

Building a new supply chain

[Business](#), [Marketing](#)



The background of the case is that a company performs garbage pickup from construction sites. Often the construction site wants them to leave a bin there or sometimes they simply pile up the garbage and the company's employees load the material into the garbage truck. Typically a truck full of garbage at the depot costs \$200 per truck to empty. The company charges \$350 per load, so there is little profit especially when taking overhead into account (labor and the cost of the truck).

The owner wonders how other companies seem to be making so much money. One day he owner finds a lot of old refrigerators and metal fencing at one of the pickup locations. He has heard that there are some companies that pick this up for free and resell the material to companies looking for scrap metal. Being entrepreneurial and worried about his business, he investigates. He finds that he is able to make an additional \$200 per shipment of scrap metal, making his new profit \$550 per load!

He gets excited and starts to think about what other opportunities may be out there with similar reverse supply chains. Some additional problems that this company have are related to what its profit really is for each of its transactions, what challenges this company would have to look at alternative materials and markets and what the current competition is for his company's type of business and lastly what approaches this company should take to ensure it was successful.

Cause - The main cause behind many of these questions the company is asking itself and problems that it is currently having with profitability lay in the appearance that the company has not built itself a good business plan

for any step of the company. A business plan helps outline what you need to start a business, but it also helps you prepare for your future and any issues along the way. Your business plan should clarify why you exist, who your customers are, what products or services you provide, how you plan to create and deliver your products or services, and where your business is going.

It looks like the owner has started the company with only a small idea of what is possible within their industry scope and has not thought through all the steps that they should take on in order to be a marketable, profitable and long lasting company. Little thought has gone into who the customers are, what equipment is required, what process would be the most profitable and how to market themselves to the correct customer base. The whole business is based on a reverse logistics model and inserting themselves into this construction supply chain as the provider of reverse logistics systems to their construction customers.

It is astounding to see that the owner has not fully considered how to best provide benefit to their clients and maximize their profitability through these services. To hear that the owner has heard that some companies "pick up materials for free and resell them clearly shows that the company has not identified the biggest opportunity for profitability in this type of business. Stating that their new profit could also be \$550 per load is also strange in that there appears to be very little understanding of accounting related to determining profitability and cost of overheads.

Based on the example provided, any revenues would have expenses of the cost of the truck (including initial purchase, fuel and any maintenance), the cost of the person driving the truck, the cost of the person piling the garbage into the truck (if this service is required) and the cost paid at the depot for disposal. There can be further costs related to equipment or training required for their people to be on a construction site including Personnel Protective Equipment and any certifications required to handle waste.

Many of these elements would be considered if the company took the time to consider what the actual business plan for the company is and whether this would lead to a profitable organization. Analysis - When looking at the market space that this company is attempting to play in, the following information shows that there indeed is a market for these services. Within the industry there is a name for the materials that are left over at a construction, renovation or demolition site. These items are called construction & demolition materials (C&D).

The most common materials are concrete, wood, drywall, asphalt shingles, asphalt pavement, metal and cardboard. These materials typically make up 70 to 95 percent of the discarded material at a residential or commercial site. In the past these items were often discarded but are actually viable commodities that can be recycled into new products or used in many new ways. When perceived as waste, disposal of C&D materials is often viewed as simply part of the cost of doing business, and recycling and reusing these materials are sometimes overlooked as management options.

Recycling can benefit a construction business's bottom line, it benefits the environment and a construction company's recycle policy can be a contributing factor to them being awarded a project. Concrete can be recycled into many markets that currently use crushed stone. Because concrete is commonly recycled, numerous concrete recycling facilities exist across the country. Asphalt pavement is heavily recycled currently and is commonly crushed and recycled back into asphalt, either in-place or at a hot-mix asphalt plant.

Asphalt shingles can also be ground and recycled into hot-mix asphalt. Clean, untreated wood can be re-milled into lumber or chipped or ground and used to make engineered board, boiler fuel and mulch. Common metals found at a construction, demolition or renovation site include steel, aluminum, and copper. Construction sites frequently generate large amounts of cardboard waste when new appliances and materials are delivered to the site in cardboard boxes. Markets are well-established for metals and cardboard.

Local metal scrap yards or recyclers that accept these materials are likely easily accessible. Gypsum in drywall can be removed and recycled into many markets that commonly use gypsum, including new drywall manufacture, cement manufacture and agriculture. All of these items should be materials the owner should investigate as to whether the local construction sites are enervating these materials and whether there are local resources available to buy and recycle these materials from construction companies or the pickup company.

Another factor to review is whether recyclers accept mixed loads of materials, or if it is more profitable to separate the materials, which can be done onsite by placing the materials in separate boxes or piles. When developing a business plan, an important first step is to look for the local resources currently available. Contact local and provincial waste regulators and learn what is and is not permissible to recycle. Many rabbinical or local officials have lists of local recyclers and their locations that they can share with you.

These local recyclers should be contacted to determine what they take and what these conditions of payment are. They may also be able to share guidance for best recycling practices in your area. It is also possible to research local waste haulers through this method to better determine the level of competition there is for the types of garbage pickup services that they provide. One key factor within the market space for recycling materials is the importance of these recycling orgasm to today's construction environment.

There is increased interest in constructing green buildings and this has generated more interest in recycling C materials. Providing knowledge of how to recycle C materials can make a company a vital asset to a green building project. The most common method of green building certification in North America is through the Green Building Council. The Council's Leadership in Energy and Environmental Design (LEED) certification process requires that the building attain points for various green attributes,

including energy savings, trials usage, indoor environmental quality and efficient water usage.

Certification is granted during the construction phase. Points are given for reusing materials, using materials with recycled content and recycling the waste that is produced at the construction site. Different levels of certification can be attained depending on the number of points the building gains. Even if LEED certification is not the goal of the building owner, committing to recycling a certain percentage of the materials generated at a Jobless can be a great marketing tool and can give a construction company an edge over its competition.

Since green building certification grants points based on recycled amounts, implementing a tracking system will aid companies in attaining LEED points for recycling. Some contractors have their waste haulers report the amount of material that is currently disposed and recycled from their construction sites. That way, contractors can evaluate how they can increase the amount of material that is recycled from each site.

Another example of how a company can differentiate themselves in this space is by providing services that eliminate the need for transporting and disposing of materials by recycling onsite. For example, waste concrete can be ground and used as fill, and clean wood, drywall, and cardboard can be ground and used onsite as a soil amendment. New, smaller, portable grinders can be relatively inexpensive and safe to use at Jobless. Some of these machines can be hitched to pickup trucks, while others are attachments for excavators.

Some challenges when looking at all of these options are related to having the appropriate equipment for providing the potential services demanded by the customer base. There can be significant overhead costs attached to these equipment purchases. Availability and cost of labor will also be a key factor in decisions. If the appropriate research is not done up front, including discussions with the potential customer base, investments can be made in equipment and people that does not drive the revenue to cover the costs.

Before Jumping into a specific market area or activity, the owner must ensure that the demand is there. Solution - The owner of this garbage pickup company needs to wake up and do his research with a goal to developing a complete business plan. Currently the owner is thinking of only kicking up garbage from construction sites and disposing them, which does indeed save the construction company these reverse logistics efforts, but clearly misses out on the big picture of what is possible in this service space.

The customer base which is construction companies, are being driven very heavily toward recycling their materials for various reasons. They can reduce their hauling and disposal costs by keeping valuable C&D materials out of landfills. The substitution of recycled C&D materials in place of virgin materials in new products and processes results in substantial energy savings and greenhouse gas reduction. Recycling C&D materials equates to green building points.

As green building becomes increasingly popular, proven knowledge about the benefits of green building-? and green building practices-? is likely to boost construction business, since many customers are now looking for this

service. Using recycled materials in new structures and recycling C&D materials produced during construction can help you achieve the LED certification that construction company customers want. All of this leads to a very strong potential market for the services that a garbage pickup company can provide.

The company can offer sorting of the products on the site, the company could offer onsite recycling, the company can ensure that they track the materials so that their customers can obtain the maximum lead points and market themselves as a green construction company. The pickup company can also very finely determine what their charge should be to the construction company based on their knowledge of what the recycling company will pay for materials. This can allow them to maximize profit while remaining at an appropriate marketable cost to the construction companies.

They could provide flexible, scalable services at the appropriate cost. The owner needs to talk to the customer base and find the niches that will allow them to compete. Work through the business plan, identify what they can afford to invest in, develop the relationships with customers and clients, market themselves appropriately and then work the plan. There is little question that reverse logistics is a growing concern in the construction industry when it comes to C&D materials. The market is there for garbage pickup companies who can show the greatest value.