## Kellogg Insight Podcast Transcript

How Do Those Valentine's Day Roses End Up in Your Bouquet? It's Complicated.

**Jessica LOVE**: As you might guess, every February 14th, there is a sudden, massive spike in demand for flowers. And not just any flowers.

**Martin LARIVIERE**: You might settle for sending whatever bouquet of flowers looks nice to your mom for Mother's Day, but for Valentine's Day you go with roses. No one sends carnations on Valentine's Day.

**LOVE**: That's Martin Lariviere. He's a professor of operations at Kellogg. Most of us think of Valentine's Day as the "day of love," or the "day of romance." But for the people in charge of getting those roses out of the field into the hands of consumers—from the growers who cultivate the roses, to the companies that ship them, to the retailers who sell them—this holiday has a very different meaning.

**PRODUCER**: What might they say Valentine's Day is? The day of...?

**LARIVIERE**: Probably a lot of stress! [laughter] This is the chance to make money for everybody that's concerned, right? This is the opportunity where you can clean up for the year.

**LOVE**: But in order for this lucrative love story to have a happy ending, everything has to go just right.

## [music interlude]

**LOVE**: Welcome to the *Kellogg Insight* podcast. I'm your host, Jessica Love (no relation to the holiday). Today on the podcast: What does Valentine's Day look like from the other side of the flower shop counter? As Martin Lariviere will tell us, the humble rose can teach us quite a bit about what goes into a working supply chain—and the many ways it can go awry.

The most thorny problem for those in the rose industry is how to line up supply with demand. You see, it takes at least two years for rose bushes to produce roses that are mature enough to be cut and sold. That means that years ago, the growers had to make a bet about how many roses people will buy this year. And if that guess was wrong, there's nothing anyone can do. It's way too late to produce more roses, or to cut back production if they produced too many.

**LARIVIERE**: You see this in other markets. You see this, for example, in Christmas tree farms. You might predict that next year is going to be great year to be selling Christmas trees, and having that information one year out doesn't do you crap. You can't act on that, because you can't get the product ready soon enough. Roses are similar. And throw on top

of that just the general uncertainty of what the weather conditions and things like that are going to be.

**LOVE**: Things are also hard to predict on the demand side. For one, consumer appetites for roses can actually change a lot from year to year. For example, when Valentine's Day falls on a weekend, people tend to buy fewer roses than when it's on a weekday. And, of course...

**LARIVIERE**: Flowers tend to be sort of a last minute purchase. You may decide on January 1 that you're going to spring for flowers for Valentine's Day, but you don't order them six weeks out. You order them much closer to the holiday, or stop in. So you end up having a greater unpredictability in exactly what sales are going to be.

**LOVE**: Both growers and retailers do whatever they can to project how many roses they're likely to sell. For instance, if they know Valentine's Day is coming on a Thursday, they might look at how many they've sold in past years when it fell on a Thursday, as well as general market trends, what competitors are doing, all that stuff. But at the end of the day, it's never a perfect science.

**LARIVIERE**: It's not the case that you can guarantee having enough supply or enough demand.

**LOVE**: Another big challenge: The flowers have to get to the flower shop looking, and smelling, fresh. That's tricky, given that most of the flowers we buy in the US are actually grown in Ecuador and Colombia. And, roses are plants, meaning they need to be transported like plants.

**LARIVIERE**: The same technologies that make it possible to buy asparagus in February is what lets you get flowers in February as well.

**LOVE**: Namely, the technology of cold storage. At every step of the supply chain, the roses have to be kept just above freezing, so that they stay fresh. That means they have to be about 34 degrees when they're packed at the farm, and when they're flown overseas, and when they're inspected by customs, and in the truck on the way to the flower shop! If the roses get too warm or cold at any point in that chain, they could wilt, rendering them unsellable. And of course, all that refrigeration costs a lot of money. So you might wonder: Wouldn't it be cheaper to just grow roses locally? Lariviere says, probably not.

**LARIVIERE**: If you think about what demand for flowers is going to be in Cook County, how many greenhouses do you need to be able to keep Cook County happy with roses, right? And do you want to pay to heat greenhouses in February in Chicago? [laughter] It's not going to come cheap.

**LOVE**: So South America it is. And there's really only one place for roses from overseas to enter the United States.

**NEWS ANCHOR**: More flowers than people are touching down at Miami International Airport right now.

**LOVE**: It turns out, nearly 90 percent of all flowers entering the U.S. go through the Miami Airport. But why Miami? After all, there are a LOT of American airports just as close to South America. The reason actually comes down to people. As Lariviere explains, flowers are typically transported on the same planes as passengers.

**LARIVIERE**: Airlines that have regularly scheduled flights between Latin America and the U.S. sell the extra space for cargo, and that's where most of the flowers go, at least generally through the year. Miami historically has been a hub for travel to Latin America. Right? So if you have a lot of flights coming in from Ecuador or Colombia, there can be a lot of flowers coming through there.

**LOVE**: So, as a result, Miami has gotten really good at handling flowers and other produce. They have a refrigerated storage facility the size of five basketball courts, and plenty of customs agents trained to handle agricultural products. But that speciality *can* be a double-edged sword.

**LARIVIERE**: If one particular port of entry carries an inordinate part of one industry, there is risk there of whatever kind of shut down. If Valentine's Day fell in September and there was a chance of a hurricane shutting down Miami for a week, that's just a risk of not having your supply served through more ports than just one. But if you have to plan for a peak, if you have to plan for being able to serve Valentine's Day or Mother's Day, it's a lot tougher to think about replicating that kind of capacity across the whole country, right? There's a reason for only doing it once, and it just happens to be in Miami.

## [music interlude]

**LOVE**: Eventually, of course, the roses end up with retailers, who stuff them in lovely bouquets and get them ready for customers. And you might think, by this point, the retailers' profits are all but guaranteed. But that's not the case! In order to unlock the full money-making potential of Valentine's Day, there's still one more critical question the retailers have to answer: How much should they charge for a rose? This is a tough one, because on Valentine's Day, the price of roses at the wholesale level nearly doubles in a lot of markets. So how much of that expense should retailers pass on to consumers? Lariviere says, it depends on the retailer.

**LARIVIERE**: If you are Costco or a supermarket, flowers are something of a side show. On the other hand, if you are a stand alone floral shop—this is the family business or whatever—charging high prices for roses on Valentine's Day is one way to pay the rent.

**LOVE**: But, like everything in this delicate supply chain dance, pricing, too, requires a careful balance. Even though the rose may be the undisputed symbol of love...

**LARIVIERE**: There's some price point at which you would not buy roses for your significant other, and face the hell of going home empty handed.

## [music interlude]

**LOVE**: This program was produced by Kevin Bailey, Jessica Love, Fred Schmalz, Jake Smith, Michael Spikes, and Emily Stone. It was written by Jake Smith, and edited by Michael Spikes.

Special thanks to Martin Lariviere.

As a reminder, you can find us on iTunes, Google Play, or our website. If you like this show, please leave us a review or rating. That helps new listeners find us. And visit us at <u>insight.kellogg.northwestern.edu</u>, where you can find more great stories about supply chains.

We'll be back in a couple weeks with another episode of the Kellogg Insight podcast.