the **SAS** best practices

BIG DATA

eBook

a tale of
CUSTOMER
LOYALTY
and going

SoLoMo

EVERYDAY SAVINGS
FROM YOUR EVERYDAY FARMERS MARKET

Thompso

LOYALTY
MEMBERSHIP
CARD

by **TAMARA DULL**
with a foreword by **JILL DYCHÉ**

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THOUGHT PROVOKING BUSINESS

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FOREWORD
by Jill Dyché

Last night I stood in line for a wine tasting. I'd bypassed the table of fruit squares pierced with colorful toothpicks and the salumi slices stacked like poker chips near a basket of flatbread, only to find a convivial gathering of shoppers nibbling Asiago and sipping free Carménère.

No, it wasn't happy hour at my favorite watering hole. It was just another evening at my local grocery store. I'd come in to buy some beef broth and tomato paste, but the ersatz tasting party made me temporarily forget about my shopping list. These were fun people drinking wine, and they wanted me to sit down and stay awhile.

I've been watching the big data trend take shape enough to understand that somewhere along the way I'd be giving my grocery store some of my own data, if not to fill my wine cellar than at least to buy some staples. My loyalty card keeps few secrets. And my grocery store, like a growing number of retailers, is hip to the quid pro quo: Jill likes wine, we carry her favorite bottles, and she'll partake of the occasional in-store sample as a hearty *Welcome Back!* from her local wine-drinking tribe. If she feels the love, she'll come see us again.

The truth is that scanning loyalty cards is so 2007. These days retailers are rolling out SoLoMo – Social, Local, Mobile – applications that can leverage location data, beamed from my iPhone, to figure out where I'm shopping, and where I'm pausing in the store to examine or buy a product. If I linger too long in front of the bergamot-scented biodegradable laundry detergent ("No synthetic fragrance or dyes!"), the store can send me a discount code via SMS message or Twitter as a real-time incentive. And it can follow up later by mailing a paper coupon to my house, just to make sure the higher-margin detergent becomes my new favorite brand.

My loyalty card keeps few secrets.

Big data is no longer confined to the dark cubicles of programmers swigging Red Bull while debating the merits of YARN over MapReduce. No, big data is driving companies across industries to reconsider how they attract and retain their customers. By combining larger volumes of detailed structured and unstructured data with historical customer behaviors and purchases, retailers can welcome us back to the tribe. They'll not only know when to reach out, they'll know when to refrain since I'm due to restock my wine cellar anyway. They'll know that if I like the Carménère, I'll love the Carignan, and they'll email me when a new shipment arrives.

Thus retailers are transcending the campaign management of yesterday. They're counting on optimal customer engagement. And so are banks, cable companies, manufacturers, energy companies, and hospitals.

The story of Thompson's Market is the story of every company engaged in the new world of big data. How to overcome entrenched business processes, longstanding cultural habits, and some natural personality tensions (okay, corporate politics), and use big data to drive innovation. Read how they do it. Their lesson can become yours.

In the meantime, here's raising a glass to your big data success!

Jill Dyché

Vice President, SAS Best Practices

> Big data is no longer confined to the dark cubicles of programmers swigging Red Bull while debating the merits of YARN over MapReduce.

THE SETUP

PROLOGUE

 "… and that's why I'm stepping down as CEO and president," said Robert Thompson III, grandson of Robert Thompson Sr., the founder of Thompson's Market. "Please join me in welcoming our new CEO - my sister, Jen Ramos, as she makes her way to the stage."

Silence filled the outdoor air as Jennifer Thompson Ramos walked across the stage. More than 5,000 of Thompson's 19,000 employees had assembled at the Santa Barbara Bowl for the annual company meeting. This gathering was the highlight event of the year because it was when executives typically announced the "next big thing" for Thompson's. Store employees had been speculating for weeks about this year's announcement. But no one had predicted a new CEO.

"Good morning, everyone! Thank you, Rob." Jen paused for a few seconds and looked out into the sea of concerned employees. "Judging by the silence, I suspect you don't know how to respond - whether you should clap or cry." Many politely chuckled and nodded.

Jen continued, "I understand how you feel. I know there have been rumors going around about Rob and people have been concerned. When our family first learned of Rob's health issues, we were devastated. It hasn't been easy. We're just grateful for each and every day we have with him. Rob has been so strong and such an inspiration to us all."

Beginning with the close relationship she had with her grandfather, Jen then spent the next 15 minutes recounting fond memories of Thompson's Market's rich history.

"And that brings us to today," she said. "By a show of hands, how many of you were here in 1999?" Several hundred employees raised their hands. "That was the year I took on the COO role, but more importantly, it was the year we began to roll out what we called the 50-Year Anniversary Store. Remember that?" Many did.

"It took several years to convert all our stores to the 50-Year Anniversary Store model, and it was well worth it. It proved to be a profitable move for the company and it provided a much better experience for our customers. Now it's time for us to take a new bold step. Today, I'm happy to present to you our new vision for Thompson's Market. We're calling it the SoLoMo Initiative."

The new CEO now had everyone's attention.

"Today, I'm happy to present to you our new vision for Thompson's Market. We're calling it the SoLoMo Initiative."

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THE SETUP

ABOUT THOMPSON'S MARKET, INC.

(from the Thompson's website)

home > about us

Who We Are

We're a private, family owned and operated grocery store chain in California. Our granddad, Bob Thompson, set up our first country store back in 1949. He wanted to give local farmers an opportunity to sell their fresh products every day – thus making Thompson's "the Everyday Farmer's Market." Never in a million years did he imagine this one store growing into the thriving institution it is today. But here we are.

— That's Thompson's Market Info!

What Matters to Us

#1: GREAT QUALITY

We're not a megastore, so we don't stock everything. But what we do stock, you can trust that it meets our team's highest standards of quality.

#2: YOUR MONEY

You want to keep it in your pocket. So do we. Sure, we have our loyalty card and discount programs just like the next guy, but we're always looking for new and innovative ways to provide you with the greatest value. Every day.

#3: YOUR TIME

It's valuable. We know that, so we focus on getting you on your way as quickly as possible. That means you won't have to go all the way to the back of the store just to pick up that single gallon of milk.

Quick Facts
- Founded: 1949 by Robert Thompson Sr.
- Headquarters: Ojai, California
- Number of stores: 380
- Annual sales: $10.6 billion
- Employees: 19,000+

Our Milestones

First store opens	25-year anniversary; We opened our 132nd store	Rolled out 50-year Anniversary Store with new open model and loyalty card program	Thompson's entered the "social" age	Rolled out revamped website and first mobile app
1949	1974	1999	2006	2010

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THE SETUP

ABOUT THE TEAM

Jennifer Thompson-Ramos

CEO & PRESIDENT

Often kills two birds with one stone.

Larry Goldstein

CFO

Doesn't cut corners well.

Brad O'Ryan

CIO

Thrives being a devil's advocate.

Celeste Taylor

VP MARKETING

Often caught between two stools.

Will Thompson

VP STORE OPERATIONS

Judges a book by its cover.

Eric Delgado

VP MERCHANDISING

Loves hot potatoes.

Angie Thompson

VP HUMAN RESOURCES

Avoids the grapevine.

Rachel Weber

DIRECTOR OF IT APPLICATIONS

Lives on the edge.

Ross Turner

DIRECTOR OF IT INFRASTRUCTURE
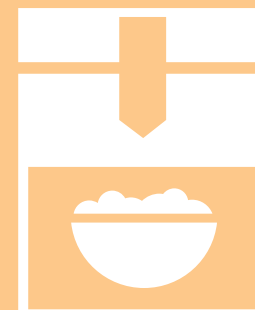
Beats around the bush.

Marco Silva

DIRECTOR OF SHOPPER EXPERIENCE

Sometimes misses the boat.

Steve Lee

DATA SCIENTIST

Bites off more than he can chew.

CHAPTER ONE:
The Loyalty Card is Not The Only Way

AT THE ANNUAL EMPLOYEE MEETING:

Celeste Taylor, Vice President of Marketing, sat there in the front row dumbfounded. Not only had her boss been promoted from COO to CEO, but her executive ally, Rob, was now stepping down. And, more selfishly, Rob wouldn't be around to run interference for her anymore.

Celeste didn't have the best relationship with her boss. When Jen denied her request to upgrade marketing's CRM system five years earlier, Celeste took the decision personally, even though the decision was one of many recession-related cutbacks Thompson's had to make that year. Despite what anyone said to appease her, Celeste just couldn't let it go.

It's Always Been About the Shopper

The new CEO stood confidently on the stage and proceeded with her presentation. "One of my favorite things to do," Jen said, "is to go grocery shopping at Thompson's." Everyone started laughing.

"You laugh, but I'm serious. I've been doing it for years. I often switch it up and visit different stores, hoping that the employees don't recognize me. And most of the time, I get away with it. Especially when I wear my LA Dodger's cap. Hint, hint." The Dodgers fans in the audience cheered.

"Why do I do this? Frankly, it's because I never want to be out of touch with our shoppers' experience. Because at Thompson's, it's always been about the shopper. About providing them with great quality and service. And about saving them both money and time."

> "One of my favorite things to do is to go grocery shopping at Thompson's."

THE STORY

Jen then directed everyone's attention to the big screen: "Many of you will probably recognize this next slide."

5 Quick Facts

about today's shoppers

FACT #1: There are 3 types of shoppers: quick trippers, fill-in, and stock-up shoppers.

FACT #2: Half of all shopping trips result in the purchase of 5 or fewer items.

FACT #3: The number of products purchased most commonly on a shopping trip is 1.

FACT #4: The average household purchases only 300 different products per year.

FACT #5: Since 2007, less than 3% of all manufacturers' coupons are ever redeemed.

These facts have helped inform some key decisions for Thompson's over the years, including our 50-Year Anniversary Store design and layout, our product selection and placement, and our loyalty card program and promotions. We need to remember these facts as we continue to move forward.

After the break, I'll be sharing our new SoLoMo vision and issuing a companywide challenge. But first, in light of the five facts presented here, I want you to consider some questions as you take on the new challenge."

For the next several minutes, Jen presented the following questions:

- Promotions are designed for stock-up shoppers, not quick-trippers. How effective are our promotions if over half of our shoppers are picking up five or less items? How can we make our promotions more effective for everyone?

- Given that a shopper's time is limited, how can we help them quickly find what they're looking for and potentially buy more in that limited amount of time?

- Paper coupons are yesterday's news. We still have some of our older shoppers who like to use them, but generally speaking, people are too time-strapped to be clipping coupons these days. Our loyalty card members often get discounts without coupons. If we got rid of paper coupons, how could non-loyalty card members get a break?

- For the overachievers: How can we add an element of surprise and keep the Thompson's shopping experience fresh and fun for everyone?

How can we add an element of surprise and keep the Thompson's shopping experience fresh and fun for everyone?

What's Wrong with Loyalty Cards?

"The final topic I want to address before the break is Thompson's loyalty card program." Given the popularity and success of the program, no one was really sure where the new CEO was going to take this discussion. Not even Celeste.

"As most of you know," Jen continued, "Celeste Taylor, our Vice President of Marketing, joined Thompson's back in 2004. Within her first two years, she rolled out a top-notch loyalty card program that proved to be wildly successful with our customers. The program continues to be a hot topic in the media, and Celeste has become a sought-after speaker for many conferences. Kudos to Celeste and the team!" Everyone applauded.

"Because of this program, we've been able to combine the loyalty card data with other data - like POS and demographic data - and use advanced analytics to better understand our shoppers and provide them with relevant and timely discounts through email, on their mobile devices and even 'just-in-time' at the cash register.

"This has all been very good for the company on multiple fronts, but now it's time to raise the bar on how we 'get personal' with our shoppers and offer them a personalized experience. It's not just about the loyalty card program. I realize this may come as a surprise, but there are four primary reasons for this shift: No. 1 is changing demographics; No. 2 is privacy; No. 3 is relevancy; and No. 4 is what folks are calling 'big data.'"

Jen went on to summarize each item:

- Changing Demographics. Thompson's is a California-based grocery chain. The data, from both internal and external sources, has been showing that two of our largest customer segments are also our fastest-growing segments: Hispanics and senior citizens. We need to do a better job of understanding and supporting these two groups.

"Now it's time to raise the bar on how we 'get personal' with our shoppers and offer them a personalized experience."

- **Privacy.** Our data shows that Hispanics lag significantly in loyalty card adoption. One reason is because culturally many of them are hesitant to share their personal information with companies. As a result, one card may be used by multiple family members, friends and neighbors. Senior citizens are also leery of sharing their personal info and letting a company learn too much about them. As reports of data breaches, government snooping and identity theft continue to increase, so do customers' concerns about their own personal data.

- **Relevancy.** So many retailers offer loyalty cards these days. If the loyalty card is mostly about discounts (which most are), it becomes increasingly difficult for any retailer to engender loyalty through their card. Also, if everyone has a loyalty card - or if the kind cashier swipes the loyalty card stashed under the register for anyone without a card (which we do at Thompson's!) - then what's the value in having a loyalty card? Isn't there an easier way to provide relevant discounts?

- **Big Data.** Regardless of customer demographics, privacy and relevancy, the new era of big data is providing opportunities for retailers to collect and process more and different types of data from both internal and external sources. Big data has the capacity to provide brick-and-mortar shoppers with a more personalized experience, thus increasing customer loyalty and satisfaction. The question Jen wanted Thompson's to tackle was whether this can be done without a customer loyalty card.

That concluded the first segment of the employee meeting. Jen could tell everyone was ready for a break.

"Let's take a 15-minute break now. When we come back, Celeste Taylor will kick off our discussion on SoLoMo. Not to be confused with sa-la-mi. Be back in 15!"

> As reports of data breaches, government snooping and identity theft continue to increase, so do customers' concerns about their own personal data.

CHAPTER TWO:
The New CEO Launches the SoLoMo Project

Now that they were on break, Celeste had a few moments to calm down. Her stomach was in knots. Her boss had just criticized her baby, the loyalty card program, in front of the whole company, and now she had to go onstage and act like all was well. This was not how she thought her morning would go.

Throwing her untouched coffee in the trash, Celeste began making her way up the aisle when Will Thompson stopped her. Will was the Vice President of Store Operations and one of Celeste's greatest supporters. He was also Rob and Jen's cousin.

"Hey, kiddo, how are you doing? What do you think about our boss' promotion?"

"I don't know what to think," Celeste replied. "And frankly, I can't believe that Jen just trash-talked my loyalty card program in front of everyone. My very successful loyalty card program."

"Celeste, come on, that's not fair. Jen didn't trash-talk your program. She's just keeping the ball moving forward. Heck, it's the Thompson way - starting with my granddad, then my uncle, and then Rob. Besides, this new SoLoMo idea is right up your alley."

"Well, I'm glad one of us is drinking from the glass half-full. I need to get going. I'm up in a few minutes."

What Is SoLoMo?

Celeste made her way up to the stage, as the employees started heading back to their seats.

"Man, oh, man! What a morning! How are you guys doing?" Celeste asked. "Are we all good?" Several nodded their heads. She wished she felt the same.

"Great! Then let's get to the good stuff! Jen asked me to introduce the SoLoMo concept. How many of you are familiar with the term?" A few dozen employees raised their hand.

"What if I told you that SoLoMo was short for Social-Local-Mobile? Now, who's heard these terms?" Almost everyone's hand went up. "Honestly, you'd have to be living under a rock …," Celeste said jokingly. Everyone laughed.

"So. Lo. Mo. What does this have to do with Thompson's? In a word: everything. Today, it's all about the SoLoMo shopper." Celeste directed everyone's attention to the big screen.

"Today, it's all about the SoLoMo shopper."

Today's SoLoMo Shopper
social • local • mobile

SOCIAL
- Discuss on social sites
- Compare products
- Share group deals

LOCAL
- Locate stores
- Receive local offers
- Lookup nearby inventory & prices

MOBILE
- Review shopping list
- Read about product
- Read reviews

Celeste explained that in the world of SoLoMo shopping, customers become the marketers. It's what they call "reverse marketing." With social sites like Facebook, Twitter and Yelp, customers tell the company story. Good or bad. Right or wrong. Marketing no longer controls the conversation.

"It's important that Thompson's participate in that conversation, but not control it," Celeste said. "We need to go to where our customers are, whether it be online, in the stores or on their mobile devices. And we need to do it in an integrated and seamless fashion - much easier said than done!

"The power of a SoLoMo strategy is not in any one element - social, local or mobile - but in the integrated connection between these elements. They all work together, and each one has implications for the other two. We need to have all three elements in place if we want to have a clear picture on how to provide our customers with the ultimate shopping experience. An experience that keeps them, and their friends and neighbors, coming back for more!

"Are you with me?!" Celeste asked the crowd, unwittingly raising her hands. Heads nodded. There was a scattered and then enthusiastic applause, and on that note, Celeste thanked her audience and walked offstage.

The SoLoMo Project Challenge

Jen took center stage again. "Thank you, Celeste. You did a great job setting us up for the SoLoMo project challenge. Is everyone ready to hear it?"

Everyone was more than ready.

"Here's the challenge: Six months from today, we are going to roll out the SoLoMo initiative." Many smiled.

"With social sites like Facebook, Twitter and Yelp, customers tell the company story. Good or bad. Right or wrong."

"Some of you may be wondering 'What does this mean?' or 'What does that look like?' And my response is: You tell me.

"What I can tell you, though, is how we're going to get there. This is going to be a very aggressive project," Jen continued, "and the clock starts on Monday morning. This is what the timeline looks like for the next six months:

- **Week 1.** This is where all of you come in. Based on what you've heard today and what you're hearing in the stores, are there any SoLoMo-type ideas you think would be a good fit for our shoppers? If so, next week is the week to share your ideas.

- **Week 2.** A small committee will pick the top eight to 10 ideas, and pass these ideas to the management team. The management team will then meet and decide what idea or collection of ideas will drive the initial rollout of the SoLoMo initiative.

- **Weeks 3-4.** The project execution team will put together the implementation plan.

- **Weeks 5-25.** The team will have about five months to get everything done for the initial rollout.

- **Week 26.** That's when Thompson's goes SoLoMo!

"And here's an added incentive: If your idea is selected, you'll win $500. If this interests you, I'd encourage you not to wait until the last minute to submit your ideas. The reason is: If multiple employees submit the same idea, only the first submitter will get the money. Make sense?"

Despite the expansive outdoor audience and faint microphone feedback, Jen heard the whispers of dozens of Thompson's employees, which she took as a collective endorsement of the SoLoMo initiative idea.

"It's been a long morning, and we've shared a lot of information with you. We're now at your favorite part

of the meeting - open mic! We have microphones set up around the Bowl, so if you have any questions or suggestions for the management team, please step up to one of the mikes. We'll take questions for the next 30-35 minutes, and then we'll adjourn the meeting."

For the next 30 minutes, employees asked a range of questions about topics ranging from Rob's resignation to company financials to the new SoLoMo challenge. Jen then bid the group a final farewell, wishing them success in the coming year.

As employees were filing out of the Santa Barbara Bowl, Celeste caught up with Will. "I can't believe it!" she exclaimed. "SoLoMo is my baby. Since when do we invite everyone on the planet to throw in their ideas about a marketing initiative?! And why didn't Jen have the decency to tell me about the challenge before she announced it to the whole company?"

"Celeste, don't you think you may be taking this a bit too personally?" Will asked. "We, as a company, got some pretty big news this morning. There was a change in leadership. My guess is that Jen just wants to start off strong and make her own mark. Asking employees for strategic ideas has never been done before. Let's see what happens before we make any judgments, OK?"

"I'm screwed. It's going to fail and Marketing's going to take the hit," Celeste said as she walked away.

> "I'm screwed. It's going to fail and Marketing's going to take the hit."

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THE STORY

CHAPTER THREE:
It's All About the Data

ONE WEEK AFTER THE ANNUAL EMPLOYEE MEETING:

Back at Thompson's headquarters in Ojai, the new CEO scheduled a meeting with "the data people." As the former COO, Jen understood the strategic value of data, and given the issues Thompson's had on its first (and last) big data project, she wanted to make sure that mistakes weren't repeated. She also wanted to make sure that best practices had been researched prior to embarking on this new big data, or rather, SoLoMo, project.

Invited to the meeting were: Brad O'Ryan, CIO; Rachel Weber, Director of IT Applications; Ross Turner, Director of IT Infrastructure; Celeste Taylor, VP of Marketing; Steve Lee, Data Scientist; and Will Thompson, VP of Store Operations.
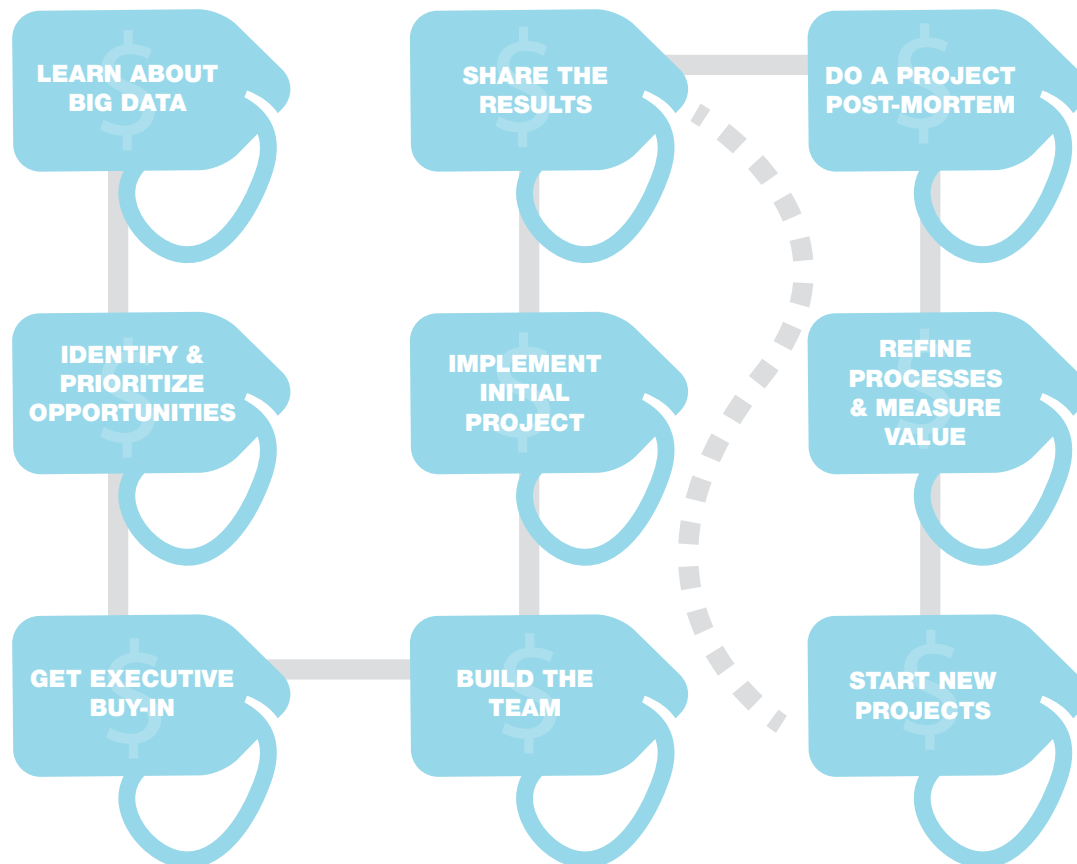
A BIG DATA ROAD MAP

A question often asked by many organizations about big data is "Where do we start?" For newcomers and seasoned experts alike, there is no shortcut to finding the "signal" in the "noise" of today's big data.

Here is a suggested road map for those organizations just getting started with big data or for those who got off to a rocky start and are looking for some course correction.

LEARN ABOUT BIG DATA

SHARE THE RESULTS

DO A PROJECT POST-MORTEM

IDENTIFY & PRIORITIZE OPPORTUNITIES

IMPLEMENT INITIAL PROJECT

REFINE PROCESSES & MEASURE VALUE

GET EXECUTIVE BUY-IN

BUILD THE TEAM

START NEW PROJECTS

For newcomers and seasoned experts alike, there is no shortcut to finding the "signal" in the "noise" of today's big data.

LEARN ABOUT BIG DATA

Do your homework. Read what others are doing with big data. Attend conferences. Talk to others who've both succeeded and failed in their big data initiatives. Research what your competition is doing with big data.

IDENTIFY AND PRIORITIZE OPPORTUNITIES

As your understanding of big data develops, you begin to "see" big data opportunities everywhere – inside and outside your organization. Focus your attention on those opportunities that will provide value to your business. Then systematically prioritize these opportunities, taking into consideration business value, size of effort and technical difficulty.

GET EXECUTIVE BUY-IN

Many big data projects fail because they skip this step. Despite the outcome of their "skunkworks" project, if the project doesn't align with executive priorities, its survival may be compromised. Instead, bring your prioritized list of opportunities to management and get their feedback and support.

BUILD THE TEAM

Once executives have approved an initial effort, it's time to build a multi-disciplinary team. This team may include the following: an executive sponsor, business subject matter experts, IT practitioners, and external resources, as needed. The size and scope of the project will help inform how many should participate.

IMPLEMENT INITIAL PROJECT

Make sure the selected effort is well-scoped. Start small. You're looking for a quick win to prove that big data is good for the organization. On the flipside, if the project is going to fail, you want to fail fast so that you can move on.

> As your understanding of big data develops, you begin to "see" big data opportunities everywhere – inside and outside your organization.

NUTS & BOLTS

SHARE THE RESULTS

Enlist interested parties in reporting the results of your effort. This is true whether the project has succeeded or failed. The accountability is good, and you will most likely garner more support along the way.

DO A PROJECT POST-MORTEM

At the end of the project, gather the team together to conduct a project post-mortem. Identify what worked well, what didn't work and lessons learned. Identify opportunities of improvement for future projects.

REFINE PROCESSES AND MEASURE VALUE

Based on feedback from the project post-mortem and management team, refine processes and adjust the project team accordingly. Depending on the type of project, start measuring the anticipated value.

START NEW PROJECTS

Now with one big data project under your belt, start the next project, and repeat the cycle of sharing results, refining processes and measuring value.

> With one big data project under your belt, start the next project, and repeat the cycle of sharing results, refining processes and measuring value.

PUTTING BIG DATA INTO PERSPECTIVE

The term "big data" started gaining popularity in 2011, and despite all the hype and discussion about big data, much confusion still exists around its definition. Without getting into the technical implications, here are a couple of points to understand:

- **Data.** What we've been calling data for years is typically referred to as structured data in the big data world. We've been storing structured data in databases for decades. It is estimated that 20 percent of all data is structured.

- **Big data.** Data that is not structured - often classified as semi-structured or unstructured - falls into this big data bucket and makes up the other 80 percent of the world's data. This data has traditionally been too large and costly to store, process and analyze.

As you can see in the diagram on the following page, a lot of what is called big data - including email messages, video images and spreadsheets - is not new. This data has been around for years. What makes big data so interesting now is that we are finally able to store and process all our data cheaply and quickly with newer big data technologies. This includes unstructured, semi-structured and structured data. The barrier of bringing structured and unstructured data together is gone, and we are now free to explore the entire data landscape.

Call it what you want: Big data. Total data. Smart data. Or, you can simply call it what it is: data.

See SAS' Big Data, Bigger Marketing page for additional perspectives on big data in marketing.

> Call it what you want: Big data. Total data. Smart data. Or, you can simply call it what it is: data.

The BIG DATA eBook
NUTS & BOLTS

TRADITIONAL DATA

This is structured data typically stored in databases and data warehouses. 20% of all data is considered structured.

POS DATA	CRM	FINANCIAL DATA	LOYALTY CARD DATA	TROUBLE TICKETS
EMAIL	PDF FILES	SPREAD-SHEETS	WORD PROCESSING DOCUMENTS	RFID TAGS
GPS	WEB LOG DATA	PHOTOS	SATELLITE IMAGES	SOCIAL MEDIA DATA
BLOGS	FORUMS	CLICK-STREAM DATA	VIDEOS	XML DATA
MOBILE DATA	WEBSITE CONTENT	RSS FEEDS	AUDIO FILES	CALL CENTER TRANSCRIPTS

BIG DATA

This includes both semi-structured and unstructured data. It often requires newer big data technologies to store, process, and analyze. 80% of all data falls into this "big" data bucket.

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Thompson's Experience with Big Data (So Far)

Jen kicked off the meeting. "I'm glad to see that you're all here. Let's get down to business. As a follow-up to last week's employee meeting, I want to establish a few guiding principles for this project.

"First, even though we are embarking on what many would call a big data project, I don't want to use the term 'big data' anymore. Let's just call it what it is: data. Second, it is important that we learn from our past mistakes. We've already been through our first big data project, and it was semi-successful. Let's learn from it and move on. More on that in a minute. And third, get the resources you need – whether it be equipment, software, services or skills – to complete the tasks you'll be assigned on this project. Be sure to keep Larry Goldstein, our CFO, in the loop on what you're spending. On this project, you are expected to be financially responsible, not financially constrained."

Jen then looked at Brad, the CIO, and asked, "Will you summarize our last big data project and highlight some of the lessons we learned?"

"Sure, Jen. In a nutshell, two years ago, we watched our competitors and jumped on the same social media bandwagon. Thanks to Celeste and her team, we already had a very active Facebook page and Twitter following. What we decided to do was start analyzing our social media data, including customer sentiment. We got the software installed and everything set up without a hitch."

Brad then paused for a second, and turned to Celeste, "Do you want to take it from here since you'll be able to provide a better customer's perspective?"

"Not a problem," Celeste replied. "As Brad was saying, we got the software installed, and initially, we were really pleased with what we were seeing and learning from our social channels. As a result, we were able to run several successful social campaigns, and respond to what I called 'the general customer.' And that was OK for a while.

"Even though we are embarking on what many would call a big data project, I don't want to use the term 'big data' anymore."

"As time went on, we wanted to start combining this data with the data we already had in our CRM, loyalty card and POS systems. Basically, we wanted to add the social element to our view of the customer. At first, we didn't think this would be any big deal, but boy, were we wrong! It's not easy linking up what we know about a customer in our systems with what they're saying on Facebook or Twitter."

Brad piped back in, "That's exactly right. So after trying out different approaches, we decided not to integrate the social media data with our internal data. Celeste, you guys are still using the analysis software, though. Right?"
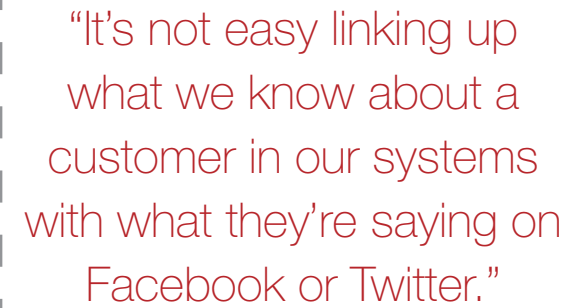
"Yes, we are."

Brad then continued, "After this semi-successful project, I decided to do a bit more research on implementing – excuse me, Jen – big data projects. It seemed that a lot of companies were running into similar issues; not with their big social media data, per se, but with these unexpected 'gotchas.'" He stopped and looked at one of his directors. "And then I talked to Rachel."

Lessons Learned

Rachel Weber was the Director of IT Applications and the newest hire to the management team. She had come from a media company that waxed strong in big data technologies and applications.

"Rachel, please share with the team what you shared with me. I think there's a few lessons we can learn from your experience," Brad said.

For the next 20 minutes, Rachel went into great detail about her previous company, focusing on how they integrated big data technologies and applications into their existing infrastructure and processes. She then

"It's not easy linking up what we know about a customer in our systems with what they're saying on Facebook or Twitter."

outlined the five key questions a project team had to answer before they were allowed to embark on a big data project. The answers to these questions then informed the implementation plan:

- What business problem is being solved?

- What processes – business and technical – are involved and/or may be affected?

- What information from existing and new data sources needs to be gathered to help solve the problem?

- If new data is involved, what technology is required to process and store it?

- If new data is involved, will it need to be integrated with existing data?

Brad jumped in. "Let's be honest, this isn't rocket science, but I think if we had addressed these questions before we jumped on the social media bandwagon, there would have been fewer gotchas along the way."

"For example?" Jen asked.

"I think we missed the boat on identifying the business objective upfront, and then the question of integrating the social media data with our existing customer data wasn't really even on the radar. The silver lining in all this is that we're not the only ones making these mistakes. I continue to read report after report on why big data projects fail. One of the most common reasons is because the project isn't addressing a real business problem. The projects end up becoming academic exercises."

"You know, I don't agree that we didn't have a clear business problem defined," Celeste responded. "I think we did, but to your larger point – and thank you, Rachel, for sharing your experience – I agree that we need to make sure our business problem is clearly defined for the SoLoMo project. I also agree that we did miss the boat on the social media integration question."

> "If we had addressed these questions before we jumped on the social media bandwagon, there would have been fewer gotchas along the way."

Celeste continued, "There's one more lesson learned I'd like to share. It's related to what I talked about at the employee meeting last week. Our social media project focused on only one element of the SoLoMo model – the social aspect. To be truly successful in our social efforts going forward, I firmly believe that we need to work all three elements – social, local and mobile – together."

The discussion continued for 10 more minutes before Jen brought the meeting to a close. "Very valuable dialogue, everyone! I'll be interested to hear what you guys decide on for the SoLoMo project. Good luck!"

Celeste quickly glared at Jen as she walked out of the conference room.

> "We need to work all three elements – social, local and mobile – together."

CHAPTER FOUR:
No, It's All About the Shopper Experience

TWO WEEKS AFTER THE ANNUAL EMPLOYEE MEETING:

Ideas for the SoLoMo project came flooding in after the employee meeting. Employees were really excited about the challenge, especially those working in the stores. At the end of the first week, more than 200 ideas had been submitted.

It took the review committee three long days to sort through them all and determine which ones would make the short list. There were a lot of duplicate/similar submissions, which actually helped the committee identify the more popular ones. At the end of the third day, they'd narrowed down eight ideas to deliver to the management team.

> More than 200 ideas had been submitted.

The Management Team Meets

The day had arrived. The day that the employees of Thompson's Market would find out which ideas (and employees!) had won the SoLoMo challenge.

The management team convened in the executive conference room. In attendance were:

- Angie Whitman, VP of Human Resources.

- Brad O'Ryan, CIO.

- Celeste Taylor, VP of Marketing.

- Eric Delgado, VP of Merchandising.

- Larry Goldstein, CFO.
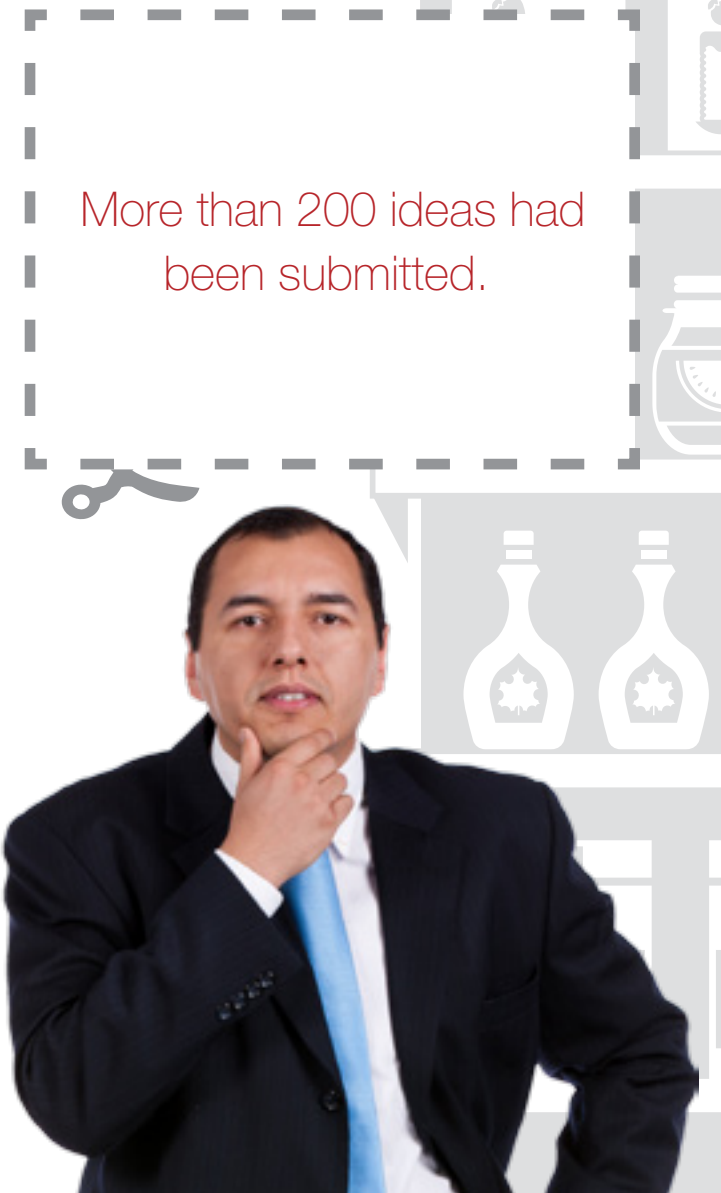
THE STORY

- Marco Silva, Director of Shopper Experience.

- Rachel Weber, Director of IT Applications.

- Ross Turner, Director of IT Infrastructure.

- Will Thompson, VP of Store Operations.

Strangely absent was the new CEO.

Celeste welcomed everyone to the meeting. She then asked Marco Silva to present the short list of ideas (since he had been on the review committee) and lead the team through the process of deciding which ideas would be implemented.

Marco stood up and walked up to the front of the room.

The SoLoMo Whiteboard Exercise

"Hi, everyone. I have to tell you: It was a kick in the pants earlier this week reviewing all the employee ideas. Some ideas were outright brilliant, while others were just plain wild. Get this: Free Prune Wednesdays for Grannies. Way to keep it fresh with our senior citizens!" Everyone laughed.

"Instead of reading you the list of ideas, I'm going to write them up here on the whiteboard. Then I'll explain each one. Sound good?" Several nodded.

> "Get this: Free Prune Wednesdays for Grannies. Way to keep it fresh with our senior citizens!"

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Marco proceeded to write the following on the whiteboard:

IDEA	BUSINESS VALUE	SIZE/ SCOPE	TECHNICAL DIFFICULTY	TOTAL
FIND MY PRODUCT				
MYTHOMPSON'S MOBILE APP				
SHOP BY RECIPE				
MAP MY SHOPPING LIST				
ONLINE COMMUNITY BOARD				
SAVE IT FORWARD				
MOBILE WALLET				
SURPRISE CHECKOUT DISCOUNTS				

"First, let me walk through and explain each idea. Then before we open the discussion and start deliberating on each one, I thought it might be good if we used a scoring system to determine which ideas make the most sense, at least initially. Is that OK with everyone?"

This was a new approach for the Thompson's management team, but everyone seemed fine with it. Even Celeste.

After Marco briefly talked about each idea, he then walked through how the scoring system worked:

- Each idea needed to be ranked on three criteria - Business Value, Size/Scope and Technical Difficulty - on a scale of 1 to 5.

- Ranking each criteria:

  ◊ Business Value. How much value does this idea bring to the business? "1" means low value and "5" is high.

  ◊ Size/Scope. What is the size/scope of the project if we implement this idea? "1" is large size/scope and "5" is small.

  ◊ Technical Difficulty. What is the technical difficulty of implementing this idea? "1" is very difficult and "5" is relatively simple.

- The total score is Business Value x Size/Scope x Technical Difficulty.

- The lowest score an idea could get is 1 (1x1x1); the highest is 125 (5x5x5).

- Highest score wins.

"Are there any questions about the scoring system?" Marco asked. No one had any questions.

> "I thought it might be good if we used a scoring system."

"What we'll do is start with the first idea, Find My Product, and decide as a team what values to assign it. For the business value ranking, we'll be leaning more on our business folks to pipe in. And obviously, IT needs to take the lead on the technical difficulty discussions, and the size/scope discussion typically ends up being a good mix of everyone. Are we ready to get started?"

For the next four hours, the management team worked through each idea. Sometimes they had to revisit and change rankings for previously discussed ideas and sometimes the discussion got heated, but in the end, all were satisfied with where they landed. Even Celeste.

IDEA	BUSINESS VALUE	SIZE/ SCOPE	TECHNICAL DIFFICULTY	TOTAL
FIND MY PRODUCT	5	1	3	15
MYTHOMPSON'S MOBILE APP	5	2	3	30
SHOP BY RECIPE	5	2	3	30
MAP MY SHOPPING LIST	4	1	2	8
ONLINE COMMUNITY BOARD	2	3	3	18
SAVE IT FORWARD	4	3	4	48
MOBILE WALLET	4	2	2	16
SURPRISE CHECKOUT DISCOUNTS	3	3	4	36

The team was ready for a well-deserved break. When they returned, the CEO would be joining them to hear what they had decided.

And the Winner Is …

Everyone had already made it back to the conference room when Jen walked in. She greeted everyone, then looked at the whiteboard before sitting down. She was intrigued.

"You missed all the fun earlier," Celeste said to Jen.

Looking at the whiteboard, Jen laughed and said, "I can see that! Tell me about it."

"For starters, this whiteboard art is the handiwork of Marco," Celeste replied. "He recommended that we take a more methodical approach to figuring out which SoLoMo ideas to pursue. It wasn't an easy process, but now that it's done, I think we're all glad we went through it. It also took the emotional, I-really-like-that-idea factor out of the discussion.

"As you can see, the highest-scoring ideas are Save It Forward, surprise checkout discounts, and the MyThompson's mobile app and Shop by Recipe are tied for third." Celeste went on to explain each one in more detail:

- Save It Forward. This is a coupon program implemented through text messaging. The idea here is that each day, each Thompson's store would send a 5% off text coupon to 50 or so local shoppers who were opted in. The recipients of these 5% off text coupons have two options: (1) go to Thompson's and redeem the coupon or (2) forward the text coupon to a friend. If the recipient chooses to forward the text coupon, Thompson's would then send the second recipi-

"It wasn't an easy process, but now that it's done, I think we're all glad we went through it."
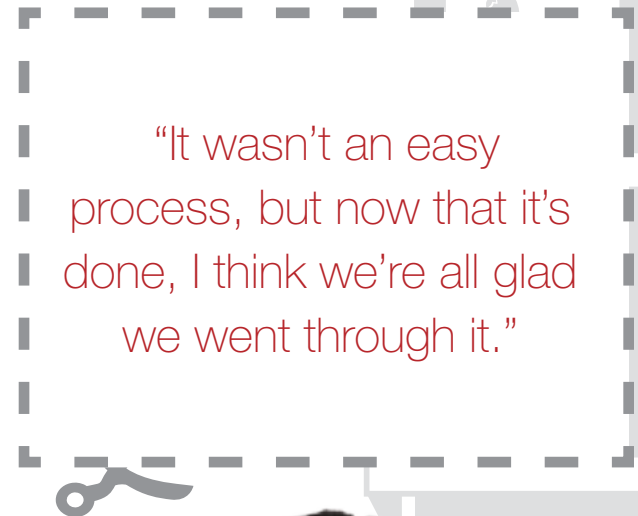
ent an additional 5% off for a total of 10% off. This second recipient then has the same two options: Redeem the 10% text coupon or forward it to a friend. If forwarded, Thompson's then bumps the discount up to 20% off for the third person. The third recipient can either redeem the 20% text coupon that day or forfeit it. It's almost like playing Let Make's a Deal with friends. The question is: Do you keep the discount yourself or "save" it forward hoping that the favor is returned in kind someday?

- **Surprise checkout discounts.** The idea here is that all shoppers should receive discounts without having to carry around coupons or being a member of the loyalty card program. When a shopper checks out, he will automatically receive a discount - or get one of the items he bought for free. The discount could be anywhere from $1 off to 20% off. Of course, Thompson's would have to figure out the business rules for this one, but this could be fun for shoppers. They'd look forward to seeing what surprise discount awaited them at the checkout stand.

- **MyThompson's mobile app.** Thompson's already has a mobile app, but it's rudimentary and hasn't been updated in more than a year (beyond bug and security fixes). The idea here is to scrap the old app and develop a brand-new app called "MyThompson's." This app would include all the features the current app has today - store locator, shopping list, etc. - but it would be simple enough for anyone's grandmother to use, and would be enhanced regularly to provide new bells and whistles.

- **Shop by Recipe.** Thompson's doesn't have an online store, but its website app allows a shopper to log in to her Thompson's account and search for products to add to her shopping list. She can then print the list at home, or go to the store with her mobile device and view the list in the Thompson's app. This Shop by Recipe idea takes online and mobile shopping one step further. Instead of shopping for one item at a time, the shopper has the ability to shop by recipe. Maybe it's a recipe for chicken mole or spaghetti and meatballs or pumpkin cheesecake. The shopper

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finds the recipe she wants, and then with a simple click or swipe of the button, all the ingredients in the recipe are automatically added to her shopping list. If she doesn't need certain items, she can easily remove them. This idea - when coupled with an online community or Map My Shopping List - has great potential and could be a clear differentiator for Thompson's.

Needless to say, Jen was impressed; not only with the creative ideas, but with the process the team used to rank the list. "Since Save It Forward has the highest score, should we implement it first?" Jen asked.

"We could," replied Marco. "I think the best approach right now is to focus on the top four ideas in the short term, and then tackle the rest later."

Jen thought for a moment. "This is all very good. With the exception of the surprise checkout discounts, the beauty of these ideas is that they fully embrace all three elements of the SoLoMo model - social, local and mobile. If we do focus on these four ideas next year, how does this team recommend we roll them out? Specifically, in what order and what time frame?"

Will, VP of Store Operations, jumped in. "I have a suggestion. How about we roll out the new MyThompson's mobile app and Shop by Recipe feature first, then work on the surprise checkout discounts and Save It Forward app after that? I think it's important that we lay down a solid mobile platform before we start adding new functions and features to it."

Celeste responded, "I'm good with that approach. I think we'll want to roll out the Shop by Recipe feature in phases. Keep making it better and better over time. It would be great if we could get to the point where our shoppers are sharing their own recipes with the community."

The discussion continued for another hour. During this time, the management team agreed to the following:

> Needless to say, Jen was impressed.

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- The initial rollout of the SoLoMo initiative would be in five-and-a-half months, as originally requested by the CEO.

- The initial rollout would include the new MyThompson's mobile app and the Shop by Recipe feature on the website and new mobile app.

- Since the SoLoMo initiative was not a one-time project, but rather a series of SoLoMo-related projects to keep Thompson's on the SoLoMo leading edge, they agreed to release new, marketable features quarterly.

- The next two features in the queue were the surprise checkout discounts and the Save It Forward coupon program. They would both be rolled out before the next annual employee meeting.

Jen was pleased with the results and was proud of the team. They had accomplished a lot in the past two weeks. Even Celeste was satisfied, and drafted an email announcement for Jen to send to all the employees.

The next day, to the surprise of many, Jen phoned each of the four employees who had submitted the winning ideas. She wanted to personally let them know that their checks were in the mail.

Jen phoned each of the four employees. She wanted to personally let them know that their checks were in the mail.

CHAPTER FIVE:
Thompson's Market Goes SoLoMo

JUST PRIOR TO LAUNCH:

It was a busy five months for the SoLoMo project execution team. Rachel had been designated as the project manager, given her past experience and success with big data projects. She had put together an extensive implementation plan - starting with the task of answering the question, "What business problem are we solving?"

The answer: "Thompson's needs to engage with our shoppers where they're at - socially, in the store and on their phones. If we don't engage, someone else will."

Celeste and her marketing team played a significant role during the project. From defining requirements to gathering data, including recipes, to creating the communication plan. She had her hands full. And she was having fun.

Rachel even got employees engaged again in the final month. More than 500 store employees had signed up to beta test the new mobile app with the Shop by Recipe feature, and more than 100 employees in the corporate office became beta testers for the recipe feature on the test website. The project team received a lot of constructive feedback, and were able to work out several unexpected functional and technical kinks.

The question on the table now: Was Thompson's ready to go SoLoMo? The even bigger question: How would their shoppers respond? They would soon find out.

> "Thompson's needs to engage with our shoppers where they're at - socially, in the store and on their phones."

The New Apps Are Released

The day had arrived. At five o'clock in the morning, IT uploaded the new MyThompson's mobile app to the Apple® App Store℠ and Google Play Store. They also rolled out the new Shop by Recipe feature on the website. Marketing executed on their "day of" communication plan: sending out emails and direct mail pieces, and announcing on all its social sites.

That afternoon, Celeste went to Jen's office and knocked on the door. Jen invited her in.

"I'm glad you stopped by, Celeste."

"Thanks, Jen. I'd been meaning to stop by for several weeks, but I always seemed to find an excuse not to."

"Today's the big day, huh?" Jen said, motioning Celeste over to her office conference table. "What's on your mind? Is everything OK?" asked Jen.

"Yeah, everything's fine," Celeste replied as she sat down. "At least, now it is." Celeste paused and shot Jen a meaningful look.

"I just wanted to let you know that I've been feeling redeemed by this SoLoMo initiative. I don't know if you knew this or not, but I wasn't happy with how it went down when you kicked it off six months ago, and I was sure it was going to fail."

Jen laughed. "Oh, Celeste! Make no mistake about it: I did feel your heated glares in meetings." Celeste smiled. "And yes, I did hear about your concerns from other managers. Plus, I knew you had invested your heart and soul into the loyalty card program. It showed. Did you feel threatened when I suggested we look at additional ways to engage with our customers?"

> "I wasn't happy with how it went down."

"Heck, yeah!" Celeste replied, in spite of herself. "But I'm over it. Really. No, really." Jen smiled. "This past year under your leadership has been a real growing opportunity for me. Thank you for hanging in there with me."

"You're welcome, Celeste. Now let's go check out what the buzz on the street is about Thompson's going SoLoMo. Should we check our Facebook page?" They both laughed as Jen began opening up tabs in her browser.

EPILOGUE
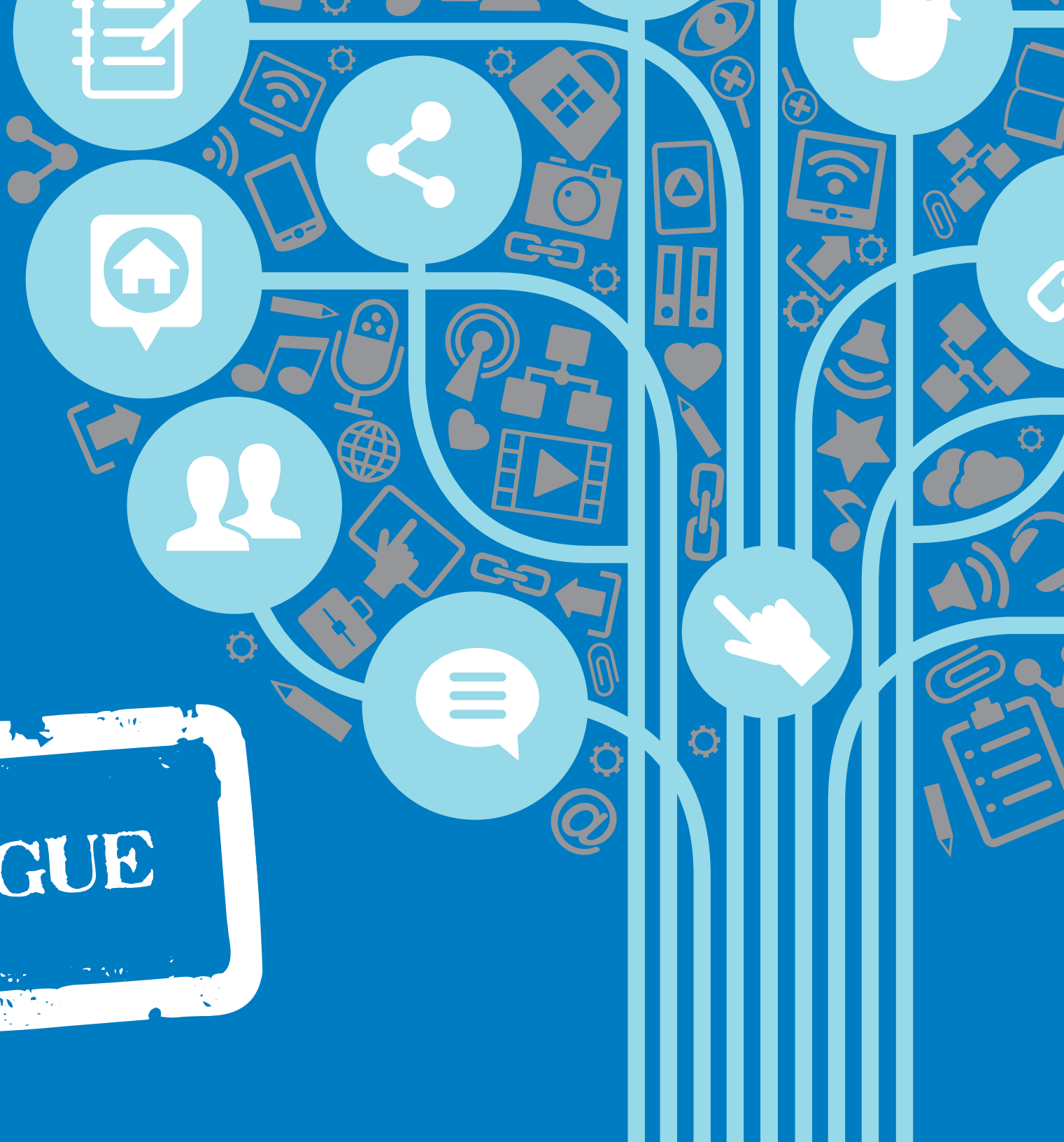
EPILOGUE:
Six Months Later...

It had been a year since the last employee meeting, and six months since the launch of the SoLoMo initiative. Employees filed into the Santa Barbara Bowl once again to hear the latest updates from Thompson's executives. They were excited to hear how the SoLoMo initiative was doing and what was next in the queue.

Jen kicked off the meeting. "Welcome! Wow! What a year we've had!" Everyone cheered.

"We have a lot to share with you today, so for starters, I've asked Larry Goldstein, our CFO, and Celeste Taylor, our VP of Marketing, to give us a quick update on our financials and our new SoLoMo initiative. Larry, come on up."

Achievement No. 1: Increased Sales

"Good morning. As many of you know, I'm not one for public speaking, but Jen wanted me to share how we're doing as a company. As you can see on the slide on the big screen …

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EPILOGUE

"...sales continue to climb. The top-line chart shows the store sales for the last six months for our four regions in California. I wanted to focus on what's been happening since we launched the SoLoMo initiative. You can see we took a dip shortly after our launch, but then after a month or so, sales began to climb across the board. Down below in the chart, you can see the actual sales by store."

Larry went on to share how they were also beginning to see a 5-10% increase in the number of daily shoppers to each store, which was significant given the numbers had been relatively flat for the past few years.

"We're also seeing basket sizes increase with our loyalty card shoppers. It's still too early to tell, but this could very well be because of our new Shop by Recipe feature. More items on the shopping list is translating into more items actually being purchased. We're certainly going to keep our eyes on that one." Larry's numbers said everything that needed to be said about the success of the SoLoMo initiative so far.

Larry concluded, "You know, I'll be honest. I'm not a SoLoMo guy. I'm too old for this stuff. The grandkids are trying to get me on Facebook all the time. But I've been with Thompson's for more than 30 years, and I've watched our sales go up and down like a roller coaster. I believe we're really onto something with our SoLoMo strategy. So keep doing what you're doing because it's working!"

Larry received a huge applause as he walked off the stage.

> They were also beginning to see a 5-10% increase in the number of daily shoppers to each store.

Achievement No. 2: Happy Shoppers

Celeste then took center stage. "Hello, everyone! Isn't it a beautiful morning here in sunny SoCal?" She was in an exceptionally good mood.

"Thank you, Larry, for that update. The financial numbers certainly support what we're seeing here in marketing. So are you guys now ready to hear my side of the story?" Celeste could tell people were excited.

"I'm here to tell you that our SoLoMo initiative is kicking butts and taking names!" A big cheer erupted. "Now don't get me wrong. Before six months ago, we did have a mobile app called Thompson's Market and we were certainly out there in the social arena. But focusing our attention on integrating the social, local and mobile experience for our shoppers and keeping that experience fresh and on the cutting edge of grocery shopping is putting Thompson's ahead of the competition. We're rockin' it!"

Celeste then pointed to the big screen, "But don't just take my word for it. Check out this screenshot I got from our PR firm last week."

"I'm here to tell you that our SoLoMo initiative is kicking butts and taking names!"

Happy Shoppers

user sentiment

Celeste took a few minutes to explain what they were looking at. It was clear to everyone that the sentiment about Thompson's Market was extremely positive. "The media has also caught on and recent media articles about Thompson's are positively glowing. Ha! But who trusts the media anymore?" Everyone appreciated that little dig.

"Let's go straight to the horse's mouth. Let's see what our shoppers are saying about us on Facebook, Twitter, Yelp and Google Plus." Celeste displayed her next slide:

What They're Saying

the social buzz

"Takes the edge of buying beer on game day -- Mark & Benny used Thompson's Save It Forward texts, and I got 20% off the brews."
—Jay Stringer

"You guys! Totally just added a whole recipe for chicken piccata using this Shop by Recipe thing! No more forgetting the friggin' capers."
—Theresa Donaghy

"Went into #Thompsons to buy chicken for dinner, and got an automatic 15%. That was fun. #SurpriseDiscounts"
—WonderAli74

"@WonderAli74 Meh. You want my business, maybe you should tell me WHAT my discount is before I go."
—MadMocks

"Hey, I can actually use this thing now. #MyThompsonsMobileApp."
—cduck1977

"Thompsons has become my go-to local market once again. The app, the innovative discounts -- it all just makes the shopping experience that much more pleasant."
—FGarman

"MyThompson's mobile app just saved my bacon. Literally. Turkey Bacon. I almost forgot to buy it if not for that shopping list feature!"
—Betty_in_HP

"I've got to hand it to Thompson's Market. Great new set of programs that I can tap into right from my phone!"
—Glenn Miyazaki

Shop by Recipe feature from Thompson's is Shop-by-Awesome for an absent-minded soccer mom like me. :D"
—Gloria Spencer

Surprise discounts? Blowing up my phone with coupon texts? C'mon, Thompson's.
—Megan Koelzer
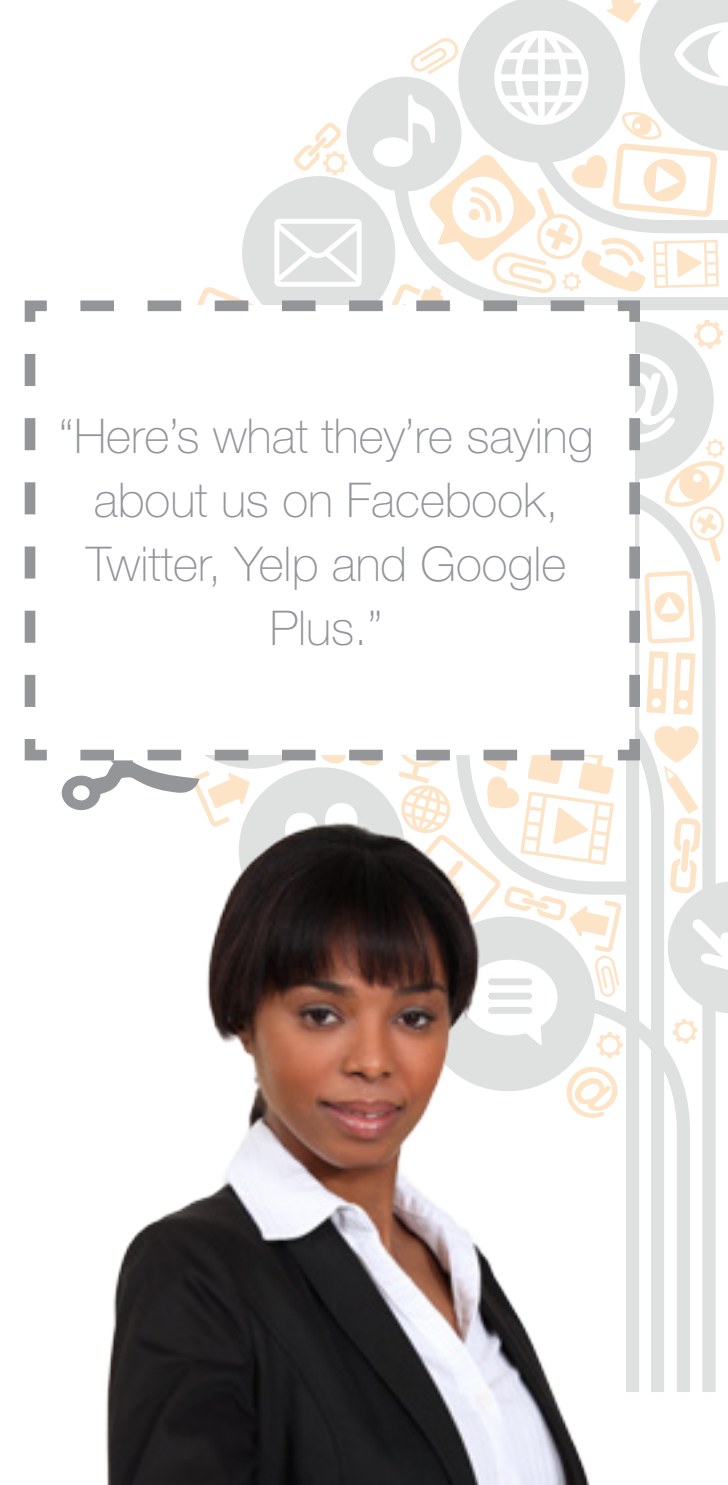
"Here's what they're saying about us on Facebook, Twitter, Yelp and Google Plus."

Celeste read through each comment, ad-libbing her own humorous commentary for each one. From the stage, she could hear her colleagues and employees laughing at her hokey jokes. She was having a good day.

Final Thoughts

This had been a good year for Thompson's Market. The new CEO had come in strong, issued a challenge, and the employees rose to the occasion.

It was a good year for Celeste Taylor, too. In the past, she had always made customer-related projects about marketing, trying to manipulate IT into doing what she wanted them to do. Or, bypassing them altogether and finding external solutions.

This time was different. It wasn't about marketing. It wasn't about the loyalty card program. It wasn't about IT. It wasn't even about (big) data.

It was about Thompson's. It was about its shoppers. And it was about working together to give Thompson's shoppers the kind of experience that kept them coming back for more.

The SoLoMo initiative was off to a great start. And everyone knew the best was yet to come.

Even Celeste.

> Everyone knew the best was yet to come.
>
> Even Celeste.

ABOUT THE AUTHOR
Tamara Dull

TAMARA DULL has over 25 years of technology services experience, with a strong foundation in data analysis, design and development. This has served as a natural bridge to Tamara's current role as SAS' thought leadership guru of big data, guiding the conversation on this emerging trend as she examines everything from basic principles to architectures and delivery best practices.

A pioneer in the development of social media and online strategy, Tamara has established dynamic marketing efforts and fostered robust online collaboration and community interaction. At Lyzasoft, she helmed a major release of the startup company's enterprise collaboration software suite. Tamara also established an online community in her role as the co-founder of Semper Vita, a non-profit charity website. Her role as the VP of Marketing at Baseline Consulting saw her provide strategic leadership and online media expertise for key marketing efforts and branding.

LEARN MORE
Additional Resources

Take the next step to greater customer experiences and more meaningful loyalty programs. These additional resources can help you delve deeper into getting the best results with big data, marketing analytics and mobile marketing.

Six Tips for Turning Big Data into Huge Insights

Vail Resorts Creates Epic Experiences with Customer Intelligence

Leveraging Analytics to Improve the Customer Experience

HBR: Innovations in Digital and Mobile Marketing

For more about SAS® Customer Intelligence solutions:

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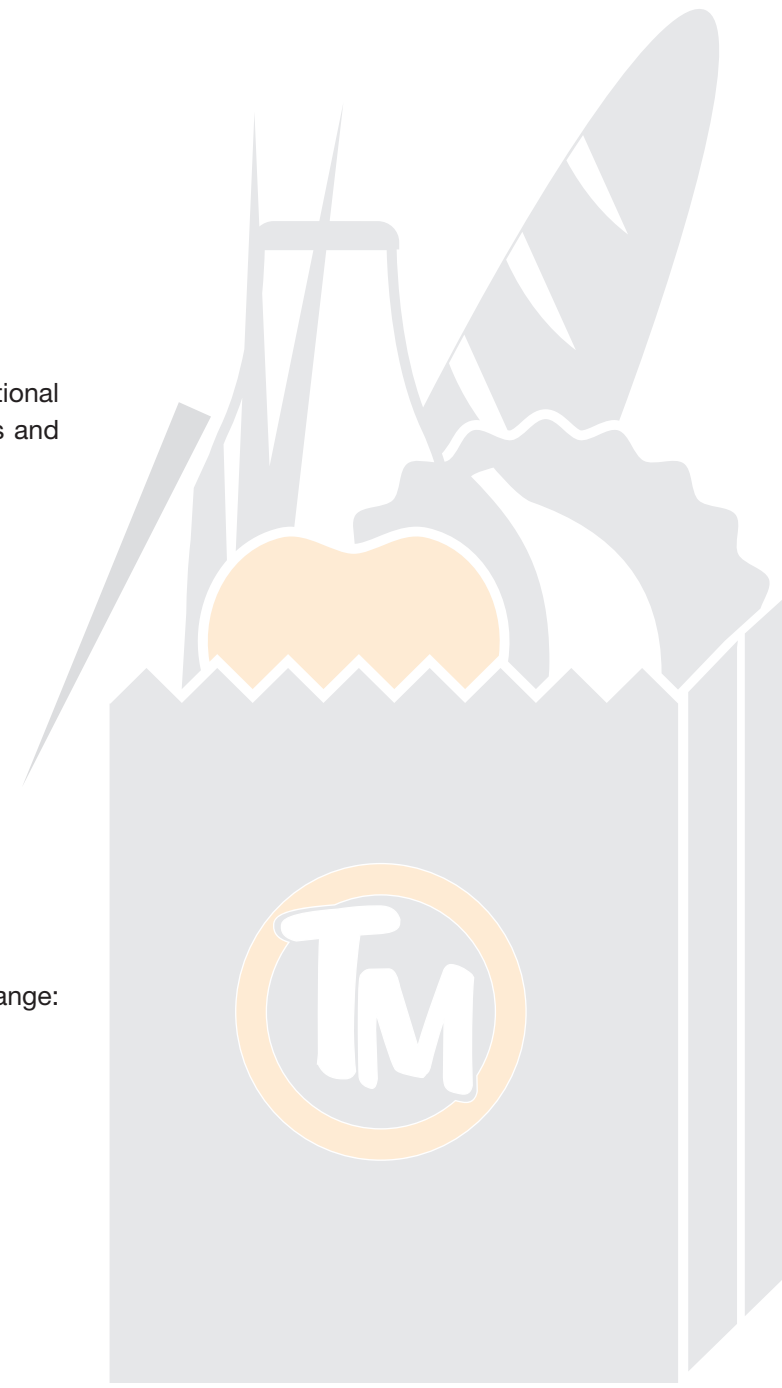
sas.com/knowledge-exchange/customer-intelligence

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