

DIRTT

Doing It Right This Time

A Story of DIRTTbags Revolutionizing the Building Industry

MIX Cutting Edge Case

Houston Peschl and Rosalynn Dodd

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TITLE

DIRTT – Doing It Right This Time: A Story of DIRTTbags Revolutionizing the Building Industry

SUMMARY

DIRTT — Doing It Right This Time — is revolutionizing the manufacturing and building industry by empowering self-professed DIRTTbags (no, not *those* kinds of dirt bags) to be accountable for driving innovative change. The result? A collaboration of passionate people working to create sustainable and agile solutions for the built environment. DIRTT's products and culture are deeply rooted in a leadership philosophy with a scalable model that supports all stakeholder values. Being a DIRTTbag means being adaptable, passionate, agile, customer-focused, and oftentimes quirky. We're empowered to create change, we thrive on solving problems, and we live and breathe this culture every day—it's how we've created a solution of products that are changing the way interiors are built.

MOONSHOTS

The moonshots chosen to frame our innovative company culture are:

1. Expand the scope of employee autonomy
2. Encourage the dissenters
3. Redefine the work of leadership
4. Humanize the language of business
5. Take the work out of work

CONTEXT

We are DIRTT Environmental Solutions, North America's leading manufacturer of modular architectural solutions (walls, doors, millwork, floors, plug-n-play power and data, etc.). We build prefab agile and adaptable interiors for office spaces, healthcare facilities, classrooms,

and anywhere else you can think of. Think of our solutions as children's building blocks for the built environment – smaller pieces come together to form whole solutions, in any way needed. You create, we build. Our head office (and one of our three manufacturing facilities) is located in Calgary, Alberta. We currently have 119 North American Distribution Partners, with our other two manufacturing plants in Savannah, Georgia and Phoenix, Arizona. DIRT is currently also expanding into the Middle East with Green Learning Centers (no traditional showrooms here) in Beirut and India.

We're a young company, and we're growing quickly. DIRT was incorporated in 2005 and we've since grown to more than 700 employees with revenues of \$116 million and 40% year-over-year growth. While we have an industry-leading package of solutions that's won us clients such as Apple, Google, Devon Energy, Bank of America, Morgan Stanley, AutoTrader and LinkedIn, it's our culture and leadership style that's truly responsible for this growth. Not many companies can refer to their employees as DIRTTbags in a way that makes them feel like part of a family. We have weekly social events, company-wide gatherings, and team building sessions throughout the year, where we truly come together to learn from each other and grow together.

At DIRT we say that, "custom is our standard" because we do not have *any* standard offerings. Every single wall frame, tile and support is custom made for each and every job. The sky is the limit when it comes to designing and building with DIRT.



DIRT's Chicago Green Learning Centre

A Few Cool Stats:

1. 2011 revenue \$116 Million. 2012 is on track to be \$140 Million
2. Awarded 2012 Deloitte Canada's 50 Best Managed Companies
3. Client List: Google, Apple, Bank of America, Morgan Stanley, Devon Energy, and numerous GSA contracts.
4. Founding Canadian B Corp member
5. 2,450,580 lbs of manufacturing waste diverted from landfill in 2012

6. Coolest Raw Material: Denim Insulation

Authors of MIX Case Study:

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Houston with the new Denim Insulation!

TRIGGERS

Disruptive Innovation: an innovation that creates a new market by applying a different set of values, which ultimately overtakes an existing market.

– *Clayton Christensen*

DIRTT's leadership and management style create a culture that *encourages* disruptive innovation every day since the company's inception seven years ago. DIRTТ stands for *Doing It Right This Time* and is commentary from a legacy company named SMED International, once owned by DIRTТ founder Mogens Smed and later sold. In its heyday, SMED grew to a \$300+ million company – but this success was realized through the means of a traditional, top-heavy, silo-managed organization. *Doing It Right This Time* means turning that management style upside-down and empowering employees to be autonomous and entrepreneurial. Working at DIRTТ is like nothing Rosalynn nor I have ever experienced before. The intensity, agility, rapid growth, empowerment, accountability, and social and environmental commitment have proven that a strong business case exists for the new economy. This new economy proves that a business can make its shareholders a substantial profit *and* take care of its community and environment. This evolution of innovative social purpose businesses can only occur through revolutionizing the leadership and management model.

DIRTT is a young company. At the tender age of seven, we've covered a lot of ground. Growing to more than 700 employees and over \$116-million in revenues in such a short time takes a "special" group of people. We say special in quotations because we use it to encompass the differences that we like to think set us apart: an intense need to do good; a drive for unprecedented success; a vision to change age-old building processes and the naiveté to go full-force ahead without the fear of failure.

Two weeks into my new life as a DIRTTag, I (Rosalynn) was sitting in our company dining area, Greens Bistro, enjoying a weekly lounge night with colleagues. Our CFO approached me and asked me in a serious tone, “So, what’s wrong with *you*?” Naturally, I was a bit taken aback. I didn’t fully understand the culture yet and responded with a less-than-eloquent, “Huh?” He asked me again, “What’s wrong with you? No one *normal* fits in here easily and you seem to fit in pretty well. So, what’s wrong with you?” This memory brings a smile to my face because it’s one small example of how DIRT has always gloried in its own way of doing things and being a bit different. The management style we embody is embedded in the company since the conception of DIRT. *Doing It Right This Time* is based on the idea there is “A little DIRTTag in all of us.” I admit, it’s a character trait we’re proud to tout.

What follows here are the stories and observations from two DIRTTags (DIRT doesn’t use job titles). We’ll tell you how a radically innovative organization uses a new leadership model to demonstrate how it became so successful in the North American manufacturing sector—an industry that is dying out in many other areas. What is important to note is that not only is DIRT proving you can be a profitable manufacturer in North America, but that you can do it in a sustainable manner, from product design right through to manufacturing processes. Sustainability is embedded in every aspect and every role at DIRT, from selected cleaning agents for our toilets to a product built to last a lifetime (not obsolescence!).

KEY INNOVATIONS & TIMELINE

We’re drawing on a number of MIX’s Moonshots to frame this discussion. We want to share a few stories for each of the five Moonshot areas that clearly demonstrate how DIRT’s model of leadership is not only successful, but is also scalable and applicable for both a private and public company. DIRT’s culture is one of autonomy and accountability. We have clients all over the world and our continually growing client list becomes more impressive each month. The following stories demonstrate some of the DIRTTy aspects that set us apart.

1. Expand the scope of employee autonomy

As DIRTTags, we admittedly thrive on toppling silos and crushing bureaucracy in the name of better business. With over 700 employees, locations all over North America, and 40%

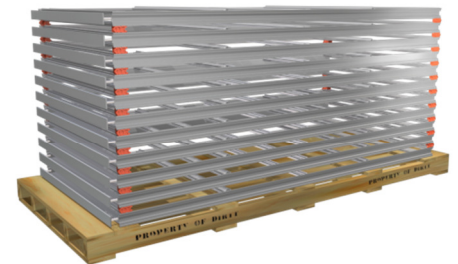
year-over-year growth, following a typical MBA route of analysis–creating–paralysis just won't do. This flat organization empowers everyone, from the factory DIRTbags to the finance team, and is a result of having a creative and inspiring leader: Mogens Smed. Mogens is an entrepreneurial visionary who challenges the status quo: everyone is accountable for their own areas and they make their own decisions to better their role and improve the organization. Many of our greatest cultural and product innovations have come from the factory floor.

Here's one small example of what happens when a company empowers its employees to continually improve the company: the invention of the Cookie. DIRT used to use wooden 2x4s to separate our walls when shipping from factory to job installation site. Henry, a factory floor DIRTbag, thought up a design for something we affectionately now refer to as our Cookie. This molded plastic unit—which we affectionately think resembles a traditional Dutch chef holding a cookie tray—safely and securely separates our walls to ship to site, *and* can be reused an infinite number of times. Cookies are collected and sent back to the closest DIRT distributed manufacturing site for reuse in other shipments.



The Cookie.

In typical manufacturing facilities, admin offices are above the factory floor, looking down with closed offices and a host of doors separating the areas and employees. At DIRT, our admin “fishbowl” is an open floor-plan, glass-walled structure on the factory floor. The fishbowl houses a range of staff, including our COO Tracy Baker, our procurement team, product development, engineering, and payroll. Factory employees are welcome to come in anytime to chat directly to our COO or anyone else they need to speak with. Closed door meetings are non-existent; we operate transparently so everyone knows what's happening and can contribute to the success of the business.



Cookies attached to the corners of wall frames for safe and secure shipping.

We have no official job titles at DIRT. No one is restricted by their label or role; we have had people move from the factory floor to the procurement team to the accounting department. Anyone can be an inventor, and anyone can call Mogens at any time to ask him a question or offer a suggestion. Recently, factory employee Slav designed a way to reprogram a CNC machine to save a few seconds on an operation that he performed

hundreds of times each day. He emailed Mogens to tell him about it and within a few minutes he had a response directly from Mogens. Mogens found him on the floor the next day to congratulate him for his smart thinking and efforts.

2. Encourage the dissenters

We enjoy discussing LEED vs. LEAD. LEED stands for Leadership in Energy, and Environmental Design, an internationally-recognized rating system that many construction projects adhere to in order to gain environmental credits. DIRTТ prefers to *lead*. Rather than trying to adapt a building plan to suit some third-party verification that oftentimes acts merely as a step in the right direction, we design our products, our culture and our whole business model around leading the pack. DIRTТ creates products that are inherently sustainable and don't need LEED credits to prove it, because chasing LEED credits can actually create a more unsustainable approach or building. We like to challenge assumptions and feel that the very nature of LEED is worthy of being challenged. Mogens is outspoken about his disdain for LEED and will go nose-to-nose with anyone that wants to challenge him on it. For example, a building can receive LEED points for having a bike rack, but it doesn't say anything about the application of the rack. So we put a bike rack on a ceiling in the Phoenix factory to draw attention to the holes in LEED's system and to make people think. DIRTТ is leading by creating a sustainable approach throughout our business practices.

By working with our suppliers to create as many mutually beneficial relationships as possible, we're trying to develop a supply *cycle* rather than a supply *chain*. For example DIRTТ is now almost a zero-waste production facility. Yes, wow. This is a big deal! In traditional stud and drywall construction, Cornell University's research concluded that roughly one pound of waste ends up in a landfill for every square foot of drywall used! One of the initiatives we've created to help us achieve zero-waste is the use of denim insulation in lieu of fiberglass. It's made of 80% recycled denim and the rest is cotton fiber, and it's completely reusable – unlike fiberglass. Another initiative is with a local Calgary company called Full Circle. Full Circle takes DIRTТ's wood scraps and turns them into a lawn fertilizer. These initiatives demonstrate the tip of the iceberg when it comes to the ways DIRTТ “walks the talk,” not because it gets us credits but because, simply put, it's a better way to do business.

3. Redefine the work of leadership

DIRTT promotes leadership throughout the organization; from an individual on the factory floor, to the entire company making an impact at the community level. When the Savannah factory opened in 2009, there were very limited recycling facilities in the city. Because DIRTTbags are driven to make a positive impact wherever we go, we helped the city of Savannah setup a recycling program that now serves the entire area. This shows our commitment to environmental practices, leadership and the importance of the community in which we work. As a result of the work there, DIRTT COO Tracy Baker was recently honored with a community leadership award from the Savannah Technical College Foundation Community Council, for her accomplishments and contributions toward making Savannah a better place to work and live.

(Rosalynn) — At my hiring interview, my (now current) team leader told me if we never had to talk about work, that would ideal. He is incredibly supportive, knowledgeable and will go to bat for me if I ever need him to. We do talk about work every day, but he doesn't want to manage every detail of his team. Projects are scheduled down to the minute at DIRTT. If someone on the floor has a question about one of our jobs, we need to know we can make that decision right now or we risk holding up the whole factory. If we had to follow traditional bureaucracy or chains of command, we would never get an answer in time. We know we can make decisions and that at some point we will make a mistake, but as long as we can own up to it, we don't need to be led and managed every step of the way.



The project management team in Phoenix for the 2012 learning & teambuilding "PM Powwow."

DIRTT's hiring practices also reflect our unique approach. In lieu of a human resources department, we have a Talent Agency. We don't look for the longest resumes or highest credentials (in fact Mogens is rather outspoken against MBAs). We *do* look for people that work hard, learn fast, fit into our culture and are able to manage themselves while contributing to the greater team. Our individual eccentricities are not only accepted but encouraged. Our culture and leadership is the only way we can have so much autonomy and yet so much cohesion in the company.

4. Humanize the language of business

DIRTT has created a language all its own (in case you couldn't already tell). We're DIRTTbags, and we're proud of it! Our product line names extend from Madonnas, Cookies, and gerbils to UFOs, Breathe (pictured), flux capacitors and antlers. Sure, they all have technical names, but when you have a part that looks like a chef holding a cookie tray, it's more fun to call it a cookie and far easier to remember. (You should see the Madonna...)

A lot of our parts and pieces were named by a group of early DIRTTbags (there may or may not have been a bottle of wine involved...) that looked at each individual piece to decide what it looked like.



DIRTT's award-winning Breathe wall can be any size and hold any array of plants. This one is built around an aquarium!

There is a lot of technical jargon that *could* surround our company. We are a manufacturing company that deals with construction, architects, designers, clients, general contractors, lawyers, government etc. We have to have a language that can work for each and every one of these groups, and just as importantly, for each DIRTTbag. We hire for passion, intelligence and "fit" so we can't get bogged down in technical jargon because the world of construction and manufacturing is new to many DIRTTbags. We have an incredibly diverse workforce and our language must be accessible and understandable for people from all industry backgrounds. Our language is organic and homegrown. It is a reflection of our culture and our dedication to doing this differently. It makes us feel like we are even more a part of something. And it's part of being a DIRTTbag to be a bit quirky.

5. Take the work out of work

Each DIRTT Factory is equipped with a full kitchen and talented chefs that prepare healthy lunches for DIRTTbags every day of the week. We have a salad bar, cold meats, cheeses, fruit and hot food options every day, for just \$2/day. We watch in delight when new employees discover the wonders of our kitchen and the candy drawer (and on that note, we also have a self-monitored fitness program). This meal program isn't a money-making practice for DIRTT. In fact it's a healthy expense, but the team knows the value. Employees are fed well, we get a chance to have lunch together and socialize and we don't have to

drive to a restaurant or pack our own lunches every day (which reduces our environmental impact as well).

Each week, we are treated to “lounge night.” At 4:00 pm each Thursday, we head to Greens Bistro and enjoy some pub-style fare, a drink and a fun activity (such as trivia, games, seasonal fun, etc.) DIRT’s culture is based on camaraderie, and when things get stressful it’s great to kick back and socialize while getting to know one another better.



One of the many challenges at a lounge night: this time we got to play with Play Doh!

In addition to lounge nights, we have Beer Nights once per month. These meetings build on the social aspect of lounge nights but act as opportunities to share *everything* about DIRT with the employees. We have complete transparency and all the successes, failures, positives, negatives and new initiatives are discussed at these meetings. For example, DIRT recently underwent a 40,000 sq/ft expansion in the Calgary factory. Before we made this move, the plans, layout and design of the new space were discussed and comments were invited from all of the people that would be using the new space. Throughout these discussions, the layout was fine-tuned to allow for the greatest efficiency and cost savings and also resulted in happier and more engaged floor staff. Like any company, DIRT relies on the dedication of its employees. With transparency, all DIRTbags have the opportunity to be engaged and contribute even more to the company. With so much autonomy, DIRT has found a way to keep all the DIRTbags moving in the same direction. Everyone understands our vision, mission and goals and can make the decisions necessary to make them happen.

DIRT participates in community events throughout the year as well. We cook dinner for the families at the local Ronald McDonald Houses, “adopt” families at Christmas, and support fundraising efforts throughout the year. Last year, DIRT raised over \$29,000 for cancer research in just one month, making it the 3rd largest one-time corporate donation to the Canadian and American Cancer Funds!



Houston Peschl gets his head shaved during the 2011 cancer fundraiser.

BENEFITS & METRICS

You've read about some of our competitive advantages, our culture, and the innovative leadership style we credit with our success. One of the best ways to judge our achievements with this innovative leadership approach is seeing the accolades the public has bestowed upon us. Here are our recent awards:

2012

Finalist – International Design Excellence Awards by IDSA

Best Managed – Deloitte's 50 Best Managed Companies in Canada

Top Movable Wall – Contract Magazine Brand Report

2011

Rookie of the Year – B Corporation Champion Awards

Green Exhibitor Award – Advocate Level, Greenbuild International Conference & Exhibition

Best in Show – Booth Design Award, NeoCon East – IIDA and Contract magazine

Excalibur Award – Technology Association of Georgia

Workplace Innovator Award – Step Up Savannah

Gulfstream Community Service Award – Savannah Area Chamber of Commerce

PM100 for Innovation Mastery – Progressive Manufacturing magazine

Bloom Award for Innovative Materials – ASID and Interiors & Sources magazine

Fast Growth 50 Award – Alberta Venture Magazine

Top 10 Green Building Product – Sustainable Industries Magazine

2010

Sustainable Exporter of the Year – Alberta Export Awards

ASID Product Award – Individual (Mogens Smed)

The Calgary Award for Corporate Environmental Achievement

Top Product Award – HEALTHCARE DESIGN Magazine

Fast Growth 50 Award – Alberta Venture Magazine

Manning Award for Outstanding Innovation – (Geoff Gosling)



We have collected a few of these benefits and some metrics that prove DIRT is truly bleeding-edge when it comes to innovation in product design, manufacturing processes, leadership and culture. Below we present what we feel is some proof and the financial results to match, that illustrate why in our opinion, DIRT is the most innovative company in North America.

The Proof

- 5 year revenue CAGR of 41.5%
- Increasing revenue from new industry verticals and internationally
- Strong EBITDA and profitability
- Strong gross margins \approx 40%
- 2011 revenues in excess of \$115 million; current run-rate exceeding \$150 million
- Strong growth forecast with growing sales pipeline: including the potential for Apple's new headquarters and Exxon Mobil's new Campus
- Distributed manufacturing with significant capacity added in 2011 (Phoenix opened July 2011, Calgary expansion August 2011)

Financial Results

	2005 ¹	2006	2007	2008	2009	2010	2011
Revenue	2.4	20.5	49.0	73.4	93.4	98.5	116.4
Gross Margin	(1.6)	(0.8)	17.5	25.6	40.1	42.3	45.5
SG&A	(5.6)	(11.6)	(16.3)	(23.1)	(34.5)	(31.7)	(37.4)
EBITDA	(7.2)	(12.4)	1.2	2.5	8.0	11.0	9.1
Net Income	(8.2)	(14.7)	(3.2)	(3.4)	4.0	1.8	-

¹ DIRT began commercial operations in May 2005

All figures in millions, September 30 year end (consolidated)

CHALLENGES & SOLUTIONS

DIRTT's rapid growth and significant brand recognition from companies like Apple and Google has proven that our approach to leadership and growing a culture has been very successful. From this wild ride we have identified a few key philosophies or solutions that are fundamental to the success of DIRTT's innovative culture:

➤ **Be strategic where applicable, and reactive when necessary**

- Don't rush or purely react to strategic decisions. Some decisions require time, collaboration and planning.

- Remain agile enough to react quickly when necessary. Some decisions need to be made immediately; there are times when we know it's better to ask for forgiveness rather than permission.
- **Use technology where applicable, and people where applicable**
 - Automate what we can, but recognize where the human aspect is superior. Our technology and proprietary ICE® software have made DIRTТ a game-changer in the construction industry, allowing us to deliver product in half the time of our competitors. Yet it's our culture and the human aspects of our customer service that truly sets us apart and wows our clients.
- **Consider sustainability in every decision**
 - What is right from an environmental, community and financial perspective? Our new denim insulation is easier and safer to work with, is made of recycled material and is recyclable, and is 40% cheaper than the fiberglass we used previously.
- **Make decisions for the right reasons**
 - Make decisions that are best for DIRTТ and the client, not just to appease shareholders. Our shareholders are important people, but more important is going home at the end of the day and being proud of the work we've accomplished.
- **Challenge the status quo, and then challenge ourselves**
 - Be different, not for the sake of being different but for the sake of doing it right.
 - Thinking conventionally would destroy our competitive advantage.
- **Do what is fair**
 - To our employees, our shareholders, our vendors, our partners...
- **Acknowledge our people**
 - DIRTТ is *not* made up of buildings, products, software and processes. It's made up of *people* who use those things as resources.
- **Top-line Thinking**
 - Without the sales we have nothing.
 - We will not sacrifice growth for bottom-line thinking.
- **Always be ahead of our growth curve**
 - We build our agile factories BEFORE we need the capacity, so we never have to tell a customer that we will not be able to meet our industry shattering lead times of 2 to 4 weeks for custom product!

The future challenges are already starting to appear: how to keep this amazing culture and leadership style as we grow to a billion dollar company with the potential of becoming a public market? Hiring employees, finding the right supply chain partners, and investors that “get it” will be a challenge. DIRTТ cannot hire people based on their résumé. We hire based on interviews that demonstrate an entrepreneurial energy, a competitive attitude and the ability to work as a team. People who act as cogs in machine and work banking hours just won’t cut it. Finding the right people is a challenge, but once they are in, they never leave! DIRTТ has a very low turnover rate, due to our culture and empowerment.



Breathe wall above the assembly tables in our Phoenix Factory.

DIRTТ’s innovative approach and culture has allowed us to enjoy rapid growth as a successful company. The management style is embedded throughout and our vision and mission are integrated into everything we do. Operational transparency means every employee knows where they stand and together we’re pulling in the same direction.

This approach has grown DIRTТ from 3 employees to over 700. It’s proven to be successful, scalable and repeatable throughout the organization and across demographics, and we’ll work to maintain it as we grow. DIRTТ is unlike anywhere either of us has ever worked before and that’s due to the disruptively innovative management style that we work with every day.

[DIRTТbag Credits](#)

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And to the other 697 DIRTТbags that make DIRTТ so successful!