

Interviewed by: Uday Kapoor

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Uday Kapoor: On behalf of the Computer History Museum in Mountain View California it is my privilege to welcome Mr. Ratan Tata for a conversation. My name is Uday Kapoor and I am a volunteer in the Oral Histores Program in the Museum, the world's leading institution in preserving and presenting the history of computing, semiconductor technology, entrepreneurship and more recently software. Mr. Ratan Tata was the Chairman of Tata Sons, the holding company of the Tata Group from 1991 till his retirement on December 28<sup>th</sup> 2012, his 75<sup>th</sup> birthday, when he was conferred the honorary title of Chairman Emeritus of Tata Sons, Tata Industries, Tata Motors, Tata Steel and Tata Chemicals. During his tenure the group's revenues grew manifold totaling over \$100 billion in 2011 to 2012. He has recently returned to his leadership role as Chairman of Tata Sons, temporarily. Mr. Tata serves on the Board of Directors of Alcoa and is also on the International Advisory Boards of Mitsubishi Corporation, J. P. Morgan Chase, Rolls Royce and the Monetary Authority of Singapore. He is the Chairman of the Sir Ratan Tata Trust and Sir Dorabji Tata Trust, two of the largest private sector promoted philanthropic trusts in India. He's the Chairman of the Council of Management of Tata Institute of Fundamental Research. He also serves on the Board of Trustees of Cornell University and the University of Southern California. The Government of India honored Mr. Tata with it's second highest civilian award, the Padma Vibhushan in 2008. He has been appointed Honorary Knight Grand Cross of the Most Excellent Order of the British Empire, Commander of the Legion honored by the Government of France and Rockefeller Foundation has conferred him with a Lifetime Achievement Award. Among his other achievements, Mr. Tata is also an Honorary Fellow of the Institute of Mechanical Engineers, The Royal Academy of Engineering and the Foreign Associate of National Academy of Engineering. He has received Honorary Doctorates from numerous universities in India and abroad. So with that we will start with Mr. Tata's early life. He was born in Bombay, British India in 1937.

Ratan Tata: I was born in Bombay.

Kapoor: Oh you were born in Bombay!

**Tata:** My father was born in Surat

Kapoor: I see, thank you. So I stand corrected.

Tata: Okay

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**Kapoor:** So at this stage I would like you to say a few words about your early life.

Tata: Okay

**Kapoor:** And we can take it from there.

Tata: Okay. As you just indicated I was born in Bombay and lived my early life in Bombay. When I was seven my father and mother separated, which was not so common in those days and both my brother and I were brought up by my grandmother who played a very significant role in my early life. I continued to go to school in Bombay and when I graduated from High School I went to the US and I was in the US for about ten years. I went to Cornell where I graduated as an Architect and then moved to Los Angeles because I never got used to the cold weather. So moved to Los Angeles and worked there in an Architect's office for about three years and then came back to India because my grandmother was ill and that changed my whole life.

Kapoor: So I was going to come back to that, your history, starting from the college, we can come back

to that

Tata: Yeah

**Kapoor:** But I wanted to spend a little more time on your childhood.

Tata: Okay

Kapoor: As you mentioned you were raised by your grandmother, what was your childhood like? Were there any mentors and special teachers that you remember?

**Tata:** As I mentioned my grandmother was probably the most influential force that existed at that time. We lived in a big house which my grandfather built, but never lived to see it finished. He had a hobby of collecting art. The house was meant to be his private museum but he didn't finish it. Most of his collections are in the Prince of Wales Museum, in Bombay. My grandmother was a very interesting person, Lady Ratan Tata. She was a very disciplined person, very intent on making sure that she lived her life with dignity and she made my brother and me follow the same stringent codes, if you might. We were often ashamed of some of the trappings that we had as the two sons of a very affluent family and I remember for example when going to school in Bombay my grandmother used to have a huge Rolls Royce which was quite old at that time and it was would embarrass my brother and me to be seen in that, so we'd walk home and the car would follow us, because it was so ostentatious. So we had many issues like that in our early days. They were very happy days because she was very understanding and yet very demanding. So we lived a life of luxury, we went spent three or four months in the UK with her. She and

her husband had a huge estate in Twickenham, outside London which I have promised the County

Council which now owns the place, to go and visit but have not as yet done so. So to sum up it was a

very nice and reminiscent of good times, childhood that we had and she was probably the most significant

force at that time.

Kapoor: It is such a fantastic legacy with Tata's, were you exposed to the values of the Tata's in your

early life?

Tata: I can't answer that consciously but I'm sure we were exposed to it because they, my father, my

grandmother and everybody lived by those standards. But it was not consciously imposed on us. The

legacy of being fair to all, tremendously strong legacy, equality among, we were never a family who

shouted at our servants or treated them like dirt or, and there was a great deal of equity in terms of how

we treated them and most of the people that worked for my grandmother and my father served them for

forty years or fifty years as the case might be. So I would imagine the underlying thing was never to do

anything that would bring shame to the family.

Kapoor: So when were you exposed to for example the life of Jamsetji Tata? Do you remember when

you learnt about his contributions and his legacy?

Tata: My grandmother would have been the only person at the time when we were young who had met

and lived in the presence Jamsetji because Sir Ratan was his younger son. So she, in her early days of

marriage, they lived in Esplanade House, which is Jamsetji's home and she used to talk of Jamsetji at

some length but somewhat superficially. The only thing I remember was that she said you couldn't take

your eyes away from his eyes that was, she kept on saying that, that he had you know penetrating eyes.

Apart from that she didn't talk very much, I suppose in those days a young bride was a young bride and

not much interface.

Kapoor: So in terms of, so that's a good segway into the legacy of the Tata's. I have read a lot about

Jamsetji and of course throughout my life history I've been aware of Jamsetji and as you said his visage

which is so impressive and he's considered the founder, of course of the whole Tata vision and the whole

industry, but also intertwined with the industrialization of India.

Tata: Yes

Kapoor: Because of the way that he saw tomorrow and the way he set up the industries; so wanted to

talk to you about that a little bit. He was born in Navsari in 1839, in Southern Gujarat to a family of Parsi

priests and he moved to Bombay at the age 13. And can you tell me a little bit about your perspective on

his contributions?

Tata: Well from what I am able to gather and just a little aside I lived six years in Jamshedpur, which is

very much Jamsetji's major creation, Tata Steel. So much of what I am about to say I would have picked

up in my six years at Jamshedpur, apart from my own guess of what Jametji was like, to me he seemed

to be a person of extraordinary vision and a great nationalistic spirit. He was able to foresee independent

India, which it was not at that time, but manufacture of goods and services, more fundamental goods and

services, basic goods and services. And if it existed on imports, he set himself the task of why could it not

be done by us; so the first industry he established was Textiles, in Nagpur where I'm told the British

talked of Lancashire y having the ideal climatic conditions to spin cotton into yarn. So he picked Nagpur

because it had the same moisture content as Lancashire did. So there was you know an element of

analysis and an element of purpose and in this he added India's first atomized moisture in the plant.

There were sprays that provided the correct moisture content and he produced the first Textile mill and it

was also the first company to have public share holdings. He did this, but it didn't fulfill his quest for

establishing industry. I think the next one he did was either Steel or Hotels. In the case of steel, I think

that's very well documented. He produced a Steel Plant which the British thought could never be done

and he did it. He picked, I believe he went on horseback and elephant to find the confluence of iron ore,

coal, and water and built the plant in Jamshedpur.

**Kapoor:** Yes, he did a lot of study in US and in Britain.

Tata: Yeah he did.

Kapoor: And amazing amount of research

Tata: He went to the US to pick a consultant who would come and run the plant. The plant was Indian;

the thinking was Indian but he didn't produce a second class plant. He produced a world class plant in

those days

Kapoor: Best equipment, yes

Tata: And he had the foresight to buy about 25 square miles of land which became the city of

Jamshedpur.

**Kapoor:** Sakchi was the name of the city before.

Tata: That's right. Then in terms of power, he foresaw that the hills around Bombay would provide a head

of water for Hydel project. So the next one or next early one was Tata Electric Company which had the

Hydel power at a time when no other similar power existed. The hotels as you may know was a funny

story of his, he was the largest land owner in Bombay till the British put a ban on his owning any more

land. Amongst his landholding, he owned the Royal Bombay Yacht Club and he was taken for lunch there

by one of his British friends but was not allowed entry into the place because he was not fair skinned. He was incensed by that because he owned the building. So he decided that he would build a hotel that was

open to everyone, which is how the Taj came to be. And all these industries are not the normal consumer

industries or manufacturing industries, they're the backbone of a country, Steel, Textile, Power and

Accommodation.

Kapoor: So in terms of his thinking when he visited England and he studied liberal thinkers, Ruskin or

people like those. So he developed his thinking for enlightened capitalism and constructive philanthropy,

based on his liberal upbringing or thinking in England. Is that true?

Tata: I guess it was. I don't know except he was just like I mentioned a great person who believed in the

equity and fair dealing with your fellowmen. He intuitively trusted people; he respected merit, tremendous

respect for merit, not family or unions of other sort. He respected a capable person when he saw him and

allowed him to operate there. Many stories about him traveling on trains and seeing somebody or talking

to somebody that he felt had merit and inviting him to come and work for him. So I guess if he had lived

on we would have had more basic industries. But his two sons finished those projects for him. He never

got to see them complete it.

Kapoor: Exactly; so one aspect that I read about was his love for education

Tata: For?

Kapoor: Love for education and also making sure that the nation is built based on education and

scientific research and scientific studies. And that is also one of the bases for his dream for advanced

scientific institution like Indian Institute of Science in Bangalore, which he did not complete but as you

mentioned his sons completed.

Tata: Yes another example of a nation building a foundation in scientific education, the Indian Institute of

Science, at a time when India never really dreamed of being a part of the scientific world, was again as

far sighted in his visionary as you could be in those days.

Kapoor: So of course going forward on the Indian Institute of Science, it has been such a place where

the distinguished names that have been associated with it, Sir Visvesvaraya, Noble Laureate Dr. C. V.

Raman, Dr. Homi Bhabha, Dr. Vikram Sarabhai and Dr. Satish Dhawan, this is of course going forward

but it made the basis for education and creating people like that.

Tata: Yes

Kapoor: So it's really amazing, and again this goes back to the linkage of nation building and how India's

industrialization and he was also a true nationalist in that he cared about the future enough that it is said

that he had attended the first meeting of the Indian National Congress with Dadabhai Navroji, who was a

friend of his; so lot of nation, feeling for the nation as a whole, future nation.

Tata: Yes between him and Sir Ratan Tata there was a lot of early support, financial support and

otherwise of Mahatma Gandhi and some of the early stalwarts.

Kapoor: Mr. Gokhale

**Tata:** Gokhale and great support for an independent India, not openly so but nevertheless the home in

which we were brought up, with had lot of pictures of Mahatma Gandhi, who stayed at their London

house for some time etc.

Kapoor: Of course you know he suddenly passed away in 1904 at Bad Nauheim in Germany and what

Jawaharlal Nehru once wrote about him, said that 'when you have to give the lead in action, in ideas, a

lead which does not fit in with the very climate of opinion, that is true courage and that, it is the type of

courage and vision that Jamsetji Tata showed.' That shows the giant of a man.

Tata: Yes you know the softer option is never to do these things because they all came from the UK. So

why do it? And he had this nationalist spirit that we could do it and we must do it and much later many,

over a hundred years later, we became exporters to the UK. So you know he in a manner of speaking

was way ahead of his time.

Kapoor: Yes exactly. So after Jamsetji, Dorabji became Chairman of Tata Sons and worked hard to fulfill

the great plans of his father, as you mentioned and three months before Sir Dorabji's death in 1932, he

created two trusts- Sir Dorabji Tata Trust and the Lady Tata Memorial Trust, who passed away before

him.

Tata: Yes

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Kapoor: And he begueathed all his wealth to his trust which enabled India with these premier institutions

like the Tata Institute of Social Sciences, Tata Memorial Hospital for cancer, the Tata Institute of

Fundamental Research and the National Center for the Performing Arts. These are premier institutions for

the country.

Tata: Yeah, that is true.

Kapoor: After Sir Dorabji, Sir Nowroji Saklatwala became Chairman and he actually did some financial

consolidation of several Tata Companies enabling future growth of the group. This is what I read.

Tata: Yeah

Kapoor: And he passed away in 1938 and then JRD succeeded him as the fourth Chairman. So we can

spend some time on JRD

Tata: Okay

Kapoor: Another giant of a man. Jamsetji's cousin Mr. R. D. Tata, Director of Tata and Sons had moved

to Paris and set up business there. He married Suzanne Briere, a French lady and their elder son J. R. D.

was born in 1904 and he grew up and was educated in France. So and then of course there's a lot of

thing that we can talk about but tell me about your perspective on what you know about J. R. D's early

life.

Tata: Well if I go back to my earliest recollections of Jeh, Jeh, is as we all loved him and called him, my

earliest exposure to him was relatively unfriendly.

Kapoor: Ah I see!

Tata: I mentioned I was in college in the States and often we used to run into each other when he visited

the Tata offices in New York City. And he was very I would say not even cool, he was very cold and you

felt you were interfering in his busy schedule and he let you know that that was the case. So it was more-

How are you? What you're doing? He'd ask the same question each time. How long have you been

here? Why did you come to the US? Just very perfunctory sort of conversation; it was in Jamshedpur,

during the six years that I was there that we started to get to know each other when he came. We shared

a common passion, we both were pilots. And I would say the fact that we both had a love for flying and

aviation that just transformed somebody who was here into somebody very close to him. He asked me to

start a Flying Club in Jamshedpur. And that was my first exposure to an entrepreneurial exercise of

raising money, of going to Hindustan Aeronautics to buy the first plane, getting Government accreditation

to operate a Flying Club and then telling him it's done. We became closer and closer and one day he

appointed me as the Chairman of Tata Industries and a few years later a Director of Tata Sons.

Kapoor: So we will come back to that

Tata: Okay

Kapoor: In terms of his life in France for example I read that as a boy with a friend he watched the first

historic flight across the English Channel. That's the love of aviation as you mentioned. And he was

hooked and so in the time of 1926 he was on the verge of going to Cambridge but his father passed away

and he returned to India at the age of 22 and succeeded his father as the Director of Tata and Sons. And

in 1929 he joined the Bombay Flying Club and became the first person to be granted a pilot's license in

India. And 1930 he competed for the Aga Khan Trophy for flying solo between England and India.

Tata: Sorry what?

**Kapoor:** So talking about his love of aviation, of course that showed up in his starting the Tata Flying

Institutions like later on here and his love for flying as you said. So you mentioned that you also have love

for flying. Was it through J. R. D. or was it ....

Tata: No, it's purely independent

Kapoor: I see

**Tata:** And it just became a common bond between us two.

Kapoor: So did you also learn flying in Bombay?

**Tata:** Yes I learnt flying in Bombay but was too young to solo. I was fourteen years old and I had to stop.

Then when I went to Cornell I started flying again. The legal age to get a license was seventeen and on

my seventeenth birthday I went solo and I've been flying ever since.

Kapoor: So in 1938 Sir Nowroji suddenly passed away and all other Directors senior to him elected J. R.

D at the age of 34 as the Chairman of Tata Sons, making him head of the largest Indian group at that

time. And of course that was unusual you know in those days for a young person, but then of course he

stamped his style of working on the organization by democratizing the working of Tata's, by changing the

common Chairmanship model, for example. And at that time as you mentioned, in 1945 a wholly owned

subsidiary of Tata Sons called Tata Industries was set up. He later on made you Chairman but this was

set up in 1945, is what I read. And this was set up to increase professionalism in the management of the

company. Also, Articles of Association of the leading Tata Companies were amended to make social

responsibility, beyond the welfare of employees, part of their objectives. And that was again his emphasis

in TISCO in Jamshedpur to make sure that you take care of not only your employees but also the town or

the city.

Tata: Yeah, I'll just add something there

Kapoor: Yes

Tata: If one were to go around Jamshedpur you would understand the significance of what J. R. D did.

You had this island of wealth, I say wealth because the workers had wealth; they had company housing,

they lived a much better life than the villagers around the plant and by being sensitive to the upbringing of

those villagers by giving them education, by giving them medical assistance, by creating industries for

example, stitching uniforms for the factory, lunches you know making food, giving the women a livelihood.

He created a situation where Jamshedpur as against some other industry towns has no rancor between

the villagers and the wealthy workers of the industry, but a oneness which is quite noticeable in Bihar or

Jharkhand today, different to what is in Bihar or Jharkhand today, and built on cooperation and

coexistence which came from look and was the start to CSR- Social Responsibility by industry to try and

find water, to try and increase crops and such, so the island spread in terms of it and it's very significant

and not so easily determinable in print if you might, unless you go there.

Kapoor: Right, actually it so happens I was born in Bihar, I was born in Jharia

Tata: Oh I see!

**Kapoor:** And my father worked for Indian Iron & Steel Company

Tata: Okay

Kapoor: So I grew up in a household which was again an island, it was a British built

Tata: Sir Biren Mookerjee

Kapoor: Yeah right so father knew him but the thing that you mentioned the disparity between affluence

and the villagers, you know I saw that as a child, so very much so.

**Tata:** Did you live in Burnpur then or?

**Kapoor:** No, we were in Jitpur that was the name of the colliery

Tata: I see.

Kapoor: And we, because there were no good schools, my brother and sister lived in Amritsar with my grandparents. We had a reverse commute, we would go to Jitpur during the summer vacations and so there are many stories I could talk of, but I very much appreciate Jamshedpur. I've met many people, there's a gentleman that I know in the Bay area whose dad actually was one of the foremen in

Jamshedpur when you were doing your, you worked in the beginning after Cornell, you worked for him.

**Tata:** Yeah I was on the shop floor for about three years.

Kapoor: His name was Arun Bose

Tata: Who?

Kapoor: Arun Bose was his name, that you may not recall and his son's name is Ajoy Bose, who did, he was at Bell Labs and he's talked to you because Arun Bose told you that please talk to my son, he wants to go abroad and you advised him.

Tata: I see.

Kapoor: So this was of course many years ago. So in 1970 the Government imposed MRTP- the Monopolies Restrictive Trade Practices Act, mandating the group to enforce a loose federal type of management of the company and Tata Sons Industries Directors in charge of various companies were withdrawn and the autonomous Boards ruled the company. This really changed the nature of Tata operations and it was purely J. R. D's talent, energy, charisma and vision that drove the company to achieve great results, in spite of the autonomous nature of the structure because of course it created people that became powerful bosses of individual companies. But it was J. R. D's talent that kept it together. Would you believe or would you.

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**Tata:** Yeah, oh yes I do, I credit him with creating the group that became the nucleus of a bigger group later, had he not done that it would have disintegrated into discrete companies. We owned very little of those companies. I think when I took over we had about 4 or 8% ownership in Tata Steel and our ownership on each of the major companies was very small and it was J. R. D's persona and the confidence the shareholders had in him that created at that time a virtual group but not a group because we had no major shareholding or legal binding on us and one had to make those changes after J. R. D. because one didn't have his charisma and have a chance to do it on the basis of non-ownership.

**Kapoor:** Yes, yes, so and his achievements were remarkable given the Tata Group operated into wage and price control, high import duties, ban on imports and capital controls. He was able to prevent the nationalization of TISCO for example; so quite a remarkable achievement. When he took over Tata Group had fourteen companies with sales of 280 crores and when he stepped down sales had increased 30X and there were 50 large manufacturing companies, not counting innumerable holding investments, subsidiaries and associate concerns, making it India's biggest business group. So his achievements are just amazing, especially going through the partition and all these controls, to do that.

**Tata:** Actually his contribution is really remarkable because, because of MRTP we never received a license to enter new business or to grow in a business. And despite that we grew to some extent and most importantly we grew without succumbing to corruption or to bribery to payouts; none of those, none of those props were our content or our DNA. So he set new moral standards for India, set new for us to follow and we've been doing our best to follow them continuously since then.

**Kapoor:** Yes I know that the Indian Government, I mean Jawaharlal Nehru respected him and of course he was conferred the highest civilian award, the Bharat Ratna, so he more than deserved it. I mean what a figure! And as an internationalist, J. R. D became widely known and admired outside India. He was of course a true internationalist as he was the Chairman of Air India, which led to his serving a term as Chairman of the IATA-International Air Transport Authority. He served as a Consultant to the Nobel Foundation in Sweden along with Nobel Laureate Dr Linus Pauling. And of course as during the dusk of his career some of those structures in the companies started to impinge on the performance of the company or of the Tata Group as a whole and at some point it seemed like there was a possibility that the Tata Group may dissolve into separate companies. Is there something you'd like to comment on that?

**Tata:** No that, that phenomena has reemerged many times when you have CEOs of those companies who suddenly feel that they could move out and become a bigger fish in a pond and when I got involved J was already a more elderly person and given to looking at soft options more often than he did when he was younger, which is natural, aging phenomena. And he would allow this to take place and he and I would disagree on whether that should be, whether let's say a Tata Chemicals or Tata Power should be

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its own company and not be governed by Tata Sons. So it has happened through the years. Russi Mody

of Tata Steel tried to take it away from Central control and when J realized that he brought everything

back into focus. But that phenomenon has happened on more than one occasion.

**Kapoor:** But MRTP also restricted his options, is that true?

Tata: Well MRTP actually you had, if you had considered it to be MRTP Company you couldn't grow

without the permission of the Government, you couldn't, you were restricted in what you did; so the aim

was to stay out of MRTP and that was one of the phenomenons that was in favor of carving companies

out because they ceased to be MRTP companies and were feared to grow etc. That was the rationale

many a times for taking it away.

Kapoor: Right so in any case so in 1991 when he decided to step down and proposed that you become

Chairman of Tata Sons and we'll come back to that a little bit more and so now I think unless you have

some comments

Tata: No

Kapoor: We want to start with your career and truly starting from your days in US when you went to

Cornell. By the way, my son just did his Ph. D. at Cornell

Tata: I see.

**Kapoor:** Biology and Ornithology, now he's doing his post Doc

Tata: At Cornell

Kapoor: At Cornell

Tata: I see

Kapoor: Yeah. So you graduated with a B.S. Degree in Architecture and Structural Engineering from

Cornell in 1962 and as you mentioned you worked in the US briefly in Los Angeles. And you returned to

India in 1962 at the urging of your grandmother, Lady Ratan Tata and then you trained on the shop floor

of TISCO as you mentioned. Then you were, so maybe you can take it from there and we can talk a little

bit about your work as a Director at Nelco and other places.

Tata: Okay

**Kapoor:** And if you want to add anything else please do.

Tata: I actually came back with a letter of appointment to IBM. So I came back to India and actually

worked for IBM for about 15 days till JRD telephoned me and he said you can't work for IBM, you're here,

you must work in Tata's or, you couldn't say no to him

**Kapoor:** Right (laughs)

Tata: So I remember using IBMs electric typewriters because they were neat in those days and this, the

resume that JRD wanted from me to give to him to process my employment. I was then shipped out to Jamshedpur on the shop floor in TELCO, not in the steel. So I was involved in looking at the, never really

a meaningful assignment but tremendous learning experience. So I was placed in the Automotive Plant

for trucks and then a year later I was moved to TISCO.

Kapoor: So at that time TELCO had already been acquired from Eastern Railways and locomotives had

been stopped

Tata: They were still making steam locomotives but the jewel was the new Tata Mercedes Benz truck

Plant and headed by Germans at that time and but probably right now if you look at the manufacturing

facilities at that time, they were very spartan but for the day it was a state of the art truck plant and the

pride of India. So I worked on the shop floor of Tata Steel and then moved to the project office and went

through several assignments in Tata Steel until I became the Technical Assistant to the Managing

Director, Mr. Nanavaty and then I was called back to the Head Office in Bombay. That time Mr.

Moolgaonkar was the Vice Chairman of Tata Steel and I then was asked to go to Australia to a Joint

Venture, which I did. I was there for six or seven months in Sydney and came back and was asked to go

back to Jamshedpur, which I refused. That changed my career a little bit. I joined a fledgling company

called TCS in 1971 whose work was to get paper documents from US Corporations convert them to

punch key to punch cards and ship the cards back because at that time Information Technology was

moving away from paper bills and paper documents to punch cards. So IBM had these machines that

were run through punch cards and print them out. So ..

Kapoor: I didn't realize you worked for TCS

Tata: Six months or so

Kapoor: Because I was going to in fact spend some time on TCS, this is the consultancy service. Tata: Yes Kapoor: But it started off as Tata Computer Center with Lalit Kanodia and Tata: Yes Kapoor: And Tata: Yes I was there in Kanodia's time **Kapoor:** Oh you were there, okay Tata: Yeah Kapoor: So it was at that time Tata: Yeah Kapoor: Because they had just come from MIT Tata: That's right Kapoor: And there were two other gentlemen you know but in any case, that's very interesting that you were there during the time of the data processing Tata: Yeah Kohli was the Chief Kapoor: He, later, right?

Tata: No, Kanodia worked under Kohli

Kapoor: Sure

Tata: And Kohli was the Chief, there was another person called Ashok Malhotra who then went to MIT

and so it was a small, we occupied one floor of Nirmal Building and the business was very, very small.

Computers were banned; no they were banned a little later.

Kapoor: Yes

Tata: But ......

Kapoor: And I believe it was IBM 1401 you were using

Tata: That's right, that's right

Kapoor: Yes; yeah so because I wanted to, since I am representing the Computer History Museum I

wanted to spend some time to know about the computing part of things

Tata: Ah ha

Kapoor: And the true, I remember reading that Dr. Homi Bhabha actually had some correspondence with

John Von Neumann

Tata: John?

Kapoor: Von Neumann. He's the ...

Tata: Oh Von Neumann, yeah

Kapoor: His architecture is really the computer architecture, standard architecture and those were the

early days and he wanted to, in fact in 1948 he communicated with John Von Neumann about

possibilities of computing and then Mr. R. M Narasimhan in 1955 worked on the first indigenously

designed computer based on logic diagrams from University of Illinois' computer project, which was called

the TIFRS, FRAC

Tata: Oh, okay, yeah

Kapoor: by PM Nehru in 1962; but because of the cost and commitment, and it's a fast moving world, it

was not a serious commitment and then so coming to the Lalit Kanodia MIT Graduate, that was in 1965.

He got a...

Tata: I was there in 71. little later

Kapoor: It was very interesting that he was here, he came from MIT to get married and he was in

Bombay waiting to get married. He had to wait for six months apparently so he got a consulting position

with the Tata's

Tata: (Chuckles) I see

Kapoor: with Rustom Choksi and then in that process he got an opportunity to start a computer operation

in data processing for the Tata businesses

Tata: Then who I'd describe was data processing and the

Kapoor: Yeah Nitin Patel and Ashok Malhotra joined him. They worked with him at the MIT Mac project,

which was really about data processing, not so much about design of computers, because he was a

Mechanical Engineer. He did his Mechanical Engineering from IIT Bombay. So in terms of, as we were

talking about TCS, origins of TCS at the time when Nitin Patel and Ashok Malhotra joined him, they used

to work with him with Lalit Kanodia at MIT. So they then operated like an American Management

Consulting Company with the 1401, IBM 1401. They gave seminars like 'Electronic Data Processing and

a management revolution'. So it became more of a seminar and things, it didn't really take off so much. It

was only in 1968 it became TCS with a new strategy and with consultants to find application for the Tata

Company, this is what I read.

Tata: Okay, okay

Kapoor: But of course it ran into some anti automation kind of forces like LIC- the Life Insurance

Corporation, they said we'll lose jobs if you automate lot of the data processing and I understand that your

dad Mr. Naval Tata, he was a long time representative to ILO; he published in 1968 a brochure called

"Automation, Blessing or Curse" and in fact he defended the use of computers in that. And so we can

come back to TCS later but this is very interesting that you actually worked there for some time. Please

continue with your assignments, you know, like you were talking about ...

Tata: I was in TCS for about six months and I was enticed to, I was told that Tata's was going to go into

the manufacture of color television sets and I was offered a position in that new company. It was

supposed to be in collaboration with Grundig of Germany (laughs) I, it is a joke because I went to Grundig

two-three times, but I don't think there was ever a serious effort to form that company because nothing

happened. So I moved away from that and there was a small Electronic Company in the group, Nelco,

which no one wanted, it was making losses greater than it's capital and I took that because I was a little

bit fed up with the group and I thought I had nothing to lose by trying to turn Nelco around. If I didn't

succeed I could always go back to the States and I was sort of at that inflection point. I learnt a lot from

Nelco because it was a company really in trouble. It produced radios. The industry was changing from

valve radios to semi-conducting radios and the management at Nelco had decided that transistorized

radios were a toy and so they remained with valves and then the market just left them. They had about

80-90% of the market and they ended up with 2%, which was about the time I came into the picture and

we revamped, Tata Power principally owned Nelco and there was a person called K. P. P. Nambiar who

was the Head of R&D and together we designed a whole range of transistorized radios to be relevant in

the market. And eventually we ended up with about a 20% share of the radio market. We diversified into

calculators, then mini computers. We produced mini computers with a California mini computer Company. I can't remember it's name. And we produced that, we marketed that. We went into drives and inverter

systems, Industrial Electronics basically. And I was in Nelco for about ten years. We became a profitable

company, not as profitable as we should have been, but profitable; we wiped out all the losses etc.

**Kapoor:** You also had some labor trouble there

Tata: Yes I had. I said it was a learning experience. We, for the first few years would not know every

month whether we could make the payroll and you had the best way to learn how to survive is to do it in

adversary conditions. And then I had a labor problem with the Shiv Sena Union with Mr. Bal Thackeray.

We had a lock out, we took, we produced inverter systems and drive systems in flats, apartments that we

rented, so that we could meet customer's schedules; it was a wonderful learning experience. And

somewhere in that period of ten years J. R. D. called me and said that he'd like me to be a Director in

Tata Sons.

**Kapoor:** So I understand you also went to Harvard in 1975

Tata: Advanced Management Program (AMP)

**Kapoor:** Management course; was that during the same time?

Tata: Yes. I needed a break at that point in time and it was a thirteen week course, so I just decided I

would do it.

**Kapoor:** And also I guess you were assigned to Empress Mills for some time.

Tata: Yes I kept getting the troubled companies one after the other, which, like I said the Flying Club was

a test. I think these were also.

Kapoor: So in 1978 you know you had been thinking about activities at Tata's and you sent some

confidential notes to J. R. D on two occasions, proposing changes in the strategic plans and operations of

the Tata Group. Is that?

Tata: Yeah I sat down and actually in the 70s probably just notes, but in 1982, my mother was suffering

from cancer and was in Sloan Kettering and I had taken a leave of absence to be with her. So I found

myself sitting in the visitors' lounge for four months in Sloan Kettering and I sat and wrote out a strategic

plan for Tata's which I presented when I returned and it was rejected. So I picked the part that I could do,

which was basically to enter the high technology areas in Tata Industries in areas which were hitherto

disallowed for the private sector at that time

Kapoor: So in terms of the, your Chairmanship of Tata Industries, when did that happen?

**Tata:** That happened in '81.

**Kapoor:** Yes and you were made Chairman of Tata Industries

Tata: And that's the path I took to implement

Kapoor: Yes

Tata: And then in '84 Rajiv Gandhi became the Prime Minister, and it was as though he had read my

strategic plan because he opened up those very areas which were earlier closed and suddenly I found

myself in a position to implement those plans. So we formed a Joint Venture with IBM. We brought the

IBM desk top and mini and mainframes to India again. IBM was thrown out of India if you recall.

Kapoor: Yes. My brother was with them here, when they were thrown out he went back to the US

Tata: I see okay. And so we formed a Joint Venture called Tata IBM. We entered the process control

business with Honeywell and we went into contract oil drilling with Schlumberger. We also entered the

telecom space.

Kapoor: I see, so these are the companies you mentioned Tata Honeywell, Tata Telecom, High Tech

Drilling System, Keltron Telephone, Tata Finance, Advanced Materials

Tata: Keltron was not our company. Keltron was what K. P. P. Nambiar went and formed with the Kerala

State Government. But yes we formed several companies. We went into financial services and I think 13

or 14 new companies mainly in the high tech areas.

Kapoor: Yes and the Tata Elxsi as well at that time

Tata: Elxsi already existed

Kapoor: Tata Elxsi

**Tata:** Tata Elxsi, which happened with Thampy

**Kapoor:** Thampy yes, right, so was that around the same time.

**Tata:** Yes they were all in that same period.

Kapoor: And so Tata Industries had small holdings, only 10-20% in each

Tata: Because it was a shell company virtually. So it would turn to the major Tata Companies to invest in

these new businesses. And it's the major Tata companies that earned the most money from this, Tata

Industries never did but it fostered those businesses

Kapoor: Exactly. And then in 1988 I think you took over Chairmanship of Telco.

Tata: Yes

Kapoor: From Sumant Moolgaokar

Tata: That's right

Kapoor: And in March 1991 when J. R.D. stepped down as Chairman, he proposed your name and he

called it, the reason he gave is that you're more, you were like him and you have a memory like his.

Tata: (laughs)

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Kapoor: The two things that I read, because you were again, you were taking over when there were

many other senior people.

Tata: Yeah. Well by that time I was very close to him and he was more like a foster father to me at work

while and my real father was my father at home. We spent more time together than I did with my father at

work and we interacted much, much more at work every day than I did with my father.

Kapoor: Yeah I remember when he was not well and how you used to visit him and give him updates.

Tata: Who, with Jeh?

Kapoor: With J. R. D. yes

Tata: Jeh yes, but not for long. In 1993 he left India to take a winter break. He fell ill, was hospitalized and

never came back out. Mr. Moolgaokar was the one who was ill for a long period of time. We used to go

every other day to brief him on things and get his views and his inputs.

Kapoor: I see. And in 1991, very closely after you were made Chairman, Dr. Manmohan Singh scrapped

many of the MRTP provisions. So the true liberalization started around that time.

Tata: Yes

Kapoor: Which was very good

Tata: And what happened was that we rejoiced at that time and went forward in growing while certain

members of the business community went on trying to ensure that protectionism continued. We just shot

ahead because they were all busy in the corridors of power of Delhi trying to block the opening up of the

economy, while the Government was committed to economic reform, We were able to get joint venture

agreements done, go and forge ahead in areas that they missed.

Kapoor: Yes. So one of your first tasks was to rebuild a linkage between Tata Sons and the other

companies of the group.

Tata: That's right.

Kapoor: And of course you had to deal with strong individuals, Russi Mody or Darbari Seth and Ajit

Kerkar and Nani Palkiwala. But there were, you also instituted retirement age and so on

**Tata:** Yeah that made me very unpopular.

Kapoor: (Laughs)

Tata: Later I abided by my own retirement age because it would have been wrong not to.

Kapoor: Yes and in a way you updated the original strategic plan which you had proposed and the thrust

was technology driven leadership.

Tata: Yes

Kapoor: And you brought in McKinsey to help in reorganizing the company where there were overlapping

businesses and so on and of course the other thing I read about was the brand Tata that you brought in,

a common brand for all the companies.

Tata: Yeah I'd like to talk on that for a minute. The Tata group represented itself in about thirty different

ways at that time. Tata Chemicals had one logo, Tata Oil Mills had another, Tata Iron and Steel Company

was something else. Telco was Tata Engineering and Locomotive Company. Each one had its own logo,

its own identity. And yet we used to say we were the Tata Group. So we created a common logo and a

certain graphic discipline. We changed the names of many companies, Tata Iron and Steel Company

became Tata Steel. Telco became Tata Motors. Tata Chemicals remained the same and we got that sort

of order in place.. And we entered into an agreement that so long as we use the Tata name, etc. we

would abide by the existing values and business practices. And if we failed to do that, Tata Sons would

have the right to remove the name. So that was an attempt to identify the group as a group and to create

synergy at, tremendous opposition to that when we started but I think later they started to feel the benefits

of that.

Kapoor: Yes, yes. The other aspect that you emphasized was going abroad to start investing

internationally and that's where your emphasis on as you mentioned both on computer....

Tata: Yeah we made one which I think you're referring to, one major change hitherto Tata's had never

grown inorganically, they had always grown themselves and we said that we should be open to inorganic

growth, making acquisitions or mergers, which at that point in time was very significant because we

anyway bought Corus which is old British Steel and we bought Jaguar and Land Rover.

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**Kapoor:** So that has really paid dividends in terms of growth.

Tata: The Jaguar, Land Rovers paid dividends, Corus, the steel industry has been in the doldrums in

Europe

Kapoor: Yes, so it's a challenge yes. So in terms of overall performance of the group, you certainly

proved your detractors wrong and you outperformed Jeh. By the time you retired, Tata Group had more

than \$100 billion, was the largest Indian multinational with numbers larger than 65% of income from

overseas and about 100 operating companies spread across 56 countries, six continents, you spent close

to \$18 billion on acquiring 22 companies worldwide, as you mentioned Tetley, Corus, Jaguar, Land Rover

and in the hotels, The Pierre Hotel and so it has an excellent track record. Also innovation, the company

was nominated, was actually the sixth best Innovative Company in the world by Business Week in 2008.

Ahead of IBM and Sony and Nokia, so a lot of innovation happened. And of course as I mentioned in the

introduction, you've been awarded numerous prestigious awards and recognized for your work and

achievements, just an amazing history.

Tata: Well I think it's been a very exciting journey because India changed from a very protected, inward

looking economy to a country which was embracing the world, wanting to be recognized in many ways all

the things that J. R. D. stood for and shouted for from the rooftops, happened. And India emerged from

an economic disaster country to one that has had a very high growth rate which I think we all should

recognize what the Government did, in 1984.

Kapoor: So going back to the, some of the high tech emphasis that you brought in, history of computers

in India and the semiconductor technology for example, it has been fairly sparse meaning the design and

manufacture of computers and manufacturing of semiconductor, I think there was Bharat Electronics, was

one of the early people, but in terms of computers because it's so fast moving and the investments

required were very, very steep, was that a deliberate action to stay out of computes as such?

Tata: No we entered the computer here with IBM

**Kapoor:** Was that a joint manufacturing?

Tata: Yes and why we broke up was IBM decided that this is the only Joint Venture that they had and

they wanted to split it intotwo parts. Lou Gerstner had just joined and they wanted to split it into Software

Company which IBM would own and Hardware company that Tata's would own. And at that time there

was starting to be a realization that computer manufacture was a dud business and the money was in

services. So we sold out the whole thing to IBM instead at a very good price so that didn't go into

manufacture. We did produce, I remember the name of the company, Corntell was the name of the

company, producing mini computers sort of this high and then we went into Elxsi which was something

that was not part of a, was part of, we owned about 50% of Elxsi which was a company that was a

multiprocessor. It shot up in sales in the first two or three years and NSA had about six of our machines,

each of the aircraft companies had a machine or two of Elxsi and then suddenly Vector Computers came

in the market and the market disappeared for Elxsi virtually overnight and we lost everything we had at

that time but we probably were the only Indian company that actually took the risk to go into

multiprocessor to fight VAX which was the Dec Gold Standard at that time.

**Kapoor:** Yes, that's how Sun Microsystems came into being

**Tata:** Sorry?

Kapoor: Sun Microsystems

Tata: Yeah, yeah

Kapoor: So in terms of components of manufacturing of the computers they were, semiconductors were

not invested in, you would acquire components from outside?

Tata: For the Elxsi

Kapoor: Yes

**Tata:** Yeah we bought all our computers, semiconductors from Motorola

**Kapoor:** Motorola yes, because that is another very high capital

Tata: You see the Government of India did some wrong things at that time. They threw out IBM and they

decided that the only computer that would be manufactured in India would be by ECIL, which was a Government Company and that all the semiconductors would be produced by Semiconductor Corporation

of India. They banned the import of semiconductors, so LSI and so when they came into being we were

not allowed to use these and semiconductor investment in the country was in, of the older generation and

not sub micron at all and there's no market and they were just behind their times. So until we brought IBM

back in with the Joint Venture there used to only be ECIL and the British Company, British Computer, I

forget, ICL; that were the two companies that existed.

Kapoor: Right, so, anyway that's a lost opportunity but now it is extremely expensive to be in the

semiconductor business. In fact most companies have gotten out of manufacturing.

**Tata:** Well I always thought that what India needed to do was invest in a good semi- conductor company.

We obviously couldn't have any place in Intel but in the smaller companies which had their own fab

facilities. But we have not done that.

**Kapoor:** And it has become so prohibitive now that even in the United States

Tata: It's better to buy off the shelf semiconductors

Kapoor: Yes

Tata: And the key not only the going back to Silicon and trying to be self sufficient

Kapoor: Exactly, the hardware has become very commoditized

Tata: That's right

**Kapoor:** And so it's really the software world

Tata: That's right

Kapoor: And so I wanted to come back to that, we'll talk about that but before that anything else about

your career that you want to talk about because I want to then go to the section on the values. Tata

values and the guiding principles

Tata: I think I've covered most of what I could think about.

Kapoor: Okay, so in terms of Tata values and guiding principles you know starting from Jamsetji and the

DNA that exists even today, I read that you had emphasized in some of your writings the integrity,

understanding, excellence, unity, responsibility, those are some key values. Would you like to comment

on that?

Tata: I can't comment too much on them because I've been away from operations for some time, but

basically it was to protect the image that we had, to make it real and living that we would be fair to all our

stakeholders, to our customers. We would not over promise and under perform. We would be fair to our

employees and our customers and that we would attempt to be different in terms of not being an example

of favoritism but equality. And we generated a document which was a Code of conduct and we wanted

each employee to read and to sign it. And sign it each year because it got changed marginally depending

on what we did and that we achieved. Strangely enough we wanted to have all our Directors sign that too

and there we had a push back where particularly the outside Directors refused to sign our Code of

conduct stating that it impinged on the way they would run their company. And so we didn't succeed as

well as we should have in creating a Code of conduct that we could all say whether you were a sweeper

or a Managing Director, that you abided by the same conditions.

Kapoor: Right, but still the image that Tata's have displayed has always been high integrity and high

values and caring for, social caring

Tata: That's what we would want to be known for. There have been some aberrations from time to time.

How we deal with it is our report card, not the fact that we have a workforce that may not have an errant

individual that breaks the Code of Conduct, but how we deal with the situation when it does take place is

what we should be judged on.

**Kapoor:** So the other aspect that I have read about is the sense of boldness and the spirit of adventure.

This is what over the ages Tata has stood for. And many people like Mahatma Gandhi and Jawaharlal

Nehru have mentioned that, you know they always admired, when there's a challenge, whether it's a

health challenge or crisis they would come to Tata's for help or for guidance or vision.

Tata: Yeah there's a tremendous sense of spirit in the organization that you can mobilize at the time of

any crisis almost on a volunteer basis. We have a very unique system, an entity called the Tata Relief

Committee; any national calamity and Tsunami, earthquake, floods etc. that happen. This Committee gets

mobilized by employees, some of them senior employees who leave their jobs and go and work at that

Community level for free and then come back to their normal jobs when it's over. And we have done this,

for example when the Tsunami hit Chennai and Kerala; we built some 700 homes for fishermen who had

lost their homes. The fishermen who disappeared, we adopted their children and sent them to schools

and created orphanages for them. All through this committee what we do is workers and employees give

a day's wages, we either match them or give twice that amount or three times that amount; that becomes

the kitty for that calamity. And then that money is spent by an organization that has been built. When the

terrorists attacked...

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**Kapoor:** I was going to mention that, that was exemplary

Tata: Yeah we didn't form the Committee but we formed the trust to deal with anybody that got hurt or

injured or killed and we've sent people to school, our employees who got killed we've offered their

families the equivalent of their salaries throughout their life as though they continued to exist. So I think

those things are things that make me most proud about what we stand for.

Kapoor: So another area that of course lot of help has been given is in the area of sports, I just wanted to

mention that. We don't need to spend lot of time on it. But I wanted to get your view on, we'll come back

to philanthropy little bit but before that let's finish on your vision for the future in terms of technology or the

Trust. I know that after you retired you personally were involved with many start ups. But I wanted to get

some kind of an overview.

Tata: Well I think the world is changing and we have companies like TCS which are heavily into

Information Technology and Information Technology itself is changing. And we need to be looking at

gaining a strong position in analytics, in machine learning, in some of the new technologies which in fact

will replace the human inputs of TCS in course of time. And we should not be in the same position as the

valves versus transistors that I mentioned. And we should be ahead of the curve making investments in

those areas today. Similarly, we should be looking at issues such as new forms of renewable energy,

things we're actually doing in the Trust rather than in the companies as I'm suggesting is the companies

which are generating funds, large funds, should be making investments in these new areas today and

Tata's could be the people that when the dust clears we're already in that area rather than not being so.

And I'm concerned that we perhaps are not doing enough in, that we're not taking enough risks to enter

into new areas and we are looking more inward again than we have done in the last 15-20 years.

**Kapoor:** So that is well said. Thank you so much.

Tata: Not at all

Kapoor: So the one topic I wanted to dwell on was philanthropy because philanthropy and Tata's you

can't separate them, help all of the time and I have also read that it was really centered on nation building

and it is not just individual giving or institutions only. But lot of the fundamentals that were set up, Indian

Institute of Science and the Servants of India Society by Sir Ratan Tata; and all the institutions that were

established they have spawned other areas where, are helping the nation; so just a summary comment

from you.

Tata: Now philanthropy is itself changed, 30, 40 years ago philanthropy was not a term one used, it was

charity. And the charity was oriented towards personal hardship; you had cancer, you came and asked for

a grant and we gave you grant to treat your medical expenses or if you lost a leg, an artificial limb would

be made available. That's what the trust would do for you. And if you had any personal hardships you

made an application and the Trust would consider it and if it passed their gates they would assist you.

And once in a way we had a big, major project which might be a cancer hospital or the NCPA or an

institute like Tata Institute of Fundamental Research. But they were far spaced out in time. Today the

trusts are being a lot more proactive in terms of investing. For example, a project we are working one is

the elimination of malaria by changing the DNA of the mosquito or immunotherapy in cancer treatment.

We're doing a project with MIT on low cost medical devices to make diagnosis in treatment available to

the masses. We have started looking at how we leave a community, with a sustainability capability rather

than hand outs. We now disperse about \$100 million every year in philanthropic issues which still contain

grants for the individual hardship, in fact we're about three or four times of what we used to be. But the

major emphasis today is on creating projects like nutrition in the country. We're trying to embed iron to

combat anemia in rice and wheat and milk, which would be available to everybody. The state

Governments will do it, the technology is ours. So we've changed the complexion of what we do in the

Trusts for philanthropy. We're getting involved with the bigger national view, if immunotherapy eventually

becomes the way of curing cancer, then the next issue which we have to concern ourselves with is how

do we get this wonderful new technology to be available to the millions rather than to a handful of rich

people who can spend \$200,000 or \$300,000 on the treatment for themselves; what about the millions

that need it which they'll never get it because the founders of the company will become billionaires, a few hospitals will undertake this treatment and what have we done? We've just made an elitist contribution.

We're trying very hard to see if there's an innovative way that we can bring some of the new technologies

like stem cells re-programming DNA. These new discoveries are terrific and they can serve mankind. But

they will not because they're only going to be available to the wealthy and if we can find a way to bring

this to the tens of thousands if not the millions. Then I think we could say that we made a difference. So

that's where we are in philanthropy.

Kapoor: Thank you so much. That was very thoughtful. I wanted to, first of all thank you for your time and

I really appreciate this. I think the museum will appreciate it. Mr. John Hollar who's the President of the

Museum, asked me to personally thank you for your time.

Tata: Not at all

Kapoor: And one aspect that I wanted to mention I read somewhere that there is a place in Pune where

you have an archive home and I'm wondering whether we can collaborate with them for any future.

Tata: Sure

Kapoor: So I will follow up on that

Tata: Sure

Kapoor: And of course you have a standing invitation to come to the Museum; I will give you a personal

tour of this very fantastic place

Tata: Okay

Kapoor: So next time you're in the Bay area we would love to

Tata: Alright; I'm in the Bay area about 4-5 times a year, so

Kapoor: That would be wonderful. Mr. John Hollar will personally, and also there are some very

interesting programs where, which are national level programs and we'll talk to you about that later

Tata: Ah okay!

Kapoor: Thank you very much

**Tata:** Not at all, thank you.

Kapoor: Thank you very much, pleasure

Tata: Thanks I enjoyed this

END OF THE INTERVIEW