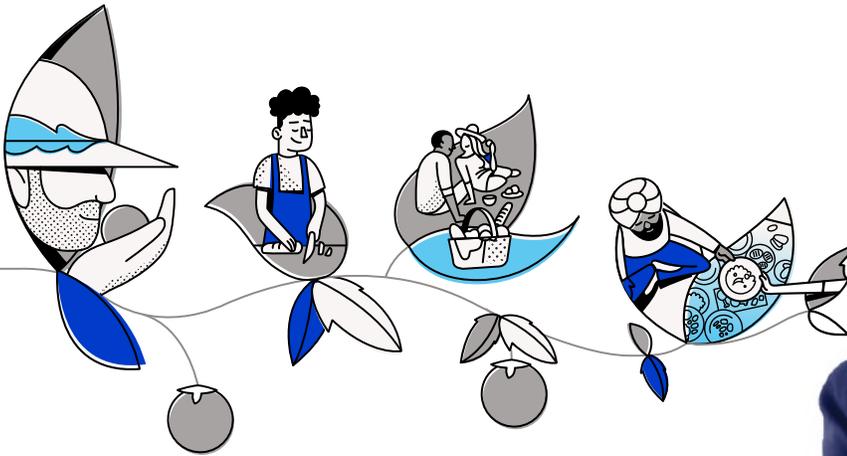


IBM Blockchain presents *Value Visionaries*



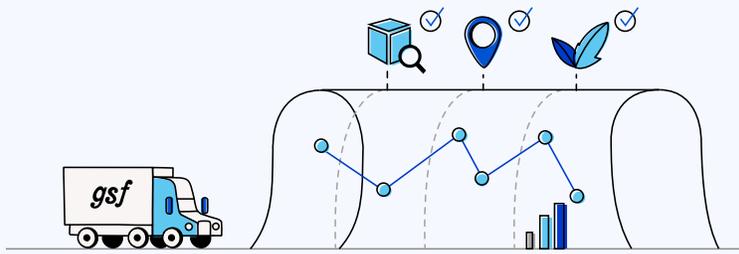
A Taste for Collaboration

an interview with **Guilda Javaheri**,
Chief Technology Officer
Golden State Foods

Standing in the spotlight leaves Guilda Javaheri feeling a bit reluctant. “I’m not necessarily comfortable with being singled out like this. It goes without saying that no one person is responsible for success. It really takes a team to work together, to trust each other and support each other.”

Guilda’s desire to share the stage comes as little surprise. As Chief Technology Officer of Golden State Foods, she’s part of a management team leading one of the most promising blockchain-based pilots in the food industry today — and collaboration is a key ingredient to its success.

“Blockchain is inherently a team sport,” says Guilda. “It’s very important for every team member to really leverage the technology and share data, trusting that it is not going to be abused. This means your competitors, your suppliers, your customers, your owner operators, they all will have to collaborate in order for your idea to come to fruition.”



That team of collaborators Guilda describes is architecting a digital transformation for one of the world's largest diversified suppliers to the Quick Service Restaurant (QSR) and retail industries. In a groundbreaking pilot program, Golden State Foods (GSF) is teaming with its supply chain partners and IBM Food Trust™ to track, trace and monitor food freshness through a solution combining blockchain, cognitive analytics and IoT. Even though the pilot is limited to a small number of GSF's client locations to start, the solution may one day deliver newfound levels of confidence and radically improved operations at a much larger scale.

Making that happen will be no small task. But as Guilda points out during our interview, the pilot's early returns — driven by the team's deep knowledge of the food industry and blockchain's unique brand of collaboration — are providing a tantalizing taste of what's to come.

Does your professional knowledge of the food industry make you a different kind of consumer?

Absolutely. I know the care every one of our associates puts in every day to delivering the freshest food. I know every mile that product travels.

What do you wish people knew about the global food supply chain that they don't already?

I wish people really paid attention to the provenance and handling of the food they consume. Oftentimes, people think that just because certain food is more expensive, it must have the right or good ingredients. And generally speaking, I would say that's a myth. I would encourage people to be more informed about what they consume, because an informed consumer makes better decisions.

What are some of the key differences between today's food supply chain and that of 20 years ago?

For one, the global nature of supply chain and seasonality make it possible to enjoy variety almost all year long. Organic food has become more affordable, and you also have the luxury of having prepared meals at quick-service restaurants featuring more fresh items. But most importantly, more data is becoming more readily available; you can see things like the nutritional value of the food you're consuming at the speed of scanning a barcode.

Why is the focus shifting from food products to food data?

Well, because the technology is advancing, and because consumers are becoming tech-savvy and they want to know more. Data-rich environments like ours can bring that information to the savvy consumer and put their minds at ease.

Why is it so important for restaurant owners to know the complete story of the food they serve?

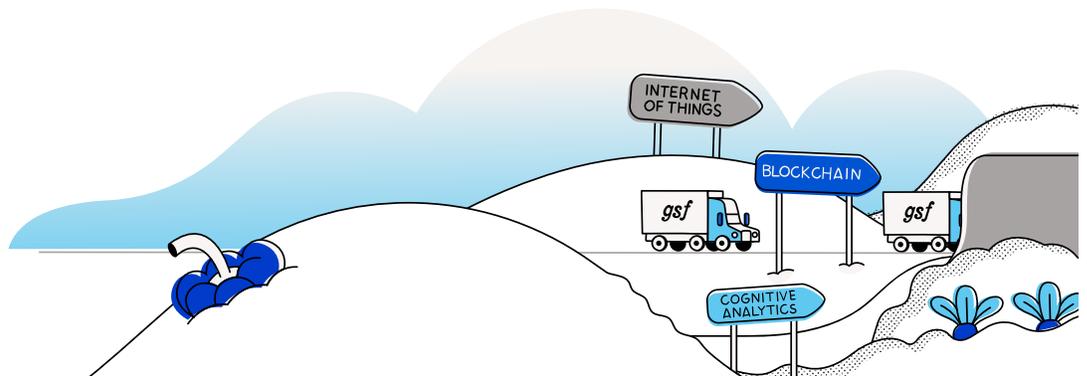
Restaurant owners put their livelihoods and their brand names on the food they serve. Today, they don't have much control about the supply chain of the ingredients they receive — they have only one-up, one-down visibility. But as consumers, we expect them to know much more than that in order to assure us about food quality and safety.

“Blockchain can bring that transparency from upstream to downstream, all the way to the consumption level in ways that you have never experienced before — and at the speed of thought.”

Describe traditional visibility in the food supply — and how blockchain can transform it.

When you think about the supply chain today, that one-up, one-down visibility is very limiting. Blockchain can bring that transparency from upstream to downstream, all the way to the consumption level in ways that you have never experienced before — and at the speed of thought.

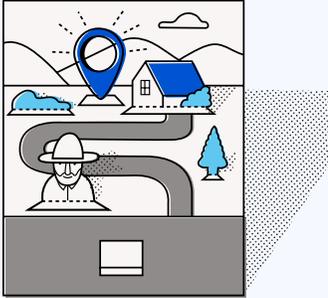
The value of blockchain's speed is immense, but there's also the inherent trust nature of blockchain, requiring collaboration with all entities in a network. And the fact that blockchain is immutable; I can bring the data into a trusted environment where I can be sure that it will not be tampered with or misused. All of this combined will revolutionize the food service industry.



What is the GSF blockchain solution?

The GSF blockchain solution is about the convergence of technologies like IoT, cognitive analytics and blockchain through IBM Food Trust to track, trace, and monitor the freshness of the product as it goes through its supply chain journey, as well as providing inventory visibility at all times through the shelf life of the item.

Starting with one product in this pilot, we are using an RFID solution to track the case as it comes off of the production line. And we use IoT sensors to listen to temperatures as the case moves through its stages of the supply chain, storing all the data in blockchain. Business rules orchestrated by blockchain alert us when there's any variation in the temperature of the product. This helps ensure freshness at all times as the case is delivered to the back of the restaurant.



“...every single time a product travels through its journey, you're assured of its freshness.”

So what's the benefit of our solution, what does it really mean? When you think about it, every single time a product travels through its journey, you're assured of its freshness. And by the time it gets to the back of the restaurant, the solution helps the restaurant manager to make sure the staff picks the product due to expire next. That really helps to prevent waste.

It also prevents waste at the manufacturing level, because the solution brings transparency throughout the supply chain; the manufacturer can see trends in consumption and can adjust the production schedule. They don't have to wait for a distributor to give them a forecast — they can see in near real-time how consumption is trending. Similarly for the distribution side, they can reduce waste along the way because they are going to have more precision about the type of product they need to carry through their inventory.

What's the future of the GSF blockchain solution?

The future of this solution is limited by the extent of your imagination. Think about five years from now, two years from now, globally, you can have visibility and transparency about where the product came from and assurance that — at all times — it has been within the control band of the temperature for freshness. Think about the power you can have to stop or control the outbreak of the amount of people touched by foodborne illness. Think about having all the information at your fingertips — think about having vital information at your fingertips. That is a game-changer.

That's a visionary transformation of your industry. What are some of the more important things you're learning?

We're learning to expect the unexpected. With emerging technologies, you have to pay special attention to processes, to put yourself in the shoes of the operators, and to make sure that you really slow down, not getting too anxious to run before you learn how to walk.

One of the challenges that we have faced in getting people to buy into the solution has really been around managing expectations. We know blockchain works. So we are strategizing and analyzing the best position for each player in order to leverage their efficiency across the ecosystem.



“With competitors, it’s actually interesting because when you share common goals, it really helps you to come together and collaborate rather than compete.”

What is it like collaborating with other companies, even when they’re your competitors?

We are always in collaboration with other companies, learning from each other, sharing best practices with each other. With competitors, it’s actually interesting because when you share common goals, it really helps you to come together and collaborate rather than compete.

Collaboration on that level is no small undertaking. Where do you even begin?

Actually, it’s all about bringing people together. We reached out to thought leaders in the technology, partnering with IBM to help us to shape our vision. We partnered with customers and with operators. We got into design thinking sessions and we started thinking, “What is the art of the possible?” And then we started asking questions like, “Why not? Why can’t we do that?” And that’s how we started — challenging the status quo.

Were there any doubts from others — or even yourself — in the process?

Blockchain requires everyone to be open and feel comfortable, but some players can be skeptical at the beginning. Some of the skepticism is that, you know, “Why would I share the information?” or, “What are you going to do with it?” You are making yourself vulnerable by showing every piece of information. But if you agree that you are going after a common goal — which is supporting your end consumer — that goal should be enough to encourage you to share the data and trust each other.

There is really no right or wrong way with blockchain; it’s really the way that we all together can move forward. And that really removes a lot of skepticism, because you all have vested interests. You are spending the time and energy to shape the solution, and ultimately that is what everyone is going to benefit from.

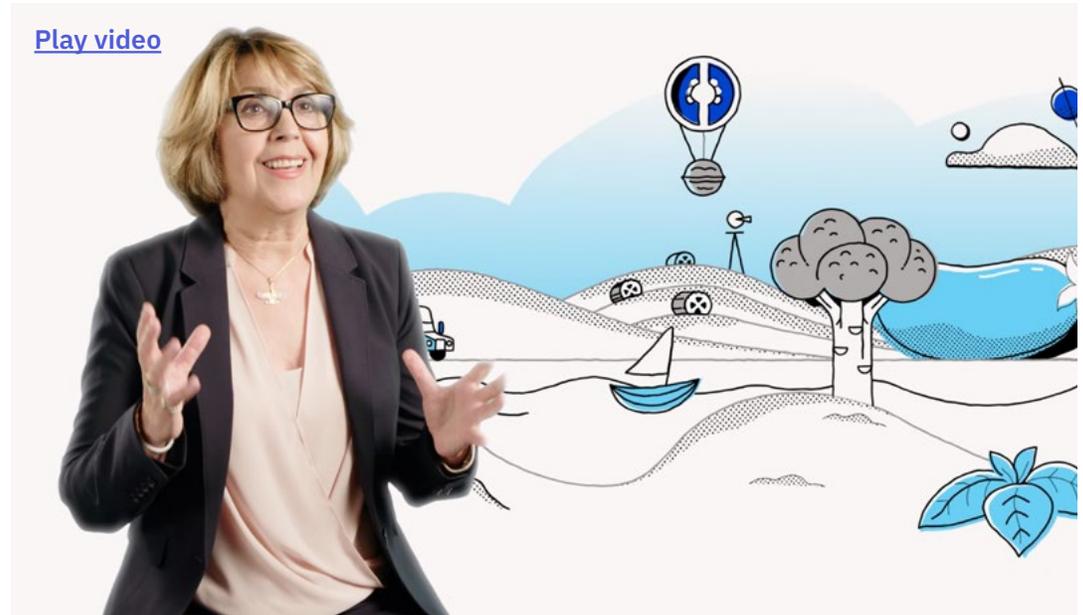
But it does require everybody coming together and working together for the common good. If you don’t want to do that, don’t even try blockchain. If you just want a solution that helps you with one-up, one-down visibility, there are a lot of systems out there that provide you with that.

Do you think there could ever be perfection in the food supply?

Absolutely. Think about having the right product with the right content at the moment that you want to consume it, assured that it has gone through the proper process of handling — and having that assurance at the speed of thought. Is that possible? Will I be able to track, trace and monitor the freshness of the product through its journey? Absolutely.

Blockchain works. Blockchain can change the world. I feel I’m so privileged that I have the opportunity to make a difference with the wave of change that blockchain is about to unleash. The first thing I think about in the morning and the last thing I think about when I’m driving home is, “Yes we can do this!”

Watch below as Guilda describes her journey in becoming a Value Visionary with the help of IBM Blockchain. Then [let's talk](#) about your vision for success.



IBM Blockchain

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