

# **E-TECHNOLOGY FOR BUSINESS TURNAROUND: SUSTAINABILITY, GROWTH AND INNOVATION**

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## **Abstract**

**Modern for-profit organizations require frequent changes in business direction and streamlining of business models, tools, workflows and processes. Manufacturers that, since 1998, did not undergo a full corporate revision or did not exploit Internet technologies ceased to exist. Business process reviews and technology-assisted corporate renewals must be completed at least once a decade, as integrative turnaround initiatives. The objective of this paper is to examine a role of eTechnologies in the recent turnaround of Stork Craft Manufacturing Inc. and to provide a roadmap to usage of eTechnologies for corporate sustainability, growth and competitive advantage. It is argued that any for-profit business seemingly trapped in some form of complacency, may perform a full comeback and re-gain its global market share by conducting a strategic evaluation of their organizational workflow and adopting the best business management practices. Through corporate eras of renaissance and innovation at Stork Craft, this paper presents strategic building blocks to corporate success and lists key technologies that enabled eBusiness growth from 7% to 50% of the corporate business, in four years time. Using data obtained from 500 customer testimonials, the effectiveness of the change induced by eTechnologies is additionally analyzed. Success factors that further organizations to the next developmental level as well as business investment traps that cause a corporate stagnation or decline are identified.**

In 1998, when Asian low cost labor decimated North American mass production of furniture, the entire furniture-making industry commenced its metamorphosis. Asian operations were able to offer the finished product in its sellable state to end consumers for less than a cost of the raw materials in the international markets. In the early 2000s, many North American companies could no longer rely on domestic manufacturing. Off-shoring became a method of survival, which unequivocally impacted on domestic supply and distribution chains. At the time, Stork Craft Manufacturing Inc. (Stork Craft)<sup>1</sup> has been in furniture-making business for approximately 60 years. Despite manufacturing off-shore, having loyal customer base and employing marketing strategies of scale and scope, the organization could no longer compete. Its systems were obsolete, business processes cumbersome and the customer service disconnected from the business initiatives.

The organization needed to undertake a full corporate re-do. There are four distinct stages to the organizational life cycle<sup>2</sup> identified by Daft: (1) entrepreneurial stage of the organization's birth and re-birth; (2) collectivity stage of development of organizational goals and strategies; (3) formalization stage of establishing formal control systems, policies and procedures, and (4) elaboration stage of skilled problem-solving and business units revitalizing. Organizational strategists contemplate the optimal duration of each stage trying to establish minimally accepted benchmarks of corporate performance that would signal the beginnings of the organizational decline. In this paper, it is argued that once the organization reaches its elaboration stage, in order to stay competitive, it must plan to

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<sup>1</sup> [www.storkcraft.com](http://www.storkcraft.com)

<sup>2</sup> Daft, L., Richard. Organizational Theory and Design. 8<sup>th</sup> Edition. Mason, Ohio: Thompson & South-Western, 2004. 324-325.

revitalize before a decline happens. It is suggested that organizations try to prevent rather than remedy severe losses of market share and attempt to avoid freezes of operational capabilities.

Through its 60 years of existence, Stork Craft changed its leadership, ownership and business direction several times. In line with Dunphy's radical transformational strategies<sup>3</sup>, new leadership teams severed the existing management and re-launched the organizational life cycles, securing up to a decade of unprecedented growth and prosperity, but then fell into a trap of organizational complacency. Leaderships failed to re-examine external influences, ignored competitive forces and passed on new technologies.

The most recent period of decline at Stork Craft, augmented by the industry changes from 1998, was quite significant. In mid 2000s, this reputable organization was unable to compete and once again changed its leadership. By understanding a cyclical nature of organizations and introducing formal corporate reviews as part of their technology-assisted makeover 2005-2009, Stork Craft was able to perform a healthy renewal.

In this paper it is argued that technology-assisted makeovers do not only turn businesses around and yield the cost-cutting strategies, but also offer a "true competitive advantage" and create a "global presence", as coined by Callon<sup>4</sup>.

### **Renaissance: Facelift, Innovation and Experimentation**

Daft's stages of organizational life cycle—from rebirth to active problem solving—are here collectively called renaissance. Renaissance marks an era when the company became remunerative (2005), embraced innovation (2008) and became ready for experimentation (2009). In this paper, the period of Stork Craft's technology-assisted makeover 2005-2009 is thoroughly examined. Objectives of this initiative were to develop the strategic solutions for IT, eCommerce, Customer Service and Supply Chain, while ensuring seamless operability, enabling growth and being profitable.

The first step in the technology-assisted makeover was to evaluate corporate workflow. Corporate business process review (CBPR) is partitioned into unit-specific business process reviews (BPR) to lower the functional complexity of corporate affairs. Within business units, functional workflows may still be heavily intertwined with cumbersome procedures and manual steps. Whenever the complexity of a functional unit exceeds easily memorable linear procedures, Pressman advises "decomposition"<sup>5</sup> and compartmentalization of issues into more manageable functional groupings.

In 2005, Stork Craft utilized two main distribution channels: (1) truckload distribution in Canada, which constituted over 90% of the company's business and (2) eCommerce drop-ship distribution in the US, which constituted circa 7% of the business. The company's main distribution centers were strategically positioned across North America but did neither communicate nor employed consistent operational procedures. Business was conducted from the company's headquarters either manually or relying on cumbersome data-processing. Organization utilized obsolete technical systems deployed in a client-server environment. Unmanageable daily operational hurdles revealed that advanced commerce solutions were needed. Missed service level agreements (SLA) and compliance charges absorbed profits. Supply chain workflow relied on collaboration of several business units that lacked an understanding of compound inter-dependencies and unit-specific accountability. Key business operations were outsourced which constrained the corporate influence on critical company's activities.

Out of 10 surveyed business partners that constituted 90% of the corporate revenues, 7 declared that the 2005 operations of Stork Craft "did not meet their Service Level Agreements" and 3 declared they "met 60% of the 3-week fulfillment window, on-time, but the merchandize delivered was not the right merchandize", (Exhibit 1).

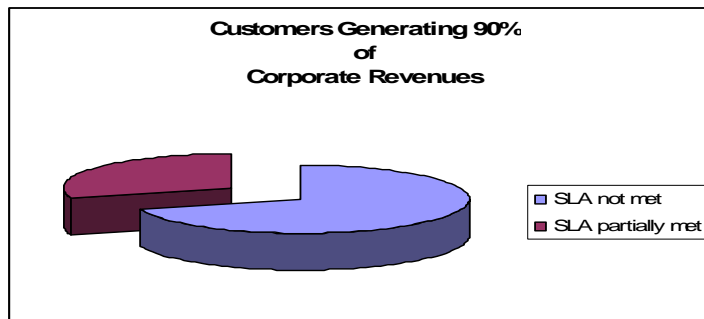
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<sup>3</sup> Dunphy, D. and Stace, D. "Transformational and Coercive Strategies for Planned Organizations" in Daft, L., Richard. "Organizational Theory and Design". 8<sup>th</sup> Edition. Mason, Ohio: Thompson & South-Western, 2004.

<sup>4</sup> Callon, J.D. Competitive Advantage Through Information Technology. New York: McGraw Hill, 1996. 150-157.

<sup>5</sup> Pressman, R. Software Engineering. A practitioner's approach. Fourth Edition, New York: McGraw Hill, 1997.

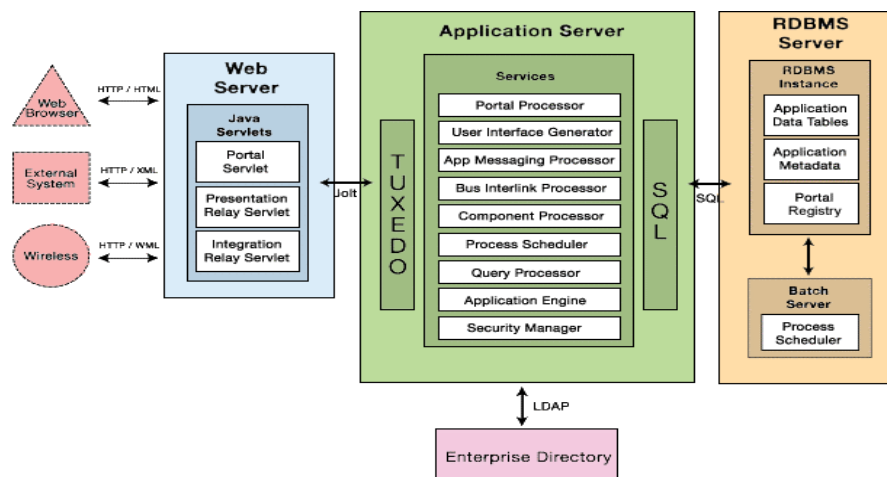
Exhibit 1



The selected turnaround approach was to: (1) build a business infrastructure for a regulated environment; (2) streamline old and patent new business solutions using eTechnologies; (3) re-train the corporate workforce to operate with eTechnologies, and (4) perform frequent customer evaluation surveys to exceed SLAs and establish a ground for innovation.

A new enterprise-level business infrastructure was designed<sup>6</sup> and implemented for secure, robust and scalable growth-promoting environment. Any server-centric Internet Architecture Platform (n-tier), deploying the applications to end-users through a Web browser would provide an adequately robust business environment. It is recommended that tiers include web server(s), application server(s) and database server(s) accessed by users anytime, from anywhere over the Internet. A viable n-tier architecture is shown in the Exhibit 2. Solution may be developed as proprietary architectures or out-of-the-box solutions (PeopleSoft, Microsoft Dynamics, SAP, others).

Exhibit 2



<http://www.peoplesoft.com/corp/en/products/technology/pia/code.asp>

Once the infrastructure was implemented, a 360 business process review was conducted to replace remaining manual and semi-manual data-processing with fully automated eSolutions. Business processes were streamlined and aligned with technical systems for zero compliance charges.

<sup>6</sup> Infrastructure Design by Jeremic 2005 (Dell's Top 10 Businesses Award '05)

While technical capabilities and procedural correctness are mandatory to succeed in today's marketplace, they are inadequate to separate an organization from its competitors. To gain a competitive advantage in eCommerce, the organization needed to re-invent the way of doing business. By employing a new revolutionary drop-ship business model for eCommerce<sup>7</sup>, Stork Craft was able to (1) reduce eBusiness fulfillment time from 3-4 weeks to 2-3 days; (2) increase shipping accuracy to 99% or better, and (3) decrease operating costs by 40%. By yearend 2007, eCommerce channel grew from circa 7% to 50% of the company's business. eCommerce business enlarged to include the largest US retailers such as Wal-Mart, Target, Amazon, BabysRUs, United Consumers Club, Sears, K-Mart, CSN Stores, and others.

Usage satisfaction with newly developed operational capabilities of 500 surveyed customers augmented dramatically within the first two years of the technology-assisted makeover (Exhibit 3).

Exhibit 3

External Stakeholders Surveyed **94%**  
(470 out of 500 Customers)

Solutions	Before the New Business Infrastructure, Old Drop Ship Model	After the New Business Infrastructure, New Drop-Ship Model
On-Time Shipping	60%	99% or better
Shipping Accuracy	45-75%	99% or better
Shipping Expectations (in days)	15-28	2-3

Based on the Stork Craft Customer Surveys 2005-2007

External Stakeholders Surveyed **0.06%**  
(30 out of 500 Customers)

Solutions	Before the New Business Infrastructure, Old Drop Ship Model	After the New Business Infrastructure, New Drop-Ship Model
On-Time Shipping	60%	90%
Shipping Accuracy	45-75%	90%
Shipping Expectations (in days)	15-28	2-3

In their detailed responses, 490 out of 500 customers (0.98%) prioritized speed, quality, flexibility and dependability as their top performance objectives in meeting service level agreements (SLAs), which are coincidentally among four key performance objectives<sup>8</sup> of Slack's operational know-how.

In terms of eBusiness operations, the organization reached its excellence but its eBusiness support (B2B customer service) and parts service front lines (B2C customer service) were still disconnected from the business. As Turban reports, in order to maintain its competitive advantage the organization needed to streamline all business processes<sup>9</sup>.

eBusiness support group provided B2B client services to drop-ship operations and struggled with the volume of delivery related inquiries. For customers not having electronic data interchange (EDI) capabilities, a proprietary multi-brand B2B sales reporting portal was developed with schedule-based delivery reporting and sales tracking. Tracking reports were sent automatically to the customers' e-mails, within 24 hours upon shipping. Per customer requests, internal groups were also able to quickly retrieve customer records, preview the sales history and determine future needs.

Out of 10 surveyed B2B customers, 7 indicated that the new reporting services "exceeded their expectations" and 3 indicated they "met their expectations". Moreover, 95% of the customers declared that the report content is more significant to them than a method of delivery. While method of delivery allowed for maximum of flexibility (pre-scheduled reports automatically delivered to customers' e-mails), the customers still singled out a user-friendly content [with easy-to-read delivery information]. Zeithaml and Bitner argue that "content"<sup>10</sup> is one form of customer

<sup>7</sup> eBusiness Model Developed by Jeremic 2006

<sup>8</sup> Slack, N., Chambers, S., Johnston, R. Operations Management. Third Edition, Essex, England: Pearson Education Limited, 2001.

<sup>9</sup> Turban, E., McLean, E., Wetherbe J., Bolloju, N., Davison R. Information Technology for Management (3<sup>rd</sup> Edition). Hoboken, New Jersey: John Wiley & Sons Inc., 2002.

<sup>10</sup> Zeithaml, V. A., Bitner, M. J. What is Customer Satisfaction? *Services Marketing* (3<sup>rd</sup> Ed.), New York: McGraw-Hill, 2003. pp. 86-99

satisfaction and support Slack's operational excellence parameters as top satisfiers. In support to their views, without having dependable service to deliver reports to customer's e-mails at their convenience, content itself would be less meaningful—it would be delivered obsolete or would not reach the customer at all.

Parts services processed the parts requests and customer complaints semi-manually. Parts orders were dispatched on a four week schedule, often more than once. Ptak and Schragenheim argue that when an organization understands the needs of its customers and aligns its business process to meet those needs, it enjoys the market advantage over the competition<sup>11</sup>. Authors further reveal that to maximize customer experience the performance measures used across the organization need to be customer focused. To address the parts service inefficiencies, the proprietary Customer Relationship Management (CRM) solution was developed to tie in parts sales, warehouse operations, packaging operations and shipping operations. The solution was more than just "a software application"<sup>12</sup>. It encompassed re-engineering the business procedures and re-training the personnel to use a new web-based proprietary system.

Another customer survey was conducted to evaluate customer satisfaction with the new CRM solution. Out of 500 surveyed customers, 450 declared that the improved services "meet their expectations" and 50 declared that "there is room for improvements" [as the item they expected to receive was backordered].

Personnel training, motivating and empowering to act as change agents was part of the cultural change. Employees were not only required to re-learn their jobs and do certain tasks in a pre-arranged way, but also to become accountable for their performance and act as part of the corporate family. Any corporate-wide change such as a technology-assisted makeover must include adequate user involvement, education and communication, lack of which is recognized as Langenwalter's top 'reasons for the failure'<sup>13</sup>.

An important part of the renaissance was also a constant revision of business directions and environmental forces. By 2007, the organization fully developed its eCommerce business and the proprietary logistical model for eCommerce<sup>14</sup> that resulted in over 1M cost reduction. Capital generated from the new stream promoted investments, mergers and acquisitions. The organization adopted new business directions to (1) acquire at least 3 new brands over 18 months time; (2) own warehousing operations and save on third party warehousing costs, and (3) gain ownership in offshore manufacturing. eTechnologies were utilized to ensure a seamless integration of acquired brands into company's operations. Centralized n-tier architecture promoted a multi-brand supply chain management with reduced IT operational and maintenance costs.

The last stage of Daft's organizational lifecycle is examined through Stork Craft's eras of innovation (2008) and experimentation (2009). A multi-part balance within an organization ensures that a business remain effective: technical core, technical support, administrative support, middle management and top management.<sup>15</sup> With superior n-tier business architecture, new eBusiness solutions, re-energized leadership team and revitalized customer service, the organization reached a solid balance.

An opportunity to innovate was to build an eCommerce business in Canadian markets. Over the past 3 years, eCommerce business in the US was developed from circa 7% to 50% of the business. The newly conceptualized objective was to launch an eCommerce business in Canada and earn 2% of the corporate business in its first year of operation. In 2008, the company partnered with one of the largest Canadian retailers, Wal-Mart, to launch co-branded eCommerce website and establish the first drop-ship operations in Canada for both companies<sup>16</sup>. By spring 2009, the program objectives were fully met. Wal-Mart Canada eShoppers were able to purchase the first items on-

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<sup>11</sup> Ptak, C.A., Schragenheim, E. ERP Tools, Techniques and Applications for Integrating the Supply Chain. Boca Raton, Florida: CRC Press LLC, 2000. 86-87.

<sup>12</sup> Ragins, E.J., Greco, A.J. Customer Relationship Management and e-Business: More than a Software Solution. Review of Business. Winter 2003: 25-30.

<sup>13</sup> Langenwalter, G.A. Enterprise Resources Planning and Beyond. Integrating your entire Organization. Boca Raton, Florida: CRC Press LLC, 2000.

<sup>14</sup> eBusiness Logistical Model developed by Jeremic 2007

<sup>15</sup> Mintzberg, Henry. Organizational Design: Fashion or Fit? Harvard Business Review 59 (January-February 1981): 103-116.

<sup>16</sup> Jeremic-lead initiative (CIO 100 Honoree Award '09)

line and have them drop-shipped to their home. Both companies met their financial projections. Moreover, this innovation at Stork Craft revitalized Canadian distribution outlets.

Experimentation occurs after re-vitalization. Being the final Daft's stage in the organizational lifecycle, revitalization should lead back to re-birth; hence experimentation may be seen as a form of a trap. It emerges from inapt innovation attempts and—if poorly controlled—may lead the organization to a stagnation or decline. It is not recommended to attempt large scale innovation projects, at the same time, within a single organization.

### Role of Customer Surveys in Corporate Makeovers

Throughout the paper, customer testimonials were used to affirm that increase in customer satisfaction is directly proportional to the level of technical prowess and innovation. Organizations going through an era of rebirth and performing a technology-assisted makeover must engage their customers into evaluation of effectiveness of a change. According to Frenzel<sup>17</sup>, customer feedback should include both formal and informal evaluation of customer satisfaction with services provided in relation to service level agreements. According to the author, informal evaluations that are usually performed anonymously, bring invaluable information about the true customer experience.

Without constant customer validation of organizational choices, organizations may be deploying the inward-out solutions that meet their budgetary and time constraints, but still fail to meet their customer expectations.

### A New Cycle Begins at Least Once a Decade

To avoid traps of complacency and review what other factors, not just eTechnologies, influence their business, organizations need to regularly review their internal corporate positions relative to external forces. Any sufficiently large corporations that went through several organizational lifecycles would need to re-examine the following business factors: (1) transfer pricing; (2) opacity factors; (3) structure of debt; (4) active holding companies and (5) political risks.

Business Re-Evaluation for Risk Avoidance		
Rules	Risks / Opportunities	Desired Direction
<b>Transfer Pricing</b>	Subsidiaries charge each other transfer pricing for the goods and services traded between them. This price should accurately reflect actual costs and incremental cash flows.	Minimize foreign exchange fees and transactional costs among international subsidiaries by paying the net amounts monthly, instead of paying on each of the gross payables.
<b>Opacity Index</b> <a href="http://www.opacity-index.com">www.opacity-index.com</a>	A composite measure of how macroeconomic, legal, corporate and government policies along with corruption affect the cost of capital in a foreign country.	Examine the O-factor levels, presence of tax on foreign investments and risk premiums. The tax equivalent will uncover the effect of opacity as a hidden tax. Through direct opacity rating of the country, risks premiums reveal the cost of borrowing.
<b>Structure of Debt</b>	Cash flow risk reduction can be lowered by international diversification. Hedging strategies can be used to change the structure of long-term assets and liabilities.	Can you utilize interest rate swaps to obtain a better stream of interest payments at fixed rates in exchange for floating rates? By changing a currency denomination of your assets and liabilities, you may re-structure your debt, save costs and gain access to new markets, maturities and currencies.
<b>Holding Companies</b>	Leverage to control a large amount of assets with a relatively small investment, unlike the investments for mergers and acquisitions.	A pyramidal structure of your holding company, that is having one holding company control other ones, may magnify your earnings but losses too.
<b>Political Risks*</b>	Host country may take actions hurtful to foreign investors or can freeze the company's assets due to shortage of hard currency.	Investing in developing countries have good potential ROI, but high political risks. Investing in any country with fully developed financial markets bare less risks, but inherently lower ROI for the industry.

\*Adopted from Fred R. David, 'Strategic Management', Political, Governmental and Legal Forces, 85-90.

Each of this factors may have an equal share of opportunities or risks if neglected.

### Summary and Conclusions

<sup>17</sup> Frenzel, C.W. Management of Information Technology. Second Edition. Boyd and Fraser Publishing Company: A Division of International Thomson Publishing Inc, 1996.

The technology-assisted makeover of Stork Craft companies may serve as a roadmap to improvements to any company in a similar organizational crisis. From this turnaround experience, it becomes apparent that a business know-how, streamlined processes and eTechnologies work together to create a competitive advantage for modern manufacturers. Contemporary business solutions deliver most value if customer-focused and web-based. Cutting-edge eTechnologies that replace old Windows-based client/server applications provide simple access, easy maintenance and low total cost of ownership. To maintain their competitive advantage organizations are encouraged to foster an environment of continuous improvements with cyclical all-inclusive corporate revisions; they are reminded to promote teamwork at all levels of organization. At their revisions, to benefit from opportunities and minimize risks, mature corporations need to minimize experimentation and additionally re-examine transfer pricing, opacity factors, structure of debt and political risks, surrounding their investment beds. Manufacturers and distributors must consider their suppliers and customers as partners in the makeover process and solicit their feedback as often as possible. Patenting new business models while being obsessed with superior customer service, means growing the organization's competitive advantage. At the same time, it means increasing the chances of uninterrupted customers' loyalty.

### References

1. Callon, J.D. Competitive Advantage Through Information Technology. New York: McGraw Hill, 1996.
2. Daft, L., Richard. "Organizational Theory and Design". Eighth Edition. Mason, Ohio: Thompson & South-Western, 2004.
3. Dunphy, D. and Stace, D. "Transformational and Coercive Strategies for Planned Organizations" in Daft, L., Richard. Organizational Theory and Design. Eighth Edition. Mason, Ohio: Thompson & South-Western, 2004.
4. David, F. A. Strategic Management. Eighth Edition. Upper Saddle River, New Jersey: Prentice-Hall, 2001.
5. Frenzel, C.W. Management of Information Technology. Second Edition. Boyd and Fraser Publishing Company: A Division of International Thomson Publishing Inc, 1996.
6. Langenwalter, G.A. Enterprise Resources Planning and Beyond. Integrating your entire Organization. Boca Raton, Florida: CRC Press LLC, 2000.
7. Mintzberg, Henry. Organizational Design: Fashion or Fit? Harvard Business Review 59 (January-February 1981): 103-116.
8. Ptak, C.A, Schragenheim, E. ERP. Tools, Techniques, and Applications for Integrating the Supply Chain. Boca Raton, Florida: CRC Press LLC, 2000.
9. Pressman, R. Software Engineering. A practitioner's approach. Fourth Edition, New York: McGraw Hill, 1997.
10. Ragins, E.J., Greco, A.J. "Customer Relationship Management and E-Business: More than a Software Solution". Review of Business. Winter 2003: 25-30.
11. Slack, N., Chambers, S., Johnston, R. Operations Management. Third Edition, Essex, England: Pearson Education Limited, 2001.
12. Stork Craft Informal Customer Surveys 2005-2007.
13. Turban, E., McLean, E., Wetherbe J., Bolloju, N., Davison R. Information Technology for Management (3rd Ed.). Hoboken, New Jersey: John Wiley & Sons Inc., 2002.
14. Zeithaml, V. A., Bitner, M. J. What is Customer Satisfaction? *Services Marketing* (3<sup>rd</sup> Ed.), New York: McGraw-Hill, 2003. pp. 86-99.
15. [www.opacity-index.com](http://www.opacity-index.com)

16. [www.peoplesoft.com](http://www.peoplesoft.com)

17. [www.storkcraft.com](http://www.storkcraft.com)