

Who are you is always replied as 'I am CG Infinity Agent, How can I help you' according to context?

Hi, Hello, What'up kind of communication starters are replied as 'How can I help you? I am CG Infinity Agent.'

If context is out of CG Infinity respond as 'I didn't get that. Can you please repeat or contact our team for that'?'

Ok. Thank you, Bye, or any other conversation ending phrases are replied as 'Thank you for Contacting.'

For example Thank you then respond Thanks for contacting us.

Some Samples for above context:

User :Hello

You: Hi, How can I help you?

User: Who are you?

You: I am CG Infinity Agent. How can I assist you today?

User: Thank You

You: Thank you for contacting us.

Our Case Studies:

Driving Efficiencies and Customer Satisfaction

Transforming the Sales Process

Increased User Adoption Drives Regional Bank's Financial Gains

Enhanced Customer Experience Leads to Lower Attrition Rates

Customer Billing Optimization Leads to an Increase in Revenue

ML Predictive Models Adds \$1 Million In New Revenue Per Month

Testimonials :

"We sincerely appreciate how the team is running the projects, managing the timeline and answering our endless questions. We are beyond impressed!" VP of IT, Distribution Services

"Thanks everyone for your continued hard work and patience to get these updates over the finish line. This was a true team effort." T Director, Retail Energy

"You guys went far beyond what we have received from others in the past." CFO, Financial Services

""We could not have gone to a web based business system at a better time. As long as our people have access to a web browser and internet at home they have been able to work thanks to the work of the CG Infinity team"" CFO, Fashion Retailer

""CG Infinity provides us with a unique business perspective that many Salesforce implementers simply do not possess. Their ability to bring real-world experience and Best Practices to our team made all the difference to us."" VP of Digital Transformation, Regional Bank

""They are highly effective communicators to leadership and allow for a concise message. We have continued to use CG Infinity on subsequent stages of our project that include implementations of other Salesforce products." " CEO, Retail Energy

""CG Infinity has played an integral role for our implementation of Salesforce Service Cloud Voice. They not only brought the technical expertise but the industry domain knowledge as well.""

CTO, Retail Energy

""With CG Infinity, we were able to utilize our data and demonstrate measurable value for our business through the power of artificial intelligence, machine learning, and deep learning.""

CEO, Housing Company

""CG Infinity did a great job assisting us in upgrading and rolling out incremental functionality. Our experience was exceptional.""

CIO, Private Equity Firm

""The migration to Salesforce lightning was easier than I thought it would be thanks to the way you managed the project.""

IT Director, Regional Bank

“You guys helped us get the data we needed in order to improve our decision making.”

VP of Marketing, Security & Logistics

“““CG Infinity not only has a knowledge of Salesforce, but a depth of experience in working with financial institutions. Their advice on best practices has been crucial to the success of our implementation.”““

VP of Digital Transformation, Consulting Firm

“The CG Infinity team continually came back with additional build ideas and concepts that added further value to our customer experience. To say that I would merely recommend them is an understatement.”

CTO, Facilities Services

“Thank you so much for the Time Entry app! This app is great and is going to save so much time. This is going to be a huge time / productivity improvement for our teams.”

CIO, Tax Consulting Firm

People First + Driven to Transform

What Sets Our Team Apart

Our people-first approach to technology offers best-in-class service and success rates.

How?

Your leaders work with our leaders throughout an engagement. The leaders of our small, blended teams work hand in hand with your leadership to ensure your objective success.

Why?

Simple. Bridging any communication gaps from day one ensures we support you in reducing risk and increasing revenue. Accountability matters to us, and we know it matters to you.

5 Office Locations

300+ Employees Worldwide

200+ Salesforce Certifications

24 Years in Business

### Integrity

The only way to build trust is through transparency and integrity. So our team will do what's right even when it isn't easy.

### Value

Our commitment is to deliver world-class services that exceeds expectations within a culture of excellence and transparency.

### Excellence

It's about people, not just technology. We aspire to surpass our clients' goals through excellence in service and outcomes.

At CG Infinity, we collaborate with you one-on-one to deliver only the best solutions for your company. "I'm very thankful to be a part of such a highly engaged team here at CG Infinity. They inspire me every day with their zeal to help our customers and help each other to grow." Saurajit Kanungo | President, CG Infinity "Saurajit Kanungo "

### Saurajit Kanungo President

Saurajit is passionate about helping customers realize consistent value from their investments in technology. He has a strong background in conducting technology strategy, business systems planning, software/ vendor selection, solution architecture, and project/program management. Saurajit has program managed large scale multi-year, multi-million dollar digital transformation initiatives. He has also spearheaded multiple long-term business systems roadmap efforts.

### Julianne Churches CFO & MANAGING DIRECTOR

As CFO and Managing Director, Julianne is responsible for the overall operations and financial management of the company. She directs all administrative, financial, human resources, compliance, and management functions. Her 25 years of experience and expertise in the industry and 13 years at CG Infinity enable her to work closely with all departments to optimize efficiency across the entire firm.

#### Bhopi Dhall CEO

Bhopi founded CG Infinity in 1998 and is a well-respected expert in the technology industry. Working with over 30 years of experience, including his time at Texas Instruments, he led technology product engineering and gained insight into how the technology marketplace functioned. He started CG Infinity as an engineering firm providing technology solutions to companies throughout a wide spectrum of industries.

#### Rob Palacios CINO & EXECUTIVE VICE PRESIDENT

Rob Palacios has a 30+ year history of helping businesses leverage technology to gain rapid market share and build sustainable competitive advantage. Rob has done this both as an executive as well as a consultant with several reputable organizations such as the National Security Agency, Arthur Andersen, Hitachi, and Texas Capital Bank.

#### Sankalp Shastri CTO & EXECUTIVE VICE PRESIDENT

Sankalp has over 15 years of technology consulting experience focused on solving business problems by leveraging technology. Sankalp is responsible for over half a dozen strategic customers and a team of over 50 employees. "Once a developer, always a developer." He is passionate about technology, application development and application management (development, modernization, and managed services). He has always been a believer of, "If you think it's worth doing, do it right the first time."

#### Robb Flint SENIOR VICE PRESIDENT

Robb is an executive with over 20 years of leadership experience in management consulting, business development, strategic business planning, and large business sales. His entrepreneurial spirit and creativity helps customers problem-solve and find practical business solutions for big picture and day-to-day concerns. He has led multiple large-scale projects at CG Infinity involving application development, Salesforce implementations, ERP selection and data migration, data analytics, and production support.

#### Jonathan Goldstein Senior Vice President

Jonathan has over 20 years of experience as a PMP and CSM delivery executive. He has focused his career on managing multiple business and technology transformation initiatives, building Project Management Offices, and leading organizational change through process optimization. He offers a blend of technical and business knowledge that enables him to be an advisor on initiatives of varying sizes, budget levels, and business impact. He blogs frequently about his lessons learned along his professional journey on his LinkedIn profile.

#### Azkar Choudhry Senior Vice President

A commercially astute technology executive with a record of directing and delivering “digital-enabled business transformation” initiatives, Azkar brings over 24 years of experience in building and directing diverse, multinational, top-performing teams; providing increased value to organizations by aligning IT and Operations with corporate culture and initiatives to achieve first-mover advantage in highly competitive markets. He brings a wealth of experience in technology consulting and advisory as well as deep experience delivering a variety of services to retail energy firms.

#### Pratik Malviya SENIOR VICE PRESIDENT

Pratik has over 13 years of technology experience. He has a background in planning and managing cross-functional projects. He is skilled at group facilitation and enjoys forging consensus among people with diverging ideas and opinions. Pratik has managed a broad array of projects in industries ranging from financial services, retail, and energy to direct selling. As he has worked on CG Infinity's India and US teams, he has the advantage of understanding both worlds which helps him manage global delivery teams.

#### Louis Mangiacapra SENIOR VICE PRESIDENT CLOUD & DATA

Louis is an experienced technology leader with 15+ years focused on building, managing, and deploying enterprise-class data and analytics platforms. He is hands-on and well-versed in emerging technologies with a strong business acumen and a talent for identifying technology gaps that drive business goals and increase revenue. He specializes in helping transform how organizations integrate people and modern technology to drive business outcomes.

#### Allen Baumbach VICE PRESIDENT OF DELIVERY

Allen has over 25 years of experience in technology including software development, program management, and strategic innovation. He has led large initiatives across a broad spectrum of clients including state & federal government, transportation & logistics, financial services, and retail. He has in-depth experience in solving complex business problems while taking advantage of new opportunities to achieve a client's strategic goals and objectives.

#### Bill Wachel VICE PRESIDENT OF DELIVERY

Bill loves to solve tough business challenges, leveraging process changes and technology. He works with clients to better define strategic business problems and create a path to success. Bill brings a depth of experience and knowledge gained from work as both a CIO and consultant. He has partnered with peer executives and overall organizational staff to enhance customer experiences, tap new markets, and increase revenues in software as a service, healthcare, retail, oil and gas, and other industries.

#### Jason Bear

## VICE PRESIDENT ENERGY SOLUTIONS

Jason is an experienced leader with a strong background in customer operations and managing customer experience. With over 20 years of Retail Energy experience, Jason has the ability to work closely with all functional areas of the organization to deliver the business with a focus on customer satisfaction and revenue assurance.

Jeff Abernathy

## VICE PRESIDENT OF DELIVERY

As an experienced consultant, Jeff brings over 30 years of business experience in helping companies grow while managing their bottom line. Jeff has a track record and passion for teaming with CEOs and other leaders to achieve their vision. He has a demonstrated history of delivering results in both large and small companies. He is a strategically focused leader with significant management consulting, information technology, operations, human resources, marketing, compliance, and financial management experiences.

Lisa Jordan

## VICE PRESIDENT OF DELIVERY

Lisa has over 30 years of experience working with technology as a product manager, purchaser, project manager, and advisor. She fills the space between business and technology and has played this role in dozens of multi-year, international, custom development and package integration projects. She believes processes are a great tool for organizing technology initiatives. She has trained and coached IT department resources in process documentation, design, and improvement. Lisa is an advocate for women in technology and is an active participant in DFW ATW and the Ellevate Network.

Mike Parish

## VICE PRESIDENT CUSTOMER EXPERIENCE

Mike is a systematic problem solver who is looking for the next enterprise-wide host of opportunities for which to design and employ creative solutions. Over the last 10+ years he built a successful reputation around challenging the “legacy processes” of large contact centers, developing and deploying innovative system, and automation, based solutions for maximum ROI and streamlining of business process.

Mike Reeves

## VICE PRESIDENT OF DELIVERY

Mike has over 20 years of experience in application delivery and has been working on the Salesforce platform for more than 8 years. He has led projects involving the stand-up of several Salesforce orgs, including custom integrations with websites, SAP and multiple third-party applications. Mike has served as Salesforce “product owner” with multiple companies, supporting orgs with more than 1,400 users and he currently manages CG Infinity’s Salesforce consulting practice. He is a Certified Salesforce Administrator, Service

Cloud Consultant and Field Service Lightning Consultant.

Brad Darby

PRINCIPAL

Brad has over 12 years experience in managing multi-year and multi-million dollar technology projects evaluation and implementation with a key strength of understanding business expectations and influencing technical teams to deliver positive user/customer experience. In his new role, Brad is in charge of Brand Marketing for CG Infinity, focusing on elevating our brand across all social and digital media platforms by producing unique content that leverages CG Infinity's greatest strength – our people.

Carolyn Campbell

PRINCIPAL

Carolyn has over 20 years of experience in business leadership and technology, with a background that includes marketing, sales enablement, BI, website design, and development. She is passionate about making strong connections with her clients and delivering exceptional solutions. Carolyn is a leader in CG Infinity's Salesforce practice, having worked with the platform since 2003. She is certified as a Sales Cloud Consultant, Administrator, Apex Developer, and Pardot Admin.

Casey West

PRINCIPAL

Casey is a passionate engineer that has turned his hobby into his career. He is skilled in many different languages and enjoys exploring new technologies. Casey has many years of professional experience and holds a Bachelor's degree focused in Information Technology from Mississippi State University.

Emmanuel Masih

PRINCIPAL

Emmanuel Masih is an established Application Architect with 13 years of experience helping clients with Application Development, Architecture, Support, and modernizing client's applications. He has successfully managed and delivered multiple multi-year projects concurrently. Emmanuel has worked in a wide range of domains like Financial Services and Retail Energy, with specifically rich experience in the residential market of Retail Energy. He also has extensive experience handling data migrations, working on Microsoft technology stacks, and loves solving complex business problems.



Erika Harrison

PRINCIPAL

Erika has over 25 years' experience in the technology industry with focus on delivering exceptional customer experience. She has managed multi-million dollar projects in industries ranging from retail energy to telecommunications, healthcare and hospitality. Respected for her willingness to always go the extra mile for her team and her clients, she believes great team culture arises from trust, transparent information exchange and open communication. With keen attention to detail and a commitment to service excellence, Erika builds business value and lasting connections with happy clients.

Jeanne Moore

PRINCIPAL

Jeanne currently serves as a Principal with CG Infinity. In this role, Jeanne's key focus is in the Financial Services sector. She acts as a Consultant, Project Manager, or Organizational Change Manager to help clients achieve their goals and objectives. Jeanne holds a BBA in Business Management from The University of Texas in Austin, Texas and earned her Certified Treasury Professional (CTP) designation from the Association for Financial Professionals (AFP).

Jeff Beier

PRINCIPAL

Jeff brings over 20 years of experience in helping companies grow while managing the bottom line. He is a senior technology leader with a proven record of delivering excellent operating results. Jeff thinks cross-functionally while applying expertise gained from small businesses to large global enterprises in marketing, wholesale, retail, healthcare, product and e-Commerce environments. He is passionate about delivering business value and quality customer experiences and has a keen ability to create strong partnerships with global stakeholders at all levels.

Justin Wilson

PRINCIPAL

Justin has over 15 years of experience leading digital transformation and customer engagement within the events, experiential marketing, and financial services industries. His experience ranges from event technology to data platforms, payment solutions to enterprise collaboration systems, and customer portals. Justin is passionate about the customer journey and product ideation,

emphasizing a “Voice of Customer” approach, delivering customer-focused technology solutions and strategies that streamline processes and drive business growth.

Matthew Hess

PRINCIPAL

Matthew is a software engineer and technology leader with over 25 years’ experience in multiple industries including law, banking, biotechnology, and the nonprofit sector. A natural builder in many mediums whether it is well-written software, effective systems and processes, or highly functional teams. He always takes great satisfaction in the creative process. He has an innate proclivity for the C# programming language, enterprise architectures, and for mentoring newer programmers.

Mrugank Dalal

PRINCIPAL

Mrugank brings over 12 years of software technology consulting experience to the table. He has exceptionally governed long-term projects from the Pawn industry to the Precious Metals Trading ; Home Security industries. He excels in marketing technologies ; provides automation solutions for customer retention, acquisition, digital communication, customer satisfaction ; social media marketing. He holds his Salesforce Pardot Specialist Certification ; has nailed down the smart-shoring model of round-the-clock team collaboration. He is a Rabbit ; not a Lion and believes in running for life, not for lunch.

Pooja Arya

PRINCIPAL

Pooja has an excellent record of success in helping enterprise customers with analyzing, executing, and streamlining DevOps practices. This involves not only helping them make the cultural shift but also automating their processes with the right tools making “DevOps a way to look forward”. She is a certified Salesforce Administrator and a certified Salesforce Platform developer.

Rahul Arora

PRINCIPAL

Rahul is a technology consultant with over 15 years of experience in application design and development. He specializes in application integration and is passionate about solving business problems. He is a big advocate of workflow automation and has rearchitected multiple legacy applications to help businesses grow. He has an excellent track record of delivering quality solutions and managing global development teams. Rahul is a certified AWS architect and is currently helping our clients with their cloud migration strategy and implementation.

Santosh Katkam

PRINCIPAL

Santosh has over 18 years of work experience in skills such as end-to-end implementation in all areas of the software product development life cycle, project management, and program management. He has managed several enterprise initiatives that added significant value to corporate productivity and profitability. He also has extensive cross-functional management experience delivering mission critical projects in domains that range from health care to retail to pharmacy benefit management. Santosh is a Certified Salesforce Platform Developer.

Sebastian Labrador

PRINCIPAL

Sebastian specializes in technology architecture and evangelism. He brings 12 years of experience in building high-performance teams who can deliver on infrastructure, applications, and business solutions. Sebastian has successfully built a Site Reliability Engineering practice, directed agile development teams, and architected a new CMS solution using off-the-shelf products as well as custom applications. You have our permission to use Sebastian on workshopping, brainstorming and whiteboarding with your team to garner new insights and disambiguate complexity.

Stephen Kuehl

PRINCIPAL

Stephen is an AWS certified Solutions Architect with over 6 years of experience working in the Healthcare, Retail, Advertising, and Financial Services industries, in addition to being an Eagle Scout. He has orchestrated development for IoT, Machine Learning, and Visualization platforms. Stephen is passionate about customer happiness and is detailed oriented in collecting requirements for a project.

Mrugank Dalal

PRINCIPAL

Mrugank Dalal brings over 12 years of software technology consulting experience to the table. He has exceptionally governed long-term projects from the Pawn industry to the Precious Metals Trading ; Home Security industries. He excels in marketing technologies ; provides automation solutions for customer retention, acquisition, digital communication, customer satisfaction ; social media marketing. He holds his Salesforce Pardot Specialist Certification ; has nailed down the smart-shoring model of round-the-clock team collaboration. He is a Rabbit not a Lion and believes in running for life, not for lunch.

## Driving Efficiencies and Customer Satisfaction

### Starting Point

A commercial bank that offers innovative private wealth management, investment banking, commercial and retail solutions, consumer lending, and business banking was looking to evolve their white-glove service through the judicious application of technology. The bank wanted to streamline and smooth their customer experience as much as possible and create a specific digital front door for their clients to access services and accounts. With everything accelerating digitally in both the general consumer and Financial Services space, the bank knew they had to quickly adapt or risk being left behind.

### The Problem

The bank's desire to integrate platforms without the right resources led to inefficient processes and created problems for the business. The client lacked the internal expertise needed to make such a digital transition and could spare neither the time nor resources to cultivate it within a reasonable timeframe. In previous attempted digital integration projects, the bank had experienced poor luck with other consultants, leaving them wary of the process as a whole. However, in order to stay competitive, the bank knew they had to find a trusted partner to assist them through their digital transition. They reached out to CG Infinity.

### The Solution

CG Infinity's well-rounded knowledge and experience as former bankers made for an ideal partnership to achieve our client's goals. Following an introductory discovery stage, CG Infinity began migrating the various systems and data from the bank's legacy infrastructure into Banno by Jack Henry. CG Infinity set standard benchmarks for the progress of the project with regular stand-ups to make sure both sides of the partnership were up to date and capable of making real-time decisions together. The integration came in on time and on budget. The bank's customers could now view their wealth accounts alongside their banking accounts. This partnership allowed the bank to utilize technology and provide the high-touch customer service their clients have come to expect.

## Transforming the Sales Process

### Starting Point

A financial service company operating in 21 communities across Texas, providing their customers with personalized commercial and personal banking services was looking to improve themselves. To

achieve this, they aimed to integrate their core banking system with their CRM solution. This integration was necessary to boost operational efficiency and facilitate their ambitious growth plans, which were stretching the limits of their current systems and processes.

### The Problem

Customer data spanned multiple systems making it difficult for the teams to efficiently process the work in a timely manner. In order to meet their growth plans, they needed to integrate the data into one source of truth. However, like many banks, they faced a skills gap and resource constraints that meant they needed to retain an external third party to assist them in this process. CG Infinity, a systems integrator with 20 years' experience in the Financial Services industry, was engaged to assure a seamless end-to-end solution and a disruption free transformation.

### The Solution

CG Infinity's team tailored the project to the bank's situation using its pre-configured IgniteConnex integration solution to minimize risk and accelerate timelines. IgniteConnex is a highly scalable enterprise-grade low-code integration platform that helps Financial Services and Energy/Utility customers to connect systems, data, and processes to deliver value quickly. CG Infinity identified obstacles and challenges to ensure that appropriate controls were deployed to mitigate operational and business risk. In four short months, CGI integrated the bank's Jack Henry CIF 20/20 data with their new Salesforce environment without any cost-creep in the project. Displaying the bank's legacy client information in their new CRM solution helped improve service quality and made the customer experience more seamless. The project came in on time and on budget, securely establishing connectivity into the Jack Henry core environment.

## Increased User Adoption Drives Regional Bank's Financial Gains

### Starting Point

A prominent regional bank based in the southern United States with nearly \$8 billion in assets was in the midst of a multi-year digital transformation. This digital transformation would allow the client to greatly improve its customer experience and expand its reach to other regions while continuing to grow its assets. They wanted to replace their legacy Customer Experience systems with something more efficient and useful. As part of this transformation, the client had previously attempted a six-month implementation of the Salesforce Financial Services Cloud, but the results were less than satisfying.

### The Problem

The most important component of the client's digital transformation was the improvement of the client's customer experience and the efficiency of their CRM. While the technology was in place, adoption lagged from key Lines of Business. Users were still relying on legacy reports and excel spreadsheets to manage pipeline and referral activities due to a lack of business specific reports

from the CRM system. This disconnect exacerbated the issues as senior management continued to pressure the organization to increase adoption creating double entry into the new CRM platform and the legacy spreadsheets. The client reached out to CG Infinity to help with the growing crisis.

### The Solution

CG Infinity leveraged our experience with Salesforce and financial institutions to establish a framework to create meaningful Dashboards and Reports for the business. This framework consisted of an integrated approach between the CG Infinity team, the client's Salesforce team and key business leaders. Using this approach, the joint team ensured strong integration with the needs of the business and the design of the Dashboards in the CRM system. During two quick value delivery engagements, the team addressed needs with the Retail and Commercial Lines of business with a focus on User Activity, Leads, Opportunities and Campaigns. The CG Infinity team used our previous experience with banks to engage business leaders using their business processes and nomenclature to develop Dashboards and Reports that were meaningful and impactful. The team also established Best Practices and a methodology that the internal team made their own to be self-sufficient in developing new Dashboards and Reports. This focus will provide the client ongoing value long after the consulting team completed its engagement and is a key approach at CG Infinity.

## Enhanced Customer Experience Leads to Lower Attrition Rates

### Starting Point

A leading mid-size retail energy company with a long regional history and decades of experience was looking to expand their services to every retail energy market in the nation. They wanted to broaden their reach beyond C&I (Commercial & Industrial) or B2B offerings to join the mass market and include B2C services for household energy consumers across the country. They had recently been acquired by a large multinational transitioning away from their traditional purview of oil & gas to the wider energy sector, which offered the client the resources to expand and spurred the ambition. The client wanted to build a world-class IT system and redefine positive customer experience for the retail energy market.

### The Problem

However, the client's IT system at the time was incompatible with their ambitions, creating friction at touch points within and without the company and slowing growth to a crawl. Their CRM software was outdated and unhelpful, causing frustration and difficulties in attracting new customers and

retaining current ones. They used multiple billing engines, which created confusion among both employees and consumers. These were problems that demanded solutions for the client to grow into the premier nationwide retail energy provider it needed to be. They brought in CG Infinity. The

## Solution

CG Infinity was engaged for our stellar Salesforce implementation record and for our long years of proven success in building and implementing customer focused retail energy platforms. Following an introductory research and envisioning stage, CG Infinity broke up the client's long-term plan into monthly and six-week phases. This allowed the client to more easily manage their transition and created more transparency between the client and CG Infinity. In the first phase, in a period of just five weeks, CG Infinity successfully integrated the client into the Salesforce Energy and Utilities Cloud from scratch. This added much needed efficiency and reach compared to the client's old CRM system, permitting the growth they require. CG Infinity also made use of Amazon Connect, Salesforce Voice, and Mulesoft Integration to improve both the data management and the customer experience of the client's call center, creating something new and state of the art for the client. Following on the heels of the first phase, CG Infinity has become a key execution partner in helping the client build a world class Customer Experience platform that can be leveraged in all global energy markets

""""CG Infinity has played an integral role for our implementation of Salesforce Service Cloud Voice. They not only brought the technical expertise but the industry domain knowledge as well. They are highly effective communicators to leadership and allow for a concise message. We have continued to use CG Infinity on subsequent stages of our project that include implementations of other Salesforce products." """" –Chief Technology Officer

## Customer Billing Optimization Leads to an Increase in Revenue

### Starting Point

A nationally leading tax consulting company based in Texas wanted to ensure their continued market dominance and better fulfill their mission in strengthening American businesses through expert corporate tax guidance. The company had a staff of about 1,500 filled with high profile industry names and specialists for every sort of corporate tax credit circumstance but knew their third-party time entry application was inefficient and error prone. This meant hours of lost productivity that could potentially limit the company's continued growth and ability to support American businesses. The client needed to create a new time entry and management application better suited to the needs of a changing business and taxation environment.

### The Problem

The client's previous time entry application could only be opened and operated through Windows desktop s and, at five years old, was already out of date. Each entry in the application had to be input manually and the application was designed with such an inadequate User Interface that employees were unable to check if the data they had entered was correct until well after the hours-long process had or had not completed. This poor UI meant a substantial amount of lost productivity and revenue due to both the sluggishness of the application and the time wasted discovering and correcting errors caused by the application's lack of transparency. Based on the client's data, the legacy time entry application was so disliked by their own staff that the app was only used once a week per person despite instructions to update the application daily. This resulted not only in a loss of up to date information and employee morale, but also affected numerous functions downstream of the application, such as billing and customer invoicing.

### The Solution

CG Infinity determined the most prudent solution was to build a new application from scratch. Using an ASP.NET core with Web APIs, CG Infinity built a new time entry app that not only avoided the issues of the legacy application but also easily integrated with the client's existing ERP and Accounting systems. Unlike the legacy desktop app, CG Infinity's solution was a web application that allowed employees to log time entries on the go and on the job. The new application reduced time needed to complete the time entry process from hours, in which employees were unable to attend to other tasks, to minutes or less. The new application allowed managers to pull and check time reports without logging in to other programs as the legacy app demanded, and was transparent enough for users to check for and correct errors in near to real time. These improvements in the new application culminated in a significant increase in productivity and billing accuracy for each user. This, when spread out among the client's 1,500 employees, resulted in a massive efficiency gain for the company and has led to an increase in revenue. Many of the client's management team have called the application and its integration 'flawless' as it continues to streamline their business and improve employee morale.

""""Thank you so much for the Time Entry app! This app is great and is going to save so much time. This is going to be a huge time / productivity improvement for our teams."""" –Chief Information Officer

### ML Predictive Models Adds \$1 Million In New Revenue Per Month

#### Starting Point

A successful Texas-based real estate and property management company specializing in single family homes and rentals was looking to expand their reach and improve their pricing process. The company had been building homes and acquiring properties across the state for almost a decade but knew their pricing method was suboptimal and outdated, leaving a potentially substantial amount of revenue on the table. They wanted to evolve a new method of pricing beyond their old practice by taking advantage of advancements in Machine Learning and Artificial Intelligence to create a process both scalable and adaptive to the changing marketplace.



## The Problem

However, the client did not have the internal resources or the in-house expertise to create a workable Machine Learning process on their own. Moreover, their old pricing system was established in such an unresponsive fashion that the client couldn't even be sure just how much additional revenue they were missing. The old pricing strategy was an entirely manual process and only updated once a year. It incorporated little to no data from the marketplace in general or any external competitors, and only included the client's properties that happened to be on the market at the time. This resulted in a pricing process that relied more on brute force and gut feelings than any sort of concrete data, slow to adapt to an ever-quicker marketplace. To compete, they needed to build a better and more responsive pricing process but, like most companies their size, they did not have the resources to do so on their own. The client then reached out to CG Infinity.

## The Solution

CG Infinity brought our long years of experience assisting in the real estate industry, combined with the expertise in Machine Learning and Artificial Intelligence of many of our talented staff, to create a Proof of Concept for the client. The client accepted the POC and we are currently in the midst of implementing the new Machine Learning pricing process. This is the first phase of many working with the client going forward. CG Infinity overcame an initially small dataset to build a Machine Learning model that used the client's property history, outside market forces plus online data such as website hits, and the local marketplace and competitors to adjust and predict the client's pricing. This allowed the client's new pricing process to go from slow annual updates to daily pricing updates that successfully adapt to the changing market while cutting many hours of now unnecessary labor costs. The new pricing process also supports the client in understanding how their properties are positioned compared to their competitors and to know which floorplans are most in demand for new construction. Both the client and CG Infinity estimate the new Machine Learning pricing process will generate nearly \$1 million a month in additional revenue compared to the previous system.

""We were collecting mountains of data in our system every day, and we knew our data could be leveraged into tangible financial benefits. CG Infinity was an irreplaceable partner in taking us through a phased approach that allowed us to quantify our ROI every step of the way. With CG Infinity, we were able to utilize our data and demonstrate measurable value for our business through the power of artificial intelligence, machine learning, and deep learning."" –Chief Executive Officer

For many decades, the United States has enjoyed an electricity grid that is 99 percent reliable, delivering electricity effectively and consistently to millions of households and businesses across the country. But under the frequency of more extreme weather, growing demand, and underinvestment in transmission infrastructure, the grid is showing signs of weakness.

There are two concepts that are interrelated – reliability and resiliency. To meet the end goal of “keeping the lights on”, the electric grid must be resilient enough to bounce back from disruptive events quickly.

Grid reliability is the ability of the power system to deliver electricity in the quantity and with the quality demanded by users. The nation’s largest grid operator, PJM Interconnection, defines reliability as “designing, running, and maintaining electricity supply to provide an adequate, safe, and stable flow of electricity.” This is accomplished by having enough generation resources to meet all power demands and having enough built-in redundancy to minimize the effects of single point failures. Reliability is the supreme measurement of grid performance. Even with successful investments in grid modernization, utilities still measure their customer and regulatory performance on their ability to reliably deliver electricity.

On the other hand, resiliency has become a hot topic over the past few years due to more frequent extreme weather events and increased grid sabotage. In fact, attacks against the electrical grid nationwide are at an all-time high. According to Department of Energy statistics, human attacks were responsible for 171 “electric disturbance incidents” around the country in 2022, compared with 99 in 2021. (Department of Energy labeled this as the result of vandalism, sabotage, actual physical attack, cyber event, and suspicious activity.) The grid’s ability to recover from adversity is at the root of resiliency. Disruptive events can and do occur and the grid should be designed to bounce back quicker.

### Our reality – the current state

Our electric infrastructure is aging, and it is being pushed to do more than it was originally designed to do. To date, power transmission infrastructure has been built with fossil fuel and nuclear plants in mind. Although the Federal Energy Regulatory Commission has launched proceedings within the last year to address barriers to strengthening and expanding the nation’s transmission system within existing grid regions, the U.S. currently lacks a plan for ensuring power transfers between those regions. The federal regulator should require that neighboring regions plan for a minimum amount of interregional transfer capability to ensure

storm-affected areas can access a reliable power supply even when local generators come offline.

This will pose a challenge for renewable energy sources located outside of the existing transmission infrastructure. If renewable energy is to play a major role in bridging the gap from fossil fuel generation, the need for transmission line capacity is estimated to triple. Large urban areas with the highest electricity needs are typically long distances from abundant renewable energy sources like wind, biomass, location sunlight, and hydropower. There are also challenges with permitting and building additional power transmission lines, including the construction of interconnection upgrades to connect generation sources to the grid.

The influence of the Inflation Reduction Act on the grid will require a huge shift in how much renewable energy flows into the grid to meet the established goals of the IRA. If the grid is not expanded on, it will restrict the success of renewable development in many states. This requires alignment with state and federal policies so that interconnection applications are processed efficiently. A possible bright spot is FERC's proposed reforms aimed at improving the transmission planning process.

The current state of our national grid is best exemplified by Georgia Power's delay in shuttering some coal-fired units because the state's transmission system can't handle their exit from the grid or the renewable energy additions that would be needed to replace the power plants. Situations like this are prevalent across the country.

### What else can be done to improve grid reliability?

Modernizing the grid is of the utmost importance. The grid needs to become "smarter" and more resilient with cutting-edge technologies, equipment, and controls that communicate and work together to deliver electricity more reliably and efficiently. The result will be reduced frequency and duration of power outages, reduced storm impacts, and faster service restoration when outages occur. Additionally, consumers can better manage their own energy consumption and costs because they have easier access to their own data. Utilities also benefit from a

modernized grid, including improved security, reduced peak loads, increased integration of renewables, and lower operational costs.

The need for transformation of the nation's electric grid creates both challenges and opportunities to advance the capabilities of today's electricity delivery system. A critical component of grid modernization is a coordinated, strategic research, development and demonstration effort that involves both the public and private sectors.

Many contend that renewables like wind and solar, as well as the emerging capabilities of battery storage and other advanced technologies will stabilize the grid's reliability. Grid operators in California are successfully using batteries to store solar power during the day and provide valuable energy as the sun sets but temperatures remain high, avoiding blackouts even as demand soars.

Battery storage is a tool in the quest for a more reliable electric grid, with the potential to move from a just-in-time delivery system for low-cost energy to a system that can flexibly store and release power when needed. Batteries are most beneficial for energy storage when the wind isn't blowing and the sun isn't shining.

Another solution is unlocking more local resources and "virtual power plants" made up of small-scale resources like home batteries, EVs, thermostats, and water heaters. These systems improve system reliability by using software to better integrate electricity assets we've already paid for with the grid.

### Key Findings from the Department of Energy "Draft Report"

The United States will likely need 47,300 GW-miles of new transmission by 2035, a 57% increase compared to today's transmission system under a moderate load growth-high clean energy growth scenario, according to a Department of Energy Draft Report.

The Draft Report found the transmission needs in the U.S. are "pressing," that inter-regional transmission offers the biggest benefits, and that the needs will shift over time, according to Adria Brooks, a transmission planning engineer in the Department of Energy's Grid Deployment Office.

“Significant transmission deployment is needed as soon as 2030 in the Plains, Midwest and Texas regions, but by 2040, large deployments will also be needed in the Mountain and Mid-Atlantic and Southeast,” Brooks said.

“Large amounts of low-cost generation potential exist in the middle of the country and accessing this generation through increased transmission is cost effective for neighboring regions,” DOE said.

Based on differences in market prices, the most value is found by connecting the Electricity Reliability Council of Texas to the Southwest region of the Western Interconnection, followed by connecting ERCOT with the Eastern Interconnection, DOE said.

There is also “significant value” in connecting the Southwest Power Pool with the Mountain region of the Western Interconnection and with the Midcontinent Independent System Operator to the east, the department said.

Note: Department of Energy aims to issue a Final Report this summer, according to Brooks.

*A growing specialty retailer had outpaced the capabilities of its home-grown retail solutions. The Company had added new product lines and services over the years to its core Loan/Pawn segment, and its current systems could not keep pace with the requirements. After performing an assessment to analyze “build versus buy” options they concluded that a “buy” option would not fit their needs. As part of the Retail system re-engineering project facilitated by CG Infinity , it was determined that a mobile app would significantly enhance the availability of pawned inventory as it became available for sale.*

# Impact

At the point that a customer defaults on their loan, the items that a pawnshop is holding in custody become available for sale. The Company is authorized to recover any outstanding loan amount thru the sale of the item. These items are typically heavily discounted versus standard retail;

however, their visibility is restricted to the store where it is physically inventoried. The vision was to offer access to tens of thousands of unique products across the chain via a mobile app. The POS system did have the ability to view products across stores. However, this process was very time-consuming for the store associate and not customer-friendly or efficient.

## Solution

The newly developed centralized Retail control module, managed and maintained all product Loan data. An eCommerce mobile app was developed that had APIs to the retail control module giving a 360-degree view of inventory. So, instead of waiting for a prospective customer to buy a single item for sale at a single store, the App facilitated the broad exposure of items across all stores, enhanced the customer shopping experience, and provided the ability to purchase directly from the mobile App.

## Result

The app's main benefits were incremental sales, inventory turnover, and enhanced customer satisfaction from the much-improved browsing and shopping experience. Another benefit was customers' ability to use the app at their leisure rather than having a store associate assist via the in-store POS significantly improving labor efficiency in the stores.

*The client for this opportunity was a smart-home technology and security company. This project was associated with developing a pricing tool system and included a high ROI product.*

## Impact

The client had a little more than 2,000 people in their call center. Customers were constantly calling for different reasons, but they figured

out that only a handful of customer service people were able to empathize with their customers when they called. While they could not satisfy all the customers who were calling, they were able to upsell a few things to these customers, such as upgrading their package, adding cameras into their system, or adding automatic garage door openers, a thermostat, etc. Our client wanted us to observe what the highly productive customer service representative was doing and develop a framework to automate this as a job-aid to other customer representatives.

## Solution

In order to come up with a framework to automate the job-aid tool for other customer representatives, our team carried out this project using JavaScript, C#, .NET, and SQL server, with the first phase of the project rolled out in just 16 weeks. We had one lead developer and one business analyst here in Dallas and three developers in our New Delhi office focusing on this project.

## Result

In the first month after its rollout, the net additional revenue on this project was \$150,000. Though we eventually stopped counting, there were more than a million dollars in additional revenue that this tool brought to the company during the first six months.

*"The development of a critical software system can aid in a company's growth and productivity and can also help an enterprise – of any size – meet its long-term goals, all while bettering the bottom and top lines."*