# SCIENCE AND ENGINEERING RESEARCH COUNCIL RUTHERFORD APPLETON LABORATORY

## INFORMATICS DEPARTMENT

SOFTWARE AND KNOWLEDGE ENGINEERING GROUP NOTE 217

Scott McNealy President of SUN Microsystems Inc

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#### 1. INTRODUCTION

This note is a report of a lecture given by Scott McNealy the president of SUN Microsystems to the De Anza business school in Los Altos California. It formed part of their lunchtime seminar programme given by the entrepreneurs of Silicon Valley.

Scott McNealy is the son of a Vice President of American Motors Corporation. He took a Batchelors degree in Economics from Harvard and then an MBA from the Stanford Business School. He started his business career on the manufacturing staff of FMC and then became Director Operations at ONYX. He was one of the founder members of SUN who were all aged 27 when they began SUN. The four founders of SUN were:

Scott McNealy Vinod Khosla (known as VK) Andreas V. Bechtolsheim (who designed the SUN hardware) Bill Joy, (the last man to be brought on board).

## 2. APRIL FOOLS DAY AT SUN

The youthful spirit of SUN Microsystems is demonstrated by their tradition of playing April Fools jokes on the founders. One year Bill Joy found his Ferrari floating on a raft in the middle of his swimming pool, another year one of the founders found that his car had been dismantled and reassembled inside his office and this (April 87) year Scott McNealy who is a single figure handicap golfer found that his office and the adjoining founders office had been dismantled, cleaned out and a forty foot long golf hole had been constructed including landscaped fairway and a real green.

### THE FOUNDING OF SUN

Scott McNealy prefaced his remarks by saying they "didn't think it would happen", yet from 1983 to 1988 they have gone from nothing to almost a one billion dollar company.

At the end 1983 they had 97 employees and at the end of 1988 they will have over 7,000 employees all over the world with a rate of increase of over 200 people per month. SUN apparently erect a tent in the car park when they run out space.

It was a basic business decision to do direct selling of SUN products from their own offices and not through dealers. They now have a thousand sales staff in the USA.

McNealy said that he "grew up in the auto industry" and that the USA auto industry did not pay enough attention to international markets and were badly hurt by this error, so that SUN has a keen interest in overseas markets. They currently have export revenues of over four hundred million dollars a year representing some forty per cent of overall revenue.

SUN claim to be the largest workstation vendor in Japan. Again I think this stems from the auto industry experience of understanding the importance of the Japanese market.

SUN now have over two million square feet of manufacturing space which is scheduled to increase by one million square feet over the next twelve months.

By the end of 1983 SUN had an installed base of 400 machines and by the end of 88 they will have installed over 70,000 machines. Sales are at the rate of ten per cent of installed base per month and they build a new workstation every twelve minutes. Scott McNealy said that he himself built the first 25 machines. McNealy said that the world market for workstations currently breaks down as follows:

1.	SUN	31%
2.	APOLLO	23%
3.	DEC	15%
4.	HP	14%
5.	IBM	68

He quoted a piece of wisdom as saying "if the market grows fast then it can fail fast". He said that SUN, IBM and DEC all increased their market share last year where as everyone else lost market share. Therefore he felt that SUN had now got some very big rivals, ie he saw IBM and DEC as their big rivals.

He posed the question how does SUN do it? How do they cope with this massive rate of expansion and build such a large business up quickly and he gave the answer "I don't know (if I did I would write a book)".

McNealy told us that he had a sum total of three years of business experience when he began SUN Microsystems (however I think we should understand the grew up as the Son of a Vice President of an international corporation which accounts for a little more than 3 years).

McNealy claimed that SUN started when venture capital was extremely easy to get and later in the lecture he said that SUN was put forward as a workstation company because that was what was fashionable amongst the venture capitalists. However he went on to say they never intended SUN just to be workstation company and they see themselves building a general purpose computer company to rival IBM and DEC.

He came out with another statement that "all of business is selling" and that everything that he had done with SUN was to sell one thing or another and that his skill in life was being able to sell (I'm sure he is very good at this).

SUN took a four page business plan to the venture capitalist. In answer to the question how does one sell things McNealy said "to sell - ask questions and listen". McNealy said that too many salesmen spend too much time talking where as if they actually ask questions and listen their customers would educate them and they would know what the customers really wanted and they could target their presentation to fulfil the customers wishes. SUN asked for fifty thousand dollars initially from venture capital people and due to fast talking McNealy managed to get a building which was rent free for the first year.

McNealy said that the bigger the deal the more times they were told no and one just had to keep on persisting till eventually somebody said yes.

The first President was actually V.K who is Asian and McNealy claimed to have inherited the presidency more by default. V.K. is another Stanford MBA who is a friend of McNealy's.

A crucial contract which helped to found SUN was a contract for workstations with Computer Vision in which they beat APOLLO to sign up the last CAD software vendor. McNealy claimed that they "gave away" this business to Computer Vision and as a result nearly went bust but at least they managed to get a hold in such a vital market.

### 4. MANAGING GROWTH

Commenting on how one hires staff for such a fast growing organisation McNealy said that one "over hires" ie hire over qualified people for the immediate position so that these people can grow their own organisations underneath them. When one thinks that Daryl Barbe and Bill Passmore of DEC were some of the very earliest employees clearly this is the sort of thing he has mind here.

V.K and McNealy whilst doing their Stanford MBA met Bechtolsheim who had designed a workstation and the three of them decided to set up a company to manufacture said workstation. Bill Joy was the forth of the founders was invited by the other three after they decided they needed a software expert. McNealy revelled in giving Bill Joy guru status. Another nice quote from McNealy was "ten months before I joined SUN I did not know what a computer was".

McNealy feels that the management style at SUN is that of consensus and participative management, this is not always possible but they try to run it this way. Another quote is "to ask is to seek denial". Macnealy's attitude to people was to tell them just to do and then tell someone afterwards that they had done it, asking people up the line was a way to stifle initiative and progress.

V.K and McNealy at the same time they started SUN started another company called DataDump which went bankrupt and failed and so even McNealy does not have the golden touch every time.

Every employee who joins SUN gets stock when he joins the company and for merit bonuses. McNealy said that 85% participated in this stock option and that it generates intense peer group pressure and motivates people and is a great way of involving the staff in the overall performance of the company.

McNealy felt that unless the product was absolutely unique then the staff formed the key competitive advantage. Again he stressed the idea "just go do" as their management philosophy, don't over analyse it because the world is changing to fast, just go do.

The first 300,000 of the first half a million dollars of revenue that SUN made was spent on a computerised information system. They are still running it today even though it gives them incomplete knowledge of the company.

McNealy said that out of naivety they challenged the idea that one had to protect the company's own technology. This was a Bill Joy idea to go for an open company which would publish their technology thus NFS became published and licenceable and later on all of the SUN technology became licenceable. Interestingly McNealy compared this to the standardisation of automobile control ie the accelerator on the right and the clutch on the left. He made it clear that it was Bill Joy who was the driving force behind the open policy.

McNealy educates his staff not to under estimate their own ability to lead. He told us a little bit about his own history at business school which had clearly been a place where he had learned to lead and had been given the confidence to lead. He felt that one should lead by good example and not manhandle people. Clearly growing up in a family home which was one of the leading managers of corporate America had a big influence here. He told us that his mother had brought him up to understand that he was always going to be the boss of a very big American corporation, the only thing she did know when he was a child was which one.

McNealy spoke for about an hour and half completely without notes and with a friendly relaxed style. It was very impressive performance in handling a big audience. McNealy demonstrated a very warm sense of humour during his talk, clearly he is going to be very good at handling people.

He regularly stressed that one had to work extremely hard as a company in order to grow and it was only through this hard work that success had been achieved. Another one of his quotes was "that Japan is successful because they work very hard".

## MCNEALY'S SERMON

At the end of his talk he did something very interesting, and that was he begged leave of his audience to stop talking about SUN Microsystems and read them something of a sermon. The messages he put across in his sermon were as follows:

- 1. US deficit is a major problem, the US population is not aware and he felt that America would go into crisis before they really understand the problem.
- 2. The rate of personal savings in the US is too low. This meant that the capital is too expensive for business to acquire and contrasted marketly with the situation in Japan.
- 3. Wall Street is too profit motivated. They need to understand that companies need to build more market share now not profits. Again the short term nature of Wall Street was a big problem for a growing company.
- 4. He felt that American society was educating too many lawyers and bankers and not enough engineers.
- International Trade Ministry as "US sanctioned OPEC". He claimed that SUNs production of workstations was being controlled by MITI. Because MITI controls the DRAM supplies in Japan, Japan hold the DRAM market and MITI was imposing quotas on what the Japanese manufacturers can sell to individual American computer makers thus MITI was controlling the growth of SUN. He felt it was a nonsense to accuse the Japanese of dumping in the US market. He said that this was really just equivalent of planting ones foot firmly on the ground before hitting a good punch. Very interesting analogy. McNealy said that what the Japanese were doing in the chip market in the US was investing otherwise achievable profits in order to build the market share base which was good business sense but the US law was trying to say that this was illegal.

## 6. QUESTION TIME

Returning to SUN during question time, he said that "complacency arrogance and bureaucracy" were grave dangers to the present success of SUN and that they must be careful not believe their own publicity.

When asked about his own personal success he said that only he needed five to six hours sleep a night and the secret of building a big international company from nothing was the ability was to sleep on aeroplanes.

Asked about motivating the staff, he talked about the relaxed, dynamic "go do it" atmosphere they try to promote and retain at SUN with such things as the April Fool tradition, taking all the staff to the Mallabu race-way, the beerbusts and treating IBM, DEC Apollo etc as the common enemy.

As the number of staff employeed grew then top management began to lose its connection with the vast majority of the staff and McNealy said that video is the only way for 7,000 people to be able to feel the conviction of the top managers. Scott McNealy said he worked very

hard at making videos which go out to the staff so that they can actually see the gleam and determination in his eyes. I can imagine that he comes across extremely well on video. McNealy said that he has only set foot in half of the present crop of SUN buildings but at least all the staff has seen him because they see him on the video.

The deal with AT&T is that AT&T will buy 20% of SUN over the next 3 years but they cannot buy more than 20% for the next 10 years. McNealy said that the AT&T deal prevented SUN from being bought.

He felt that SPARC will remove the monopolies presently owned by the vendors ie proprietry architectures like the IBM 360. Same deal with AT&T will make sure that SPARC is included in all AT&T future plans.

When asked about his apparent success in the Japanese market McNealy explained that SUN had taken great pains to make sure that they built their work stations up to Japanese quality standards. Again he used the analogy with the auto business where the US's poor reputation for manufacturing quality in Japan had killed them off in that market so McNealy was extremely careful with SUN's quality in the Japanese market.

McNealy claimed that DEC's biggest competitor is SUN because SUN are going for the technical market and the VAX market.

McNealy said "the Japanese will do very well in the software market in the longer term". He felt it was wrong to say that they could not do it.

Kodak has invested 20 million dollars in SUN.

McNealy said that SUN had always planned to be a general purpose computer company but had started us as a workstation company because that is what was fashionable with the venture capitalist because of the success of Apollo (remember SUN started up after PERQ and Apollo).

All in all it was a pretty impressive performance by McNealy.