

significant differences in progress on implementation between the various business groups. The question was how DSM could speed up the process. Top management hoped that the new appraisal system would help the implementation move forward.

Another concern related to how BSDs and SVCs could be effectively translated into specific actions and program management. Thus far, it had been entirely up to the business groups whether and how to operationalize the chosen strategy in terms of value drivers, or how to integrate the SVC with the performance measurement system such as the balanced scorecard. Business groups chose their own way to resolve these issues, with the outcome often being dependent on the consultant that had been hired.

The real test for the future was 'consequence management'. What should DSM do if a business group did not meet its contract, given DSM's historical culture of tolerance for mediocre performance?

Finally, there were some more fundamental questions. Implementing the new financial metrics had led to greater emphasis on short-term performance. DSM felt that this short-term focus could be hazardous for a specialty company that heavily depended on innovation and R&D. For example, in 2000 one of DSM's most successful and profitable products was Stanyl, a product which had been 10 years in development, with negative EPs throughout all those years. How would these kinds of investment projects be handled under the new approach?

CASE

7

## Transforming the prancing horse: Ferrari 1950–2004

By Mark Jenkins<sup>1</sup>

In 2004 Ferrari won their sixth successive world championship constructors title, the first time this had ever happened since the award began in 1958. Furthermore driver Michael Schumacher won his fifth successive drivers' world championship, the first time a driver had ever achieved such a concentrated dominance, his previous world championships for the Benetton team in 1994 and 1995 also meant that he had now achieved a total of seven drivers' world championships making him the most successful driver since F1 began in 1950. However, this success had not come without controversy. At the Austrian Grand Prix of 2002 Ferrari were accused of unsporting behaviour when their second driver, Rubens Barrichello, who had dominated the race, moved over to allow Michael Schumacher to win, thereby maximizing Schumacher's world championship points. Whilst there was a furore in the press, the Ferrari management remained stoical about their approach. After all, this success had been a long time coming, their 1999 constructors' title had been their first for 16 years, during which the honours had been dominated by the British based Williams, McLaren and Benetton teams. Moreover Ferrari's focus had always been to secure the drivers' championship and Schumacher's title in 2000 had been Ferrari's first since Jody Scheckter in 1979, a gap of 21 years. The roots of Ferrari's 2000 victory can be traced back to the appointment of a new chairman, Luca di Montezemolo in 1991, the fact that it took Ferrari ten years to reinvent itself into a world championship winner, meant that those involved in this journey felt justified in savouring the fruits of victory for as long as possible.

### The Prancing Horse

Born in 1898, Enzo Ferrari achieved his boyhood ambition of becoming a racing driver. Legend has it that on his first victory at the 1923 Circuito del Savio he was presented the prize by Countess Paolina Baracca, the mother of first world war fighter pilot

Francesco Baracca who had used an image of a prancing horse on the side of his plane. The countess offered Ferrari the horse logo so that he could use it for his racing cars, an offer he gratefully accepted. However Ferrari's career as a driver was soon behind him and in November 1929 he created Scuderia Ferrari (SF) based in Modena, between Parma and Bologna in northern Italy. SF focused on the preparation and competition of racecars for enthusiasts, thereby creating one of the first specialist motorsport companies. They exclusively raced Alfa Romeo cars and in 1932 Alfa Romeo outsourced all its motorsport activity to be run by SF. 1932 was also the year that Ferrari used the prancing horse logo, a black horse on a yellow background – the historic colour of Modena, to symbolize Scuderia Ferrari. The partnership with Alfa Romeo proved to be very successful, winning 144 out of 225 races in the period up to 1937. However during the late thirties the German Mercedes and Auto Unions began to dominate racing and following the second world-war Alfa Romeo split with SF and Enzo Ferrari went on to build his first car.

The Ferrari 125 made its debut in May 1947 having been designed and developed over the previous two years. Most of the design and development had focused on the creation of the Ferrari supercharged 12-cylinder engine, the first in a long line of Ferrari *dodici cilindri* engines. The Ferrari 125 entered the new F1 championship when it began in 1950, but it was not until 1951 that a Ferrari won a Grand Prix and in 1952 driver Alberto Ascari won the driver's world championship. The early fifties were of unparalleled success for Ferrari and the other Italian teams of Alfa Romeo and Maserati who were all based in northern Italy. Italy were now the world leaders in motorsport engineering with designs which focused on supercharged 4.5 litre engines positioned in front of the driver, their blood red cars a reflection of the earlier days of grand prix racing when cars were colour coded by country of origin with British racing green for the Vanwalls and BRMs, and the silver Mercedes and Auto-Unions from Germany.

The 1950s were also a tragic time for Ferrari, overall safety standards were poor and many drivers died in Ferrari cars. As a consequence Ferrari often had to endure a great deal of criticism from the press, Ferrari had lost his son Dino in 1956, and for many this loss hardened his attitude to life and to the loss of drivers. The role of the driver was simply to do a job – bring victory to the red cars of Ferrari and if they did not there was always another to take their place. He was also very frugal about driver's wages as former world champion Phil Hill remarked: 'The Old Man's line was very much that you drove for Ferrari for the honour of it. And he wasn't kidding.' Similarly it was also claimed that Enzo liked to manage the situation so no particular driver was able to gain the credit for success, as the following observation by former driver Stirling Moss illustrates: 'I never drove for him, but I've no doubts that in my day he would allow different drivers to win by giving them better cars sometimes, thereby giving the impression that the driver didn't count for anything – that it was the *car* which had won.'

Ferrari himself had a rather enigmatic approach to running the company. After the death of his son Dino he very rarely left the Modena area, and hardly ever attended races, preferring to spend his time either in the factory or at the Ferrari test facilities. He relied on the Italian media – who had always shown a keen interest in Ferrari – and his closest advisors for information which often created a highly political atmosphere in the team.

However, the Italian supremacy was challenged towards the end of the fifties with the British constructor Cooper developing small 2.0 litre cars which positioned the engine behind the driver and whose designs focused on maximizing mechanical grip as opposed to the emphasis on engine power preferred by the Italians. Cooper dominated the world championships of 1959 and 1960 using the 'bought in' Coventry Climax engine which had been originally designed to power water pumps for fire engines. They were followed by Lotus who, like Cooper, produced lightweight agile cars with high levels of mechanical grip.

Ferrari initially resisted the trend being pioneered by the British constructors whom he referred to as 'assemblatori' or 'garagistes'. He defended the engine layout of the Ferrari with the analogy that the 'horse' had always pulled, not pushed, the cart. Although not an engineer himself, the designers who Ferrari employed (Alberto Massimino, Gioachino Colombo, Carlo Chiti and Mauro Forghieri) had learnt their trade as engine designers and so the design of a new car would always start with the engine. Ferrari himself

often referred to 'the song of the twelve' underlining the distinctive high pitched note of the Ferrari engine. However by 1960 the dominance of the British cars was clear, and Ferrari had to build a lighter rear-engined car, which they did using a highly effective V6 engine. The Dino 156 (1.5 litre, V6) or 'shark nose' dominated 1961 and gave Ferrari a further world title. However, the advances made in chassis construction by other teams had meant that they were increasingly uncompetitive and in 1964 the Ferrari 158 was launched with a similar monocoque type chassis to the Lotus 25 of 1962. In 1964 Ferrari tried out the 'Flat 12' engine developed by Mauro Forghieri, it was this 12 cylinder unit that was seen to be the future for Ferrari.

## Ferrari renaissance: The mid-seventies

In the late sixties Ferrari merged with Italian automotive manufacturer Fiat. This was, in effect, a benign acquisition, with Fiat acquiring 40% of the equity in Ferrari, thereby providing a huge injection of cash to support R&D activities. This allowed the construction of a private Grand Prix circuit at Fiorano close to the SF factory at Maranello. The technical team used this facility to engage in a period of intensive development focusing on the 'flat 12' engine.

The new ownership and influence from Fiat meant increased resources, but also increased pressure for results. In the early seventies F1 was dominated by the Ford DFV engine. Built by Cosworth Engineering near Northampton and funded by the Ford Motor Company, the DFV was F1's first purpose built engine. It was light, powerful and relatively inexpensive. In 1968 the engines were available for 7500 each and were fully capable of winning a Grand Prix. This enabled the British constructors, who specialized in chassis design, to become increasingly competitive. In 1971 and 1973 every Grand Prix was won by a car using a DFV engine. The impact of the DFV engine was that it made the cars both very light and very powerful, at a time when tyre technology was relatively primitive. This left the designers searching for other ways to increase grip. The answer came from aerodynamics with aircraft type 'wings' being used to create downforce or aerodynamic grip allowing the cars to both enter and exit corners at vastly increased speeds.

During this time Enzo himself had been suffering from ill health, now in his seventies he made the decision to appoint a team manager to run the day-to-day activities of the F1 team. Luca di Montezemolo was a

25-year-old lawyer who was also connected to Fiat's Agnelli dynasty. In addition Mauro Forghieri had been recalled to Ferrari in 1973 as technical director. In 1975 the fruits of Forghieri's creative ideas and the intensive testing at Fiorano were exemplified in the new 312T which featured a wide low body with a powerful flat 12, 12-cylinder engine and a revolutionary transverse (sideways mounted) gearbox which improved the balance of the car making it handle extremely well. The engine was originally designed by Forghieri in 1964, and when asked why he didn't take the opportunity to copy the V8 DFV his response was unequivocal: 'I used the 12 cylinder because it is the story of the factory (at Maranello). We make 6 and 8 cylinder engines for our cars, but the 12 is the best. Every engineer that comes to Ferrari, first wants to work on engines and second the 12 cylinder engines. There are economic reasons as we already have many of the parts and components, but most importantly it is the history of Ferrari.'

Although the new car was not ready until the season had already started, driver Niki Lauda, with the support of team-mate Clay Regazzoni, was able to easily secure both the drivers and constructors world championships. The Ferraris dominated the 1975 season. With their elegant handling and the power advantage of the engine, they were in a class of their own. This unprecedented run of Ferrari success continued through to 1978 and in 1979 when they won both the drivers and constructors championships, but perhaps their greatest moment was in 1979 when Ferrari's finished first and second at the Italian grand prix at Monza. Sending the fanatical Italian fans or tifosi, and the Italian press into a complete frenzy.

## Ferrari, the end of an era: 1980–1990

However in 1980 312T5 car was outclassed by the competition. New innovations in aerodynamics brought the 'ground effect' revolution, pioneered by Lotus and quickly adopted by Williams and Brabham. Here the underside of the car featured two 'venturi', or channels either side of the driver. These were aerodynamically designed to create a low pressure area under the car which sucked the car to the track allowing faster cornering. Sliding strips of material or 'skirts' were used to create a seal for the air flowing under the car. Whilst the Ferrari's engine was one of the most powerful it was a 'flat 12' meaning that the cylinders were horizontal to the ground creating a low

and wide barrier which gave little opportunity to create the ground effect achieved with the slimmer V8 engines. In 1978 Alfa Romeo had launched a V12 engine to replace their flat 12 for this very reason. No such initiative had been taken at Ferrari who were concentrating on a longer term project to develop a V6 turbocharged engine. Autosport correspondent Nigel Roebuck commented on this change of fortune: 'Maranello's flat-12, still a magnificent racing engine, is incompatible with modern chassis. Villeneuve and Scheckter were competing in yesterday's cars.' The lowest point came in the Canadian Grand Prix when the reigning world champion, Jody Scheckter, failed to qualify his Ferrari for the race, a bit like Italy failing to qualify for the soccer World Cup. Once again the full wrath of the Italian press descended on the team.

In the mid-eighties more and more investment was poured into the Italian facilities but with no dramatic effect on performance. A key problem was that new developments in aerodynamics and the use of composite materials had emerged from the UK's motorsport valley. Rather than a valley this was an area to the west, north and south of London where the major British F1 teams were located. These teams bought in their engines from specialist suppliers such as Cosworth, Renault, Honda and Porsche. They therefore focused their expertise on the design and development of the chassis which featured advance materials such as the carbon composite monocoque (a term for the one piece chassis) which had been pioneered by McLaren's John Barnard in the early 1980s. These teams also used sophisticated 'moving ground' wind tunnels which were available at local universities in Cranfield, Southampton and Imperial College London to perfect their aerodynamic performance.

In 1984, British designer Harvey Postlethwaite became the first non-Italian Technical Director of Ferrari. In 1986 British designer John Barnard was recruited to the top technical role. However Barnard was not prepared to move to Italy as he felt that his network of contacts in the UK would be essential to the success of his position. Surprisingly Enzo Ferrari allowed him to establish a design and manufacturing facility near Guildford in Surrey that became known as the Ferrari 'GTO' or Guildford Technical Office. The fact that Barnard was defining the technical direction of Ferrari meant that he became increasingly involved in activities at both sites. However the geographical separation between the car and engine departments led to development of various 'factions' within Ferrari, making Barnard's job increasingly difficult. In 1987 on arrival at

Maranello he ordered a ban on the consumption of wine at the midday canteen, there was uproar with the workforce seeing this as an insult to their professionalism.

Enzo Ferrari's death in 1988 created a vacuum which was filled by a series of executives from the Fiat organization for a number of years. It was written into the contract that on Enzo's death Fiat's original stake would be increased to 90%, this greater investment led to attempts to run Ferrari as a formal subsidiary of the Fiat group. Barnard became frustrated with the interference and politics of the situation and left to join Benetton in 1989. Ferrari had recruited world champion Alain Prost to drive for them in 1990, but whilst the GTO designed 1990 car was highly competitive (an example of this Ferrari 641 now resides in New York's Museum of Modern Art), the organization was falling apart and in 1991 Prost was fired by the Ferrari management for criticising the car and therefore the sacred name of Ferrari. Former driver Patrick Tambay commented on the situation as follows: 'No one's in charge anymore. When the Old Man was alive the buck stopped with him. Maybe he took some curious decisions – but at least he took them. I'm not saying that Ferrari will never win again, but the fabric of what the name meant has gone. There are so many layers of management, so many bosses reporting to bosses, until ultimately it gets to Gianni Agnelli (Chairman of Fiat).'

## Transforming the Prancing Horse: 1990–2004

However at the end of 1991, Fiat's chairman Gianni Agnelli appointed Luca di Montezemolo as CEO with a mandate to do whatever was needed to take Ferrari back to the top. Montezemolo had been team manager for Ferrari during the successful period in the mid-seventies, subsequently he had taken on a range of high-profile management roles including running Italy's hosting of the Soccer World Cup in 1990. di Montezemolo accepted the role on the basis that Ferrari and in particular, the racing operation, was independent of Fiat. 'I have not been in the Fiat management stream for ten years. Maranello is another world and has to be treated as such.'

In an article in *Autosport* he described the situation as follows:

*After I arrived last December (1991) I spent five months working to understand the situation. To understand the manpower, to understand the*

*potential of the car. Once I had absorbed all this I decided to approach the whole situation in a completely different manner. Ferrari had become an inflexible monolith of a company which was no good for racing. As a result I decided to divide it into three small departments: future developments and special projects in the UK under John Barnard; the engine department in Maranello under Paolo Massai and finally the Scuderia Ferrari under Harvey Postlethwaite which is the place where we build the cars and manage the team.*

*I also wanted to build up a strong relationship between our UK facility and Italy in order to take full advantage of the F1 'silicon valley' in England for chassis development and specialist sub-contractors while still harnessing the huge potential of Maranello.*

When asked why he was repeating the 'GTO' initiative which Enzo Ferrari had set up with Barnard and which had ultimately ended with Barnard leaving and taking the facility with him, Montezemolo had a very clear response:

*I think that the GTO concept of Enzo Ferrari was a super idea. Unfortunately, at the time Ferrari was very old and the situation was managed in a bad way. But the fundamental idea was very good. For me the approach is slightly different. First of all, I am in charge of the company with full powers, so I can take a decision without anyone else taking a parallel initiative. I take my responsibilities and I want the people in the company to follow my ideas. If they follow, I am very happy. If they don't then there are many other doors, many possibilities available to them outside Ferrari. My objective is to create a smaller racing department which contains less bureaucracy, of course, there will be a lot of discussion between the engine and chassis departments. In Maranello we have a huge organization geared to building cars, but I want to take advantage of the UK facilities, and for a world-wide company like Ferrari it is certainly not a scandal to have an affiliate in the UK. If you want to make pasta, then you have to be in Parma, I want to make a sophisticated F1 project so I want to be involved in England. Then it is up to me to put everything together.*

In August 1992 John Barnard signed a five-year contract with Ferrari to design and develop their new cars.

In an effort to avoid a 'them and us' situation between the UK and Italy a number of Italian technical people were recruited to work for Barnard in the UK, and a number of English technicians were redeployed to Maranello.

At the launch of the 1992 car, Luca di Montezemolo broke with tradition, and introduced a new numbering system based on the year a car would be racing, an approach which has been followed from 1992 up to the championship winning F2003-GA (in recognition of Fiat's Gianni Agnelli who passed away in January 2003). Prior to this the numbering of many Ferrari cars had been based on the characteristics of the engine – the 312 of 1971 representing 3.0 litre 12 cylinders, the 126C4 of 1984 representing a 12° V angle with 6 cylinders, and C standing for 'Compression' or turbo-charging.

*At Ferrari we have always devoted and will continue to devote, great attention to racing, racing is part of the history, the culture and the traditions of this company. We live in a country which, especially in recent times, people have yelled and complained a bit too much. We hope that the only noise around here will be our engine as it sets new lap records at Fiorano. We are looking for a revival here, and with an eye to the future we have tried to put together a group which combines young engineers, many of them with the highest qualifications, and people whose enthusiasm and abilities will make a notable contribution. We have a lot of work to do, we have a lot of ground to make up on the opposition. We have code-named the new car F92A to demonstrate that we are turning a new page in our history.*

When asked about drivers in 1992 he also gave some indication of his thinking: 'the main priority is the new organization. We are lucky because it is a big challenge to offer a driver the chance to help re-establish Ferrari to a competitive level. I want a driver who is motivated and prepared to work with us. Motivation is everything in a driver, as Niki Lauda reminds us!'

In addition to the structural changes, di Montezemolo had also brought in some familiar faces from Ferrari's successful period in the mid seventies, driver Niki Lauda acted as a consultant to the team and Sante Ghedini took on the role of team manager. With an Englishman heading up design he followed this up with the appointment of a Frenchman, Jean Todt, to handle the overall management of the team. Todt had no experience in F1 but had been in motorsport

management for many years and had recently led a successful rally and sportscar programme at Peugeot. Driver Gerhard Berger commented on Todt's team building skills 'I was able to bring some links in the chain to Ferrari, but it took Todt to join them together. Ferrari is now working as a team for the first time. He has made a huge difference.' Chief Mechanic Nigel Stepney joined Ferrari in 1993, but his first impressions were not positive.

'When I joined Ferrari at the beginning of 1993, it was like being thrown into the lion's den. I was in a non-position, regarded as John Barnard's spy and not allowed to take any responsibility.' However he recalled the arrival of Jean Todt as a turning point in the team. 'It was like Julius Caesar every day. People getting sacked and leaving every five minutes. You never knew who was boss – not until Jean Todt arrived, took control of the situation and instilled organization, stability and loyalty into the team.'

However the physical separation between design and development in Guildford and the racing operation in Maranello led to increased problems and eventually Barnard and Ferrari parted company for the second time in 1996. This opened the way for Ferrari to recruit, not only driver Michael Schumacher, but also a number of the key individuals in the Benetton technical team which had helped him to his world titles in 1994 and 1995. The arrival of Schumacher provided new impetus for the team, as Nigel Stepney recounted: 'Once Schumacher arrived, everyone started putting us under incredible pressure. We weren't quite ready as we still needed key people, but at some point you just have to go for it and get the best driver around. He was the icing on the cake and it sent out signals that we were serious again.' Todt and di Montezemolo also chose not to make a direct replacement for the role of technical supremo who would both lead the design of the car and the management of the technical activity. They split the role between a chief designer, Rory Byrne, who had overall responsibility for designing the car, and Ross Brawn who managed the entire technical operation, these were roles which both had undertaken in working with Schumacher at Benetton. However the contractual arrangement with John Barnard had been one where the GTO designers were paid through his private company. When he left they all went with him and Byrne and Brawn faced the task of building up from scratch a new design department – around 50 people, based in Italy. The engine department continued to develop Ferrari's engines, but in line with new technologies and developments these were

now lighter V10s to compete with the Renault and Mercedes engines, rather than the beloved, but now dated Ferrari *dodici cilindri*. As part of their recruitment of Michael Schumacher in 1996 Ferrari entered into a commercial partnership with tobacco giant Phillip Morris to use their Marlboro brand on the Ferrari cars. In a novel arrangement Phillip Morris, rather than Ferrari, paid Schumacher's salary, and also made a significant contribution to Ferrari's annual operating budget. However there was one price to pay which was too high for many long-term Ferrari aficionados: the blood red Ferrari of old was now replaced by a bright orange red which was more closely matched to the Marlboro colour scheme, but most importantly was more effective on television than the original Ferrari red.

In addition to Marlboro, Ferrari also entered into a long-term partnership with Shell to provide both financial and technical support to the team (for example Shell were able to develop fuels for Ferrari which were lighter and delivered more power on combustion thereby improving both the weight distribution and performance of the car). This was a departure for Ferrari who had previously always worked with Italian petroleum giant Agip. In these kinds of arrangements Ferrari led a trend away from selling space on cars to long-term commercial arrangements, with coordinated marketing strategies for commercial partners to maximize the benefits of their investments. Ferrari also had a particular style of doing business with their partners as described by Raul Pinnel of Shell: 'They took me straight to a restaurant and offered me some wine. Normally I don't drink wine at lunch, but I realized it would be rude if I did not oblige. They asked me about my family, my friends, my history, and my life in general. I kept thinking when are they going to get to business? I kept checking my watch and worrying about my plane departure time. Finally, I told them of my concern, they said, "Don't worry; we've got a car ready for you. And now we know you and like you. You are part of the family." They gave me a big bear hug, we talked and after we agreed certain things in principle, they poured me into a Ferrari for the drive to catch my plane.'

To many the team now revolved around Schumacher, rather than, as in the past, the drivers who were honoured to work for Ferrari. Jean Alesi, a former Ferrari driver observed that 'Schumacher does whatever he wants, and they do whatever he says.' This was in marked contrast to Enzo Ferrari who had famously rejected a number of top class drivers because they wanted too much money, such as Jackie

Stewart in 1970 and Ayrton Senna in 1986 whose wage demands Enzo described as 'imaginativo'.

Another key part of this revised organization was the relationship between engine design and the other critical areas of aerodynamics and chassis development, as summarized by Ross Brawn: 'I really felt that if we could get into a situation where the engine was completely integrated into the car, then that must be the best situation. So one of the things that was important to myself and Rory was to have someone who understood that and luckily Paolo (Martinelli, Engine Director) very quickly appreciated our ideas and was completely receptive to the idea of a fully integrated engine as part of the car package.' Paolo Martinelli had worked on engines in Ferrari for many years, and was one in a long line of brilliant Italian engine designers, but he recognized that there was a need for change which was supported at the top of the organization and that real progress could be made by working closely with the other areas of the car: 'I think it was very important that there was trust and direction from the top management.' This approach is best summarized by Brawn: 'Our efforts have always been not to make everything as good as it can be, but to work together as a complete package.'

This rejuvenated team provided the basis for Michael Schumacher's dominance of F1. In 1997 they raced the Barnard developed Ferrari and finished second in the constructors championship. Although as this was Ferrari's 50th anniversary there was high anticipation that this was to be their year, as Nigel Stepney recounts: '1997 was a great disappointment for the team as we so nearly won the championship, we felt we had the right way of working; we just had to keep at it and not panic.' Their competitiveness continued to improve and in 1999 they won the constructors championship – although the driver's championship went to Mika Hakkinen in a McLaren-Mercedes, Stepney again recalls: 'It was a very stressful year, we lost Michael Schumacher after he broke his leg at Silverstone. Then we made mistakes such as the pit-stop at the Nurburgring. But although we paid the price in one respect, we gained from the experiences. We realized that as a team, we had to pace ourselves, to switch off and recharge our batteries sometime.'

There was clear momentum in the company now to secure the world championships and what followed was a complete domination by Ferrari in the period 2000–2004. For Montezemolo this was the culmination of a process which had started from the moment of his appointment in 1991: 'At the beginning of the '90s,

that, but we had to find out about things we didn't know such as aerodynamics, electronics and perhaps most importantly, team work. It's because of all that change that we have a very strong team today.'

## PENDIX A: SUMMARY OF WORLD CHAMPIONS

YEAR	Driver	Car/Engine	Constructor's Cup
1950	Giuseppe Farina	Alfa Romeo	
1951	Juan Manuel Fangio	Alfa Romeo	
1952	Alberto Ascari	Ferrari	
1953	Alberto Ascari	Ferrari	
1954	Juan Manuel Fangio	Maserati	
1955	Juan Manuel Fangio	Mercedes-Benz	
1956	Juan Manuel Fangio	Lancia-Ferrari	
1957	Juan Manuel Fangio	Maserati	
1958	Mike Hawthorn	Ferrari	Vanwall
1959	Jack Brabham	Cooper/Climax	Cooper/Climax
1960	Jack Brabham	Cooper/Climax	Cooper/Climax
1961	Phil Hill	Ferrari	Ferrari
1962	Graham Hill	BRM	BRM
1963	Jim Clark	Lotus/Climax	Lotus/Climax
1964	John Surtees	Ferrari	Ferrari
1965	Jim Clark	Lotus/Climax	Lotus/Climax
1966	Jack Brabham	Brabham/Repco	Brabham/Repco
1967	Denny Hulme	Brabham/Repco	Brabham/Repco
1968	Graham Hill	Lotus/Ford	Lotus/Ford
1969	Jackie Stewart	Matra/Ford	Matra/Ford
1970	Jochen Rindt	Lotus/Ford	Lotus/Ford
1971	Jackie Stewart	Tyrrell/Ford	Tyrrell/Ford
1972	Emerson Fittipaldi	Lotus/Ford	Lotus/Ford
1973	Jackie Stewart	Tyrrell/Ford	Tyrrell/Ford
1974	Emerson Fittipaldi	McLaren/Ford	McLaren/Ford
1975	Niki Lauda	Ferrari	Ferrari
1976	James Hunt	McLaren/Ford	McLaren/Ford
1977	Niki Lauda	Ferrari	Ferrari
1978	Mario Andretti	Lotus/Ford	Lotus/Ford
1979	Jody Scheckter	Ferrari	Ferrari
1980	Alan Jones	Williams/Ford	Williams/Ford
1981	Nelson Piquet	Brabham/Ford	Brabham/Ford
1982	Keke Rosberg	Williams/Ford	Williams/Ford
1983	Nelson Piquet	Brabham/BMW	Brabham/BMW
1984	Niki Lauda	McLaren/Porsche	McLaren/Porsche

Year	Driver	Car/Engine	Constructor's Cup
1985	Alain Prost	McLaren/Porsche	McLaren/Porsche
1986	Alain Prost	McLaren/Porsche	Williams/Honda
1987	Nelson Piquet	Williams/Honda	Williams/Honda
1988	Ayrton Senna	McLaren/Honda	McLaren/Honda
1989	Alain Prost	McLaren/Honda	McLaren/Honda
1990	Ayrton Senna	McLaren/Honda	McLaren/Honda
1991	Ayrton Senna	McLaren/Honda	McLaren/Honda
1992	Nigel Mansell	Williams/Renault	Williams/Renault
1993	Alain Prost	Williams/Renault	Williams/Renault
1994	Michael Schumacher	Benetton/Ford	Williams/Renault
1995	Michael Schumacher	Benetton/Renault	Benetton/Renault
1996	Damon Hill	Williams/Renault	Williams/Renault
1997	Jacques Villeneuve	Williams/Renault	Williams/Renault
1998	Mika Hakkinen	McLaren/Mercedes	McLaren/Mercedes
1999	Mika Hakkinen	McLaren/Mercedes	Ferrari
2000	Michael Schumacher	Ferrari	Ferrari
2001	Michael Schumacher	Ferrari	Ferrari
2002	Michael Schumacher	Ferrari	Ferrari
2003	Michael Schumacher	Ferrari	Ferrari
2004	Michael Schumacher	Ferrari	Ferrari

Notes: Constructors championship is based on the cumulative points gained by a team during the season. Currently each team is limited to entering two cars and drivers per race.

## COSCO

By Lily Zhang, Gary Liu and Peter Lorange<sup>1</sup>

CASE  
8

By 2007, China Ocean Shipping (Group) Company (COSCO) owned and operated a varied merchant fleet of some 800 vessels. It included about 140 container ships, with a carrying capacity of over 430 000 twenty-foot equivalent units (TEUs), and about 500 dry bulk vessels with a carrying capacity of up to 38 million deadweight tonnes (DWT). COSCO was the second largest shipping company in the world, with total carrying capacity of more than 50 million DWT; it was also the No.1 dry bulk shipping company.

Back in 1998, the shipping industry was experiencing tough times in its business cycle because of the Asian financial crisis. Wei Jiafu, the recently appointed president and CEO of COSCO, was reconsidering the corporate strategy. Was it possible to build a business model that would help COSCO pull through hard times, given that the industry was typically cyclical?

### Background

Founded in 1961, COSCO was the first international shipping carrier in China. In May 1967 one of COSCO's liners embarked on a maiden voyage to Western Europe, marking the beginning of the first international liner service in China. In 1978 COSCO's regular container liner business came into operation as the first of its kind in China.

In the 1980s, as developed western economies began to pay more attention to services and high-tech products and to transfer manufacturing eastward. Some developing eastern countries took up the challenge and evolved to become manufacturing bases. All of this changed the shipping industry, with eastern countries emerging as the drivers of the industry. In 1982 COSCO established COSCO America in California; it then established COSCO North America Limited in partnership with Norton Lilly. In 1988 COSCO restructured a joint venture it had in UK by purchasing the shares held by its business partner, thus giving it a wholly owned subsidiary in London. The establishment of a new COSCO UK marked the beginning of COSCO's transnational business operations in the international arena.

In the 1990s China's economy and foreign trade started to grow fast. This 'China factor' became increasingly influential in the world economy and the global shipping industry. Besides all the external factors, COSCO's growth could also be attributed to its skills in leveraging the capital markets. In 1993 COSCO acquired a company listed on the Singapore Stock Exchange and changed its name to COSCO Investment (Singapore), which was later renamed COSCO Corporation. In 1994 COSCO Pacific began trading on the Hong Kong Stock Exchange.

Wei Jiafu was born in 1950 and obtained a master's degree in shipping management engineering and a doctorate in shipping and ocean structure design. Before becoming COSCO's CEO in 1998 – the 36th year in his shipping career – Wei was a senior executive in many COSCO subsidiaries, both at home and abroad. During his tenure as the president of COSCO (Singapore) Ltd, he had managed to turn it into a listed company in 1993 – a double first. It marked the first entry of COSCO and of a state-owned enterprise (SOE) into the international capital market.

### 'Two transformation' strategy

In 1998 Wei Jiafu decided to initiate a 'two transformation' strategy at COSCO: Transformation from a global shipping carrier to a global logistics operator based on the shipping business, and from a cross-border business player to a multinational conglomerate. To carry out the transformation from a carrier to a logistics operator, COSCO planned to extend the industry value chain and move into logistics, terminal operations, ship repair and shipbuilding businesses.

### Logistics

COSCO Logistics was set up in 2002. The company had eight regional subsidiaries across the nation, covering a wide range of areas from Dalian, Qingdao, Shanghai and Ningbo in northern and eastern China to Wuhan, Xiamen and Guangzhou in central and

<sup>1</sup>Source: Copyright © 2008 by IMD – International Institute for Management Development, Lausanne, Switzerland.

system, and launching updated models and software almost every 4 months. Most importantly the iMac was the first Apple product with wide consumer acceptance, since 70 per cent of sales were adding to the Macs already in use, helping Apple double its worldwide market share to 6 per cent by the end of 1998.

In parallel Steve Jobs proceeded to simplify Apple's product mix in terms of four lines of desktop and portable computers designed for both the professional and consumer markets. Following the iMac's success, the iBook was launched in 1999. This consumer portable computer featured an optional AirPort wireless networking hub that allowed up to ten Macs to share an Internet connection. Just six weeks after the iBook's unveiling, Apple had received more than 140 000 advance orders, making it a success equal to the iMac.

After the introduction of the iMac and the iBook, Apple's figures looked a lot healthier. In October 1999 Apple announced its eighth consecutive profitable quarter and closed that fiscal year with revenues of \$6.1 billion and net earnings of \$601 million. Whereas most of Apple's innovations led to an even more closed Apple archipelagos (software and hardware integration), at the same time Jobs decided to loosen control in other areas, for example the use of standard interfaces, such as the USB port. This change made the Mac a more open system since users of a Mac Mini for example could use a non-Mac keyboard. In the years to follow, a variety of innovative proprietary applications, developed in-house, supported the Macintosh product lines. These include programs such as those in the iLife package (iDVD, iMovie, iPhoto,) that offered editing and creative opportunities to users as well as Apple's own Web browser, Safari, developed in 2003.

### ***Breakthrough innovation in consumer electronics and entertainment industries***

In 2001 Apple introduced its first iPod, launching a new era for the company as it entered the consumer electronics industry. Capitalizing on the emerging trend of MP3 music, Apple introduced a breakthrough product that soon became synonymous with the MP3 music player category. With impeccable design and easy to use menu, the iPod could load 1000 songs in just 10 minutes and play music for 10 hours. The integration with the iTunes 2.0 software also made synchronizing music libraries a matter of few seconds. A year later, in 2002 Apple released more capacious iPods that could also work with Windows, a move that helped to

skyrocket iPod sales. By the end of 2003 more than one million iPods were sold marking the first substantial stream of revenues apart from the Macintosh. Since then the iPod product range has been renewed every 3 to 5 months and the company announced in 2007 that it sold the 100 millionth iPod. These numbers made the iPod the fastest selling music player in history.

Arguably, one of the most important innovations for Apple has been the launch of the iTunes Music store in 2003, a revolutionary service through which consumers could access and purchase online music for only \$0.99 per song. The iTunes Music Store was compatible with all iPods (running both in Macs as well as Windows based computers) and served as Apple's Trojan horse to what Jobs has envisioned as the digital hub where digital content and Apple devices would be seamlessly interconnected. The downloaded songs had royalty protection and could only be played by iPods, bringing the interoperability between Apple's hardware, software and content to a new level and creating higher barriers to entry in this ecosystem.

Apple's next big innovation was the iPhone, a device combining a phone, a music player and a personal computer that was expected to redefine the mobile phone industry in the same way iPod and iTunes revolutionized the music industry. According to Jobs, 'It was a great challenge: Let's make a great phone that we fall in love with. Nobody had thought about putting operating systems as sophisticated as an OS X inside a phone, so that was a real question'. iPhone's success is attributed not only to its technological capacity but also to its design: 'We had a different enclosure design for this iPhone until way too close to the introduction to ever change it. And it came one Monday morning and I said: I just don't love it. And we pushed the reset button. That happens more than you think because it is not just engineering and science. There is art too.' According to Burrows and Grover (2006), 'Jobs' true secret weapon is his ability to meld technical vision with a gut feel of what regular consumers want and then market it in ways that make regular consumers want to be part of tech's cool club.'

### **Playing by different rules: Sticking with a proprietary ecosystem**

Apple's innovations have redefined existing product categories such as music players, and helped the company successfully enter hotly contested new

### EXHIBIT 5 HP'S REVENUES FROM VARIOUS BUSINESS SEGMENTS (IN BILLIONS OF \$)

Years (ending October 31st)	1999	2000	2001	2002	2003	2004	2005
Imaging and printing systems	18.5	20.4	19.4	20.4	22.6	24.1	25.1
Computing systems	17.3	20.6	17.7				
IT services	6.3	7.1	6.3				
Other	1.2	1.5	1.0				
Personal systems group			21.8	21.2	24.6	26.7	
Enterprise systems group				16.1	15.3	15.0	16.7
HP services				12.3	12.3	13.8	15.5
Software						1.1	0.9

cent holding in the company to oppose the merger. Following this, David Woodley Packard, a relative of HP's co-founder Packard, and the Packard and Lucile Packard Foundation<sup>3</sup> also decided to use their stakes in the company to oppose the merger. Said Walter, 'After careful deliberation, consultation with my financial adviser, and consideration of developments since the announcement of the merger, I have decided to vote against the transaction. I believe that Hewlett-Packard can create greater value for stockholders as a stand-alone company than as a company combined with Compaq.'

Many industry observers too felt that the HP-Compaq merger did not make sense as it did not provide many real synergies to either company. This view was shared by HP's competitors as well, who foresaw with glee that the merger might instead create better opportunities for themselves. Ed Zander, president, Sun Microsystems, said, 'When two sick companies combine, I'm not sure what you get. This is a great opportunity for us, IBM and others to go after sales.' There were rumours that the HP-Compaq merger would never materialize. However, Fiorina was quick to brush aside these speculations. She said, 'We remain convinced it is in the best interests of shareholders. We remain convinced that this merger will occur....'

On March 19, 2002, after a proxy vote, HP announced that the majority of its shareholders were in favour of the proposed merger. Walter subsequently filed a suit against HP claiming that the company improperly gained votes from Deutsche Asset

Management, one of the company's largest shareholders. This suit was resolved in May 2002, when the court ruled in favour of HP. In May 2002, HP paid \$19 billion in stock for Compaq.

After the merger, HP had four main businesses – imaging and printing, personal systems, enterprise systems and HP services.

The HP-Compaq merger brought about many changes in HP, especially in the company's culture. Fiorina had earlier framed the 'Rules of the Garage' which, according to her, 'tried to capture the true spirit of HP' and 'ensured continued innovation' in the company. These rules emphasized performance, and although they did not seem to be in conflict with the HP Way, it was believed that Fiorina was trying to change the culture that was immortalized by the company's founders. (Refer to Exhibit 5 for the Rules of the Garage.)

The new rules did not find favour with many HP employees, who still believed in the HP Way and did not take easily to any change in the company's culture. One of the most radical steps that Fiorina took after the merger was to lay off more than 17 000 HP employees. This was a major shock to the employees, as under the HP Way employees were never laid off. Fiorina's popularity at the company had reached a low by this time, as she was believed to be putting profits ahead of people.

Commenting on Fiorina's management style, Shane Robison, executive vice president and chief strategy and technology officer at HP said, 'She's not in our offices every day beating on us, but she expects

us to be on top of what we're doing. She believes our culture should be based on performance, self-motivation and high achievement.' Fiorina made a drastic organizational change by bringing in a top-down approach in the company. Analysts observed that Fiorina tried to bring in the hierarchical system of management followed at AT&T and Lucent, to HP – a company that prided itself on its egalitarian work culture.

Critics also pointed out that Fiorina had started behaving like a celebrity during her tenure as HP's CEO, and this did not go down well with HP employees. Fiorina always travelled in a limousine, while all the previous CEOs of the company had used regular rented cars to visit employees at various locations. It was also said that Fiorina did not interact much with the employees personally. She communicated with them mostly through e-mails, webcasts, etc. This went against the HP Way where managers and other top executives interacted freely with employees and practised management by walking around. Against this background, Fiorina's 'movie star antics' only served to make her more unpopular at the company.

In 2003, Fiorina attempted another reorganization at HP. The company's product line now included a wide range of products ranging from digital cameras to printers and from personal computers to IT infrastructure. The company was reorganized into four main business divisions – customer solutions group, imaging and printing group, personal systems group and technology solutions group. HP offered products like personal computers, digital cameras, notebooks, etc. to individual consumers. At the same time, it provided IT infrastructure and services to businesses.

Some observers were doubtful as to whether HP would succeed in its strategy of offering a wide range of products to disparate customers. HP still faced stiff competition from Dell in the PC market and IBM in the

services market, and this would make it difficult for the company to gain a lead in either of these markets.

Fiorina, however, believed that HP had a competitive advantage in that it offered high-technology innovative products at relatively low prices, thereby providing the 'best customer experience'. She believed that although Dell offered low-cost products, it was low on technology and its products did not match the quality of HP's products. On the other hand, though IBM's products and services were of superior quality, their prices were high and mainly targeted business customers. Hence HP was in a better position than its two main competitors, in Fiorina's view.

However, analysts remained skeptical. Cal Braunestein, chairman and CEO, Robert Frances Group Inc. commented, 'I think they've got the capability to be broad and deep. Whether they can execute is the real issue.'

Others doubted the competitive advantages that HP claimed in relation to Dell and IBM. It was believed that HP was too diversified and that its position in the market squeezed it between the two companies. Frank Gillett, principal analyst, Forrester Research said, 'The market challenges that are in place right now for HP are trying to compete with Dell in the commodity market while also filling out the mix to compete in the full-service high-end (market) with IBM.'

By 2004, Fiorina's critics had become even more vocal. HP had been posting disappointing earnings ever since its merger with Compaq. This took a toll on the company's stock price which was on a downward trajectory between 2002 and 2004. Moreover, even after its merger with Compaq, HP continued to post disappointing results from the PC and the storage and servers businesses. It was believed that HP was surviving on the revenues from the imaging and printing business alone.

### EXHIBIT 6 THE RULES OF THE GARAGE

- Believe you can change the world.
- Work quickly, keep the tools unlocked, work whenever.
- Know when to work alone and when to work together.
- Share tools, ideas. Trust your colleagues.
- No politics. No bureaucracy. (These are ridiculous in a garage)

- The customer defines a job well done.
- Radical ideas are not bad ideas.
- Invent different ways of working.
- Make a contribution everyday. If it doesn't contribute, it doesn't leave the garage.
- Believe that together we can do anything.

Source: Lance Knobel, 'Rules of garage ensured innovation', <http://www.digitalnpq.org>, May 15, 2001.

<sup>3</sup>Created in 1964 by Packard and his wife Lucile Packard, the Packard and Lucile Packard Foundation is a philanthropic organization. It is the largest shareholder of HP.

Some industry observers said that Fiorina had failed to execute the diversification strategy properly. She kept all authority with herself and refused to delegate. In the third quarter of fiscal year 2003–2004, HP reported earnings of \$586 million, with earnings per share of 24 cents – seven cents less than what had been forecast. After the announcement of the results, HP's share price dropped by 13 per cent. Following this, Fiorina fired three top HP executives whom she held responsible for the disappointing financial performance of the company.

By 2005, HP's share price still languished around the \$20 level, a far cry from its peaks in 2000. Fiorina was blamed for not managing the company well. Investors held her responsible for the condition of the company. Analysts opined that Fiorina concentrated more on 'marketing' her vision (some even went so far as to say that Fiorina was more interested in marketing 'herself' during her presentations, as she was believed to be nurturing political ambitions) rather than focusing on aspects such as the company's structure and strategy to realize that vision. According to reports, Fiorina also opposed the HP board's decision to appoint a chief operating officer to manage the operations of the company. It was said that she was trying to do everything herself.

Criticisms were also beginning to be heard about Fiorina's vision of transforming HP from a computer manufacturing company to a 'consulting and computing powerhouse'. Fiorina was accused of having continuously over-promised and under-delivered as the CEO of HP. The merger between HP and Compaq was also being labelled as a big mistake as it had failed to show concrete results.

Some people were of the view that HP should spin off its lucrative imaging and printers business and focus on improving its computing devices and services business. Instead, Fiorina merged HP's personal systems group and the imaging and printing group in January 2005. This too drew criticism from industry observers. They felt that merging two product groups would only make the company's operations more complex and difficult.

HP's board too was believed to be unhappy with Fiorina's unwillingness or inability to delegate. As a result, her relationship with the HP board became more and more strained over time.

Finally, in February 2005, the board forced Fiorina to step down, citing differences over the execution of HP's strategy. Said Fiorina, 'While I regret the board and I have differences about how to execute HP's strategy, I respect their decision. HP is a great

company and I wish all the people of HP much success in the future.'

Commenting on Fiorina's exit, Patricia Dunn (Dunn), non-executive chairman of HP said, 'Carly (Fiorina) was brought in to catalyze a transformation of HP. She did that in a remarkable fashion, and she executed the merger with her management team in a superior fashion. Looking forward, we think the job is very reliant on hands-on execution, and we thought a new set of capabilities was called for.'

After Fiorina left, HP's board appointed chief financial officer, Robert Wayman (Wayman) as the company's interim CEO. He was later replaced by Mark Hurd in March 2005.

## Mark Hurd

Mark Hurd was born in New York City in 1957. He was a good tennis player and won a tennis scholarship to Baylor University, from where he received a bachelors degree in business administration in 1979. Hurd had also spent some time playing professional tennis.

Hurd joined NCR Corp. in 1980 as a fresh graduate. At NCR, Hurd became known for his excellent operational skills. In 1999, Hurd was promoted as the chief operating officer of Teradata, the data warehousing division of NCR. Hurd was credited with having increased the revenues of this division by almost 36 per cent during his tenure. In 2001, Hurd became the president and chief operating officer of NCR. He was later promoted as the company's CEO in 2003. Hurd turned NCR around by scrapping its unprofitable business units and implementing cost control measures.

Although NCR was a smaller organization than HP, both companies had some similarities in their businesses. The *Wall Street Journal* wrote that Hurd had in fact been running a 'mini HP' at NCR.

On March 29, 2005, HP named Hurd as its new CEO. 'Mark came to our attention because of his strong execution skills, his proven ability to lead top performing teams and his track record in driving shareholder value. He demonstrated these skills by turning around NCR, which, while smaller than HP, is a complex organization with multiple business segments', said Dunn, commenting on the choice of Hurd as CEO.

Industry observers opined that HP's choice might have been guided by the fact that Hurd was almost the polar opposite of Fiorina. While Fiorina was known for her marketing and sales abilities, Hurd was known

for his execution skills. He was even called an 'operations whiz' by the media. Fiorina was a high-profile celebrity CEO. Whereas Hurd was known to maintain a very low profile and had a down-to-earth approach to his work.

Steve Milunovich, an analyst at Merrill Lynch, called Hurd a 'blue-collar CEO' who would concentrate on fixing the problems at HP rather than 'marketing' the company and its vision. He was perceived to be so different from Fiorina that the media nicknamed him 'anti-Carly'.

## HP under Hurd

As a new CEO, Hurd said nothing about his vision for HP, and in fact, said that he did not even have a strategy. At an analysts' meeting held in July 2005, Hurd said that he did not intend to change the current HP strategy but would focus his efforts on attaining 'operational excellence' at the company. Hurd also said that he did not intend to spin off the profitable imaging and printing business, in spite of repeated suggestions from various quarters.

In late 2005, Hurd announced that he would lay off 14 500 workers – almost 10 per cent of HP's workforce – over the next 18 months. Most of the lay-offs were in the IT, finance and human resource departments. This was to be the biggest lay-off in the history of HP after the lay-off of 17 000 workers by Fiorina after the merger with Compaq. Apart from this, Hurd also announced that he would do away with some employee benefits like the worker-pension plan and the medical programmes among others. Hurd also scrapped the 'e-inclusion' programme as part of his cost cutting measures. Fiorina had started this programme in 2000 to promote the use of computers in developing countries.

Critics pointed out that though Hurd was different from Fiorina in his style of management, he too was going against HP's traditional values by cutting benefits and laying off employees. However, Hurd said that these were necessary cost-cutting measures and that he intended to save \$1.9 billion a year through them. In response to a concern about whether he was trying to end the HP Way, Hurd said 'When things weren't right in the past, they were fixed. If things aren't right now, we've got to fix them. If that's countercultural to the past few years, so be it. We're just trying to run the fundamentals of a sound business.'

Hurd's next big move was restructuring HP. Hurd 'reversed' Fiorina's decision to combine imaging and

printing businesses into one division by de-merging them. He reorganized HP into three main business divisions – the personal systems group, the technology solutions group and the imaging and printing group.

Hurd also took some bold decisions like hiring 'outsiders' for key posts in a company that had traditionally promoted from within to fill senior positions. For the post of chief information officer, Hurd brought in Randy Mott, the former CIO of Dell. He made Todd Bradley (Bradley), former CEO of PalmOne, head of HP's personal systems group. However, Hurd also posted HP veterans in important positions. For example, Ann Livermore and Vyomesh Joshi, two long-time HP executives, were named the heads of the enterprise solutions and imaging and printing businesses, respectively.

During her tenure, Fiorina had integrated the company's sales force in order to focus more on customer needs and preferences. In effect, there were two teams of sales people – one concentrating on marketing HP products to its business customers and the other marketing to its individual customers. Later in 2003, Fiorina had once again reorganized HP and created a new business division called 'customer solutions group'. This group was responsible for selling the entire portfolio of HP's products and services to business and government customers.

After the reorganization, HP's sales force was responsible for selling a wide range of products to different sets of customers. Further, the sales teams were required to report to different product heads. According to Hurd, this led to a 'matrixed' organizational structure. He observed that the heads of the main business divisions were not held responsible for sales revenues as they were not in charge of the sales forces for the products from their divisions. As Hurd saw it, the organizational structure was such that too many people were held accountable for a single task. Therefore, it was difficult to hold a single employee accountable for a particular task.

Hurd believed that HP had failed to execute its strategy well under Fiorina because employees were not assigned clear responsibilities for their work. He believed that the 'matrixed' organizational structure was to a large extent responsible for this. He said that he would make some changes in the HP structure so that there was more transparency with regard to reporting between executives and their subordinates.

Hurd decided to decentralize the company's workforce and make it more 'product-specific'. He divided the sales force between the three business divisions. Further, the heads of these divisions, Livermore,

Bradley and Joshi, were also given charge of their own sales forces. In addition, Hurd appointed Cathy Lyons, an HP veteran, as the company's vice-president and chief marketing officer. Lyons' task was to co-ordinate the activities of the sales forces of the three business divisions. According to Hurd, 'More than anything about the new model (it) is bringing clarity, accountability and responsibility across the company.'

Commenting on the reorganization, he said, 'The more accountable I can make you, the easier it is for you to show you're a great performer. The more that I make it a matrix, the more I give you the opportunity to blame others for something, or for you not to shine if you disagree with them.' Hurd believed that the way to make an individual more accountable for his/her work was to link his/her performance to results. Hurd, in fact, made this clear soon as he took over as HP's CEO. After his appointment, he was quoted as saying, 'I believe in an execution-oriented culture. My management style reflects a fundamental belief in cost discipline and focused investment in strategic growth initiatives.'

As part of his restructuring programme, Hurd had earlier dissolved the customer solutions group, created by Fiorina in early 2005. According to him, this group was not adding any value to the sales of the company. After this, Hurd integrated almost 100 of the largest enterprise partners of HP (in the Americas) into the direct sales force of the technology solutions group in order to improve the company's relation with value-added resellers. An in-house sales team was made responsible for overseeing the activities of the enterprise partners.

HP's direct sales force and the enterprise partners collaborated on such aspects as account mapping, which included planning and quota development among other things. Hurd expected that this kind of collaboration would lead to 'more streamlined decision-making, fewer conflicts and more profitable sales.' 'It allows these value partners to be uniquely aligned with the end-user selling organization within HP and drive the decision-making authority closer to the street', said John Thompson, vice president and general manager, solution partners organization for the Americas region.

According to Bradley, the reorganization of HP's sales force would remove some organizational layers and enable quicker decision-making. Analysts noted that the reorganization made HP more 'pragmatic and result-oriented than before'. It was said that the new sales force concentrated on selling a complete suite of HP products to customers, rather than the fragmented

approach they used earlier. Further, it also allowed the company to identify the most profitable combination of products to sell.

Under Fiorina's management, HP was known for its engineering prowess and marketing abilities. However, her strategies failed to emphasize sales growth sufficiently. In contrast, Hurd laid more emphasis on sales and the reorganization too was meant to bring in a 'sales culture' in HP. In this, Hurd apparently was strongly influenced by his tenure at NCR which had a strong sales culture and was the birthplace of concepts like sales training, dedicated territories and quota-based commissions.

In early 2006, Hurd announced his decision to close around 80 HP data centres (the company's information storehouses) spread across the world to achieve cost savings of \$1 billion. Further, he announced that six existing data centres in the US would be made into larger offices to manage all the company's information including business transaction records, e-mails, etc. The closure of the data centres was expected to be completed over a period of three or four years.

Together with Mott, HP's chief information officer, Hurd also revamped the company's internal technology to bring about cost savings and achieve efficiencies. For example, Mott planned to bring in more automation in the six data centres in the US so that the number of workers needed would be less.

As of mid 2006, analysts were divided in their opinion on Hurd's stint as CEO. While Hurd had already proved that he was different from Fiorina in his approach to leadership, some questioned whether merely being different was enough for HP at that point.

Analysts were particularly skeptical about Hurd's decision to not make any strategic changes at HP. They felt that HP's strategy, which was to offer high-technology and low-cost products to a wide range of customers, had already proven to be unreliable. Hurd was also criticized for repeatedly saying that he did not have a vision or a long-term strategy for the company. Said, Michael Beer, professor, Harvard Business School, 'What he's doing appears to be absolutely right in this stage of development. But truly great companies have to do more than just focus on operations and performance.' According to him, to bring back HP's past glory as an innovative company, Hurd would have to create the right vision as well as execute it properly. Hurd was also criticized for not concentrating enough on ways to create new sources of revenue for the company.

There were also concerns whether an 'operational CEO', who was more concerned about the company's sales, would be able to revive HP as an innovative company. They pointed out that in his efforts to cut costs, Hurd had also reduced investment in R&D. According to analysts, the computing industry was

highly competitive and companies needed to constantly innovate in order to survive in this market.

Even though Hurd had managed to improve the financial performance of HP within a year of his appointment, opinion was still divided on whether he would be able to help HP regain its past glory.