The **Digital Bridge**

Knowing *what’s next*, and how to *get there*
“For too long, information, opportunities, and resources have been constraints, they need to be the bridges.”

– Sharad Vivek Sagar
Contents

04  Digitization and business

05  The Digital Bridge
  What is the digital bridge?

07  The Digital Bridge: Type 1
  Spanning cost to contribution

10  The Digital Bridge: Type 2
    Connecting progress with optimization

13  The Digital Bridge: Type 3
    The route from reactive to proactive

16  The Digital Bridge: Type 4
    Toward horizons, synthesis, and the ultimate destination

17  Contributors and endnotes
Digitization and business

In the last decade, rapid digitization has been the most prevailing source of change for businesses. As tech evolved from early computers to smartphones, artificial intelligence and cryptocurrency, the impact has been nothing short of profound. Not only are customer preferences constantly changing – the way businesses operate is also evolving.

A notable influx of digital business management tools occurred right alongside the wave of digital advancement in the 21st century. Businesses have become more efficient and streamlined than ever before. By utilizing ACH direct deposits, wire transfers, automation and other digital tools, companies have been able to simplify processes, analyze data, reduce their paper trail and optimize cash flow. In fact, these digital updates have, in many cases, transformed obligatory business operations from a cost center expense to a “value-add partner to the CFO.”

Yet technology can only go so far. For businesses to truly optimize their operations, they must harness the power of people and technology collectively, using human intellect to drive key decisions and maximize digital tools. The process of using digital tools to enhance your business is known as “digitizing” – and can be anything but easy.

Digitization requires commitment, ongoing analyses, and communication. The digital business transformation is a journey that requires expert guidance and partnership every step of the way. It is not a leap of faith, but a well-planned crossing into the digital future.

“Digital? People have been talking about ‘going digital,’ ‘digitizing’ and ‘transformation’ for such a long time now … what does it even mean anymore?”

– Adam Kruis, U.S. Bank
The Digital Bridge

What is the digital bridge?

Beginning in southern Florida, the Seven Mile Bridge connects several islands on the route to Key West. The narrow bridge allows travelers to make their way south quickly and safely, admiring and exploring the natural beauty along the way. Compared to alternatives, many travelers find the Seven Mile Bridge to be the most efficient, most affordable, and most enjoyable path to Key West.

By reducing cost and risk while saving time, the Seven Mile Bridge is an optimal route to Key West and each of its nearby islands. Likewise, the digital bridge is an optimal route toward business goals.

Where is the digital bridge?

The location and construction of bridges is a strategic decision resulting from careful analysis and engineering. So much as any bridge should serve to optimize a particular route, trusted partners in finance and technology are invaluable to determining when and how a company can build the digital bridge to their strategic goals.

The benefits of digitization

- Data visibility and accuracy
- Reinvested time and money
- Enhanced controls and fraud mitigation
- Scalability
- Reliable cash flow analysis and forecasting
- Enhanced working capital & liquidity management
Design and structure of the digital bridge

Because the digital bridge is an optimized route toward business goals, designing the bridge requires understanding a) what your strategic direction and goals are, and b) what obstacles and challenges must be traversed. This requires companies to analyze the operations and processes of their current working capital cycle.

Through an in-depth analysis of working capital and its contributors and detractors, a business can quickly and thoroughly identify their strategic position and opportunities for digital optimization. The analysis should focus on identifying inefficiencies and pain points. Outside partnerships with finance and technology firms may benefit this process with additional rigor and objectivity.

Collaboratively, the entire team develops a clear journey map, then determines what should be optimized and when; or, with what and where to build the digital bridge.

Like a physical bridge, the structure of a digital bridge must be reliable and secure. The architects, planners, crew and consultants must be knowledgeable and – above all else – trustworthy.

A closer look at working capital and optimization

Digitization is key to optimizing business at every level. Beginning with startup capital, most companies make disbursements and invest toward growth. They collect what is owed, and manage cash from earnings against debt toward their strategic goals. Reviewing these key processes is critical to an effective working capital analysis.
Only with a thorough understanding of these processes, their pain points and inefficiencies can digital optimization begin to occur. And because digitization inevitably results in clearer data and better forecasting, every small step toward digitization leads to further opportunities for optimization.

The world of commerce has evolved to favor speed, accuracy and security. It’s simply no longer enough for the working capital sub-processes to merely “function.” For a business to remain competitive, processes and their components must be constantly evaluated, improved and optimized. For these reasons, the digital bridge might not only be an optimal route, but also a competitive advantage.

The Digital Bridge: Type 1

Spanning cost to contribution

For most business managers, the first digital crossing spans from cost to contribution. Having analyzed alternate options, e.g., rocks and water below, changes in consumer preference, cost analysis, etc., a company at this stage has realized that digitizing is their best path forward.

This first bridge represents a company’s strategic move away from paper-based payments – including both payables and receivables – and optimizing all operations and sub-processes of the legacy environment. The gains that can be made in terms of saving operational time and expenses, then reallocating human efforts toward intellectual activities, may actually transform how functional management appears on the company balance sheet. Digital optimizations could make the difference between an operations expense or a business credit.

This is the bridge from cost to contribution.
Fig. 3 - Processing paper-based payments requires many steps that cost time, money, and may increase exposure.

Fig. 4 - Electronic payments reduce steps required for processing.

Payments, paper, and the digital difference

Cost savings – Wires, Automated Clearing House (ACH) transfers, virtual cards and automated transactions can dramatically reduce the cost associated with processing payments. Savings come from reduced risk of fraud and exposure (passing through fewer hands and traveling less distance), processing time saved, alleviating the uncertainty of lost mail, and more. Bypassing these steps greatly reduces operating expenses and saves working capital.

Increased profit – In most cases, a decrease in operating expense also means an increase in profit. So, it could be rightly stated that moving from paper to electronic payments transforms money movement from a business operating cost to a bottom-line credit.

Staying competitive – According to the Federal Reserve, there are on average 4.3 million paper check payments processed every day. Each check must be processed, printed, mailed, delivered, received and applied within a company before clearing with a bank. Along that pathway, checks are subject to errors, mailing time, fraud and working hours, all which must be accounted for in operating expenses.
A simplified experience

Company
PaperMill Office & Home Supply

Goals
- Increase working capital
- Increase payment speed
- Elevate industry position

Obstacles
- Organizational preference for “the old way”
- Predominantly manual processes
- Majority of payments (disbursements + receivables) are paper-based

Digital bridge
- Converting some payments to electronic
- Automate remaining check payments, utilize ACH and card
- Automate bill generation (AR), invoice receipt and processing (AP)
- Enhance traditional tech with check outsourcing (AP), lockbox and remote deposit capture (AR)

Results
- Significant savings in time and cost, enhanced fraud protection through automation
- Gained foothold in evolving marketplace ahead of competition
- Increased working capital through on-time incentives, rationalized vendor payment terms

Note: All company information (name, size, industry, etc.) is fictitious and used solely to illustrate real-world business challenges and solutions.
The Digital Bridge: Type 2

Connecting progress with optimization

For companies that have adopted electronic payments and crossed the first bridge from cost to contribution, digitization is no longer simply an imperative to remain competitive. Instead, it’s the next pathway to further progress and optimization of all business operations.

A working capital cycle analysis at this stage will show opportunities to optimize, not by changing the means of payment, but the mechanisms. If electronic payments outnumbering paper checks produces savings and other benefits, so too can all legacy processes and efforts be optimized.

Optimizing processes

In terms of efficiency and effectiveness, digitizing and automating processes can deliver almost immediate results. For example:

Legacy manual tasks like exception management, issuing payments, end-of-month reconciliation and reporting demand a large share of time and attention. Digital optimizations are known to reduce days sales outstanding (DSO).

Disparate ERPs and payment methods create pain points for treasury operations that have since been alleviated by digital solutions. This is particularly challenging for companies with multiple banking relationships.

Accounts and banking relationships can be overly complicated if not consolidated in a single user portal, either cloud-based or on premises. Banking information can be integrated with existing ERPs and programmed to default to (or suggest) the most efficient transaction methods.
Optimizing people

As the human workforce evolves with the pace of change, talent pools diversify in terms of skill and preference for the most modern technology. Professionals who were initially trained with paper payments and manual processing experience digitization differently than “digital natives.” For the former, transitioning to digital means a shift in day-to-day tasks – from button pushing to analysis, or exception processing to cash flow forecasting. For the new talent generation, optimal technology enablement – e.g., automation and data visibility – is the expectation.

The bridge

From the foundation of electronic payments, businesses seeking to harness technology and enhance processes are on the bridge from progress to optimization. By assuming labor-intensive activities with superior speed and accuracy, technology restores the power of human intelligence, intuition and acumen to business.

“In the past, young people who simply showed a reliable and detail-oriented nature might have sufficed, but now CFOs need employees with a wide range of capabilities, from data visualization to flexible thinking.”

— Accenture, The CFO Reimagined

Technologies:

- ERP integration
- Synchronized accounts
- Real-Time Payments
- Virtual Card payment
- Automated Invoice Processing
- Straight-through remittance

Benefits:

- Limited exposure
- Fraud and risk mitigation
- Working capital visibility
- Reduced operating cost
- Humans refocus on higher-order activity (analysis, forecasting)
Example case

Collaborative innovation

Hi-Altitude Insurance Co.

Goals
- Optimize existing electronic payments (ACH, card) by increasing digital platforms
- Establish complete end-to-end digital AP/AR processes
- Maximize internal efficiency
- Elevate customer experience

Obstacles
- Disbursements and receipts remain 49% check-based
- Electronic remittance may still require email, occasional manual interventions
- Innovation has occurred in silos vs. enterprise-wide

Digital bridge
- Adopt new payment rails (RTP®) to streamline remittance communication, accelerate and secure transaction
- Fully integrate processes + reporting with APIs
- Deploy AI and RPA solutions to remaining manual, non-value tasks

Results
- Company-wide ERP integration takes operations away from silos
- Enhanced internal + external stakeholder relations
- Working capital enhanced through card rebates, early-pay discounts
- Best-in-class customer experience

Note: All company information (name, size, industry, etc.) is fictitious and used solely to illustrate real-world business challenges and solutions. RTP® is a registered trademark of The Clearing House Payments Company LLC.
The Digital Bridge: Type 3

The route from reactive to proactive

With optimized processes and digital tools in place, companies can become highly agile and better prepared for uncertainty and change.

Improvements in the business operations cycle – adopting electronic payments, automating processes and reallocating human intelligence to new analytical roles, for example – mean working capital itself is optimized. These companies have established a financial position that mitigates effects from external crises, changes in the market, and dramatic shifts in consumer preferences. The digitized working capital cycle, which performed for short- and mid-term gains, also has the potential to strengthen a company’s long-term strategy.

This type of digital bridge spans from reaction to proactivity. Working toward a long-term strategy requires first achieving short-term goals, which cannot occur unless humans and technology are highly collaborative. People and machines must work together in order for a company to transition into a proactive position.

Very few companies – of any size – have realized every benefit from combining machine-based innovation with human intuition. To begin with, there are endless possibilities. But, practically speaking, there is a considerable investment at stake, and many companies are adopting these solutions progressively in short waves.

Fig. 6 - Companies with lesser investment in digital have less time for working capital management. By automating legacy processes, more time may be allocated to verifying and applying payments, reducing exposure and focusing on growth.3

Less digital = less time

<table>
<thead>
<tr>
<th>Process</th>
<th>Time Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoicing</td>
<td>24.5%</td>
</tr>
<tr>
<td>Payments</td>
<td>23.2%</td>
</tr>
<tr>
<td>Collections</td>
<td>19.4%</td>
</tr>
<tr>
<td>Credit</td>
<td>17.9%</td>
</tr>
<tr>
<td>Cash application</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

This type of digital bridge spans from reaction to proactivity. Working toward a long-term strategy requires first achieving short-term goals, which cannot occur unless humans and technology are highly collaborative. People and machines must work together in order for a company to transition into a proactive position.

Very few companies – of any size – have realized every benefit from combining machine-based innovation with human intuition. To begin with, there are endless possibilities. But, practically speaking, there is a considerable investment at stake, and many companies are adopting these solutions progressively in short waves.
Having established a digital foundation in terms of materials and processes, companies can take automation and optimization even further. Between the processes and sub-processes and systems of business management, there are opportunities to leverage Application Programming Interfaces (APIs) and Robotic Process Automation (RPA) for fully-automated payables and receivables; ERP integration for seamless banking relationships and instant transactions produce new levels of accounting accuracy; real-time data visibility, reporting, and cash flow forecasting to the decimal in any currency – these are the traits of preparation for prosperity.

As these various components come together to form a true structure, companies are able to design their own digital bridge. Artificial intelligence (AI) can assist in Distributed Ledger Technology (DLT) for blockchain transactions and analysis. Access to deep lakes of data, using machines programmed to “learn” and identify trends, can be used to produce predictive analytics.

Business will be able to understand more about itself, how it performs in the present, and performed in the past, and perhaps even what the relationship between now and the past indicates for the future. Humans will leverage technology further as they continue to explore the horizons unseen beyond the digital bridge.
**Example case**

**Company**
Next-Gen CRE, Inc.

**Goals**
Enterprise-wide financial tech deployment
Remain ahead of industry trends to mitigate unforeseen market conditions
Always looking for pilot opportunities with financial vendors to benefit business processes

**Obstacles**
Stakeholder awareness
Disparity among vendor capabilities, willingness to explore new opportunities

**Digital bridge**
Continuous communication, surveying internal + external stakeholders for opportunities
Strategic deployment of APIs, artificial intelligence, RPA, Distributive Ledger Technology, faster payment rails

**Results**
Remains at the cutting-edge in terms of speed, enhanced fraud mitigation, stakeholder satisfaction
Reputation as industry leader, able to adopt and implement payment tech (Zelle®, push-to-card, RFP via RTP®) ahead of competition

*Note: All company information (name, size, industry, etc.) is fictitious and used solely to illustrate real-world business challenges and solutions.

RTP® is a registered trademark of The Clearing House Payments Company LLC. Zelle® and the Zelle® related marks are wholly owned by Early Warning Services, LLC and are used herein under license.*
The Digital Bridge: Type 4

Toward horizons, synthesis, and the ultimate destination

Where does the digital bridge lead? In business, new applications of virtual reality (VR) are just now being discovered. Some strive to synthesize our physical world with the digital, e.g., augmented reality (AR), mixed reality (MR) and extended reality (XR), but is the synthesis of worlds enabled by a bridge, or something else?

Boundaryless

For business professionals to perform their work, myriad modes of communication and processes are necessary. Between their voices and microphones, and their fingers and keyboard keys, there exist negative spaces between the physical action and the resulting electronic signal. Those conceptual gaps exist also between their speakers and eardrums, and monitors and eyes.

The further those means and modes of work are broken down and closely examined, the more these conceptual gaps are revealed. Just as working capital and business operations may be improved in terms of means, methods, processes and sub-processes, so too can optimization be realized in the spaces between.

Possible optimizations at this level stem from AR, MR and XR. “Solutions” toward greater speed, accuracy, efficiency, etc. will likely not attempt to bridge across these physical/virtual gaps, but rather eliminate bridges entirely through synthesis, where a distinction between physical and virtual ceases to exist.

So, the question is not “where does the digital bridge lead?”

The question is “where can the digital bridge take you?”
Ready to optimize business?
Let’s collaborate to build your Digital Bridge.

Connect with a digital business expert today.

Contributors

U.S. Bank – Global Treasury Management

Adam Kruis
Senior Vice President
Working Capital Consulting Manager
adam.kruis@usbank.com

John Melvin
Vice President
Working Capital Consultant
johnd.melvin@usbank.com

Endnotes

1. Deloitte, 2019 Global Treasury Report
2. Federal Reserve, Annual Commercial Check Data
4. Accenture, The CFO Reimagined
The information provided represents the opinion of U.S. Bank and U.S. Bancorp Investments and is not intended to be a forecast of future events or guarantee of future results. It is not intended to provide specific investment advice and should not be construed as an offering of securities or recommendation to invest. Not for use as a primary basis of investment decisions. Not to be construed to meet the needs of any particular investor. Not a representation or solicitation or an offer to sell/buy any security. Investors should consult with their investment professional for advice concerning their particular situation.

RTP® is a registered trademark of The Clearing House Payments Company LLC.

Zelle and the Zelle related marks are wholly owned by Early Warning Services, LLC and are used herein under license.

U.S. Bank, U.S. Bancorp Investments and their representatives do not provide tax or legal advice. Your tax and financial situation is unique. You should consult your tax and/or legal advisor for advice and information concerning your particular situation.