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#### **General Electric Company**

3135 Easton Turnpike Fairfield, CT 06828-0001 United States Phone: 203-373-3476 www.ge.com NYSE: GE

Chairman of the Board & Chief Executive Officer Mr. Jeffrey R. Immelt

Revenues \$152.4 Billion

Employees 300,000+

#### **ROI Study Highlights**

- ROI of 406% in 5 years
- IRR of 59% in 5 years

#### **Strategic Benefits**

- Enhanced Security
- Improved Flexibility
- Increased Automation
- Increased Visibility

#### Study Scope

- Corporate Treasury Payments activity only
- Does not include receipts
- Does not include Business Unit Cash & Financial Management Activity

# GE Corporate Treasury moves to global banking industry solution SWIFTNet — 406% ROI to be realized

## **Executive Summary**

GE is a diversified technology, media and financial services company dedicated to creating products that make life better. From aircraft engines and power generation to financial services, medical imaging, television programming and plastics, GE employs more than 300,000 people worldwide in over a dozen operating segments and it operates in more than 100 countries. In order to run its businesses GE makes millions of payments each year, many of which must be made within a specific time frame to meet contractual obligations with its customers and suppliers.

GE Corporate Treasury serves over 4,000 business units within the GE family of companies, spanning some 20,000+ bank accounts with nearly 200 banks around the globe. Every day, GE Corporate Treasury manages billions of dollars – money that must be collected from customers and paid to vendors around the globe, in over a dozen foreign currencies. For GE, availability, reliability, security and control are paramount to get the job done.

In 2004, GE Corporate Treasury, like most large multi-nationals, was wrestling with multiple banking relationships and connections to execute their cash management (payment and receipts) strategies. Scaling to handle the volume and demands of it's growing business, GE would have required an increase in headcount to process more than the current 50% level of treasury volume. IT (Information Technology) was spending a significant amount of resources to maintain multiple systems and connection points. Each connection was different—systems, processes, and data (quality, availability and timeliness) impacting GE's ability to quickly assemble a view of its current cash positions. IT was in an endless cycle of break-fix, work-a-rounds and updating and maintaining various security protocols.

To overcome these challenges, GE made the decision to use SWIFT, and its SWIFTNet Corporate-to-Bank (C2B) solution to provide GE with a simple, secure and reliable communications platform to transmit financial messages to and from GE's banks around the globe. SWIFT serves 7,800 financial institutions in more than 202 countries.

With SWIFTNet, GE is able to create one window from its internal Treasury Workstation, (GE WebCash) directly to its banks. The SWIFTNet solution allows GE to replace its existing fragmented approach, comprised of point-to-point, EDI VANS (Value Added Networks) and proprietary bank connections to one single, reliable, integrated non-repudiated platform. Since the implementation began, GE Treasury has realized enormous benefits from the combination of SWIFTNet and GE WebCash.

GE is experiencing increased reliability, enhanced security and controllership, which translates into an impressive financial Return On Investment (ROI) of 406% over five years.







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*'...With SWIFTNet, we never have to worry about availability"* 

— Dennis Sweeney, Assistant Treasurer

# **Study Findings**

- GE Corporate Treasury IT used to address connectivity issues on a weekly basis.
   With SWIFTNet, these issues have been eliminated
- Connection failures averaged over 50 per year, since the SWIFTNet implementation, connection failures have been eliminated
- By implementing SWIFTNet, the Treasury Operations team can increase the activity volume per resource by 31%

Now, with SWIFTNet, GE Corporate Treasury is positioned to scale and handle a greater portion of GE's overall cash balances, which translates into enormous potential for GE to optimize the management of its working capital.

For GE, SWIFTNet solved four key issues: *Reliability, Security, Controllership, and Scalability.* 

# Reliability

Before SWIFTNet, GE Corporate Treasury was spending a significant amount of money and resources addressing the complexity of interfacing with over 30 primary banks, 200+ in all, incorporating over 20,000 bank accounts. This enormous effort required 6+ full-time equivalents fully dedicated to mapping software for financial messaging, monitoring, and managing connection points to multiple systems and banks around the globe.

Before SWIFTNet, reliability was such an issue for GE that it required two FTEs solely focused on monitoring message traffic to minimize the impact of failed messages. The IT team was increasingly, focusing on the non-value add activities of EDI Mapping, break-fix and workarounds. These activities were impacting GE Corporate Treasury's performance and its ability to scale cost effectively.

As a growth organization, with true global operations and active Mergers & Acquisitions (M&A) strategy, GE was constantly faced with adding new banks and accounts to its network, resulting in new connections and additional mapping and security management. GE was further challenged by the inconsistent availability and reliability of the underlying bank connections. Also, since most banks do not provide real-time acknowledgement of receipt and/or confirmation of settlement messages, GE Corporate Treasury was further burdened by the need to have dedicated resources to monitor transactions to identify and address connection problems on a timely basis. Business Continuity (BC) and Disaster Recovery (DR) became very difficult to manage given the complex web of connections and the fragility of its bank network – having just one bank unavailable could cause enormous problems.

After 9/11, GE was able to see first-hand the effects of a major disaster, and how each of its banks responded. Efforts to restore communication and process payments took longer, and were much more involved than anticipated.

# **Security**

In today's on-line, digital world, security is top of mind for everyone — but especially so for one of the most respected brands in the world. The GE brand symbolizes strength, security and reliability mandating that it operate in the most secure environment available. Before SWIFTNet, GE faced multiple security packages, protocols and security keys — a never ending management headache for GE Corporate Treasury's operations. With multiple banks, GE was constantly in an update, upgrade, and test mode — no end in sight for the underlying costs.







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"...we have unlocked the constraints of our infrastructure by moving to SWIFTNet"

> Steve Kalkowski, Manager,
>  Cash Management Systems

# **Operational Challenges**

- Transaction monitoring was required to ensure message receipt and settlement given the entitlement of the previous infrastructure. SWIFTNet reliability eliminates the need to monitor connections
- The majority of transactions' status were updated at the end of the day, or, the next day. With SWIFTNet, Banks deliver transaction and intraday balance information
- "Real Time" information from the banks was limited. SWIFTNet opens the door for banks to deliver real-time two way transaction acknowledgement and/or confirmation

Furthermore, with multiple connections points, protocols and integration, GE's security was only as strong as the weakest link, something that was constantly on GE management's mind given all the recent security breaches in the news.

# Visibility

With its previous infrastructure, GE was burdened in mapping its transactions to the format dictated by each bank, severely hindering its ability to quickly scale and on-board additional financial institutions. Also, without real-time responses to outbound messaging, control of transactions debiting 20,000+ bank accounts was nearly impossible making cash management more art than science.

Rejected and failed payment transactions presented a very real risk to GE. A failed or rejected payment transaction incurs interest charges due to the payee as well as the additional costs to process the transaction. But more importantly in GE's case, failed transactions impacted customer and vendor relationships – real people counting on receipts and payments to run their enterprise could be severely damaged if a transaction was not completed and known in a timely fashion. In order to reduce rejected or failed transactions and the underlying risks, GE Corporate Treasury had to dedicate additional resources to monitor their bank connections and all transactions. This reactive response did nothing to reduce the number of rejected transactions or improve connection reliability, it only served to reduce the response time to address issues. With intraday confirmations, rejection notifications and account statements, GE could proactively manage its failed payments and intraday cash positions.

# **Scalability**

Prior to moving to SWIFTNet, the fragility of GE Corporate Treasury's solution severely limited its ability to scale and provide cash management services to the GE family of companies. Each bank required a unique messaging format for payment instructions (over 100 file formats and 40 plus EDI connections). Each of those formats and connections had to be integrated into the internal GE Treasury Workstation (GE WebCash). GE IT was perpetually in upgrade / maintenance mode – every time a bank made a change, GE would be faced with an IT project to ensure the payment messaging formats were still valid, secure and could be used with GE WebCash solution.

In 2004, decision makers at GE Corporate Treasury determined that SWIFTNet was the only solution available that would provide GE with a secure, and reliable communications network that could easily be scaled up in alignment with GE's organic and acquisition-based growth model.







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#### **Operational Benefits**

Thoughtware Worldwide's analysis shows GE Corporate Treasury will generate \$10.5 million in Net Benefits over five years from its investment in SWIFTNet. From the operational benefits alone, GE achieves a positive return on its investment in SWIFTNet. Operational Benefits

# "...Before SWIFTNet, it took 10% of a person's time to chase failed transactions"

 Charlotte Powell, Managing Director, Global Cash Operations

#### IT Mapping and Maintenance Savings — Based on the avoidance of two-and-a-half initial Full Time Equivalents (FTEs), growing by one-half FTE each subsequent year. By moving to SWIFTNet, GE no longer required dedicated resources for mapping and maintaining links to individual banks

**Traffic Monitor Elimination** — Eliminating two FTEs dedicated to monitoring traffic (F3 screen refresh) to alert GE to failed transmissions. These resources did not prevent failures, only accelerated GE's knowledge so that remedies could be attempted sooner

#### Traffic Monitor Elimination 22% IT M apping & Maint. Savings 48% Cash Mgr. Ops. Savings 20% Software Hardware Retirement Network Cost Retirement 5% Avoidance 1% 4%

**Cash Manager Operations Savings** — Productivity improvement for cash management operations team, based on one FTE plus the growth avoidance of one-half FTE each subsequent year

## **Operational Highlights**

- Reduced Connection
   Failures Average 50+
   per year to zero
- Reduced Connection
   Points From nearly 38 to
   one
- Increased Treasury
   Operations Activity from
   299 transactions per
   resource, per hour to over
   390 transactions
- Reduced On-boarding Process Time-line for New Banks — With SWIFTNet it takes one-third less time, with GE experiencing gradual improvement

**Network Cost Avoidance** — Elimination of lease lines, VANS and other telecom costs associated with connectivity to individual banks

# **Financial Benefits**

Beyond the operational benefits GE Corporate Treasury received from SWIFTNet, GE will achieve long term benefits from its improved visibility and availability of cash around the globe, resulting in improved cash management and reduced borrowing through optimization of its idle cash

#### Capital Growth Avoidance — Based on slowing the year-over-year growth of GE's Working Capital by 50%, we calculated the SWIFTNet enabling role at 10% of this benefit to reflect GE's better management of working capital over two years

Working Capital Optimization — Produced by reducing overdrafts and borrowings, while improving the returns on idle cash. This benefit was calculated using a ten basis point improvement in GE's working capital, attributing 50% of the calculated value to SWIFTNet's role in enabling the improvement, over three years

#### **Financial Benefits**









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Business & Technology Benefits

- Increased Visibility GE operates globally in over 100 countries and numerous currencies
- Improved On-boarding Process — GE can now add new bank accounts and relationships more quickly and easily
- **Consolidation** Single global financial messaging platform with standardized message formats and a single point of connection allows for greater STP efforts at GE
- Real-time Message
   Acknowledgement /
   Rejections SWIFTNet
   allows for repair,
   re-submission and more
   timely reconciliation
- Enhanced Liquidity Management — Real-time information provides better liquidity decisions and lower borrowing costs and/or increased investment returns
- Reduced Systems
   Integration Costs —
   Simplified IT systems
   management; implement first
   bank on SWIFTNet and then
   iterate
- Improved Security Single integrated solution eliminates security holes between products, banks and GE

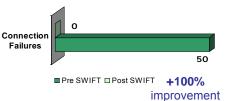
Beyond the financial returns, the Thoughtware Worldwide study uncovered numerous strategic, operational and technological benefits that are transforming the way GE performs Cash and Treasury Management, including:

Number Of

Connections

## **Improved Reliability**

By implementing SWIFTNet, GE Corporate Treasury has experienced a reduction in the number of connection failures. Pre-SWIFTNet, the average connection failure was 50 times per year, after SWIFTNet no connection failures have occurred

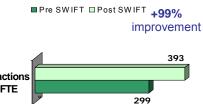




 Before implementing SWIFTNet, GE Corporate Treasury dealt with over 100 banks with 38 proprietary software connections. With SWIFTNet fully implemented the number of connections will drop to one



 By implementing SWIFTNet, the Treasury Transactions Operations team can increase the activity per FTE volume per resource by 31%



Pre SWIFT Post SWIFT

+31% improvement

38

#### **Labor Savings**

- Reduced connection points to increase uptime, reliability and flexibility which allows IT to refocus its staff to more value added activities
- Standardized message formats and eliminate EDI Mapping:
  - Outbound: PAYMUL, PAYORD, PAYEXT & 820
  - Inbound: FINSTA, BANSTA, CONTRL 821,824,997 and AUTACK
- Improved Security; single integrated solution eliminates security holes between products, protocols, banks and GE
- Generated labor savings of approximately \$ 2.5MM over a five year period by eliminating mundane functions performed by the *cash managers* and *IT mapping and maintenance* personnel; contributing over 20% of the overall benefits

# **IT Reduction – Simplification**

- Reduced the number of mappings and message formats to improve bank account on-boarding process
- Eliminated the patchwork of software upgrades and incompatibilities
- Increased quality, visibility, availability and analysis of information
- Reduced systems integration costs; one connection, one map, one security protocol — fewer "moving parts"

## **Improved Cash Management**

- Reduced compensation claims: real-time payment message acknowledgement and rejections allow for repair and re-submission to ensure cash movement
- Improved account reconciliation; more timely availability of account activity
- Enhanced liquidity management; reduce "cushions" or "balances" in accounts resulting in reduced borrowings and increased investment returns





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## **Future Opportunities**

Achieving Straight Through Processing (STP) is only possible when the global financial community speaks the same language — platforms, communications protocols, information definitions and usage so that information can flow freely.

The Thoughtware Worldwide study uncovered a number of areas where GE can expect to harvest additional value assuming the following challenges are overcome: *Standards, Information Integrity* and *Participation* 

#### "Standards Need to Become Standards"

"Full automation" and STP can not be achieved until "Standards" become standards. The SWIFTNet message formats enables rich data sets and information that facilitates Straight Through Processing (STP) from "wing to wing" (ERP systems »Treasury » Bank's funds transfer systems » "the street" « and back). However, until the standards are defined and enforced as standards, the full potential of SWIFTNet can not be realized by corporate customers or the banks.

#### **ERP Integration**

GE Corporate Treasury will explore extending SWIFTNet to support other financial messaging requirements, including, local cash management, asset management, collateral management, foreign exchange, SWAPS and derivatives. With SWIFTNet, GE hopes to increase the overall cash it manages, including the quality and transparency of its accounting ledgering, reporting and reconciliation and finally the optimization of the cash in its accounts.

#### **Rich Information**

Improved reconciliation and STP are only possible when information flows through the value chain in its original form. Only when the entire banking community embraces and implements a common standard like SWIFTNet, and makes it available to their corporate customers will STP become possible. Banks must truly agree on standards so that formats and data usage is consistent (elimination of data = reduced automation opportunities) across the globe. Furthermore, banks must maintain the richness of information (avoiding data truncation when the SWIFT data hits their backend systems) and timely acknowledgement of messages that is possible via the SWIFTNet solution to finally deliver on the promise of STP.

#### **Availability and Support**

In order for Corporates to improve their Treasury and Cash Management, Banks must participate in supporting industry standards like SWIFT to lessen the burden on Corporates. Today, Corporates bare all the burden of connecting to their banks in whatever format they require. This inherent complexity benefits no one. As commerce moves to a 24x7, global, multi-currency world, connectivity, support and availability is paramount to running a successful enterprise. Without it, everything comes to a grinding halt—creating operating costs for everyone in the value chain. By moving to standards, all participants can reallocate resources to value-add activities that truly generate value for all.



This study is one of a series of investigations into the costs and business returns of SWIFTNet investments. It is intended to serve business executives and managers who are evaluating investment options to improve the way they conduct Cash and Treasury Management.

This case study is based on original research and analysis conducted by Thoughtware Worldwide, LLC, an independent research and consulting firm. Thoughtware Worldwide's research included on-site interviews with members of GE Corporate Treasury and reviews of company financial and planning documents.

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For more information about this study, please visit: ThoughtwareWorldwide.com or contact your local SWIFT office.

