whitepaper

## INFLATION:

How Distributors Can Understand, Navigate, & Overcome Challenges in 2022

A PROKEEP REPORT

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## **Executive Summary**

2020 marked the beginning of an unprecedented era that shook
Americans to their core. A global pandemic, a war, and all of the following
aftermath has painted a picture of a turbulent country with only looming
uncertainty to look forward to. The world today is drastically different
from the world we once recognized; it is rich with aberrant hardships
that touch the lives of nearly every American. But along with a sea of
disruptions in our modern world came one of the most pressing economic
challenges across the board: the unparalleled inflation.

Business owners everywhere are feeling inflation's relentless grip when making decisions. Drastic inflation, without proactivity, can be devastating to an economy and to the lives of many Americans. And construction, the very industry that builds America, is particularly vulnerable to severe inflation and bottlenecked supply chains. Navigating this rough terrain can be taxing on any organization, but with proper understanding and effective planning there are tools individuals can utilize to navigate these challenges and ensure their organization's longevity.

#### In this report we will explore:

- Is Inflation positive or negative?
- · What are the general causes of Inflation?
- What makes Inflation in 2022 so much different than previous downturns?
- What part do COVID-19, The War in Ukraine, and the Housing Crisis play in current economic projections?
- How can distributors expect business to be impacted by inflation?
- What are some easy ways distributors can get ahead and secure profits during inflation?



#### Inflation: Good or Bad?

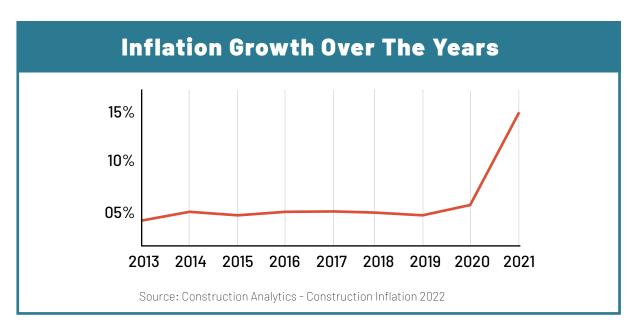
Inflation has always been typically regarded as a negative thing because it forces consumers to pay more for daily necessities. However inflation alone is neither good nor bad; it is a naturally occurring component of an economic life cycle. It can be considered a sign of a healthy economy and increases in prices typically counterbalance the increase in demand for labor and supply. Higher demands for services often follow financial superfluity or increased disposable income.

Inflation however can be extremely problematic for households when it is persistently too high and not accompanied by an increase in wages. This leaves families with considerably less income and buying power. Inflation that is consistently too low can signal weakness<sup>1</sup> in the economy; when interest rates are too low there is little room for the Federal Reserve to further lower them, as they do when the economy is weak in order to encourage consumers to spend.

#### Today inflation is astoundingly high.

The residential 8 year average inflation for 2013-2020 is 5.0%. In 2020 it grew to 5.3% and in 2021 it sprung all the way to  $14\%^2$ . This is the highest increase seen since 1978 and a 40 year high for U.S. inflation.

Based on this, experts forecast that a cost of living crisis is on the horizon.



So is inflation good or bad? The answer is inflation is neither positive nor negative, despite the drastic effects it has. A healthy, growing economy will always experience inflation at varying degrees. Drastic inflation however, is undoubtedly catastrophic for businesses and households alike.



While a variety of factors contribute to the economy, there are two typical causes of inflation:

## Cost-Push

Cost-Push is when higher wages or costs of materials cause prices to rise. This may be caused by labor shortages or disruptions in the supply chain that make it more expensive to produce something.

#### Demand-Pull Inflation

Demand-Pull is when a shortage in supply causes prices to rise.

Many economist refer<sup>3</sup> to this as "too many dollars chasing too few goods."

Low interest rates and other components of fiscal and monetary policy can also have an influence by fueling demand and cost inflation in the housing market. Over the recent months, the economy has experienced both of these sources of inflation, following a perfect storm of calamitous events that ravaged our economy and left Americans struggling to recover.



Of the many devastating nationwide changes, three are particularly prominent in bringing our inflation to these record breaking levels:

COVID-19

War in Ukraine

## The Housing Crisis

Over the next 10 pages we will be exploring the root of why these events caused high inflation, comparing them to similar historical crises, reporting on what is unique about them, and examining just how they are expected to impact distributors' profits.



This unparalleled pandemic brought drastic and unprecedented changes to the U.S. economy. Following the shutdown of our nation, Americans experienced an aberrantly short recession. Few examples of pandemics prior to COVID exist, let alone any with its magnitude. This left policymakers with little to go off of when making crucial decisions. During extraordinary times like the COVID-19 pandemic, it's important to examine comparable pandemics that occurred before.



#### **Inflation during Pandemics: a historical look**

Following previous pandemics<sup>4</sup> the U.S. experienced small, sporadic bouts of inflation or large-scale redistribution of economic assets. The Spanish Flu would be an example of this, followed by the demobilization from World War I. It is estimated that the Spanish Flu reduced real GDP per capita by  $6\%^5$ .

Other pandemics, however, followed different trends. The 1957 H2N2 flu outbreak and following pandemic was accompanied by a 9-month recession and weakened inflation. After its end there was no large revival, even when the pandemic had ended and the economy was beginning to slowly recover. Compared to pandemics in the past COVID-19 has experienced the quickest recovery, for short periods, only to be followed by more restrictions and subsequent rapid economic declines.

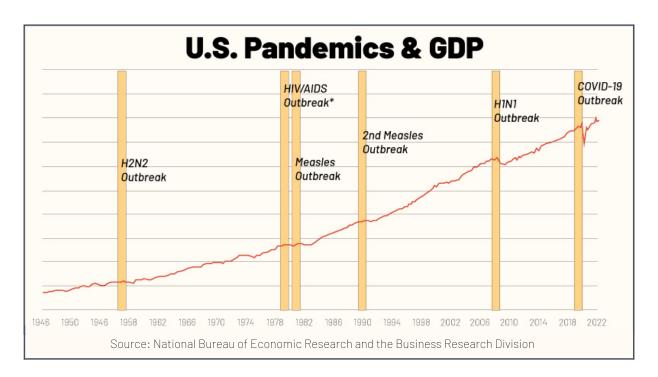
#### What made COVID-19 different?

As we emerged from the pandemic in 2022 many experts had varying predictions regarding our recovery. Many thought that supply chains would gradually unclog as world economies recovered throughout 2021. Experts predicted inflation and that the cost burden of these disturbances would be passed onto consumers. Though few could predict the magnitude of disruptions that were to come.



When COVID first emerged and government restrictions were placed, Americans took cover in their homes, and subsequently came a dramatic decrease in demand for goods and services. The hospitality industry, restaurants, airlines, and many other services felt this devastating blow the most. The earliest days of COVID were filled with immense consumer anxiety and stern health restrictions, nearly shutting down several industries across the economy.

For distributors, with the exponential rise and falls of demand came the overall financial strain on businesses, blatant lack of supply, and a shortage of workers.



#### How the long-term impacts of COVID-19 affect distributors

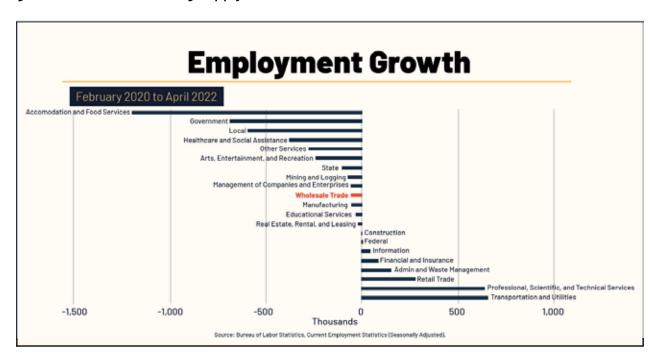
#### **Financial Strain & Business Development**

The very start of the pandemic preceded a significant decrease in economic activity, as Americans quarantined, and the level of average prices measured by the core PCE deflator fell by  $.5\%^4$ . Following this dramatic fall, it was expected that the subsequent inflation growth rates would be sporadic and unpredictable.

As we moved into 2021, constraints were lifted, COVID cases decreased, and people ventured out en masse; eager to experience the world they've been missing. Consumers began spending again, creating a rapid increase in demand for services of all kinds and radically restarting the economy. Stores and restaurants were flooded with buyers, but in nearly every industry workers were in short supply. Ensuing nearly every wave of economic resurgence would be another torrent of coronavirus and harsh government restrictions, severely suppressing the economy. This drastic push and pull of consumer habits resulted in sporadic and unpredictable economic trends.



For business owners the swing between extremes was straining. Either business was worryingly slow and employee salaries were difficult to pay, or business was inundated with consumers, while being understaffed and facing supply chain difficulties.



#### **Supply Chain Interruptions & Customer service**

An unexpected side effect of COVID-19 was its manner of greatly exposing the vulnerabilities of global supply chains. Supply shortages sparked by the pandemic have continued since, affecting key materials like lumber, paint, aluminum, coatings, and several other crucial supplies. This is despite 2021 being predicted to feature record levels<sup>6</sup> of economic growth following the pandemic.

It was also predicted for global supply chains to gradually unclog as world economies recovered throughout 2021; however these disruptions were always expected to cause prices to rise, passing the burden onto consumers everywhere.

The construction industry deeply felt these supply chain disturbances, and continues to feel them to this day. Acquiring materials became increasingly difficult and expensive, and there have been huge delays on supply orders, making projects difficult to predict and complete. According to an Associate General Contractors of America survey<sup>7</sup>, 75% of E&C firms experienced prominent project delays. This is due to much longer wait times or the persistent shortage of materials. 57% of these firms reported delays in product shipment. Following these shortages were drastic increases in costs. During the first of seven months of 2021<sup>7</sup>, the prices of essential materials increased by double digits every month.



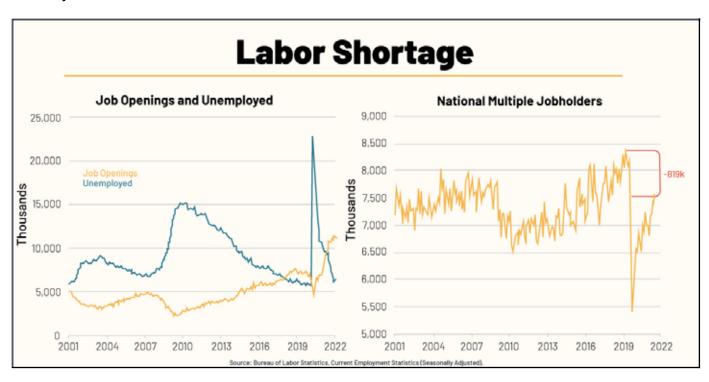
COVID-19 itself was a wildly unparalleled phenomenon, touching the lives of millions of people across the country. Alongside the waves of uncertainty came so many unexpected side-effects, like the debilitating supply chain disturbances that continue to strain many distributor businesses.

#### The Labor Shortage & Business Operations

Another economically debilitating component, which was heavily exasperated by COVID, was the labor shortage. For years, many companies have struggled to find talent and currently remain understaffed, creating a cost-push inflation response that contributes to the volatile economic climate. To this day the task of recruiting and retaining skilled workers is one of the most pressing challenges on the hands of construction business owners all over the country.

There are a few factors contributing to the labor shortage, one being the aging population of workers. The vast majority of the current construction workforce belongs to the baby boom generation. The National Center for Construction Edication and Research<sup>8</sup> reports that 41% of the workforce will retire in the coming decade. including several individuals in management positions and with crucial skills.

While the largest generation, millennials, are predicted to make up nearly 75% of the North American workforce by 2025, there are few in construction. The U.S. Chamber of Commerce reported in 2019 that 61% of millennials found construction jobs undesirable, despite how crucial they are to society. The construction industry, like many, has also never quite recovered from the 2008 housing crisis. The New York Times reported that 630,000 construction workers left the industry in 2009, never to return.





Following COVID, the labor shortage has caused 60% of construction companies to postpone or cancel scheduled projects, as reported by AGC. And as reported by Construction Executive, 52% of contractors rated the labor shortage as the second-worst effect of the pandemic. With a weakened population of workers, projects are considerably lengthened and remaining laborers are handed extra work, risking lessened quality of work and potential burnout.

While the labor shortage persists and demand for workers outpaces the supply, prices remain high<sup>10</sup>. Businesses are left with no choice but to pay rising salaries to attract skilled workers and remain competitive. These increases become embedded in product pricing and manifest in additional consumer spending. And raising salaries alone will not solve the persistent shortage; many candidates are in need of greater working conditions, benefits, and support from their companies.

As the world around us changes and the labor shortage continues to grow, the construction industry needs to continue to evolve in order to attract and retain a skilled workforce. New generations are entering construction, and businesses will need to modernize their practices to remain competitive. Without efficiency in business functions, employees will move to better work environments further aggravating the labor shortage and placing an incredible strain on business owners, who are already navigating rising costs in every corner.





## The War in Ukraine

#### Inflation across wartime; a historical look

Throughout history, periods of war and geopolitical tension have been accompanied by economic tension<sup>11</sup>. In the past the cost of energy has also risen tremendously during wars because armies use an incredible amount of oil. In the early 2000s, when the US invaded Afghanistan and Iraq, oil prices increased by 25%<sup>12</sup> from \$25 per barrel to \$140 per barrel. This is due to the rise in demand for oil, as armies heavily rely on it, and because of their incessant use its supply greatly diminishes.

Dating back to the Second World War, government spending, labor shortages, and economic tension caused inflationary duress<sup>13</sup>. Printing money, as a means of desperation, typically has a negative effect as the value of money begins to decline. Cost-push inflation is also typical of war due to the scarcity of goods and services, alongside the rising costs of oil. This affects middle-income families who quickly see the value of their savings drained.





## **The War in Ukraine**

#### What makes The War in Ukraine Different?

This war, alongside COVID-19, brought to light the fragility of our supply chain. Russia and Ukraine are major suppliers of several crucial raw materials such as energy, metals, and agricultural products like wheat and coarse grains. The war strained the supply of these essentials and in turn drove their costs up <sup>14</sup>.

Following high consumer demand post-COVID, the price of oil was already inflated. During Vladimir Putin's invasion of Ukraine, Western countries placed strict sanctions on Russia, which had notable effects on our economy.

#### Some U.S. Sanctions included:

- A ban on the export of dual-use goods, or materials with both a civilian and military use, like vehicle parts <sup>15</sup>.
- A ban on all Russian flights from the U.S.
- An import ban on Russian gold.
- An Import ban on all Russian oil and gas.

These sanctions resulted in the cost of oil rising from below \$80 to an astounding \$110 a barrel 16.

The World Trade Organization (WTO) had pessimistic predictions for their 2022 growth of merchandise trade volumes following the start of the war, estimating the import and export of goods would sink from 4.7% to 3% <sup>17</sup>.

#### How the War in Ukraine is affecting distributors

The most pressing effect of this war for distributors was the strain on the supply chain. This lack of raw materials, especially essentials like energy and metals, caused product shipments to take much longer and prices to rise substantially. For distributors, this means long project delays and higher costs of materials. Improperly navigating those changes can result in strained customer relationships and poor finances.

The war is a quintessential example of cost-push inflation, where issues in the supply chain drove inflation, making projects more expensive to complete. While the Russian-Ukraine war saw immense suffering, tensions were also felt overseas in America. Distributors everywhere experienced the immobilizing disruptions in the supply chain, and essentials that were once accessible became tremendously expensive.



### **The Housing Crisis**

Most individuals, from business owners to consumers, are painfully aware of the housing crisis brought on throughout COVID. Projects are nearly unfeasible to complete and reasonably priced family homes are a dream of the past. While it seems that this calamity was produced by coronavirus, it is actually a symptom of an ongoing economic ailment, beginning with the housing market crash in 2008 <sup>18</sup>.



## Housing crises of the recent past; a historical look

The 2000s saw an incredible buying frenzy, firing up a surge in new construction as builders were suddenly faced with a remarkable demand. When the bubble finally burst contractors withdrew in an attempt to combat the receding demand.

In addition, during a volatile economic period, many construction workers left the industry never to return. Despite more than a decade having passed since the 2008 crash, the construction industry never found its previous momentum.

When the pandemic forced a surge of housing purchases, and when millennials, the largest generation, looked for homes, there were no homes to accommodate the tremendous amount of buyers.

#### What makes 2022 different

The turbulent crash of 2008 paved the way for years of economic instability, only to come to head when aggravated by a war and a pandemic. A strained housing market bleeds into the economy and creates complications for everyone in the country. When housing costs climb, inflation, and the cost of goods and services, rise as well. This depresses economic growth. Without affordable homes, low-income workers are forced to live farther away from their jobs, creating long and expensive commutes as well as decreasing effective work<sup>19</sup>.



## **The Housing Crisis**

Today's housing market is unlike any seen before, and is growing increasingly unstable as time goes on. In 2020, median home prices rose 7% in the first quarter, which was a 38%<sup>20</sup> increase over the same period. For the first time since 2005<sup>18</sup>, the median cost for previously owned single-family homes is higher than that for new construction. In addition, a disrupted supply chain has caused construction starts to dip; economists surveyed by bloomberg expected them to continue to drop to a pace of 1.7 million units per year. According to Redfin housing construction fell in may and the median listing price of a home rose by 14.8% reaching \$430,621. Median rents also increased by 15%, reaching a staggering \$2,002<sup>21</sup>.

For many families, homeownership is astonishingly out of reach. Two years ago, to qualify for a mortgage on a median priced house, families needed an income of 73,400, which  $45\%^{20}$  of US households could meet. By April 2022, families needed over \$113,000 to qualify for the same home, which only 25% could afford. As this trend continues the number of households able to qualify for a mortgage will shrink.

#### How the housing crisis of 2022 affects Distributors

For so many Americans the lack of homes means that affordable living is a dream lost, and the construction industry is directly tasked with building more, putting them on the frontlines of the growing problem.

On top of a diminished supply there is a strong demand for housing now that Millennials, many of whom are in their 30s and 40s, look to buy homes<sup>22</sup>. The largest generation, one who was termed the "renter generation," has discredited this nickname as now the share of buyers looking for a home in the next six months has risen from 8.1% to 8.9% <sup>18</sup>. According to the Conference Board's Consumer Confidence Index this is the highest proportion since 1987.

The world is going to need 96,000 new affordable homes built everyday to accommodate the predicted 3 billion people who do not have adequate housing. This crisis stems from a combination of the shortage of land, lending, laborers and a shortage of materials. The compounding effect of several record breaking world events that has rocked nearly every industry.

The lack of crucial supplies like lumber and steel create indecipherable difficulties for builders tasked with creating more homes to combat the shortage. Long, unpredictable shipment delays create longer project times and further strain customer relationships.



## **The Housing Crisis**

Another challenge that has left construction workers struggling to overcome is the limited amount of land. Very restrictive zoning prevents people from building much needed townhomes, and a piece of land that would be suitable for five homes will often end up being bought by someone who plans on building one or two<sup>22</sup>. These government-imposed rules are limiting builders in providing the homes that the market wants.

The struggles accompanying the housing shortage are joining the already steep inflation to create a fraught environment for the construction industry. Distributors, who are faced with supplying contractors the necessary materials to complete projects, are juggling extremely high costs, an inadequate supply, and frustrated customers who are also stretched thin.



All of America is feeling the tight grip of inflation, though it is the construction industry that is directly facing its wrath. While higher prices, land restrictions, and a vast demand all provide challenges to construction workers, it is the disruptions in the supply chain that make these issues nearly insurmountable. The difficulty in the supply chain pushes up prices and creates a cycle of high demand, high costs, and little supply, keeping distributors and contractors locked in to this persistent cycle of financial strain.

In the recent 6 months  $60.7\%^{23}$  of US businesses in the construction industry have reported a significant increase in the cost of materials and services. As inflation continues to grow, buyers have tighter budgets, less spending power and therefore push less money into the economy. These constraints lead up to purchasing less services, meaning less revenue for business owners.



Inflation, whether negatively or positively, directly impacts nearly every component of a construction business:

## Supply Chain Partners

Supply chain partners are heavily feeling the strain of inflation and likely raising their prices to combat costs, which in turn passes the burden onto distributors and potentially strains their relationship.

#### Sales Teams

During an inflationary period, a sales team can potentially earn more in commissions if the prices of projects are raised and there is no drop-off in clients.

#### Skilled Laborers

Along with the rising prices, pay for contractors or skilled workers is likely not going to rise at the same rate as essential food and living costs. This may push workers to ask for higher wages and better working conditions.

#### Clients

If business owners opt not to raise prices they are forced to absorb the increasing costs. However, if they offset inflation by raising prices or extending project timelines they pass on the burden of inflation onto their clients.

## Construction Business Owners

Higher expenses and lower profits that come with steep inflation can put business under severe duress.

#### **Impact Summary**

Elevated material costs are the most obvious and pressing result of inflation for a construction business. In addition to higher costs of goods, contractors are navigating the uncertainty of when materials will turn up to site; straining customer relationships. Without thoughtful proactivity, businesses are likely to deeply feel the impact of inflation. Business owners risk damaging their customer relations, or wounding their financial planning by absorbing costs or underbidding projects.



## 4 Ways Distributors can Mitigate the Impact of Inflation

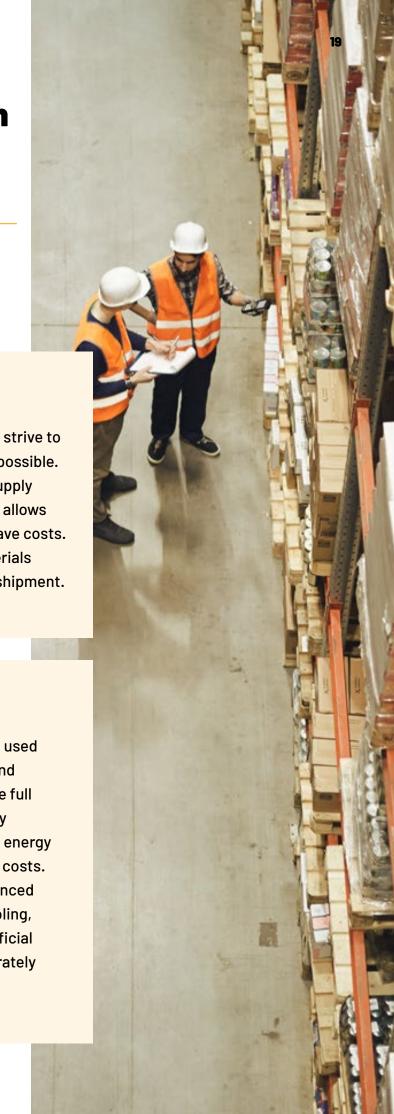
Despite the rising uncertainty and strain on nearly every facet of business, there are steps that distributors can take to navigate the current economic difficulties.

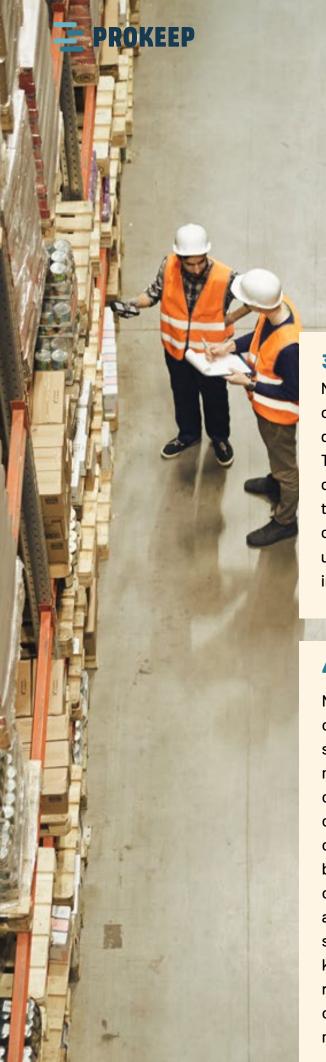
#### 1. Proactive Purchasing

Distributors can expect lagging delivery times and strive to get projects approved and designed as quickly as possible. Proactive purchasing is a planned purchase of a supply or service before a customer places orders<sup>24</sup>. This allows businesses to also purchase bulk quantities and save costs. This is also a way for businesses to purchase materials before prices rise and in preparation for delays in shipment.

#### 2. Energy Efficiency

Inflation heavily affects oil and natural gas, so less used will mean lower costs. Business owners who depend entirely on utility companies for energy will feel the full impact of inflation. Having a combination of energy efficient strategies as well as onsite generation of energy can drastically reduce consumption and therefore costs. Construction companies can do this by using advanced designs and techniques that optimize heating, cooling, ventilation and light consumption<sup>25</sup>. It is also beneficial for contractors to track fuel consumption to accurately measure what they are being charged for.





## 4 Ways Distributors can Mitigate the Impact of Inflation

Despite the rising uncertainty and strain on nearly every facet of business, there are steps that distributors can take to navigate the current economic difficulties.

#### 3. MEP Engineers

Mechanical, Electric and Plumbing (MEP) engineers can optimize building designs, decreasing the length of air ducts, electrical conduit, and other distribution systems. The less materials needed onsite the lesser the cost. MEP companies specialize in designing, planning, and optimizing the systems of a building and can save large amounts for companies<sup>26</sup>. Inefficient buildings can waste fuel and drive up expenses during a time where essentials are already high in cost.

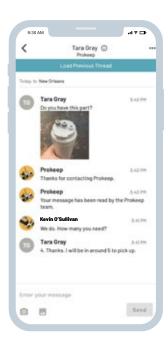
#### 4. Invest in Technology

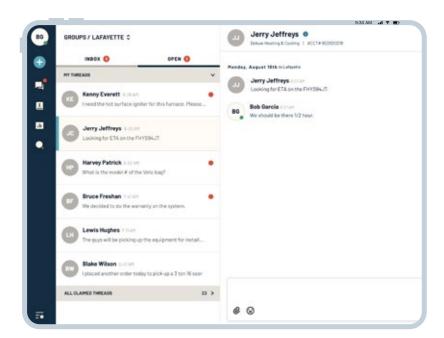
New technologies that boost efficiency are being developed constantly. Effectively implementing technology will save time and allow for better communication, project management, and planning. When facing roadblocks, construction managers should have the ability to communicate with their employees. When conducting sales, counter associates should be able to speak to customers briefly and clearly, saving labor and time. When placing an order, clients should be able to reach out directly and place an order within minutes. Investing in a texting software can save valuable time, labor and prevent costly mistakes by keeping record of every order. At a time where inflation has reached a record breaking high and the future for business owners may seem grim, careful planning is necessary to navigate the difficult changes.



## Using a Communication Platform to Cut Costs

As younger generations of business owners enter the construction industry, there is a greater desire for technology to boost efficiency, specifically texting. Businesses across all fields are incorporating text messaging to better bridge the gap between sales rep and client, allowing for orders to be placed within seconds. In the construction industry specifically, the ability to receive text orders can save hours for counter sales representatives, clearing congestion on phone lines and emails. A messaging platform for distributors not only boosts efficiency but it optimizes customer relationships and increases communication within the branch.





#### Prokeep — Messaging Built for Distributors

Prokeep is an innovative communication software that text-enables a company's main phone line and allows employees to communicate directly via text with customers and internally with other employees. Prokeep allows orders to be placed in minutes and keeps record of every text message sent, boosting accountability. The future of our economy is wildly uncertain and many negative trends are predicted to get worse. Investing in efficient technologies can be what makes the difference between struggling to stay afloat, and continuing to thrive and prosper.



Prokeep provides solutions to Distributors for nearly every current struggle posed by Inflation:

#### 1. Dwindling Supply Chain - Solutions through Prokeep

- Delays in shipments - proactive communication allows you to order in advance and communicate delays with customers.

 Low inventory - automated inventory updates allow VIP customers to know when high traffic inventory is available.

-Unsatisfied Customers - transparent and active communication keeps your business top of mind & keeps transparency between your business and your customers.

#### 2. Labor Shortage - Solutions through Prokeep

**Disorganized business** Prokeep saves 9 hours per employee monthly & improves **operations** - business efficiency by centralizing customer records<sup>27</sup>.

Longer waits for the average hold time on the phone is 2 minutes. Through
 customers - Prokeep, customers can submit orders, questions, and
 get updates with an average read and response time of 90 seconds.

-Unsatisfied Employees - Prokeep fights burnout through increased efficiency and simplified workflows. Learn more in our blog, "Distributor-Driven Technology to Combat the Great Resignation<sup>28</sup>."

#### 3. Rising Costs of Materials & Living - Solutions through Prokeep

Contractors cutting

Prokeep saves time for contractors by offering them an

costs - efficient and convenient way to place orders and receive

updates which results in less hours spent on the phone

sending emails and more time completing projects. This

results in contractors not having to pay their employees

more in overtime or having to worry about projects going

over budget because of the time savings their distributor is

providing them.



# Moving Forward

Our modern world may seem eruptive and unpredictable as three major world events, COVID-19, the Russian-Ukrainian war, and today's housing crisis, have created a record breakingly inflated economy. The devastating impacts of this unprecedented inflation are felt by business owners and Americans alike. From the COVID-19 fueled dips and surges in supply and demand, to the dwindling supply of labor and essentials following the war, distributors are without a doubt struggling. Though however grim the world may seem, there are always proactive measures that can be taken to strengthen a business. The construction industry, the very individuals who build our society, will always persevere. For distributors who may be struggling, with the right proactivity and tools, there is always hope for the future.

For more information be sure to check out our webinar about increasing sales and boosting customer service in times of disruption, inflation, and changing buyer behaviors, led by Jonathan Caldwell at:

info.prokeep.com/gawda-webinar-winningnew-sales-with-streamlined-customerservice







### **Messaging Built For Distributors**

Book a demo to see Prokeep in action at www.prokeep.com/demo



#### **Works Cited**

- 1 Klein, Michael. "What's the Problem with Low Inflation?" Monetary Policy. Econofact. 6 Aug. 2017.
- 2 Edzarenski. "Construction Inflation 2022 update 5-3-22." Behind the Headlines, Inflation Indexing, Outlook. 11 Feb. 2022.
- 3 Chen, James. "Demand-Pull Inflation." Investopedia. 4 Jun. 2021.
- 4 Bernstein & Tedeschi. "Pandemic Prices: Accessing Inflation in the Months and Years Ahead." Written Materials. The White House. 12 Apr. 2021.
- 5 Daly & Chankova. "Inflation in the aftermath of wars and pandemics." VoxEU. CEPR. 15 Apr. 2021.
- 6 PwC Global. "Global economy watch: Predictions for 2021." PwC Global. 07 Jan. 2021.
- 7 Deloitte. "2022 engineering and construction industry outlook." Analysis. Deloitte. 11 Mar. 2022
- 8 Lake, Lauren. "Construction HR: Dealing with the labor shortage through COVID-19 and beyond." Bridgit. 15 Oct. 2020.
- 9 Boyd, Deren. "Keep Safety a Priority, Even During a Labor Shortage." Construction Executive. 27 Feb. 2022.
- 10 Hetrick, Ron. "Why Inflation Isn't Going Away." Lightcast. 20 Aug. 2021.
- 11 Caldera, Conlisk, et al. "The Effect of the War in Ukraine on Global Activity and Inflation." FEDS Notes. The Federal Reserve. 27 May. 2022.
- 12 Strauss, Adam. "The Reasons Why A War In Ukraine Will Make Inflation Worse." Forbes. 27 Jan. 2022.
- 13 Petting, Tejvan. "Economic impact of war." Economics Help. 24 Feb. 2022.
- 14 Seiler, Pascal. "The Ukraine war has raised long-term inflation expectations." CEPR. VOXEU. 12 Mar. 2022.
- 15 BBC. "What are the sanctions on Russia and are they hurting its economy?" BBC World. 27 Jun. 2022.
- 16 Reynolds, Alan. "Yes, Russia's War on Ukraine Did Raise the Price of Gasoline." CATO Institute. 6 Apr. 2022.
- 17 Masterson, Victoria. "These 3 charts show the impact of war in Ukraine on global trade." World Economic Forum. 26 Apr. 2022.
- 18 Winck, Brandt, Hoffower. "The housing market is the hottest it's been since right before the 2008 crash." Insider. 28 Apr. 2021.
- 19 Masterson, Victoria. "What has caused the global housing crisis and how can we fix it?" World Economic Forum. 16 Jun. 2022.
- 20 Pollack, Lynn. "Think We're In A Housing Bubble? Think Again." Globest. 21 Jun. 2022.
- 21 Winck & Lloyd. "The number of new homes being built in the US tanked 14% in May it'll make buying or renting even more of a nightmare." Insider. 16 Jun. 2022.
- 22 Campisi, Natalie. "Housing Market Predictions 2022: When Will Prices Drop?" Forbes Advisor. 1 Jul. 2022.
- 23 Miller, Derek. "High Inflation: Softening the Impact for Construction Businesses." Lendio. 13 Apr. 2022.
- 24 Piyu. "Difference Between Proactive and Reactive Purchasing." DifferenceBetween.com. 4 Aug. 2019.
- 25 Shipley Energy. "Energy Efficiency for Construction." shipleyenergy.com. 18 Jan. 2021.
- 26 Peter Basso Associates. "MEP Engineering." peterbassoassociates.com. 2022.
- 27 Prokeep. "Embracing Change: How Texting for Business Helped Johnstone Organizations Increase Revenues." Prokeep.com. 03, Jun. 2021.
- 28 Wilcox, Jhané. "Distributor-Driven Technology to Combat the Great Resignation." Prokeep Post. 21 Feb. 2022.

