

IDLEAIRE TECHNOLOGIES CORPORATION – FROM IDEA TO IPO PLANS

Courtney Dalton
Mary Kay Sullivan
Maryville College

With oil prices hitting record highs in 2007, fuel conservation became a priority for the trucking industry. As companies searched for ways to get better mileage, one company looked in a different direction to address the problem. IdleAire Technologies Corporation, established in 2000, introduced a new technology that could conserve billions of gallons of fuel each year as well as significantly cut back on air and noise pollution. What IdleAire created was an engine idling alternative; truck drivers no longer would have to leave their engines running to access heating or air conditioning, as well as other cab accessories, while resting. IdleAire provided these services through a small, simple window attachment at an hourly service charge. With this product and service, IdleAire believed it would benefit all parties involved in the trucking industry, including truck drivers, trucking fleets, communities, travel center and parking lot owners as well as the environment. The company found a receptive market and expanded rapidly. Expansion was important to the success of the venture, but the build-out was very capital intensive. In late 2007, as the company prepared for an initial public offering, its revenues were increasing, but so were losses.

TRUCKING INDUSTRY – CURRENT SITUATION AND PROBLEMS

Trucks travel over 440 billion miles each year in order to haul 88% of the United States' total goods. For every 11 hours on the road, truckers in the U.S. are required by law to rest for 10 hours. In order to keep comfortable in their cabs, truckers often keep their engines running at an idle to provide heating or air conditioning during rest periods or while waiting to load or unload. Class 7 and 8 truck diesel engines idle at 900 rpm, which burns approximately one gallon of fuel per hour and creates unnecessary wear on the engine, shortening its useful life. An idling motor also creates harmful fumes, noise pollution and excessive vibrations. Nitrogen oxide, particulate matter, volatile organic compounds such as formaldehyde and benzene, carbon dioxide, and carbon dioxide are all substances that are emitted from idling diesel engines. The substances are released into the air and are breathed into the lungs of truck drivers along with any individuals near idling trucks for an extended

period of time. This type of air pollution can cause harmful health effects leading to respiratory illnesses, including asthma, chronic bronchitis, and emphysema. (About us, 2007)

A SOLUTION: IDLEAIRE TECHNOLOGIES

IdleAire Technologies began with a conversation on a family camping trip. A. C. Wilson's brother-in-law, a long-haul trucker, had received a ticket for idling his engine at an Interstate on-ramp and he was annoyed. "I'm required by law to stop and rest for 10 hours after a certain amount of time on the road. How in the world can I keep cool in summer—or warm in winter—if I don't idle the engine?"

Keeping the engine running while the truck was parked was very inefficient, he acknowledged. It caused wear and tear on the engine and it was expensive, especially now that the price of diesel fuel was hitting record highs. Another disadvantage to idling the engine was the noise and air pollution it created. But there just wasn't an alternative to idling.

Wilson pondered this at some length. Surely there was a solution. Here he was camping in comfort in his motor home, with air conditioning and easy access to TV and the Internet. Why couldn't truckers have a similar way to hook up their cabs to electricity and eliminate the need to idle?

Wilson drew up some sketches of a device that could be inserted into a window fitting of a truck cab; this would be attached to a source of power outside the truck and could provide heat and air as well as a safe electrical connection. Wilson showed the sketches to his brother-in-law and, on his return home, to his business partners. All liked the idea and believed it had great business potential. The attachment device could be sold at a minimum cost of \$10; revenues would come from hourly usage fees. The beauty of the idea was that many constituents would benefit from this service—truck drivers, certainly, and the owners of large truck fleets, but also the public at large. Eliminating engine idling would reduce harmful exhaust emissions and thus benefit the environment. This could be a win-win-win. The concept had the potential for conserving billions of gallons of fuel each year as well as significantly cutting back on air and noise pollution. How could it not be a success?

This group began raising venture capital from local investors and hired a management team with significant entrepreneurial experience. Michael Crabtree, who had successfully started and brought public two new technology ventures, agreed to be CEO. Thus, in 2000, IdleAire Technologies Corporation was born.

MOVING FORWARD

Wilson's first sketches evolved into a round sleek window attachment with an in-cab touch-screen control panel that could connect via a flexible, insulated hose to an external HVAC (heating, ventilating, and air conditioning) unit that provided filtered air. This unit was mounted on a truss structure above truck parking places. (See Exhibits 1 and 2.) The control panel module was equipped with a night light, a card reader where drivers swipe their cards for payment, USB ports for a keyboard or mouse, and a "help" button with 24-hour assistance. This also enabled access to electric power – and for premium services at an extra fee, access to expanded satellite television channels, movies-on-demand, and high-speed Ethernet and wireless Internet access.

The company secured two patents on its system and began lining up long-term contracts with large travel centers and truck stops. These truck stops would allow IdleAire to build its truck electrification system, called "Advanced Travel Center Electrification" or ATE on their premises and in return would receive a percentage of an hourly usage fee that truckers would pay to use the system.

IdleAire also set about securing relationships with large, long-haul truck operators. The sales pitch was twofold: The fleet owners would benefit through reduced wear on the engines from idling as well as saving fuel. Further, IdleAire literature pointed out, truckers would find the cab environment more appealing and might find additional services such as Internet access and the ability to watch movies in the cab entertaining.

A third front of early efforts was raising capital. Building the electrification system was very capital intensive. The cost to install the ATE system in an average size travel center with about 65 parking spaces was about \$1 million, an average of \$15,000 per parking space. Management spent a good deal of time in the early years seeking investors. An offering of convertible preferred shares (Series A) sold to qualified investors brought in over \$30 million in fall of 2002; two later series of convertible preferred shares were sold for a total of almost \$80 million.

IdleAire also applied for government grants on the basis of the environmental benefits of its service. As of June 30, 2007, the company had been awarded \$55.6 million in cumulative grants from government agencies. Government grants usually stipulated the location where the ATE system should be built. Some of these locations turned out not to be profitable, however, and had to be closed.

On December 30, 2005, IdleAire raised approximately \$234.8 million through

the sale of \$320.0 million of 13% senior discount notes and detachable common stock warrants. The net proceeds (after fees and expenses and repayment of debt) of \$207.6 million were used to fund the ATE network expansion and to cover interim operating losses.

OPERATIONS

As of August 30, 2007, IdleAire had 130 site locations in 33 states with 6,559 ATE equipped parking spaces and over 600 locations waiting on IdleAire service installations. These included the national chains of Pilot Travel Centers, Petro, and Travel Centers of America. IdleAire planned to have 200 site locations by the end of 2007.

Expansion was very important to the company. John Doty, manager of corporate communications at IdleAire, explained the importance of expanding the number of site locations. "It's not like opening a store on the corner and your market being right around you. Our market moves every day so we've got to be where they are" (IdleAire drives competitive edge for fleets, travel centers, 2005.) He also described the growing popularity of IdleAire as a result of operating more sites. "We've got over 1,116 fleets that have signed up for the service for their drivers. It's growing, and along with this the network grows. It is out there where it can be accessed easily, then more fleets and more drivers will come along."

As IdleAire expanded site locations and service, it was seeing significant increases in driver usage. During July 2007, IdleAire hit an all time record for service usage hours of 1.7 million. On the Web site earthtimes.org, IdleAire COO Lynn Youngs reported that the company was nearing 20 million hours in cumulative service usage by drivers. The second quarter of 2007 brought 3.4 million usage hours from more than 340,000 driver visits. This represented a 325% increase compared to the second quarter 2006. Furthermore, usage hours paid by fleets increased by 470% from the second quarter 2006 to second quarter 2007. IdleAire believed that their technology had saved more than 5.9 million gallons of diesel fuel and eliminated more than 139 millions pounds of diesel emissions within the first six months of 2007. "We are very pleased at our improved operating results. Our focus on respect for the driver, in part represented by several new promotions designed to recognize and celebrate the contributions drivers make to this country, is resonating well with our driver guests." (IdleAire opens two new locations, 2007.)

IdleAire offered a number of products and services to facilitate use of the system. Drivers could pay for IdleAire services by swiping an IdleAire Easy Card; machines were located at each site to load cash onto the Easy Card. Gold Card Membership

cards, effective for six months, were available for \$10 for frequent users of the service. These offered 15% discounts off the price of hourly service, which, with discount, for the first quarter 2007 came to \$1.85. (At this time, prices of diesel fuel averaged \$2.55 per gallon in the U.S.)

IdleAire provided the installation of the service site at no cost to lot owners. An IdleAire employee was onsite at all times, providing monitoring, driver assistance and increased security. Products and services were also offered to trucking fleets and lot owners, providing additional revenue for these stores. The company suggested that fleets could also use the service as a recruitment tool by advertising that they pay for IdleAire usage.

MARKETING

Company marketing efforts focused primarily on the benefits that the ATE system provided truckers in terms of personal health, entertainment, and communication. This theme was incorporated into the IdleAire logo as "Life Improved." The company presented its materials at national trade shows, published a monthly color magazine, *The Guide*, with driver-oriented stories, and distributed print, in-cab, and satellite radio ads targeted at drivers.

IdleAire also marketed itself to fleet owners and travel center and parking lot owners by addressing perceived needs of each group. According to Travel Centers of America executive vice president Peter Greene,

"IdleAire is the single best solution [to saving fuel for truckers]. It requires minimal investment in truck retrofits, is reliable and, with four million hours of service delivered to drivers, is a proven popular system. IdleAire is the only comprehensive electrification technology and business model that provides an immediate value proposition to all our customers, while conserving fuel, improving drivers' lifestyles and reducing emissions." (IdleAire drives competitive edge for fleets, 2005)

The company also signed a marketing contract with country music star Trace Adkins, who had personal experience with the product. Adkins learned about the service from one of his employees who had used IdleAire. Due to Adkins' experience living on the road while on concert tours, he claimed to have gained a respect for long haul truck drivers and an understanding of the benefits of IdleAire usage. Atkins' promotion of IdleAire through country radio media was expected to reach the large segment of country music fans that were truck drivers. ("Trace Adkins and IdleAire Technologies announce partnership", 2006.)

HUMAN RESOURCES

IdleAire had system deployments throughout the country, providing a number of opportunities for advancement for employees. A priority of IdleAire was promoting from within the company based upon job performance. The company offered competitive benefit packages, including health, dental and life insurance, sick leave, long-term disability, and paid holiday and vacations. The company also offered a stock incentive plan to all of its key employees. The company was not unionized.

As of March 31, 2007, IdleAire employed 1,147 full-time workers and 164 part-time employees. The company planned to hire more employees as the network expanded.

FINANCE

IdleAire generated revenue from three principle sources: basic and premium service, ancillary products, and amortization of grants. Basic and premium service created revenue from its hourly usage charges. As of March 31, 2007, the retail rate for basic service was \$2.18 per hour, not including any discounts. Items that fell under ancillary products included window adaptors, telephones, computer accessories including keyboards, Ethernet and Wi-Fi cards, and power cables. Amortization of grants involved government grants that had been awarded.

Although company revenues were increasing each year, IdleAire was not yet profitable (See Exhibits 3 and 4). In its SEC filing, IdleAire stated that it “expects to incur net losses for the foreseeable future as we continue to deploy a critical mass network of locations, expand fleet sales efforts, and grow operations.”

COMPETITIVE ENVIRONMENT

There were several other providers of truck stop electrification systems. Shurepower, LLC, based in Rome, New York, planned on opening its first service location in July 2007. It offered many of the same options as IdleAire, however, the hookup of the two idle-eliminating services was quite different. Instead of mounting a hose with a control panel into the truck’s window adapter, Shurepower required an electrical plug that provided the major services available from an idling truck through 120 volt or 220 volt pedestals. This plug was connected to an electrical outlet located at each separate parking space. Just as IdleAire’s services were charged hourly, so were those of Shurepower. New trucks could be purchased with the wiring required for Shurepower hook-up already installed, and other trucks could purchase an installation kit that would enable those trucks to utilize Shurepower services. However, the Shurepower system did not provide filtered air-conditioning or heating. (Geske, 2007)

Another company, Craufurd Manufacturing, in Massachusetts, also offered a truck stop electrification system that they claimed provided a better service than IdleAire. The Craufurd system unit provided heat, air conditioning, electrical power and internet access. Service was purchased by credit card, fleet card, or smart card. There was a separate unit for each parking space and it could be accessed from the unit or from within the travel center. Craufurd required a window adapter similar to IdleAire that was attached to hoses carrying hot or cold air. An electrical power plug resembling that of Shurepower provided electrification inside the cab. Craufurd's key difference was that revenue from the service went to the truck stop owners, not Craufurd. Craufurd sold or leased the units to truck stops; no staff or continuous monitoring was needed. (Truck stop electrification, 2007.)

LOOKING AHEAD

The summer of 2007, IdleAire announced plans to raise capital through an initial public offering. The proceeds were intended to finance continued network expansion, with plans for 75 to 125 new sites each year for three years beginning in 2008.

September 18, 2007, IdleAire filed form S-1, a registration statement for public offering of stock, with the Security and Exchange Commission. The company did not set a date for the IPO, but news reports speculated that, if conditions were appropriate, the offering would be in late 2007 or early 2008.

In early October, 2007, the U.S. stock market was hovering near all-time highs, reaching a peak of 14,279 on October 11. This was followed by a steady market decline. By the end of December, 2007, the Dow was near 12,000 and concerns about a recession were headline news.

The company's financial future was uncertain. Revenues were increasing, but so were costs. The company cautioned that "[our ability to pay our expenses and make these [debt] payments therefore depends on our future performance, which will be affected by financial, business, economic, legislative and other factors, many of which are beyond our control." (Prospectus, 2007)

Indeed, financial and economic factors beyond the company's control presented serious problems for IdleAire. A mortgage market crisis that began unwinding the summer of 2007 had led to a credit crunch. Another major factor weighing on the economy was the startling decline in the housing market that was showing no sign of abating in 2007. Also, the price of oil was hitting new highs, prompting concerns about inflation. Diminished expectations for the economy made a successful initial public offering of stock unlikely; IPO plans stayed on hold.

Yet, access to capital and credit was essential to the company's expansion. The company was convinced that rapid growth was critical to securing the loyalty of its customers, who would want to find an IdleAire electrification system wherever they stopped across the county. Also, any slowdown in expansion could help the competition.

As management at IdleAire pondered the future, they also reflected on the past. What had they done right in bringing this idea to market? And what might they have done better? What factors had contributed to their success – and what had held them back? They were convinced that they had an outstanding value proposition to offer, but they believed they were at a crossroads. What could they do?

QUESTIONS

1. Use Stakeholder Theory to analyze IdleAire's "value proposition." Is the company creating value? If so, for whom?
2. Consider IdleAire's strengths and weaknesses. What has the company done right in developing the business concept? What might have been done better?
3. Assess the company's financial condition. What concerns do you have?
4. Are internal or external factors primarily responsible for the current situation? What options are available to the company?

REFERENCES

- About us. (2007) Retrieved 27 Sept. 2007 from www.idleaire.com/
- Fact sheet. (2007) Retrieved 27 Sept. 2007 from www.idleaire.com/
- Geske, D. M. (2007) The next stop in electrification. *Diesel Progress North American Ed.* 73.7 (July 2007) Expanded Academic ASAP. Infotrac Web.
- IdleAire drives competitive edge for fleets, travels. (2005) *Fleet Maintenance* 9.2 (March 2005) Expanded Academic ASAP. Infotrac Web.
- IdleAire opens two new locations. (2007) Retrieved www.earthtimes.org/articles
- Prospectus: IdleAire Technologies Corporation. (2007) Retrieved 10 Oct. 2007 www.sec.gov/archives/edgar/data/1162298/000095013307002969

Trace Adkins and IdleAire Technologies announce partnership. (2006) Retrieved 20 Sept. 2007 from <http://www.capitolnashville.com/NewsDetailMain>

Truck stop electrification. (2007) Retrieved [www.craufordmanufacturing.com/](http://www.craufordmanufacturing.com/Images/PPO2Dock.ppt#256,1,SOLUTION)
[Images/PPO2Dock.ppt#256,1,SOLUTION](http://www.craufordmanufacturing.com/Images/PPO2Dock.ppt#256,1,SOLUTION).

EXHIBIT 1

In-cab Service Module (attached to exterior hose at right)

IdleAire Service Delivery Module

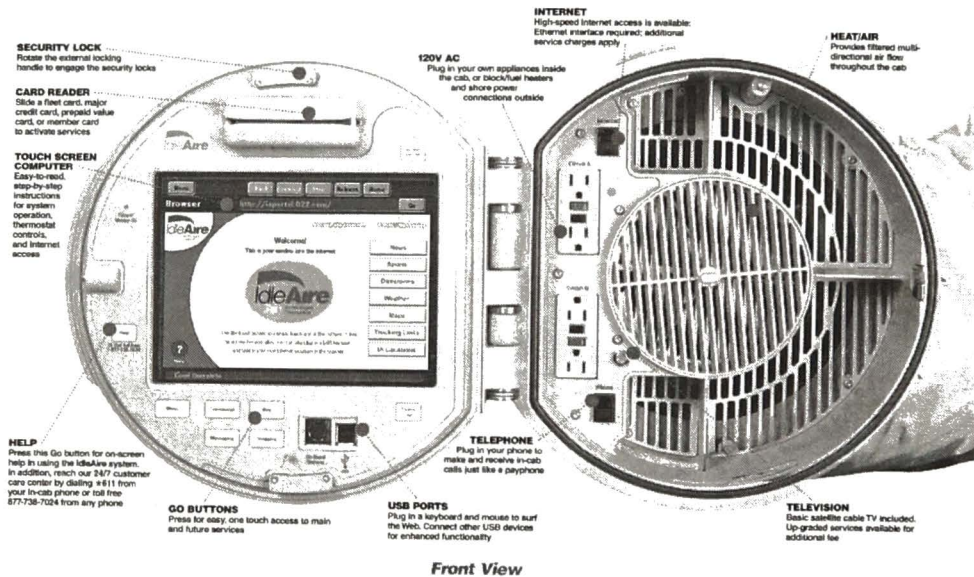


EXHIBIT 2

Travel Center Parking Spaces Equipped with ATE Technology



EXHIBIT 3

**IdleAire Technologies Corporation
Selected Balance Sheet Data (in thousands)**

	As of year ended December 31				Six months ended June 30
	2003	2004	2005	2006	2007
Cash, short-term investments	5,081	3,613	208,698	70,854	35,388
Property & equipment, net	20,062	35,492	33,253	137,507	156,093
Total assets	27,525	43,268	273,785	262,353	238,149
Senior secured discount notes	---	---	201,690	234,511	252,806
Stockholders' equity totals	19,940	25,564	59,435	(312)	(44,337)

Source: "Prospectus: IdleAire Technologies Corporation." Securities and Exchange Commission. www.sec.gov 17 Jul. 2007. www.sec.gov/Archives/Edgar/data/

EXHIBIT 4

IdleAire Technologies Corporation

Selected Statement of Operations Data (in thousands)

	For six months or the year ended December 31				ended June 30
	2003	2004	2005	2006	2007
Net revenues:					
Basic & premium services, net	214	1,485	3,828	10,911	12,543
Ancillary product sales	105	595	435	1,153	9,57
Net product rev.	319	2,080	4,263	12,064	13,491,
Grant revenues	548	1,444	1,827	1,513	1,209
Total net revenues	895	3,588	6,352	13,977	174
Operating exp...:					
Direct site operating costs	7,082	12,657	10,253	23,363	6.490
Depreciation	2,181	4,322	5,444	9,467	2,933
Selling, general, Administrative	8,854	12,593	13,509	16,091	7,609
Loss on disposal of fixed assets	1,967	2,171	1,024	3,181	989
Total operating expenses	20,200	32,129	30,778	54,559	19,886
Loss from operations	(19,305)	(28,541)	(24,426)	(40,582)	(15,672)
Interest expense	(241)	(315)	(2,439)	(19,703)	(10,155)
Net loss	(19,546)	(28,856)	(26,865)	(60,285)	(25,827)

Source: Prospectus: IdleAire Technologies Corporation