London Business School

Oracle Corporation

Transformation to an e-Business

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Oracle Corporation: Transformation to an e-business

Larry Ellison, Founder and CEO of Oracle Corporation, had made a big bet on his vision of the future of computer industry in the Internet era. In May 2000, Oracle had introduced Oracle 11i, a product that integrated a broad suite of Internet-based e-business applications and aimed to be a single product that would fully integrate the software needs of any company. Oracle 11i had software modules for Customer Relationship Management (CRM), Employee Resource Planning (ERP), Supply Chain Management (SCM), online requisitions, Internet exchanges, financial management and human resources. It was meant to eliminate the need for customers to be purchasing several different software components from several different vendors.

This was a new direction for both the computer industry as well as Oracle. Internet had only been around commercially for less than five years. Most established computer companies still sold packaged software to handle some critical area of enterprise management, be it CRM, ERP or SCM. Customers bought these packages and customised them to suit their individual needs by hiring consultants. Larry Ellison had declared that the Internet would change this forever. He said,

> "It's like if you want to buy a car, would you get an engine from BMW, a chassis from Jaguar, windshield wipers from Ford? No, of course not. Right now with the software that's out there, you need a glue gun – or hire all these consultants to put it together. They call it best-of-breed. I call it a mess."

Ellison vision of the future of the computer industry was that the Internet would transform it into a utility industry, rather like electricity or water. Computers, data and applications would reside in a centralised location and customers all over the world would be able to use these over the Internet, with only a personal computer and a browser. The customers would no longer be tying up their resources heavily in IT investments, but would instead just pay for what they used. Successful computer companies would be providing the hardware, software and maintenance as a service over the Internet. According to him,

> "You don't need a nuclear power plant in every backyard to use electricity, so why do you need to buy, run and maintain computers when all you really care about is the service."

Ellison had bet on transforming Oracle from a database company to an e-business that would offer applications as a service over the Internet, including hosting the database, applications for front and back office operations as well as development tools for writing specialised programs to meet the unique needs of customers everywhere.

In 2000, Oracle was the world's second largest software company with a market capitalisation of $184 billion and annual sales of US $ 10.1 billion. Oracle software could run on PCs, workstations, minicomputers, mainframes and massively parallel computers as well as personal digital assistants and set-top devices. Oracle had 42,000 employees of which 21,000 were in the US. Oracle sold relational databases, tools and application products and related consulting, education and support services in over 145 countries around the world. (See **Exhibit 1** for product and service offerings). It had customers in

various industries including manufacturing, financial, automotive, aerospace, aviation and defence, consumer, energy, pharmaceutical, utilities, shipping and telecommunications. "Oracle had over $3 billion in operating profits, which are growing at 40% a year."[1]

Would Ellison's vision of the computer industry turn out to be right? Would he be able to transform Oracle, the largest database vendor successfully selling packaged software, into an Application Services Provider (ASP)?

Larry Ellison: Founder and CEO

Lawrence (Larry) Joseph Ellison was adopted by his aunt, Lillian Ellison, and her Russian Jewish immigrant husband Louise Ellison, who adopted the name Ellison after Ellis Island. Louise was a quiet accountant and Lillian worked as a bookkeeper. Larry Ellison was raised on the affluent North Side of Chicago and graduated from South Shore High School in 1962. He enrolled at the University of Illinois in Champaign Urbana, only to drop out after his sophomore year. Ellison later enrolled at the University of Chicago, only to drop out again, but not before he had discovered computing, which was a way to make some money at student jobs. Friends remember him as being very intelligent, good at thinking on his feet and intensely competitive. He could talk about anything and read a lot but did not bother much about exams.

Ellison moved to California in the summer of 1966 and took up various programming jobs, working during nights and weekends just so he could spend the days at Yosemite. Some of the companies he worked for are Wellsco Data Systems, Fireman's Insurance Co, Amdahl, Ampex and Precision Instruments. Into his thirties, he was still drifting from one job to another, while enjoying other interests, with little evidence to hint at such a successful future.

Oracle's Origins:

In June of 1977, Ellison invited two former colleagues, Bob Miner and Ed Oates, to start a company that would provide contract-programming services to his then employer Precision Instruments (PI). They called it Software Development Laboratories (SDL), and made Ellison the CEO, Miner the president and Oates the vice president.

After the initial contract with (PI) ended, they decided to develop a product-platform that could be sold over and over again. Oates discovered the idea for a product; it was to build a relational database that would be a better alternative to the hierarchical and the network databases – since the structure of data storage would not limit the speed with which one could query the data and convert it into information. He read about a group of IBM engineers at San Jose developing System R and Structured Query Language (SQL), and he decided to join the race. SDL's name was changed to Relational Software Inc (RSI).

Ellison sold the early version of the database to the Central Intelligence Agency (CIA). The second customer was the Office of Navy Intelligence. RSI changed its name to Oracle and re-located to a prestigious address at Sand Hill Road in Menlo Park. Oracle's two customers operated several computers with different operating systems; forcing Oracle to find a way to make its product 'portable', i.e. adapt it so that it could run on a

range of computers from different manufacturers. By version 3, Oracle had re-written their product entirely in C, a language for which compilers were available for many machines. This created a remarkable first, a 'promiscuous' software that ran on many different machines irrespective of hardware.

By making the Oracle database portable, Ellison and his team were able to shift the balance of power in the computing industry from hardware manufacturers towards software. The choice of hardware went from being a key strategic decision to a mere commodity detail. With the winning combination of a relational database that could run on different computers, Oracle quickly became the favoured database provider for large companies and government agencies. It became one of the star companies of Silicon Valley by selling its innovative packaged software, database and applications to large global companies with multiple computer systems.

Oracle doubled in size every year until 1990 and retained a technically innovative spirit. See **Exhibit 2** for key events in Oracle's history. Oracle went public on March 15, 1986 at $15 a share, closing the day at $20.75, giving it a market value of $270 million[1]. See **Exhibit 3** for recent performance numbers. It re-located to a brand new sprawling office complex, called the Oracle campus, with gleaming new glass towers around a lagoon at Redwood Shores in the heart of Silicon Valley.

Oracle: The Organisation

Oracle had adopted an aggressive 'can-do' style in both technology and sales from the very beginning. Ellison's competitive nature had driven the organisation towards systematically targeting and eliminating competitors, with tools like extra bonuses for winning customer sales away from competition and comparative advertising campaigns. Oracle had systematically hired people who were entrepreneurial and thrived in the rapidly changing environment. Oracle's rapid growth was further accelerated by Oracle's customers, a majority of whom were Fortune 100 global firms, who expected to be served globally. The organisation chart A in appendix shows the structure of Oracle at the beginning of 1990s.

See Organisation Chart A in Appendix

Oracle was organised as a more or less independent business in each country, under a country manager responsible for selling the database and applications as packaged products developed in Silicon Valley. The country managers were entrepreneurial in developing their markets and systems to best meet their local needs. They had their own marketing, finance, planning and technology staff, with freedom to determine their own strategies in order to meet the aggressive revenue growth targets set by the corporate head office. The technical staff set-up and maintained the country's IT infrastructure and serviced their local clients. The marketing campaigns in each country were designed and developed independently to best suit the needs of their particular market.

[1] Fortune Nov 13, 2000
[2] The Oracle Edge by Stewart Read

The Competition:

It is hard to find organisations that are Oracle's true peers. Microsoft and IBM are the other major players in the industry but their products and services are rather different. The core Oracle database competed with IBM's SQL database and a few others. In specific products and services, Oracle faced intense competition from a number of different companies. In applications, in the ERP market, Oracle competed against Peoplesoft, SAP, J.D. Edwards, Baan and others, in the CRM market it competed with Siebel Systems, Clarify, Peoplesoft/Vantive, Broadvision, Epiphany, Kana, eGain, Baan and others, and in the SCM market, it competed with i2 technologies, Manugistics, Vitria and so on. In Procurement and Online Exchange applications businesses, its competition came from Commerceone and Ariba. Always the aggressive competitor, Ellison had a very public competition with Microsoft's Bill Gates, who was the richest man in America, making Ellison only the second richest.

See **Exhibit 4** for market-shares of Oracle and its competition in different products.

The competing firms concentrated in separate areas of applications because these systems were highly complex. According to *eCompany* magazine "building global real-time systems to tie together corporate data was very hard to do with the network architecture of the day, way back in 1997. Applications had to reside on both desktop machines and servers. Such systems became hideously complex and glacially slow as they were expanded".[2] By focussing on one specific business application, be it CRM or ERP, or whatever else, these companies claimed to be providing the 'best-of-breed' products. Every company, including Oracle, maintained a small army of consultants who 'integrated' these applications into the customer's enterprise, so that it was able to communicate and operate with the enterprise's existing software. In fact, the largest cost to customer of any new software was not the actual cost of licensing the software, but the cost of integrating that software into the enterprise. Integration costs could run to be five to ten times the cost of actual licenses. By being the largest database vendor and offering a variety of applications as well as consulting services, Oracle continued to enjoy market success.

The Internet: Oracle's early response to it

Internet started as an infrastructure initiative by the Department of Defence in the USA in 1960s. In 1986, the initial version of Internet was created with five supercomputers linked by the National Science Foundation to allow scientific researchers from around the country to connect with each other. But until 1991, it remained a limited tool for the military and academic researchers. Between 1991 and 1994, with enabling technologies like HTML and browsers being invented and cheaper PCs becoming rapidly available, the modern Internet was fast emerging as a network of distributed interconnected computers.

Oracle's early foray into the world of Internet computing was due to an initiative taken by one of its many programmers. Mark Jarvis, Senior Vice President of Global Marketing started his career at Oracle in 1987 as a programmer with the European Development Team. He had a degree in computer science from Leeds University and had

[2] eCompany Nov 2000 p 172

worked for Philips in Netherlands before joining Oracle. Being a network guy, he travelled frequently to the head office and eventually moved to Redwood Shores. He recalls his experience at Oracle:

"In late 1994 – Internet came along. It was mostly a university thing at the time but once browsing came along and the web spread outside the University, I became really interested in it. I thought that connecting a web browser to Oracle databases would be a cool thing to do. I set up a development team to do it. We showed the results of our efforts to the head of development. He promptly asked me to show it to Larry (Ellison). I was reluctant at first because being a developer I felt more comfortable in the back-office, but then I went along. As I presented, I noticed that Larry sat up and really listened. He understood the technology and asked questions that required me to drill down into the details of technology."

Oracle country organisations, being entrepreneurial and independent, were adopting the Internet at a pace suitable for their local markets. Country managers in most of the developed countries had set up their own web-sites with information about their products, services and organisations. They also harnessed the new technology for their organisation by setting up their e-mail, administrative and employee systems on Inter and Intranets. Each of these websites and systems was custom designed to meet their country's needs.

By mid-1990s, Oracle was using the Internet as a tool for internal organisation as well as external customer sales and services and public interface. Mike Rocha, Senior Vice President in charge of Oracle's IT -- infrastructure, operations and worldwide support, explained what it was like.

"Oracle.com, at its peak, had sixty different country developed and maintained web-sites, many of them with a different logo for Oracle and almost all of them with a different design. Each one was meant to be best suited for its country, so the Portugal organisation, had designed it's website in Portuguese for its customers. There were 97 e-mail servers, each running a different version of the program."

In 1995, Ray Lane, Senior Vice President in charge of Globalisation, organised a globalisation convention where 400 Oracle managers from all over the world came together, and were rallied to globalise. The motivation, at the time, was to better serve Oracle's global customers, like GE, Ford, etc. more consistently. The assumption at the time was that to be global, Oracle had to have a local country-specific staff, and the challenge was to organise them to be consistent. The Internet only made the need for consistency more urgent.

Forever in the search of the next golden goose, Ellison re-engaged in running the business after having spent time away trying to buy an Italian fighter jet and racing his sailboat.

His objective was to understand the implications of this new Internet technology and how it would be making waves in the industry. According to him,

"I tried to create an Oracle web-store. Just trying to create an on-line product catalogue made me realise how complex and fragmented the organisation had become. Despite

having the same products worldwide, the Oracle organisation had packaged, bundled and priced them differently for each market, creating an explosion in the offerings. It was alarming to see what Oracle's global customers were seeing."

According to *eCompany* magazine:

"He (Ellison) didn't understand at the time, he admits, because he had never used his applications. "The earliest revelation was that I've never even seen the applications, because the applications don't provide any information," he says. The purchasing system, for example, couldn't identify who the best suppliers were by price, quality, and other metrics. That information was scattered among 70 different computer systems and 70 databases in 70 different countries. Ditto for human-resources and sales data."

With all the clever IT infrastructure, Oracle systems could still not answer simple questions like exactly how many employees Oracle had. Someone would literally have to go out and touch 60 databases, and make sure the numbers were consistent before consolidating the answer for the company.

The country based proliferation of the systems had created some problems. One was duplication of effort as each country re-invented the wheel with everything from technical systems to marketing mailers being designed and developed independently. This duplication may have provided country specific local targeting initially but with the coming of Internet, and the customers being able to access web-sites globally, this had become a problem of lack of consistency. Each country manager believed that the needs of his organisation were unique and special and deserved custom-made solutions. Only the Oracle head-office was in a position to see and care about customers on a global basis. The Brazilian customers, because of the common language, were accessing information about Oracle from a website designed for the Portuguese market only.

Another problem was one of support and maintenance of software. Oracle released new software approximately every eighteen months. With different customised software kits in each country, every upgrade became a time and resource intensive effort. According to Rocha,

"Oracle was still growing rapidly and we could not hire fast enough. Support was swamped and was handling over 3000 calls per month, with different versions of the software running in different countries with different customised kits."

Even when software applications that incorporated standardised business processes, like Enterprise Resource Planning (ERP), became available, it was near impossible to implement these in a centralised manner. Vance Kearny, Senior Vice President of Human Resources for Oracle in Europe Middle East and Africa (EMEA) tells of the challenges he faced.

"In mid 1990s, I had been trying to implement the Oracle ERP system within the 32 countries under me. I had only managed to get four countries live on it in that time. Experience at implementation had made us really good, which meant that we could plan, install, customise and get the system up and running in a country in as little as three months. At this rate of three months for each country and 30 countries, it would have

taken us over six years before we got to some of the smaller countries, like Luxembourg. In the meantime, we would also have to deal with the new releases and updates of the software. Due to different customisation in each country, these upgrades were going to be just as challenging as the initial installation."

Ellison realised some of the implications of the Internet technology that went beyond the ad-hoc responses that he saw within the Oracle organisation to it. Firstly, Internet could enable software applications to be deployed centrally while allowing distributed computing. Secondly, designing an integrated suite of internet-enabled applications could potentially eliminate the need for expensive customised interfaces to link the front and back office applications. Deploying software over the Internet could also minimize the need for manual intervention to consolidate data into meaningful information. Internet virtually eliminated the country boundaries of the business as every customer could see the product and services offered in every other country as well as compare prices and discounts offered. He also realised that the upgrade and support problems faced by the large Oracle organisation due to the rapid proliferation and customisation of IT infrastructure were also common to their customer's organisations. The CEO of every large corporation was facing the same issues as Ellison in not being able to get meaningful information or productivity gains despite increasingly huge investments in their firm's IT infrastructure.

The New Vision: Oracle e-business

Ellison decided to take on the challenge of creating the first ever Internet enabled integrated suite of applications for business. He declared,

"If we're going to do applications, let's do it. Let's really do it. We're the big guys. We have the size and the brainpower to do this. No other software company does. Oracle will build a suite of Internet-based enterprise applications software. These enterprise applications would work perfectly with Oracle databases. The resulting combination would be irresistible to corporate IT guys looking to make their lives simpler."

This vision to create a hugely complex new technology based product required a massive shift in how Oracle used its human, capital and technology resources. It was unlike creating a new version of existing products, which Oracle was used to doing every eighteen months. This e-business vision required a radical transformation of Oracle, its technology, its organisation and business. Technical developers would have to re-create several existing applications with added functionality of being seamlessly integrated with other applications, and being deployable over the Internet.

Ellison's vision was also to not sell this new product outright to Oracle's customers but to merely sell them the service of computing. The product would be hosted by Oracle and deployed at the various customer-sites over the Internet. The customers would use the applications they needed and just pay for what they used. Oracle would go from being in the business of selling packaged software products to being an Applications Services Provider (ASP).

An Oracle white paper called 'War on Complexity' spells out this new approach, as follows:

"[A] Standardised, repeatable, quantifiable approach to enterprise software deployments, Oracle envisions a New World Order for its e-business customers, based on internet business practices (IBPs) that define new rules of engagement:

- Centralize critical business information and make it accessible via a standard web browser.
- Deploy globally rather than locally.
- Implement complete Internet business flows rather than dated business rules.
- Use standardised, certified configurations rather than modifying packaged applications.
- Invest in integrated software suites designed and engineered to work together.
- Focus on your core competency: shift complexity out of your IT organisation by deploying online services."

Ellison was so convinced and committed to the change to e-business that not only did he stop all client server development, but he also pushed for Oracle to start using its own product in a centralised manner. Under this initiative, called 'Eat your own dogfood', Oracle was to be its own beta test site so that the benefits from standardisation and globalisation of business processes could be realised and thus powerfully demonstrated.

In April 1999, Ellison told his board that Oracle would chop expenses by $500 million dollars in one year. After he saw some early results, he upped the ante to $1 billion, equal to about 10% of Oracle's revenue. The head office at Redwood Shores would become the centralised location for computers, data and applications, which the field offices would access using a browser. This initiative required a transformation in Oracle's organisation and business processes.

Historically successful Oracle with independent regional and field operations was to be transformed to a globally consistent Oracle with standardised business processes and technology deployed from a centralised location. It required standardisation of business practices across different countries and field offices, while for software, it translated into development priorities that required reusing and integrating pieces to create a suite that could be deployed over the Internet from a centralised location.

The Process of Transformation: Oracle e-business

Technology Creation:

In the first phase, various Oracle software applications were integrated to create Oracle 8i. It consolidated the various applications into 11 modules. In the next phase, the 11 modules were integrated to work together seamlessly and were web-enabled, creating an e-business suite. This suite of Internet enabled applications realised the mission of centralising the hardware, data and software, while enabling access from anywhere, with a browser. An analyst report describes what this meant for the users:

"In May 2000, Oracle introduced a broad suite of Internet-based e-business applications in its newest product, Oracle 11i applications suite. Oracle 11i provides an integrated e-business suite that includes software modules for CRM, SCM, ERP, online requisitions,

Internet exchanges, financial management and human resources. 11i challenges the idea that an enterprise needs to purchase several different software components to handle its various tasks. Rather, Oracle 11i provides a single product that fully integrates all of these software needs.

Because Oracle 11i has so many of the necessary software modules integrated, the enterprise installation and integration for Oracle 11i is much easier, faster and cheaper than attempting to integrate several different software components within one enterprise. Consequently, Oracle 11i produces real cost savings for organisations."[3]

The other aspect was to create one global Oracle website, with content that could be published with centralised editorial control.

Standardize: Global not local

A standardization program was launched with a series of meetings between Oracle managers in similar functions in different regions to discuss their business processes and agree to common practices. Each region or country insisted on their special needs and argued as to why a standard process would not be appropriate for them. Early in the process, a number of such meetings were not successful. Sometimes the sheer size of these meetings with large numbers of people participating would lead to situations where not much could be achieved. At other times the discussions were too open-ended even though some parameters for the process had already been set and were not open for change as a result of these discussions. Lessons were learnt in the early stages and the program was revised. The meetings were limited to fewer people. The limits set by technological considerations were communicated clearly, so that the discussions could be focussed on arriving at agreement on areas that were still open for change.

The globalisation process was not one of killing all regional and local initiatives indiscriminately, although inevitably a number were killed. Globalisation also did not mean that regions had to accept practices from California as the imposed standard. Instead, the discussions allowed room for best practices, no matter where they originated, to be incorporated into the standards going forward.

Loic Le Guisquet, Senior Vice President of Oracle University in EMEA recounts an example of a regional initiative that was rolled out globally. Oracle University (OU) customers in the EMEA region were offered training services where CD based training was bundled with classroom instructions. CD based training is a high margin business but it was too small in overall value to be supported by a separate sales force. By bundling it with classroom training, OU EMEA was able to charge a higher price for the classroom training and save resources previously spent on maintaining a separate sales-force. Specific country opposition to this within EMEA was overcome when trails showed that the bundled offering actually raised customer satisfaction.

[3] Pacific Crest Nov 30, 2000, a report by Brendan Barnicle, p 2

Centralise: Internet enabled suite, not kits

In creating the Internet enable suite of applications in Oracle 11i, Oracle managed to not just use the web as every other company was using it, but to take the technology lead in becoming the first company to have such an offering. According to Mark Jarvis:

"We had been hammering on the web since 1995, pushing it all the time. In April 1998, we even pulled the plug on the client-server development to focus exclusively on the Internet based product. Now, in 2001, we are not just using the web – we are two years ahead of everyone else."

Migrating the IT function from field offices to a centralised location for all of Oracle was done in two phases. First, Americas were consolidated with South American and Canadian IT functions moved to the US, and in the second phase the process was rolled out to the rest of the world. Gary Roberts, senior VP of Operations, was the project sponsor, with one project manager reporting to him and responsible for coordinating the various global teams. The eleven countries in Oracle South America became the first to run everything from a centralised system located in Redwood Shores via the Internet. This was achieved relatively easily as many of these countries were glad to have centralised systems support for their small operations. Within six months, a global team was able to migrate all systems to the US.

Gary Roberts recounted how centralisation using the new technology and incorporating the local talent of Oracle worldwide, became the obvious best way forward when implementing the new release of centralised Oracle software within the South American field offices:

"Redwood Shores based centralised implementation team estimated that to install and implement our own package of software for our $300 million dollar business in South America would take us around three years at three months for each country. This was nuts. It was way too long for such a small business. If the regional IT teams were involved, they could implement it in all 11 countries within six months. The global team that centralized South American 11 had 17 people – 2 from US, 1 from UK and rest local country people from the various South American countries. The local people provided most of the expertise needed for the migration, while the US team members provided the new standards that they had to implement. This global team, relying largely on local talent, managed to complete the migration of systems to Redwood Shores in six months, instead of three years."

There was resistance in some other parts of the company. However, some early success stories helped to reduce it.

"Ellison consolidated all of Oracle's e-mail systems first. The performance of e-mail was highly visible. When the global e-mail system went live at Oracle's headquarters data centre last spring (2000), the managers saw the light."[4]

Within the last couple of years of the millennium, Oracle had only two e-mail servers instead of ninety-seven before. Oracle had moved to one web site worldwide,

[4] eCompany Nov 2000 p174

Oracle.com, instead of sixty different country developed and maintained web sites before. Instead of being country focussed, the new web-site was global and could handle eleven languages. Thus, customers in Brazil no longer needed to use the Oracle Portugal web-site. Indeed there was no longer any country-based web-information. Oracle.com became the single repository of all information, and it was based on a publishing model for updates. Support got less than 300 maintenance calls a month, in sharp contrast to over 3000 calls that it used to handle before.

Organisational Changes:

The sheer scope of changes required to make e-business vision a reality demanded commitment from the highest levels of Oracle leadership. It was very important that Ellison was personally driving this transformation. Jeff Henley, Senior Vice President and Chief Financial Officer, said:

"Ellison was fanatical about e-business -- and you needed a fanatic driving it from the top -- to get people to cooperate."

Ellison took over the globalisation effort from Lane as it was not moving fast enough. Lane left Oracle soon after that. The focus of globalisation shifted from being multi-local with representatives in every country to being centralised with the same standardised technology driven processes implemented in every country. Ellison started talking about the new strategy during meetings, including the budget meetings in the spring. He wrote a letter to management outlining this strategy. He centralised marketing, human resources and other support functions, leaving the country mangers to focus on sales alone.

See Organisation Chart B in appendix for the new Oracle structure.

Ellison changed the technical development priorities, supporting the early Internet initiatives and later stopping all local and client-server development initiatives. When Jarvis made the presentation to Ellison about how the Oracle database could be linked to the browser, Ellison listened well and asked a number of questions. According to Jarvis:

"By the end of the presentation, Larry (Ellison) saw me as a marketer since he thought that I could explain the technology and sell it. Shortly after that, I was transferred to marketing. At the time, we were mostly selling client-server applications, but I was given the mandate to spend all my time linking the core data-base product, the cash-cow of the business, to this new thing, the Internet."

And when these new Internet enabling projects competed for development resources with existing products, Ellison finally pulled the plug on all client-server development. This sent a clear message to the entire organisation that the future of the company was riding on this bet.

Ellison changed management responsibilities and incentives to ensure that the organisation got behind this transformation. Gary Roberts, who was in-charge of the project to consolidate the North American operations, went to convey the message to the Canadian country manager. The Canadian business was a highly successful 400 million dollar business headed by a country manager who had build it up over the years. Roberts

talked to him about the idea of a centralised database and application services delivered via the Internet. Initially, he paid lip service to it and hoped that this initiative would die off. When Roberts kept coming back, he finally said, "I do not like Ellison sending people from California to tell me how to run my business". Ellison decided to make it clear who the boss was by changing the management responsibilities and the incentive structure. Most of the direct reports of the Canadian country manager were asked to report directly to the functional heads in California. Ellison then changed the reward structure of country managers to be based on margins instead of sales. The centralised data-processing services were offered for free while any local country IT infrastructure had to be maintained from the local revenues, negatively impacting the margins. The choice to accept the centralisation became a lot easier than trying to keep the local infrastructure. Ellison consistently set tough standards and drove the target margins up. The Canadian country manager left Oracle and soon the story was circulating within Oracle as how Canada was converted by 'sending in the Navy seals'. It became a powerful deterrent to anyone else considering going against the head office plans. Everyone knew that it was his (Ellison's) way or the highway.

Such strong directed leadership and radical centralisation could have left the regions and field offices, who had until then been in-charge of their own fiefdoms, feeling dis-empowered. Henley commented:

"It is true that we don't want empowerment in areas where empowerment does not make sense. It's goofy to let people do things as they please when we have limited funds. We have to ask people to make scarifies for the benefit of greater good. We need tools that work with our 7000 applications that are interrelated. Everything has to work together and it's a lot about teamwork. We empower people to the extent that makes sense. We need them to be creative in the areas that they deal with but not beyond that. After all, we are building a highly engineered system. We have to channel creativity towards greater good to make sure that unchecked creativity does not lead to chaos. We think it is a good idea if a sales person spends time selling product benefits rather than negotiating prices and deals."

Others had a different view of this centralisation. Vance Kearny, Senior Vice President Human Resources, Europe, Middle-East and Asia (EMEA), said that the new centralised organisation could actually be more empowering. He explained:

"The people who work at Oracle are very capable of making their case heard. With centralisation, they get to make their case directly to senior management of the company rather than having to go through the regional layers of management. This is empowerment."

He explained further:

"In mid 1990s, I had been trying to implement the Oracle ERP system within the 32 countries under me. I had only managed to get four countries live on it in that time. Experience at implementation had made us really good, which meant that we could plan, install, customise and get the system up and running in a country in as little as three months. At this rate of three months for each country and 30 countries, it would have taken us over six years before we got to some of the smaller countries, like Luxembourg.

In the meantime, we would also have to deal with the new releases and updates of the software, which change every eighteen months or so. Due to different customisation in each country, these upgrades were going to be just as challenging as the initial installation.

When the head-office proposed to implement a centralised system for all countries, we could see the logic of it right away. The choice was not difficult. We could either spend a lot of our resources and struggle to implement the systems ourselves or get a centralised service from one location for free. The resistance to the idea was mostly emotional, not intellectual, and it came from the larger countries in the region. UK, Germany and France already had their customised ERP packages up and running and they would have to give up all the functionality they had tailor-made into their systems in order to settle for a basic standardised package. But smaller countries like Luxembourg were really excited about the idea. Eventually for the greater good of the 32 countries in EMEA, the larger three or four were persuaded to come along."

With one global website for Oracle, the pricing and discount packages that were originally set by each country, also had to be standardised. Ellison changed the pricing strategy. Oracle products were offered for sale on the website for the same published price worldwide. The discount schemes were standardised too. These changes could not have been made by anyone with a smaller mandate than a CEO, and the results indicated success.

"Between 1998 and 2000, Oracle's annualised operating margins improved by 14 percent, up from 21 percent to 35 percent, with savings of over a billion dollars in the first year alone. Even as Oracle revenue grew almost 15% over last fiscal year, its head count actually fell 5.6% from 43,800 to 41,320"[1]. These savings came as technology changes led to changes in the business practices. In June 2000, Oracle reported that profits for the fiscal year ending May 31 had jumped a stunning 61 percent, to $2.1 billion, far outpacing its 15 percent revenue growth. Its operating expenses were, indeed, nearly $1 billion below where they had been if they had grown at the same rate as sales."[5]

Risks and Challenges

The ambition behind integrated applications suites can be understood if we consider what these really do: "They take whole segments of a company's operations and streamline them—sifting through all the sales, financial, and customer data that a company might have and then distributing them to managers and employees in all sorts of usable packages. And now, thanks to the Internet, a company can tie suppliers and customers into this movable data feast as well[1]". Even if Oracle has the brainpower for such an engineering feat, is the rest of the world ready for it? Adopting it would require companies to throw away not one or two but a number of customised applications that may even have been tailor-made to suit their needs, and accept a standardised package. Company inertia is likely to keep them from pursuing such a radical move. And even if they manage to overcome the inertial forces, will a standardised product that treats a trucking business the same as a pizza chain and a bank as similar to a manufacturing company, fulfil their expectations?

[5] eCompany Nov 2000 p171

Andy Grove of Intel, a friend of Ellison's, has expressed his doubts; "So often, when you see companies try to move from one area of dominance to another, they fail. I have my doubts about this one". And he is not the only one. Analyst Upin of Robertson Stephens is scared by Ellison's aggressive strategy. He says "Oracle hasn't been a leader in this business and all of a sudden they are talking about $1.3 billion in applications revenue for fiscal 2001[1]". "Even after the stock's incredible run over the past two years, lots of Wall Streeters have a traumatic history with Oracle. "The feeling is that this is a stock you can ride, but if you don't watch it, at some point Ellison will burn you", says one trader. Witness the big air pocket in the fall of 1997 when the company began to move to Web-based applications. Sales dropped, the Street got scared and the stock caved 40%[1]." Others feel that even if the strategy succeeds, there are no gains to be had in the stock market because Oracle's current valuation already reflects the factored in value of this strategy.

Ellison, the champion of this new strategy, is also a big risk factor in its success. He has a history of disengaging from the company ship, popping in and out of a day-to-day leadership role, depending on how well the company is doing and how involved he is in his myriad outside interests. Plus there is a concern that there is no succession planning evident at Oracle.

Jarvis remarks that Oracle has never taken on a competitor as large and diverse as IBM. He says, "This battle is much tougher than the PC battle with Microsoft because word processing is considerably simpler product than databases and applications. Besides, IBM has 400,000 employees and industry pull with much higher brand recognition.

They have been around for 50 years and have a bigger market capitalisation, with significant revenue diversity as they are in mainframes, system integration, and a host of other businesses than just software. They are also working in the consumer space when we operate only in the business world. Our challenge is to try to make this war into sorties that would help us to win it?"

Oracle's founder and CEO Larry Ellison, according to *Fortune* magazine, "is the only technology company CEO who has launched a business in the era of mainframes and taken it to client/server and then to the internet[1]." Oracle's ambition is implied in the tag lines of its ubiquitous advertisements; "Oracle, software powers the internet", and "Oracle.com, Big business. Small business. All business".

There is a lot of uncertainty in the computer industry. This time around, will it get resolved in a manner that would benefit Oracle or not? Is Ellison betting the company's future on the right vision?

Exhibit 1

(From Oracle Corp report on Competitive Assessment – August 2000, p9)
Oracle products can be segmented into three primary product families:
Server Technologies
Application development
Business Intelligence Tools & Business Applications

Business Operations

Products			**Services**
Server	Tools	Applications	Support Consulting
Oracle 8	Designer	Financials	Education
Oracle 8i	Developer	SCM	
Oracle Lite	Jdeveloper	Manufacturing	
Oracle8 Enterprise edition	Reports	Projects	
Oracle 8i Lite	Discoverer	HR	
Web Application Server	Express	Front Office Applications	
Express Server		Web Self Service Applications	
Oracle Open Gateway		Data Warehousing	

Exhibit 2

Oracle History – Some milestones

1979	Offers the first commercial SQL relational database management system (RDBMS)
1983	Offers a database written entirely in C for portability
1986	First client-server database
1992	Offers a full applications implementation methodology (AIM)
1995	First 64-bit relational database management system (RDBMS)
1996	Announces an open standards based, web-enabled architecture Breaks the 30,000 tpc-c barrier
1997	First Web database. Moves client/server applications to the Web
1998	Launches Business Online, the first hosting service for enterprise applications designed to be run over the Web. Offers full Web deployment of all applications. Offers the first set of application modelling tools that generate 100 percent of the application. Breaks the 100,000 tpc-c barrier First database with Java support
1999	First to offer a full featured internet database Launches complete e-business initiative Launches first industry exchange, AutoXchange, with Ford First to integrate Java and XML into an application development tool
2000	Launches e-business network Launches Oracle Mobile, wireless applications service provider Launches Oracle technology Network Xchange, first online developers skills exchange. Industry's first developer Service Provider (DSP) First to offer complete and simple software for information management, including the Oracle9i database, Oracle 9i Application Server and Oracle 9i Developer Suite.

Exhibit 3

Chart 1

Years	Revenue Trend (in Millions of Dollars)
1988	282
1989	570
1990	916
1991	1027
1992	1179
1993	1503
1994	2001
1995	2967
1996	4226
1997	5684
1998	7100
1999	8800
2000	10100

Source Oracle annual report 2000

License Revenue by Product		Revenue by Line of Business		Revenue by Geography	
Database Platform	77%	Services	58%	Americas	58%
Applications	23%	License	42%	EMEA	29%
				Asia Pacific	13%

Revenue by Geographic Regions (in Thousands)

	2000	1999	%(in 2000) p91
American Operations	5,913.4	5,053.2	58.4%
Europe Middle East Africa	2,983.1	2,855.2	29.4%
Asia-pacific Operations	1,233.5	918.8	12.2%
Total	10,130.1	8,827.2	

Exhibit 4

Database Market Share	
Oracle	42%
IBM DB2	20.40%
Microsoft SQL Server	7.80%
Other	29.40%

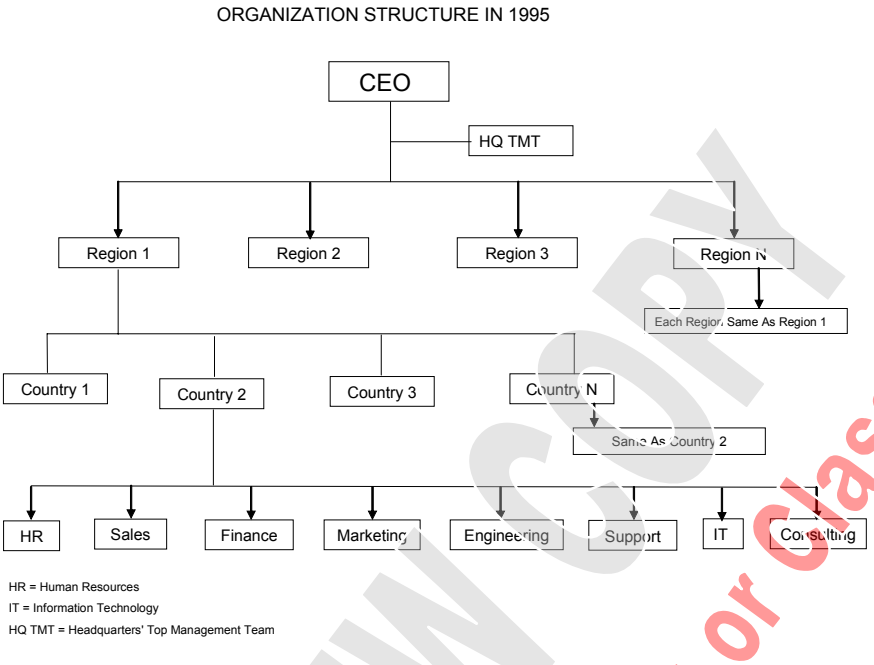
ERP Market Share 1998 (market sales in 1999 $20.3 billion, CAGR 37%)

Players	Marketshare
Sap	31%
Oracle	10%
Peoplesoft	9%
J.D.Edwards	7%
Baan	6%
Others	37%

CRM Market share 1999 (market size in 1999 was $3.7 billion with CAGR 49%)

Siebel Systems	19%
Oracle	10%
Clarify	6%
Peoplesoft/Vantive	5%
Bann	4%
Others	56%

Organisation Chart A



Organisation Chart B