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Healthy food.
Healthy people.
Healthy business.

CAR is making it easier for the underfed
to find nourishing meals

by Josh Young

6-minute read

Feeding a nation requires a lot of food. And in a modern society, where groceries can typically be found at the corner market, we often forget the rather difficult logistics challenge created when moving a tomato or tuna filet from the farm or fishery to the table where it will be eaten. But the Centro Agroalimentare Roma (CAR) focuses on that challenge every day.

Serving as a major logistics hub for the agricultural and food industries of the Lazio region of Italy, CAR keeps food moving to the grocers, restaurants and kitchens that feed people every day. "We work with 100 wholesalers and serve the central region of Italy,

so you can imagine how much food we oversee," notes Doriana Ciambruschini, Institutional Relations Manager at CAR. "In a given year, we'll handle around one million tons of food—fish, fruit, vegetables—and our goal is to make sure that as little of that is wasted as possible."

But in summer, this goal can become particularly challenging. "Consider pineapples," continues Ciambuschini. "If we have a ton of pineapples shipped in during the winter, we have several days—maybe a week—to sell them. But in the summer, because of the heat, we will only have one day. And any pineapples that were not sold by close of business, we had to throw away."

This wasted food did not sit well with Ciambuschini or CAR, particularly given that there were so many families in the surrounding region dealing with hunger and food insecurity thanks to the COVID-19 pandemic. Fortunately, IBM Business Partner Deep Lab had also been considering this challenge for some time.

Over the course of one year provided meals to more than

80,000

hungry families

Each year processes an average

1 million

tons of food

Food where it needs to be

"We started exploring this issue back in 2016," recalls Cristiano Nervegna, Managing Director at Deep Lab. "The Italian government passed a law that incentivizes the donation of food surplus, and from this law, we had the idea of building a solution that could help companies build a culture of use and recovery for food—a culture that avoided waste."

Taking advantage of IBM technologies and working closely with CAR, Deep Lab created BitGood, a waste-conscious exchange platform that simplifies the transfer of food between wholesalers, distributors and outside charity networks focused on eliminating hunger. So as unsold or surplus goods are identified, these food-based non-profits can apply for these resources.

Beyond the potential for charitable donations, BitGood also offers opportunities for wholesalers to identify other potential buyers for their surplus goods. "Going back to the previous

example of pineapples," Ciambuschini adds, "we can keep them on the shelf for one day in the summer. But if you process and transform those pineapples into something different,

like a marmalade, then the shelf life becomes one year. You give a second chance to that pineapple, and you don't waste anything."

Supported by an IBM Embedded Solution Agreement (ESA), BitGood is hosted on IBM Cloud®, running in a Kubernetes cluster. "The ESA gives us access to the IBM technology we need," notes Nervegna, "while simplifying how we deliver it."

And BitGood uses the IBM® Blockchain Platform to manage the traceability and documentation for all of the food handled by the distribution center. "This is extremely useful for the wholesalers to claim their tax incentives," clarifies Nervegna. "Any time you want to get something from a tax office, you have to prove it. That's why we put BitGood on the blockchain. With the IBM Blockchain Platform we can automatically create all of the needed paperwork."

"[I]t's not just about feeding people that don't have anything to eat. It's about feeding them properly with healthy food."

Doriana Ciambruschini, Institutional Relations Manager, Centro Agroalimentare Roma

Less waste, more good

With BitGood in place, CAR has been able to impact lives all across Italy. "In just one year," notes Ciambruschini, "we managed to provide meals to 80,000 families, which translates to over 300,000 individuals being fed through BitGood. But it's not just about feeding people that don't have anything to eat. It's about feeding them properly with healthy food."

"In Italy, we have a ministry-level organization that focuses on collecting and distributing food for people in need," adds Nervegna. "But their focus is on dry foods, on shelf-stable foods like beans or pasta. With BitGood, we can reach these same people and integrate their diets with some fresh meats and vegetables. We give them the opportunity to have a more diverse

diet that delivers more of the vitamins and minerals that are important to stay healthy and prevent illness. So in the end, the whole community—the whole society—benefits."

At the same time, the traceability delivered by IBM Blockchain helps

CAR and everyone participating in the BitGood exchange to more easily track the origin, health and age of any foods intended for human consumption, whether purchased in a supermarket or delivered by a charity. And if an issue arises, any suspect products can be easily identified and

removed. "Maintaining food safety is another big concern for us," continues Ciambruschini, "and BitGood makes that a much easier process for both CAR and our wholesalers."

Alongside these benefits to consumers, CAR has realized a number of internal efficiencies thanks to BitGood. In fact, the business was able to cut the costs related to disposing of wasted food by 30%. And the firm's customers are also much more satisfied now that they can readily donate surpluses for tax incentives, often recovering up to 35% of the street price of donated goods.

Looking forward, Nervegna adds: "With BitGood, CAR has created a lot of benefit for our society and its wholesalers. And working together, we are looking to extend this experience even further—to other cities in Italy and hopefully even outside Europe. "

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Cristiano Nervegna, Managing Director, IBM Business Partner Deep Lab

About Centro Agroalimentare Roma (CAR)

CAR is a major logistics hub for the agricultural and food industry in the Lazio region of Italy. Altogether, the business supports roughly 100 wholesalers in its massive distribution center, where regional distributors, markets and restaurants can inspect and purchase a wide assortment of foods with a particular focus on fruits, vegetables and seafood.

About Deep Lab

IBM Business Partner Deep Lab designs and markets IT solutions that focus on the intersection between society and business. Headquartered in Rome, Deep Lab focuses on small- and mid-sized businesses in the surrounding region, delivering AI and blockchain support along with related consulting services.

Solution components

- IBM® Blockchain Platform
- IBM Cloud®