

Cantech Solutions

Introduction

Adam, chief executive officer (CEO) of Cantech Solutions, smiled as he waved goodbye to the final customer for the day. He was preparing to close the store, when the customer walked back inside asking if they could do a last-minute MoneyGram transaction, but there was a problem, the customer could not remember their account number. Trying his best to provide timely service, Adam rushed to find the customer's MoneyGram account in the MoneyGram digital system using their name, however there were 10 other MoneyGram accounts registered under the same name. Eventually, Adam was able to locate the customer's account by referencing his store's Microsoft Excel database. However, searching for such information on Excel is time consuming, as it requires manual filtering between different sheets. The customer was happy that they were able to send the money, but Adam ended up closing the store 20 minutes later that day due to the delay. While this particular incident occurred at closing, scenarios like this become extra frustrating when other customers are waiting in queue for their own service needs.

Tired and annoyed with the late closing, Adam called his friend Raj, who works at Amazon as a data management specialist to vent. The conversation went as followed:

Adam: "Man, this is becoming so common now. Not just with MoneyGram, but anything we have to do in the store. Last week a customer came to repair a broken phone screen, and they returned this week for another repair. We added another repair row into our Repairs Excel sheet, but we had to type all his information like name, phone number and email all over again, which annoyed the customer. Is there an easier way to do this?"

Raj: "Adam, I understand you have a small family business, and this might require some upfront financial investment, but have you considered establishing a formal database for your store?"

Adam: "I'm not sure what that means? I'm using Excel right now, but are you saying there's another way for me to organize the data at Cantech Solutions?"

Raj: "Yes, you can create a database. Databases are much more useful for you than Excel, given your business structure. It will help you keep track of your customers' information. For you this is quite important since you have many returning customers that engage with MoneyGram or Repairs on a weekly basis. You can easily pull the information you need to conduct different services for your customers. It will just need to be set up correctly."

Adam: "Hmmm...interesting. I wanted to actually start marketing more for my store as well, but I wanted more information about my customer distribution. I also need more insight into which products, repairs, and phones are most popular for different customers, since I want to manage my inventory better. Can a database help me do this?"

Raj: "The database alone will not do the data analysis for you. However, if you have a well-constructed model, then you can easily use programs like SQL to help you answer those questions for better store management. It shouldn't be too hard!"

Adam: “That would be revolutionary! I heard of some small businesses creating databases, but I never thought about it for Cantech Solutions. After talking to you, I think it's the right move!”

Raj: “Perfect! I’m more than happy to help you.

Adam: “Thanks! Drinks on me tomorrow night!”

Feeling excited and optimistic after his conversation with Raj, Adam happily went to bed.

The Business

Cantech Solutions is a family-owned small business that specializes in providing services to its customers. Customers can choose to engage with multiple offered services including MoneyGram transfers, Roger’s phone-plan activations, and technological repairs. Cantech also offers a variety of tech-related accessories for purchase in-store.

MoneyGram Transfers

MoneyGram is an international money transfer business. Cantech Solutions is partnered with this company to serve as the middle-point of contact between customers and the MoneyGram digital system. Customers enter the store, an employee opens the customers MoneyGram account on the MoneyGram digital system, completes a transfer transaction, which is then received by a specific global bank branch, and the money is deposited appropriately. Customers often return to send money on a weekly or monthly basis. However, not all Cantech Solutions customers are MoneyGram account holders.

A MoneyGram account holds the following information: account number and sender's bank name. When a customer completes a transfer transaction, they must provide the amount (in dollars), receiver's first name, receiver's last name, receiver’s bank account number and receivers bank swift code. A bank swift code is a number that uniquely identifies a specific bank and branch anywhere in the world. The transaction is then sent to the bank indicated on the transaction. The bank processes the transaction and deposits the money into the appropriate account. Customers love this service since it’s fast (money typically deposits into the receivers account within 10 minutes), secure (MoneyGram transfers are highly secured and well-managed), and convenient for sending large sums of money without long wait times or restrictions.

Rogers Phone-Plan Activations

Another popular service at Cantech Solutions is Rogers activations. Rogers is a leading telecommunications company in Canada. Cantech Solutions is an ambassador of Rogers, providing store-front phone activation services to its customers. Customers need to be physically present for activations for sim card installation and security purposes. For each activation, a unique phone number is registered. The activation must include the plan type and payment type, along with an optional phone ID which is provided if the customer chooses to purchase a Rogers phone with the plan. Rogers offers various plans ranging from plan A to plan D. The specific plan type needs to be identified at the time of activation as this selection guides the customer's monthly bill amount. Customers can pay for their monthly bills using either cash, debit, or credit. Therefore, their specific payment type also needs to be identified at the time

of activation. Rogers has provided Cantech Solutions with stock of different Rogers Phones. Each Phone has a unique ID and all phones vary in total price, monthly price, company, year, and model. Cantech Solutions also receives commission every time a customer purchases a Rogers phone. The commission amount is based on the specific phone purchased and is a fixed dollar amount.

Tech Repairs and Product Purchases

The final service that Cantech Solutions offers is the repairing/fixing of technological devices such as phones, laptops, tablets and more. Customers bring their device into the store, and the employee that receives the device must create a repair ticket. The ticket must contain the following information: item, exact make/model, cost, type of repair (description), date, and parts required. Once the item is repaired, the customer is contacted for pickup. Since repair services are directly paid to Cantech Solutions, unlike MoneyGram and Rogers Activation, A Cantech Solutions invoice is generated for the customer. Many customers that come for repairs or other services, also buy in-store products. Cantech Solutions houses many tech related accessories, such as chargers, phone cases, screen protectors, gadgets, and more. Product purchases are also added to Cantech Solutions customer invoices.

Adam's Goals

Adam has a large vision for the future of Cantech Solutions. Being the first in his family to pursue entrepreneurship, he aims to scale the business and build a long-term sustainable model. To achieve this, he has three main goals:

- 1) Implement strategic marketing initiatives that correctly target different services to the most appropriate customer segments. "I want to know what Cantech Solutions customer distribution looks like in terms of age, gender, and service use type," said Adam. By identifying which customers use certain services most often and which ones are repeat visitors, Adam can develop more effective, segmented marketing campaigns.
- 2) Ensure Cantech has the necessary parts readily available for the most common repairs to avoid unnecessary delays. Since Cantech sources its parts from a wholesaler, delivery can take anywhere from 2 to 4 days. By identifying the parts most frequently needed, Cantech can optimize its ordering process and improve inventory management. This proactive approach will reduce service downtime, enhance customer satisfaction, and ultimately improve overall operational efficiency for Cantech Solutions.
- 3) Provide sales training for Cantech Solutions employees specifically for Rogers phones and activations. Understanding how many customers activating Rogers plans also purchase phones and which phones are most popular will help Adam deliver more effective sales training to store employees. Sharing these findings with Rogers will also strengthen the ambassador relationship by displaying Cantech Solutions as a data-driven partner. This could also open opportunities for Cantech to offer additional Rogers services beyond phone activations.

Adam is excited about the database. He looks forward to tracking the critical relationships within his business and having a thorough system to keep track of all customers, employees, and services. For customers, Adam wants to make sure he has their full name, phone number, date of birth, gender, and optionally their address and email. For employees he wants to keep their full name, phone number, and address.

Conclusion

Adam's conversation with Raj highlighted a clear need for change at Cantech Solutions. The challenges of using Excel, such as slow data searches, repeated customer entries, and lack of organization, have started to affect service quality and daily operations. By creating a formal database, Adam can improve how information is stored, accessed, and managed across all services, making it easier for employees to assist customers more quickly and accurately.

With the right data model and tools like SQL, Adam can also extract meaningful insights to guide marketing, improve inventory planning, and develop effective employee training models. Quality data management will position Cantech Solutions to grow beyond its current scope and strengthen its ambassador relationship with Rogers and MoneyGram. The database becomes more than just a digital system, but a strategic asset. As Cantech Solutions evolves, a data-driven foundation will be critical in turning Adam's long-term vision into a reality.