

From B2B Survivor to SAP's Swallow: SAP Ariba's Success

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ABSTRACT

Ariba Inc. and Commerce One Inc. (C1), two bellwethers with e-entrepreneurship in the e-commerce field, provided business-to-business (B2B) spend management and supply chain services. After having been wiped out by the devaluation of the stock market that followed the dot-com era, C1 is extinct today. Having faced the same market condition and serious competition, innovative Ariba had a different path and was acquired by SAP in 2012. Nowadays, SAP Ariba (formerly known as Ariba) is the largest digital B2B network on the planet. Why did Ariba survive whereas C1 collapsed? The authors explore the external (hidden costs, high-priced software, hurtful investigation, harmful publicity) and internal (adaptations to environment, acquire to advance, add consulting services, aim customer support) factors that would draw lessons for other companies to learn.

KEYWORDS

Acquisition, Blockchain, Business-to-Business (B2B), E-Commerce, Entrepreneurship, Innovation, Supplier Network, Supply Chain Management

INTRODUCTION

Ariba was born during the dot-com bubble, at that time a start-up with enormous potential along with countless other e-commerce companies. B2B buyers had diversified procurement systems that were provided by Ariba, Commerce One Inc. (C1), and SAP. These procurement systems used a different B2B protocol to interact with the seller's system. Ariba's software would help companies save money on their procurements, and control expenses in numerous areas aside from payroll. Ariba promised to help companies improve their bottom line, and many of Ariba's clients today hold positions on the coveted Fortune 100 list (Kakarlapudi & Mahmoud, 2021).

In September 1996, Ariba was founded in Sunnyvale CA by seven men, including one of the most influential beings Steven Krach. Krach's early career accomplishments included being one of the youngest vice presidents of General Motors. The challenges of procurement that he encountered there became the impetus for the development of Ariba. Through the use of the Internet and B2B e-commerce, Krach and his associates brainstormed and produced the idea of automating the

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purchasing of commonly used supplies and services. While this may seem to be a simple concept, it turned out to be an insight and area that held huge demand and potential (Ariba, 2022).

Ariba's objective was to become a leader in this niche industry with the means and resources to provide procurement software and network consulting services, which would allow corporations to manage and automate their spending more effectively and efficiently. The management of these would include all non-payroll expenses associated with running a business. Since access to data was one critical component, Ariba offered their clients real-time access over the Internet. These applications were used in conjunction with the *Ariba Supplier Network* to purchase goods and services (Schneider & Bruton, 2008).

After three months of intensive research, which included meeting with 60 Fortune 500 companies, Ariba had a prototype developed and ready for their initial marketing campaign. Having signed software licensing deals with Cisco Systems, Advanced Micro Devices, and Octel Communications, before software completion, the pieces were put into place for the launch of their product. While Krach and Ariba were innovative in their concepts and efforts, they were not the only pioneers in the area, C1, Oracle, I2, and PeopleSoft, Inc. were competitors with similar, but not necessarily identical, offerings (Shahin et al., 2022).

In June 1999, Ariba went public at a modest \$23 per share and traded as high as \$259 per share at times later that year (Haksoz & Seshadri, 2007). Their e-payment and service agreements were made with American Express and Bank of America. All of these were considered large and bold undertakings for a young startup company at that time. However, other Internet start-up companies were beginning to offer similar software and services. Over time, smaller companies began offering websites that provided a place to manage procurement, some with lower costs and fees. Facing challenges in the market, Ariba was to be faced difficult challenges and had to make major decisions to stay in business.

Ariba finally saw a profit of \$10 million in December 2000, which also included the completion of a few acquisitions. Soon after, in 2001, the economy began to weaken in a downward spiral and Ariba's stock plummeted 95% in just 9 months, making a business overhaul necessary. Ariba decided to take drastic cost-cutting measures, cutting about a third of their staff. Over time, Ariba persisted and would once again regain its position as a leader in the B2B procurement industry due to its specialized and niche product line (Lacoste et al., 2022; Wang et al., 2009). Before SAP's acquisition, Ariba was a software company that provides cloud-based procurement, spend management, and supply chain services that enable suppliers and buyers to connect and do business globally Ariba was purchased by the German software firm SAP for \$4.3 billion in 2012. With Ariba, SAP e-procurement platforms are an integral part of new purchasing organizations (Jones, 2012).

SAP Ariba provides some features that are unique and innovative compared to its competitors. In addition to these features. Ariba is also open to all kinds of systems along with providing the companies with an innovative way to connect with the large network of buyers and suppliers. SAP's Ariba is a strategic product that helps in the integration of Procurement & Vendor/Supplier collaboration. Ariba brings together the Supplier/Vendor management solution and provides both parties with a wide range of solutions. SAP Ariba not only has the relevance to be part of the ERP process but also plays a vital role to produce deliverables. Currently, the Ariba Network has more than 3.6 million users located in nearly two hundred countries worldwide (Wang et al., 2019).

The remainder of this paper is organized as follows: Section 2 provides theoretical background and literature review. In Section 3, we introduce the research methodology. Sections 4 and 5 detail external and internal factors, respectively. Section 6 reveals lessons learned and future research directions. Finally, the paper concludes with a summary of the paper's main points in Section 7 before references.

THEORETICAL BACKGROUND AND LITERATURE REVIEW

Leimstoll et al. (2018) indicate that digitalization and digital transformation are not fundamentally new phenomena. The era of e-business began with the result of the snowballed business use of the Internet in the early 1990s. The focus was on the digitalization of cross-company processes, which also brought new business models and interlinked value-added structures. Sampaio and Ramzan (2018) notice that as the globalization and internationalization process of companies are becoming increasingly dominant, e-procurement systems are now a trend within large companies especially. With the need for ensuring cost-efficient contracts with suppliers, as well as favorable conditions for both the company procuring and for end customers, strategic procurement becomes a significant element.

Like Devaraj et al. (2018), vendor management is a discipline that enables organizations to control costs, drive service excellence and mitigate risks to gain increased value from their vendors throughout the deal life cycle. One of the web/cloud-based solutions that are offered in SAP Ariba enables an organization to integrate the supplier and company from the point of sourcing to settling. As the most comprehensive suite solution for buyer and Supplier Digital Collaboration, SAP Ariba can integrate and find an optimal solution that will benefit both buyers and suppliers. The SAP Ariba's Supplier management solution offers capabilities such as Supplier Information and Performance management, Supplier Lifecycle and Performance, and Supplier Risk Management. All of these solutions offer a comprehensive digital collaboration between the supplier and company that leads to better connectivity along with a stronger relationship. The authors demonstrate the potential savings in various parts of a process such as Sourcing/Contracting, Procuring, Invoice & Paying, and Order processing.

Corresponding to Yarramalli et al. (2020), a business needs to optimize its internal processes, starting from procurement. Traditional procurement is a disorganized process when done manually. Digitalizing the procurement process can exponentially optimize the process by increasing spending visibility. However, there are hundreds of procurement tools available in the market. The authors explain why SAP Ariba is the best choice for the problem of procurement. SAP Ariba is a cloud-based solution. Cloud solutions like Ariba provide a minimal risk of data loss, redundancy, and older data. The authors focus on the working of SAP Ariba's operational and strategic procurement tools, and its distinguishing factors, as well as its advantages. In line with Buchman (2021), as a backbone of the consumer Internet ecosystem for decades, platforms can hook up buyers and sellers at scale. In recent years, they have increasingly spread through the business environment, from SAP Ariba to Alibaba handling procurement. The prospect of increased efficiency and access for buyers and improved sales and support for providers makes platforms tempting for the logistics space, particularly given inconsistent capacity.

Zutshi and Grilo (2019) have developed an in-depth analysis of the emerging role of Digital Platforms and their impact on Society and the Economy, which cause massive disruption across multiple industries and services. The key actors and characteristics of a Digital Platform Ecosystem and its inherent dynamics have been displayed. A Digital Platform Architecture enables us to conceptually classify the various layers based on the functionality and domain knowledge involved. To fill the gap of underexplored the sharing economy (SE) on the broader supply chain, Atkins and Gianiodis (2021) examine the effects of the SE on supply chain management (SCM) through a qualitative, internet-based exploratory study, employing an inductive categorization process. By integrating theory from strategic management and organizational theory, their study proposes a framework of how incumbent firms can identify opportunities while counterbalancing possible threats of disturbance.

Henn and Lohwasser (2020) propose the very first idea to link the theoretical and practical view of B2B buying processes. They investigate the areas of application, motives, and risks of B2B buyers using community cloud computing for supplier integration. The authors find that B2B buyers use cloud-based procurement systems to enhance supplier integration with three main outcomes. These investments in relationships reduce transaction costs due to less uncertainty and a high frequency of

transactions. Moreover, the integration of suppliers provides both partners access to resources that can become an opportunity for differentiation and protection against imitation. Chin-Hernandez et al. (2021) recommend a program to be used in a cloud base ERP, which uses the principles of lean procurement including all the processes of purchase (ordering, approvals, receiving, and invoicing) under only one application.

According to Kwilinski et al. (2019), the B2B model is one of the most promising areas of e-business development because Internet platforms significantly reduce bare-bones operations at all stages and make business operations more operational and apparent. In cases of B2B interaction, the representative of the customer's side can interactively keep an eye on the order execution process, collaborating with the vendor's databases. The main difference between e-business and other types of business is the use of new forms of interaction between participants in business operations. The constructed e-business company entrepreneurship model, including the main components of the internal environment, reflects the influence of external factors. The components of the internal environment of an e-business company are analyzed in four blocks: product, consumer interface, infrastructure management, and financial aspects.

Penttinen et al. (2021) explore the impact of external pressure in the act of onboarding trading partners to B2B connectivity platforms. Having enunciated different forms of external pressure (enticement and enforcement) and drawn on a survey of 121 organizations, the authors investigate the effect of three enticement factors and three enforcement factors on firms' decision to adopt a B2B connectivity platform. They found that in general, enforcement measures ("sticks") were more effective than enticement ("carrots"). However, an organization receiving the transaction document delivered through the B2B connectivity platform utilizes most of the benefits. Longitudinal and experimental approaches that allow a full causal examination of pressuring's effects are needed in the future.

Scherm (2021) provides the leading agile framework "Scrum" with specific guidelines, real-world examples, and useful tools to create the necessary change step by step and built to last. Borrowed from rugby for effective collaborations among team members, Scrum is a type of agile technology that consists of meetings, roles, and tools to help teams working on complex projects collaborate and better structure and manage their workload. The author shows how the elements of the leading agile framework "Scrum" should be applied to install agility in the salesforce, improve sales performance, and resolve typical performance issues in sales organizations.

The literature on the blockchain is an emerging and continuously expanding field of scientific knowledge. Faccia and Petratos (2021) claim that blockchain can smooth the progress of integration at several levels and better serve various purposes such as auditing compliance. Significant benefits for efficiency, productivity, security, reliability, safety, flexibility, transparency, accountability, traceability, and quality can be generated via Integrating distributed ledger technology (DLT), decentralized finance (DeFI), and financial technology (FinTech) applications. Business-oriented solutions always require improved security and privacy, immutability, trust, and speed. These features are the main strength of DLT systems. E-procurement can facilitate integrating ERP and AIS systems through automation (also using smart contracts) and limiting paper-based processes.

Zutshi et al. (2021) present a set of key Blockchain Value Propositions and discuss how they can add to the evolution of Digital Platforms and the Collaborative Economy. In addition to promoting innovation at the technological level, a metamorphosis of the existing social, economic, and governance models can be strengthened. Blockchain has the potential to radically transform industries and services through new models of data storage, transparency, tracking, and payment systems among other advantages.

In the following sections, we examine how Ariba, a small startup company formed during the Internet boom of the nineties, was able to overcome hardships, survive the market and industry downturns, and continue to thrive and survive in such a competitive industry. We will also review major events, innovations, and decisions that helped the company to grow and succeed rather than fail like C1 and other competitors.

RESEARCH METHODOLOGY

The case study method is the most widely used in academia for researchers interested in qualitative research (Baskarada, 2014). A case study *is a* research methodology that is used to investigate a phenomenon and generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. The qualitative case study methodology enables researchers to conduct an in-depth exploration of intricate phenomena within some specific context. Moreover, Järvensivu and Törnroos (2010) also suggest that case studies are suitable for exploring B2B relationships and networks. Also, Paparini et al. (2020) argue that case study research—currently denigrated as poor evidence—is an underutilized resource for not only providing evidence about context and transferability but also for helping strengthen causal inferences when pathways between intervention and effects are likely to be non-linear.

To explore the causes of underlying principles, case studies are descriptive and exploratory analyses of persons, groups, events, decisions, periods, policies, institutions, or other systems that are studied holistically by one or more methods. A case study is an in-depth study of a particular situation rather than a sweeping statistical survey. It is a method used to narrow down a very broad field of research into one easily researchable topic. Whilst it will not answer a question completely, it will give some indications and allow further elaboration and hypothesis creation on a subject (Rashid et al., 2019).

The starting point of that case study was not a conceptual framework, propositions, or hypothesis. Positivist research is commonly linked to quantitative research methods, whereas interpretive research is commonly linked to qualitative research methods. A case study makes it possible to identify essential factors, processes, and relationships. In case studies, the research questions are often of “how to do?” character instead of “how should?” (Punch, 2005). It is concerned with describing real-life phenomena rather than developing normative statements. These specific traits of the case study allow the researcher to focus on an individual’s behaviors, attributes, actions, and interactions (Brewer & Hunter, 1989).

Case studies are a preferred strategy when the researcher has little control over events and when the focus is on a contemporary phenomenon within some real-life context (Yin, 2018). The quality of a case study does not only depend on the empirical material collection and analysis but also on its reporting (Denzin & Lincoln, 1998). A sound report structure, along with “story-like” writing is crucial to case study reporting.

Also, we used Content Analysis, a class of research methods. As Duriau et al. (2007) indicated that “It is promising for rigorous exploration of many important but difficult-to-study issues of interest to organizational researchers in areas as diverse as business policy and strategy, managerial and organizational cognition, organizational behavior, human resources, social-issues management, technology and innovation management, international management, and organizational theory.”

Our research questions are: Why do Ariba and C1, two leading e-commerce forerunners, have different destinies? Why did Ariba survive whereas C1 collapsed? Consistent with the research objectives and questions under examination, the research hypothesizes that: Innovation and e-entrepreneurship separated the winners from the losers in the new era of B2B e-commerce.

Proposition 1: Ariba’s innovation and e-entrepreneurship paved its path to success.

Proposition 2: However, failing to adapt to an ever-evolving environment and economic uncertainty leads to C1’s dead-end.

Together, these hypothetical propositions (which together form the hypothesis) consist of the following main variables:

- Independent variables: Innovation and e-entrepreneurship; the new era of B2B e-commerce; four external factors; and four internal factors.
- Dependent variable: Ariba's success vs. C1's bankruptcy.

EXTERNAL FACTORS

High-Priced Software

Without a doubt, e-procurement is rising among the nation's largest 500 companies. Well-financed corporations are willing to invest in Internet software and technology that can reduce the inefficiency associated with the purchasing and buying processes. The use of this software can help companies to track spending and make sure they purchase products by contracts they have negotiated with suppliers. Businesses that spend billions each year on supplies can often save tens of millions in costs by implementing such technology. However, it's only the large firms that can devote the time and money to installing such systems, which frequently required that suppliers link to such systems as well (Janita & Miranda, 2013). Since the software is expensive and can be complicated to install on the customer's system, for small- and medium-sized businesses facing an uncertain economy, investments of this magnitude can be difficult to justify.

Ariba took advantage of this situation, and in 2005 announced a strategy to sell its software and services to smaller companies on an on-demand basis, so they can buy supplies more efficiently online, as well. Ariba reshaped its software system so its customers can plug into Ariba's software through the Internet instead of installing it on their systems. One major benefit of this approach, Mr. Calderoni said, is that Ariba can sell software to procurement managers and others in charge of spending, without involving the company's information technology staff.

Hidden Costs

In the beginning, the B2B marketplace offered organizations the possibility of obtaining savings by purchasing repetitive and low-value goods online. This concept would show the benefits of an idealistic competitive market. There would be a perfect flow of information and price of the product along with the interaction between supply and demand. E-marketplace software vendors asserted that moving the purchasing function over the Internet would improve the process. This idea was initially widely accepted and Ariba was one of the successful start-up businesses.

Despite Ariba and its partners' efforts for building an e-marketplace with financial benefits for their customers, enterprises were reluctant to switch their business processes over the Internet. Furthermore, suppliers were concerned their benefits would decrease significantly. They feared that a market with symmetric information might destroy their profitability. The decline in capital spending on computer software used in e-commerce exchanges caused tech companies to look for other growth opportunities. Moreover, efforts of these organizations to promote the utilization of B2B e-commerce solutions failed. The trend of shifting from mega marketplace to enterprise application was noticeable in 2001. The burst of dot-com businesses caused Ariba to lose customers.

Simply being a dot-com business survivor, however, would not ensure its continued existence and profitability, and Ariba was at risk of losing business to the likes of other competitors such as SAP and Oracle. SAP, a German enterprise resource planning software maker, joined this market and signed on with Hewlett-Packard for a product called mySAP.com e-business solutions. In addition, it built a marketplace for chemical and pharmaceutical firms by educating them on mySAP.com, with the result of installing a large SAP user base among Fortune 500 companies.

Nevertheless, Oracle had already anticipated a shift in the market and made plans to capitalize on it. Right now, the procurement sector is dominated by leading software companies Ariba and C1. But as the slowdown in the U.S economy continues, Oracle was hoping that the opportunity for companies like Ariba would start to shrink as users look to more established ones, like Oracle, for an all-around e-commerce package (Arora et al., 2007). Ariba had provided Oracle with an opportunity

to gain market share when it cut a third of its workforce and announced reduced earnings during economic recent downturns.

Ariba recognized that to remain competitive, it had to address the problem of hidden costs associated with the products they sell, in addition to the price it charged for the software itself within the supply chain, especially when the product was in the later stage of its cycle. When a company does not pay much attention to the hidden costs of new software implementation, it can creep up and well-intentioned efforts can result in financial penalties (Angeles & Nath, 2007; Brown, 2008).

By August 2008, the market for supply chain management (SCM) software market had grown. Worldwide spending on SCM solutions reached \$6 billion in 2007, which was up 17.6% from 2006. SCM Technologies was well-positioned to address the economic realities facing worldwide markets where costs were skyrocketing while competition and customer demands were intensifying (Eschinger, 2008). Several SCM solution vendors are merging and expanding their capabilities within the realm of supply chain technologies. In comparison, Ariba's 2007 revenue was \$160.3 million, which significantly trailed behind Oracle and SAP, who reported \$955.2 million and \$1,334.4 million in revenue, respectively, showing that the threat of these products cutting into Ariba's bottom line is a real one (Orme & Etzkorn, 2007).

Hurtful Investigation

In early 2003, Ariba came under investigation by the Security and Exchange Commission (SEC). The reason for the investigation was linked to Ariba's accounting errors, doubtful partner deals, and questionable e-payments items including chartered airplanes. Among the specific allegations was that Ariba failed to record a \$10 million payment from Chairman Keith Krach to former chief executive Larry Mueller as an expense. The restatements are unusual because the chairperson - not the company - covered the expense (Lau & Wang, 2007). Then three weeks later, Ariba decided to do the same for \$1.2 million in chartered jet services which were considered as Krach's compensation to Mueller, who subsequently left Ariba in July 2001. The problem was that United States laws and regulations require that payments by a principal holder to executives be treated as expenses paid on behalf of the company.

In addition, Ariba reported an additional \$7.5 million in expenses. In 2000, Ariba acquired TradingDynamic Inc., Tradex Technologies Inc., and SupplierMarket.com, and it reclassified stock options, or goodwill, that it gave to employees of these companies as a compensation expense. So by combining all of these expenses, the results were 18.7 million in added expenses. Ariba was aware that the regulator had begun an informal inquiry into its accounting practices after the firm said it would restate its earnings for ten quarters.

Harmful Publicity

There have been some bumps in the road, including some public relations debacles. Ariba was subject to bad publicity after sending out automated emails to mid-size suppliers announcing their accounts had been upgraded to Premier level status. The email listed premier supplier benefits as well. However, the email also informed them that as Premier Members, they were now required to pay associated annual fees. Many small and mid-size companies viewed this as a marketing ploy and felt they should not be made to pay for the upgrade without prior consultation or the ability to decide whether an upgrade was desired (Eschinger, 2008).

INTERNAL FACTORS

Adaptations to Environment

At the height of the e-procurement frenzy, two companies dominated the B2B space: C1 and Ariba. Due to the near collapse of the original B2B procurement model, both companies sought new niches.

C1 moved towards web services in an attempt to seek viable markets. Ariba, meanwhile, emphasized enterprise spending management (Kinsey, 2004). Ariba strongly believed that a software firm's role primarily is to be a software tool provider. As the B2B world is divided into industry-sponsored exchanges and independent marketplaces, Ariba avoided making inroads into involvement in managing its customers' exchanges. In contrast to this, C1 believed that software makers had to do more than simply provide software tools. They believe the right approach was to form strategic partnerships with their customers and to help manage their online marketplaces (Anderson et al., 2003; Bannan, 2008). It also directed its customers toward an international trading network to build critical mass and facilitate e-commerce between them.

As a new CEO, Calderoni monitored the external environment, where a fundamental shift in the marketplace existed, and responded promptly to adjust the company's product offering. He believed that B2B e-business had a direct and indirect impact on all functional areas and that these linkages with a company's supply chain system were critical. In effect, Ariba was changing its focus from e-procurement to offering products that can increase customer satisfaction by solving a variety of "spend-related" problems faced by corporations (Tadeschi, 2008).

With the concept of division of labor from a microeconomic view, Calderoni added a purchasing system, general ledger, and field system into Ariba's line of products. The added features in the company's products were favored by Ariba's existing customers in the automotive, chemical, and manufacturing industries due to the ease of system comparability. The need to transfer data from legacy systems enabled these customers to remove outdated and inaccurate data from their systems and which also helped to improve relationships with their customers.

The correct strategic plan for a small company should be profitability early on and then become acquired, hopefully, by a "white knight." The initial success of C1, along with the available cash on hand, clouded management's judgment and resulted in a missed opportunity that could have kept the company successful. C1 did not seem to have direction. Many analysts and prospective customers criticized C1 for becoming involved in too many markets. It started as an e-marketplace solutions company to offer customers ease of trading over the Internet. Shortly after that, C1 released 5.0 Suite to provide solutions in e-procurement and e-sourcing. In a matter of months, C1 moved into e-collaboration and introduced the improved 6.0 Suite enabling Web solutions. Furthermore, Conductor, an application platform with integration components was introduced in March 2003. Many critics believed that not having a focus caused C1 to lose its credibility. Many customers were leaving C1 and looking for alternative solutions.

Instead of research & development, C1 placed its resources on sales and marketing for its products. The result was the absence of a sound business strategy. This led to a poor business model with the absence of declared business benefits (namely long-term profits). C1 was so eager for sales, that they had forgotten the need to re-invest in the product. This was based upon a business model to "sell it first, fix it later." The company was obsessed with advertising and expanding. C1 tried to constantly compete with companies such as Ariba and i2. As a result, they spent much time and money on advertising. The financial side of the business was overlooked. Even though the company was able to generate sales, it still reported a loss on its income statement quarterly. The company never reached profitability and had changed business models several times since going public in 1999.

Acquire to Advance

As per Krach, a major component of Ariba's business model is partnering followed by organic growth and acquisition, and so the firm continued to follow this basic approach to help ensure the firm's success. Ariba acquired companies that had the technology and resources they needed to survive, instead of taking the time to develop them in-house. Mr. Calderoni implemented an aggressive acquisition strategy that significantly expanded Ariba's technology offerings and service capabilities and positioned the company as a recognized leader in its market. One goal was to secure top Fortune 10 companies and Global 500 companies as customers (Efendi et al., 2013).

In 2004, Ariba acquired Alliente Inc. and FreeMarkets Inc. to link their spend management software with its existing capacities as a B2B procurement hub. The acquisition of FreeMarkets increased Ariba's offerings by providing global supply management software and services. This acquisition also positioned Ariba as a serious contender in the automotive industry, adding General Motors Corp., Daimler-Chrysler AG, and Ford Motor Co. to their customer base. By acquiring Alliente, Ariba expanded its spend management and procurement capabilities to include a procurement outsourcing provider.

In December 2007, Ariba announced that it had completed the acquisition of Procuri, Inc. a privately held provider of on-demand supply management solutions, rounding out Ariba's offerings that help companies automate the procurement process. According to Ariba CEO Bob Calderoni, more than 70% of Procuri's 300 customers have under \$5 billion in revenues. As a result, this deal also gave Ariba greater access to midmarket customers. These strategic acquisitions helped Ariba to grow its line of products, as well as expand its customer base.

Add Consulting Services

Calderoni believed that Ariba could not only survive but thrive, by expanding beyond software that focused on transactions, to encompassing and supporting additional facets of the buying process. Calderoni hired hundreds of consultants to advise companies on how to procure goods and services while incurring lower costs, using Ariba's software. Although consulting is viewed to be less profitable than selling software, Calderoni predicted he can successfully combine the two as an integrated set of offerings. While consultants coach Ariba's clients on how to use the software effectively, Ariba's clients can also interact and use Internet-based purchasing systems to help them buy direct materials that are core to their company's manufacturing processes.

To extend Ariba's consulting services, which in 2004 accounted for half of the company's \$323 million in sales, Ariba made consultants available via email and phone for a fraction of the price that is charged to the larger companies who require resolute consultants through in site consultation visits.

Aim Customer Support

In 2001, investors were looking for a change in leadership at Ariba after the firm missed revenue and earnings projections by a wide margin. Ariba moved Keith Krach out of the CEO position, filling the post with the company's President and COO, Larry Mueller. Mueller entered the position with a new strategy: to halt the company's current plans to enter new markets, and instead opt to add new features, including electronic payment and invoicing, to its existing e-procurement and auction applications and offerings. Mueller heightened the focus on improving e-procurement applications by making heavy investments in existing e-procurement and sourcing platforms; and building technology around the key interactions that enterprises have with trading partners.

Mueller remained focused on bolstering Ariba's role as a traditional B2B transaction platform. Ariba announced plans to invest heavily in its *Ariba Commerce Services Network* and its network-centric applications, including *Network Connect*, which allowed non-Ariba customers to use the Ariba services network and conduct business or procure products and services. The company also focused its development, sales, and marketing staff to focus on specific industries. According to Mueller, "Customer ROI is the focus." A focus on international expansion boosted revenue from outside the US from 10% in the third quarter of 2000 to 25% in the same period of 2001 (Purdum, 2007). Ariba was trying to rebuild its fortunes while the public marketplaces that used its technologies were struggling – an indication to some economists that the industry may not have been ready for e-commerce.

Since joining the company in 2000 as chairperson and CEO of Ariba, Mr. Calderoni has successfully transformed Ariba from a narrowly focused e-procurement vendor to a comprehensive spend management solutions provider that companies of all sizes rely on to transform the way they do business globally. Also, Ariba announced the availability of Chinese and Korean translations. Under Calderoni's leadership, Ariba has led the way in developing and delivering innovative solutions that

combine technology, commodity expertise, and services to help companies streamline the procurement process and drive bottom-line results.

To keep up with the growth in the industry, C1 began to compromise on quality. Preliminary testing of its software was inadequate before it was shipped to customers. As a result, engineers had to be ready to fly anywhere to install programs to create a positive atmosphere for additional sales. C1 found out the hard way when it lost customers due to declining quality. The result was faulty software and resentful customers. Unsatisfied customers lead to a loss in sales, which in turn led to a loss of revenue. This also led to tension between engineers and the sales team. The internal conflict began adding frustration to an already inconvenient situation, as sales began to dwindle.

Communication and data exchange among businesses with different proprietary technology/computing systems was more difficult than expected. Organizations offering e-procurement products had a challenging time adjusting their supplier's IT capabilities to comply with their format and software requirements. Moreover, due to organizational structure limitations, they relied on third parties to provide integration services, which affected the implementation process. Therefore, organizations did not perceive any improvement in cost management. Consequently, tech companies focused on developing micro/enterprise applications where organizations were productive from some Internet benefits. However, they went back to the pre-exchange style of dealing with suppliers in a one-to-one relationship.

LESSONS LEARNED AND FUTURE RESEARCH DIRECTIONS

It is interesting to note that while many firms came up around the time of Ariba and offered competing solutions, Ariba is one of the few that has survived and thrived, using continually new strategies and innovations to stay in business, providing a better customer experience, and utilizing advances in technology and ideas that no other companies dared to try. Ariba has been, and remains, a pioneer and a leader in an exceedingly competitive and changing marketplace. Due to increased globalization and deregulation, for a company to succeed, it needs innovations to explore e-entrepreneurship and maintain leverage over the impact of competitive forces.

Steven Krach - a leading entrepreneur - with his associates brainstormed and innovated the "first mover" in the business. Ariba is a customer-driven firm, and as such offered full support, including implementation, training, technical support, and consulting programs and packages. Since the time of its founding, the company has been evolving constantly, in cooperation with leading companies in the industry, to deliver e-commerce platform products to its customers/clients. Its value chain model was successful in helping it to develop business relationships further than expected the results of which made it a top 40 Fortune 500 company.

The shake-out that occurred among a plethora of competing businesses, confirmed the solidity of Ariba's focus and business model while competitors like C1, could not stay in business. However, the interesting evolution of Ariba, from a pioneer to a sufferer to a survivor, has taught us many lessons. Ariba has overcome many obstacles, including lawsuits, changing customer requirements, and organizational restructuring, however still managed to remain a leader in its specific niche industry area. The firm has done so by delivering solutions and services that meet, and even beat, customers' expectations, and has been able to cope with intense competition by keeping up with today's technologies as well as developing solutions for tomorrow with innovations.

In the universe of corporations, C1 was a bright meteor. C1 once acquired the e-business budgets of many Fortune 1000 companies. It facilitated the computerization of various work functions including supply chain, payment, and procurement across all industries from automotive to healthcare. On December 28, 1999, C1 sharply increased to \$1,655 (a split-adjusted) per share. However, C1 didn't make the necessary adjustments to continue to deliver the goods to their clients, without sacrificing their bottom line.

Also, its cooperation with SAP was not pleasant. In December 1997, C1 formed a strategic relationship with SAP. Afterward, they joined to develop MarketSet and Enterprise Buyer procurement applications in 2000. C1 was doing well and waited until August 2001 to explore a merger with SAP. By that time, it was too late. A faster response could well have prevented C1 from falling. In 2002, SAP announced it would end its license agreement with C1. Therefore, C1 lost an important source of intellectual property and capital investment. C1's license revenues were \$79.1 million in 2001, \$26.1 million in 2002, and only \$0.4 million in 2003 when the partnership was ended (Saveetha & Maragatham, 2021).

Many analysts were shocked by SAP's announcement of breaking the alliance with C1. SAP moved on to develop similar software. Such action put SAP in direct competition with C1. That caused C1's stock to drop to half of its value right after the announcement. Many analysts criticized SAP for not treating small companies fairly. There were a few cases when SAP, after acquiring needed technology, would break the alliances with a smaller or less influential company.

As big data accumulate and deep learning evolves, further research is needed. As a simple and powerful platform, blockchain can create and deploy smart contracts by removing barriers. SAP Ariba and IBM co-developed Hyperledger, a private blockchain that supports the execution of chain codes/smart contracts, as well as the collaborative development of blockchain-based distributed ledgers. SAP Ariba uses a procurement AI assistant to request price quotations and draft contracts (Cui et al., 2022).

It is expected that procurement will be the main function of all organizations and its digitalization will bring numerous changes in terms of organization and process. The main objective for future research is to study the impact of e-procurement on the hierarchical levels of the companies, processes, change, and personnel management of the organizations (Sampaio & Ramzan, 2018).

Furthermore, a quantitative analysis could dig more insights under the surface of an iceberg. Yes, it would be better if the arguments made are supported with numbers, critical data analysis, and models. Companies need to know about the importance of sustainability in the market, offering competitive solutions, and new strategies, providing a better customer experience, and utilizing advances in technology.

CONCLUSION

Ariba has thrived by making scores of innovations throughout the years. Having gone through ups and downs during the years, they still managed to maintain a leadership position even though markets and needs have evolved and changed. Overall, they have been able to provide customers with superb services and innovative products, and reliability is what keeps old customers, and helps to bring in new customers. With Ariba, SAP offers a cloud service for digitizing and automating the ordering process. The service supports companies in the purchasing process.

Ariba achieved recognition for its *Supplier Network*, an e-business center where millions of buyers and suppliers can electronically transact business online, with the goal of more efficient procurement. In addition, Ariba developed spend management software and took this kind of network mainstream. Ariba's application-driven strategy of an open platform, hosted and implemented by partners with vertical-market domain expertise, has helped to secure them a dominant position in the B2B e-commerce application marketplace.

Ariba has done a fantastic job in setting itself apart from its competitors by strategically aligning itself with its partners and expanding its service offerings to a wider range of customers. Ariba's software offerings help companies focus on profitability, and together with its wide array of service options, are customizable for both larger and smaller companies. The firm's products are concrete and customizable, depending on a client's needs. In addition, the product offerings are provided on a common platform, allowing information to travel accurately and quickly through the supply chain.

E-commerce was in many ways revolutionized by Ariba and C1, two leading forerunners of e-entrepreneurship. They facilitate the outsourcing of operational procurement and preparing tools

for auctions and orders. This paper focuses on what caused the different fates of Ariba and C1., as well as what challenges and key events happened throughout their years of business. The research hypotheses with both propositions have been verified through this case study and content analysis. It concludes that businesses must adapt to an ever-changing environment and adopt innovation and e-entrepreneurship to survive and succeed in the future.

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