

# SANDS OF TIME

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TATA CENTRAL ARCHIVES NEWSLETTER

# WHAT TATAS TRULY STAND FOR AND WHAT MAKES THEM DIFFERENT FROM OTHERS

This excerpt is taken from Chairman (1938–1991), J. R. D. Tata's notes to the T.A.S. Officers on the occasion of the inauguration of the Tata Management Training Centre, Poona, 6th Jan., 1966.

To understand Tatas' approach and what we stand for, it is necessary to go back to J. N. Tata.

Even today whenever I feel overwhelmed by problems, obstacles and uncertainties, I think of J. N. Tata and the circumstances in which he worked and struggled and my burden or problem seems easier.

I hope every one of you have read the "Life of J. N. Tata". Although Jamsetji Tata lived in the last century, and died over 60 years ago, his life, objectives, ideas and ideals are still alive and remarkably appropriate to today's conditions.

Even allowing for his genius, his achievements would have been impossible without the driving forces which motivated him from the start: uncompromising honesty, vision of a New India,



dedication to such vision, willpower and determination to succeed in the face of heaviest odds.

His whole life was inspired by the single–minded pursuit of a few simple lucidly conceived objectives, all dedicated to the advancement of India.

At a time when so many of us are confused and bewildered by conflicting ideas and philosophies and economic theories, most of them half baked and half digested, we can derive strength and inspiration from the clear thinking, courage and simple reliance on basic truths and values which characterised the life of Jamsetii Tata.

It is indeed worthwhile to remember that he was born and lived in one of the darkest periods in the history of India. He was 18 at the time of the 1857 Revolt against the British.

At the beginning of his career, the grip of colonial rule and exploitation was at its peak.

The people of India, then spirit broken, stagnated politically, socially and economically, and the educated elite sought solace in religious meditation or sterile contemplation of the country's past glories.

That, even at such a time when opportunities for Swadeshi economic enterprise were nonexistent and in fact systematically denied to Indians, Jamsetji Tata should have dreamt and actually planned the industrial renaissance of India, shows the calibre, vision and strength of purpose of the man.

Let me here quote a passage from the foreword I wrote to the new edition of the Life of J. N. Tata: "The genius of Jamsetji, however, and the essence of his contribution to the later growth of Indian industry is that he alone in his time understood the full significance of the industrial revolution in the West and of its potentialities for his own country. Where others thought primarily or exclusively in terms of political action, he saw clearly that India's freedom could not be achieved or maintained by political means alone, that freedom without the strength to support and, if need be, defend it, would be a cruel delusion and that the strength to defend freedom could itself only come from widespread industrialisation and the infusion of modern science and technology into the country's economic life.

"It is a measure of the man that despite the changes which have since taken place, his ideas and industrial philosophy remain today as fresh and vital as they were in his time. Jamsetji Tata dreamt of an industrialised and prosperous India. Under conditions which would have appalled and discouraged lesser men, he set about to breathe life into his dream. He realised that if he was to achieve anything worthwhile in his lifetime, he must not fritter away his resources by attempting to do too much over too wide a range of activities. He wisely concentrated his energies, knowledge and wealth on three schemes which would not only be within his own resources to bring to life but which, he saw,

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#### **EDITORIAL**

"What Tatas truly stand for and what makes them different from others" – J. R. D. Tata's note's title for the inaugural speech on the occasion of the opening of the Tata Management Training Center 1966 is intriguing. His conviction that the Tatas were 'different' stemmed from his adulation for the Founder and the well earned trust that the company evinced in independent India.

In his speech, J. R. D. Tata encourages the pioneering young managers of the Tata Administrative Services to take inspiration from the philosophy and life ideals of the Founder, Jamsetji Tata. Since then, TAS recruits have grown to embody the ideals and values that the Group symbolises. Delivered during the inauguration of the Tata Management Training Center, these words are

endearing not just because of their quintessential JRD charisma but because every word of it rings true even today. We hope our readers find it motivating.

We conclude Dr. Ian Magedera's series in this issue and look at the cosmopolitan outlook of Sooni Tata's adaption of life in India. She took every challenge in her stride and her story is

presented to us through this fascinating piece of research. To stretch the same theme, we go back a century to globetrot with Dorabji Tata and his lovely wife Mehri and look at their travels around the world.

Deepthi Sasidharan

## WHAT TATAS TRULY STAND FOR ..... contd. from pg. 1



Jamsetji Tata

"ONE HUNDRED YEARS
FROM NOW, I EXPECT THE
TATAS TO BE MUCH BIGGER
THAN IT IS NOW. MORE
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GROUP COMES TO BE
REGARDED AS BEING THE
BEST IN INDIA... BEST IN THE
MANNER IN WHICH WE
OPERATE, BEST IN THE
PRODUCTS WE DELIVER,
AND BEST IN OUR VALUE
SYSTEMS AND ETHICS."

RATAN TATA CHAIRMAN TATA SONS LIMITED were essential to any future progress and, once established, would set the pattern and the pace for future development. The three basic ingredients of economic progress, as he saw them, were steel, electric power and technical education combined with research. The soundness of his reasoning may seem pretty obvious to us today, but under the conditions prevailing in India some seventy years ago when all progress, other than that geared to satisfying colonial needs, was firmly discouraged or ridiculed; it required an exceptionally lucid and well-furnished mind, backed by courage and determination, to see the basic issues so clearly and to plan in detail the programme of action which he adopted."

Jamsetji Tata was a man of destiny who would have made his mark anywhere and in any field to which he would have applied himself.

While we cannot aspire to his genius, we can share his ideals and his philosophy of life which in fact have proved a remarkably continuing inspiration to the firm throughout its history since his death.

I firmly believe that even to this day, we owe to Jamsetji Tata's

ideas, his example and the traditions that he set for us, much of the success, prestige and reputation we have enjoyed up to now.

If there is today such an intangible yet living entity that we call the "House of Tata", it is largely due to the magic of his name and to the principles and traditions he laid down for us.

I therefore, commend to you, Members of the Tata Administrative Service a study of Jamsetji Tata's life and as your career develops, the maintenance in the forefront of your mind of the simple but everlasting truths and guidelines which he himself followed in his lifetime.

In doing so, I am not asking you to abide by out—moded ideas of 19th century paternalism.

Jamsetji Tata's industrial philosophy and ideas of industrial development, labour relations, his study and use of the latest scientific techniques, his eager and constant search for new ideas and new processes, his readiness to experiment were well ahead of his time and are even today remarkably in tune with the present day.

There was no sentimental sloppiness in his thinking and his devotion to efficiency, low costs and profitability was as great as his dedication to the welfare of his shareholders, his employees and his country. While, I have stressed up to now the patriotic and visionary ideals of Jamsetji, I hope you will never lose sight of the fact that you will be working for an industrial organisation, the first requirement of which, is to be successful.

Success in industry, is measured mainly by its profitability. With rare exceptions, profitability can come only from high productivity, high quality and low costs, all of which the nucleus require high efficiency in management.

While, therefore, I hope you will always keep before you the far view, the distant and ideal goals and the high concept of how business serves the best interests of the community and the nation, I equally hope you will concentrate primarily on the hard, practical realities of the industry and business and realise that your performance will ultimately be judged by the balance sheet and profit & loss account you produce.



## EMBEDDING AN INTERNATIONALIST VISION: SOONI TATA AND THE TRANSNATIONAL IDENTITY OF THE TATA FAMILY 1902–1923

#### Between Parsi and 'Paree': Sooni Tata's transmission of transnational identity

The languages and cultural influences which swirled around Sooni did not distract her from her decision to maintain her own brand of French and Parsiinfluenced cosmopolitanism (with Hindi and English as background languages). This might have been a challenge for a woman who moved away from her maternal home at the age of twenty two. Any insights she acquired and principles she and her husband held were soon needed in the field of child rearing. As we have said, at this period children's early education was primarily women's work and there is ample evidence that Sooni Tata took this role extremely seriously. In a letter to her mother Sooni refers to her son as 'le roi futur [the future king]'. so there is a clear intention of grooming Jehangir for a leading position in the family business empire. The regal reference is also totally in keeping with Sooni Tata's monarchical vision of the world which was hinted at in her lament of the passing of the 'knightly' Frenchman.

Once the fraught period of birth and the earliest infancy is over for her children (health concerns dominate even though this family which had access to the best healthcare available at the time), one of the key markers of how her children are progressing is language development. It may be objected that language is one of the universally acknowledged yardsticks of childhood development and that the Tatas represent nothing unusual here. It is instructive, however that,

given the necessity to transmit a transnational identity, this development is not measured in absolute terms; terms which could be conveyed by the words 'today my little girl/boy said a three-word sentence', for example. Rather it is a case of multilingualism being the norm. Sooni Tata comments on her son's language repertoire at the age of three, with both curiosity and delight. He speaks: 'un mélange de goujerati, d'hindi et d'anglais [a mix of Gujarati, Hindi and English]. It is telling that in the next few years she sent her two eldest children to live with their grandmother in France. In the following extract the mother mentally reviews the linguistic progress that she expects her daughter Sylla and her younger son to have made during their stay with their grandmother in Paris and also reflects on the sacrifice of having to send them away from

Quand je pense que Sylla va avoir 4 ans! C'est une petite femme déjà et comme elle sera drôle et amusante quand nous la reverrons, et Jehangir cheri? 3 ans bientôt quel changement nous trouverons en lui, il saura parler comme un grand. Quand je songe à tout ce que je perds en ne les voyant pas, je suis prise d'une indicible mélancholie et je voudrais partir sur l'heure pour accourir vers vous, avec Ratan bien entendu. [When I think that Sylla is going to be four soon! She is a little lady already and how funny and entertaining she will be when we see her again and dear Jehangir? He is about to turn three, what change we will see in him, he will be able to speak like a grown-up. When I think about all that I am losing by not seeing them, I am seized by an

unspeakable melancholy and I would like to leave immediately and rush over to you, with Ratan of course].

Sending the children to France, however, had a linguistic purpose, it anchored French as the children's 'mother tongue'; indeed there is an anecdote that whenever J. R. D. Tata was heard to count he did so in French. This period in France lasted until 1923 when R. D. Tata came to bring his children back to India after the death of their mother. J. R. D., however, was sent to England to improve his English (the decision about this might have been made following the son's correspondence with his father in English). For the scion of an industrial family such as the Tatas an apprenticeship with the company was more important than higher education and J. R. D. Tata recounts how he did not pursue his studies at Gonville and Caius College, Cambridge University, but was called back to the company in India in December 1925 and was doubtless reimmersed in elements of that language mix that he knew from his very early childhood.

Sooni Tata died on June 4, 1923 at the early age of forty three; however, it is clear that her influence upon the linguistic and cultural make up of her five children was profound beyond the nurturing and love evoked by J. R. D. Tata as her legacies to him and his siblings.

## A note on the Tata father and son

It is fitting perhaps, that this piece, which has foregrounded the female influence in identity formation and language use in the Tata family, should contain a



lan Magedera a lecturer in French at the University of Liverpool, UK worked with the French correspondence in the JRD files at TCA.

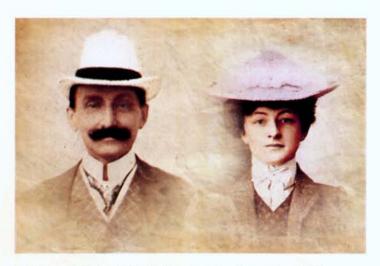
The first part of the article was featured in the previous issue of "Sands of Time".

The third and final installment is being reproduced for the benefit of the readers.





## **EMBEDDING AN INTERNATIONALIST VISION...** contd. from pg. 3



R. D. Tata with his beautiful wife, Sooni — original image circa 1902; digitally enhanced 2009.

coda about the men in the family, R. D. Tata too, of course, had made internationalist choices. It should not be forgotten that his first marriage was within caste, creed and nationality. It is described thus by R. M. Lala: 'R. D. was married at an early age to a Parsee girl from the Banaji family. She died childless not too long after the marriage'. As far as his linguistic competence was concerned, R. D. Tata, for one, had an interesting repertoire, a letter in French from him to his motherin-law suggest that he had a good command of the language. His French is virtually error-free and he uses a variety of registers (both formal and colloquial). While it might be the case that this letter to his former teacher might have been looked over by his native speaker wife, the contents do indicate that R. D. Tata himself had a voice in French that was as authentic and at least as witty as that of his wife.

The great gain between the two generations of the Tata family here mentioned is that

be called intranational identity - an identity between and beyond nations. This was offered to the children of Sooni and R. D. Tata in early childhood (whereas, as we have seen, both their parents had to work hard to acquire these skills). J. R. D. Tata begins a letter to his father in French quoting him a limerick he has written in English, after which he effortlessly switches to English and continues the letter in that language. In the 1986 interview with M. V. Kamath, J. R. D. Tata refers to three occasions where his multinational identity comes into play: 'I had dual nationality I was born a French man [sic] in France and was treated as a French man, In India as an Indian. A British subject presumably.' 'I was a French soldier and I'd been brought up as a French boy so I had dual patriotism.' Moreover, it is clear from J. R. D.'s slips of the pen that the metropolises of Mumbai and Paris were very close to each other in his mind map. In a letter to his father, the son writes: 'Tu dois être maintenant de retour à Paris Bombay [You must be back in Paris, Bombay by now].' When the time comes for J. R. D. to find his own spouse, it appears that he wanted to carry on the family tradition of multiple belonging which charactersed his parents' lives: 'I was very Europeanised, I'd lived half in Europe, in Japan, India and France, I wanted to have a wife who would be as comfortable in India as elsewhere. I was waiting to find a girl who was like me, half and half, where there were foreign parents. My wife had an English mother and a Parsi father, who was born in America and educated partly in Italy and

multilingualism and what can

spoke Italian [sic].' Given the physical distance which frequently separated members of the family, J. R. D. Tata's military service in France between 1924 and 1925 is a case in point, an obligation to practice written communication appears to have been inculcated into the children (in the same way that Sooni Tata felt obliged to write to her mother at a rate which averaged two pages a day most weeks for over four years). Languages were used in active communication and different languages for different members of the family. Such intra-family intercultural communication requires a great initial investment to establish and an effort to maintain: however, it is an efficient method to bind members of the family together, because the material support of the letter becomes a keepsake and token of affection in itself. In a nomadic life paper is fragile, but easily transportable. And care is needed to preserve it for posterity.

Seen in the round, each member of the family of Sooni and R. D. Tata has a particular linguistic constellation made up of four elements (English, French, Gujarati and Hindi), in a different hierarchy of competence for each person. As a consequence, the family's philosophy of language consisted of communicating in such a way that the palette of languages was maintained and improved.

# 'Parsiness', minority discourse and elites: Sooni Tata's role in the Group's ethos

In conclusion, it is important to affirm the importance of these matters of lifestyle and linguistic



### EMBEDDING AN INTERNATIONALIST VISION... contd. from pg. 4

repertoire and their wider impact on the development of an internationalist perspective in the Tata Group as a whole. While the history of economic activity in South Asia has always had an important international dimension within it, one only has to consider the histories of the various European East India companies and external colonialism and conquest though the ages. The Tata Group has a particular place within the history of international business in India because it was one of the first Indian-based international companies in private hands. The readiness of Jamsetji Tata to embrace French new blood into the family in the first years of the twentieth century is telling. In considering the reasons why this may have been so, the question of the role of the 'Parsiness' within Tata Group initially comes to the fore. Could it have been that, among leading members of the Tata Parsis, an awareness of their own non-majority status made them willing to enter into tangential alliances outside India (such as the admission of Suzanne Brière into such a prominent position within the family)?

There are several caveats to be borne in mind when raising this issue. The first is that any notion of 'Parsiness' within the group of companies should be divorced from 'sectarianism'; working for the benefit of special interest groups, goes against everything that Tata stood and stands for and, furthermore, it negates the basic commercial imperative of the enterprise to impact on the lives of as many people as possible. Secondly, the potential role of 'Parsiness' in the business ethos of the Tata Group

probably has little to do with the Zoroastrian religion in a strict theological sense. This is because the majority of employees are of other faiths and, because it is a minority, non–proselytising faith; few non–Parsis have a profound insight into it.

Once these limits have been set, 'Tata parsiness' loses its specific ethnic, cultural and confessional attributes and retains only one element, something which could be called 'an element of difference', marking it out from the norm of other companies (and particularly from other companies of comparable size in their home base of India). Constructed in this way, Tata parsiness' might be a lowest possible common denominator; however, its potential commercial advantages can be considerable. This element - let us call it 'the sense of being an elite' - is a category which can be quickly invested with positive qualities because it is all things to all (Tata) people. Of course there are quantifiable elements which can be used to bolster the brand, the most important of these being the role of the various charitable trusts as major beneficiaries of Tata Group. This, allied to the company's size and longevity, forms the current basis of a sentiment that can be harnessed for positive ends among the workforce and among consumers at large. Nowadays, this soft form of elitist thinking is open to everyone with an association with the company, including even consumers buying Tata products. It functions mainly in the distinctions by company employees between Tata Group and the rest of the economy and, of course, as far as executive authority within the

company is concerned, it does not negate a hierarchy among company staff.

As far as Sooni Tata and the early twentieth century is concerned, it appears clear from the self-projections of R. D. Tata's wife and the way she brought up her children, that she conceived of the Tata elite in far more exclusive terms. This is the project that Susanne Brière bought into when she became Sooni Tata and her contribution to the diversification of the whole Group at a crucial moment in its history needs to be better acknowledged. But how can her contribution be judged in the round? Other than as an informal casual translator from French into English and as a procurer of business information for her husband, she did not play any official role in the day-to-day activity of the company. Thus, because of the unquantifiable nature of her contribution, she is best described as secondary human capital and one of the Group's intangible assets (her contribution is necessarily 'secondary' because she was not a direct employee of the firm'). The fact of her being a white European is perhaps less important for the company than her native competence in French and her desire to live life with her family in a multilingual and transnational setting. The fact which confirms that we are talking about skills and a specific individual mentality, rather than 'race' is that, nowadays, these same skills (multilingualism and adaptability) are a common feature of non-resident Indians and of those whom Indian consulates and embassies describe as PIO's, 'persons of Indian origin'. We have seen



J. R. D. Tata – original print circa 1940; digitally enhanced 2009.



## EMBEDDING AN INTERNATIONALIST VISION... contd. from pg. 5



Sooni Tata – original platinum print – circa 1905; digitally enhanced 2009.

above how Sooni Tata deplored the stay—at—home and unadventurous nature of many of her French contemporaries; these people she says who are afraid of venturing to a place where [they] can no longer see the roof of [their] own house' (quoted above).

Indeed, we can uncouple these qualities from race and nationality altogether if we look back to the early years of the twentieth century and into the heart of the Tata Group, where there is an example of an Indian-born Tata employee, arguing from a purely business point of view for an increased multinational dimension to the firm's commercial activities. On 21 June 1906, B. J. Padshah writes: 'We all absolutely agree with you [R. D. Tata] that we need to travel outside India for promising recruits & thank you for your indication of the French Ecole de Mines [sic]. Perhaps it is not so difficult as it looks to secure a capable Englishspeaking French man [sic] to organise the exploration of minerals'. Just over twelve years later, on 23 July 1918, B. J. Padshah frames a plea for Tata to buy in foreign expertise in terms of a dynamic fusion strategy for the company's human capital: Don't worry about the Tata name. It won't suffer if strangers are introduced into the shrine or home. There is no Armstrong or Whitworth in the firm of Armstrong or Whitworth; a few shares may be held by a Maple in Maples, but the management is in other hands; the Caesars very soon ceased to be of the family of Julius and were ultimately Spaniards, Greeks & Barbarians & Germans. The Caesars early took Associates when the empire grew too big for one Autocrat. In India, there

is no Bird in Birds & I doubt if there is any Killick or Nixon in K & N. The principles of Transfusion', by which an external limb planted in a living body may keep the body as a whole alive & functioning, will also avail the Tata Firm; bring new blood and worthy, bring more shoulders to bear the new burden.

Leaving the accuracy of Padshah's opinions about other companies to one side, the key issue here is that these letters are addressed to R. D. Tata and thus when it comes to evaluating Sooni Tata's overall contribution to the international diversification of Tata Group, we can see that, although her activities were enclosed within the limits of the domestic sphere, there are profound similarities between them and the debates which are going on at the heart of the company at exactly the same time. Sooni Tata probably did not know about B. J. Padshah's letter, but he certainly knew about her situation and R. D. Tata obviously knew about both. More than that, Sooni and R. D. Tata's family life had the crucial advantage of providing, for all to see, a successful fully functioning practice of embedded internationalism. There is compelling evidence to understand Suzanne Brière's refashioning of herself as Sooni Tata as a prime example of exactly that process of 'transfusion' which B. J. Padshah sees as a lifeline for the company as a whole. Indeed, given the enduring importance of the dynastic principle in the history of Tata Group, and in Indian society more widely, the continued existence of 'transfusion' as a way of assuring change and continuity is all the more remarkable.



#### GLOBETROTTING WITH DORAB AND MEHRI

Geographical distance doesn't have to keep you from staying close to the people you care about. During the course of their extensive travels around the world Dorab and Meherbai Tata kept in touch with their family and friends. Tata Central Archives invites you to globetrot with the couple around the world.

On April 14, 1898 Dorabji Tata married the beautiful Meherbai or "Mehri" as she was previously called.

The first six years of their life were varied. Jamsetji Tata, Founder of the House of Tata was a voracious traveller and his son Dorab inherited this trait.

Dorab and Meherbai left for Europe soon after their marriage. Among other places they visited Karlsbad, Wiesbaden and Schwalbach.

Jamsetji's increasing age and the rapidly expanding business of the firm threw a heavy burden of responsibility on Dorab. Hirabai, Dorab's mother, was rather conservative and also an invalid, and the heavy duties

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of a hostess in Esplanade House, a centre of cosmopolitan society, then and for many years afterwards devolved on the young daughter—in—law, Mehri.

It was not till six years later that the couple were able to make their next visit to Europe. In 1904 they went to Egypt and joined Jamsetji. The whole party went from Egypt to Naples, Rome, Florence, Genoa and San Remo. After a visit to Vienna to consult specialists about Jamsetji's health which had been failing, they travelled to Bad Nauheim where he, passed away on May 19, 1904.

Dorab and Meherbai made a tour of the Lake Districts in England and Scotland and several European countries. In the winter of 1906 they were again in Europe. At St. Moritz, Meherbai took her first lessons in skating. From there they drove through the pass into Italy visiting the Italian lakes. They had also visited the Swiss lakes. In 1906, they made a tour of the Norwegian Fjords and sailed round the North Cape, Spitzbergen and the Polar Ice. On another occasion they went on a trip to the Balearic Islands and Algiers, and then through Spain and Italy, back to Paris. They made several subsequent tours in Europe in the course of which they visited Belgium, Holland, Germany and Austria more than once. In fact, they travelled all over the continent except Russia, Poland and Turkey.

Their longest journey out of India was in 1927. They stayed in the sanatoria in Kissingen in Germany, Skodsborg in Denmark, Divonne in France, Valmont and Territet in Switzerland and Vienna, and they then made the voyage to America. The couple were very cordially received and entertained by American society.

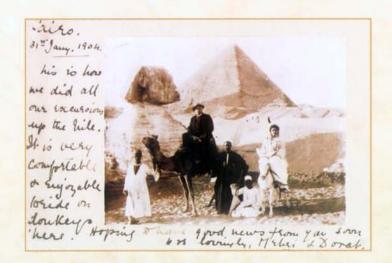
In India, too, Sir Dorab and Lady Tata made long tours. Mysore, of course, was the home of Lady Tata's childhood and they were welcome guests whenever they visited the State. They were equally honoured visitors in Baroda and Kashmir where they spent six delightful months in 1917. In the cold weather of the same year they made a tour of the Kathiawar States visiting about a dozen places. They were hospitably received by several Darbars, and in the families of the Chiefs.

Lady Tata had a hobby of collecting souvenir spoons of every place she visited. She had made a collection of about 250 spoons some of them of rare artistic merit and all reminiscent of some local association.



"ALL TRAVEL HAS ITS
ADVANTAGES. IF THE
PASSENGER VISITS BETTER
COUNTRIES, HE MAY LEARN
TO IMPROVE HIS OWN. AND
IF FORTUNE CARRIES HIM TO
WORSE, HE MAY LEARN TO
ENJOY IT."

SAMUEL JOHNSON





#### DIGITAL CONTINUITY



#### WAYS TO GIVE

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Tel: 91–20–6609 2019 Email: tca@tata.com We preserve our history and cultural heritage with a broad range of media. There are sound recordings, videotapes, films, and, more recently, electronic media, such as CDs, DVDs, e-mails, Wikis, web pages, complex datasets, Blackberries and Blue Tooth to name but a few.

Some of these records require special equipment and special technologies to access. Keeping abreast with the changes in technology is a major challenge.

As newer technologies appear, older ones cease to be used. For example, new media for storing digital information rapidly replaces older media and reading devices. Newer versions of software constantly render older versions obsolete and the hardware required by this software also changes over time. Consequently, information which relies on obsolete technologies becomes inaccessible. Presently it seems that the lifetime of digital storage media generally exceeds the life of the technology that supports it.

Strategies for dealing with technological obsolescence include: migration of digital information to technologies from which they are accessible, the emulation of obsolete systems, and the preservation of obsolete technologies.

If you don't take action now, there's a real chance you won't be able to access information that's more than 5 – 7 years old. It will be very difficult for you to operate accountably and transparently, meet your legal and regulatory requirements, or take evidence—based policy decisions. You might be able to recreate some of the information you've lost, but it's expensive and time consuming. And, of course, some data simply can't be recreated.

Can you afford to take the risk?

In 1975, NASA sent two Viking space probes to Mars. The data generated by these unrepeatable missions produced at a total mission cost of approximately \$1 billion was recorded onto magnetic tape. Two decades later, the tapes were cracking and brittle, despite the space agency's best efforts to keep them in a climate-controlled environment. Scientists needed access to the data but were unable to decode the formats used, and none of the original format developers were still alive. In the end, they had to track down old printouts and retype everything.

Continued maintenance of electronic systems may require that records and data should be migrated to new systems that can take advantage of the most current systems hardware and software. The creation of a plan which should specify a schedule for data back—ups and recopying as well as require backwards compatibility of a new electronic records system.

Backwards compatibility means that, to perform continuing functions, new systems must be able to access and read previously created electronic records and data.

Standard procedure dictates that the "three generations" back-up rule be followed. The three-generation procedure requires that the three most recent backup tapes or disks be kept at all times. The oldest back-up copy be used for making a new backup copy. Similarly, it is recommended that some type of off-site storage of backup tapes or disks be arranged. At a minimum this means that backups should be stored in a building on campus separate from the facility housing the electronic records system.

As part of its digital continuity initiative the Tata Central Archives has migrated around 150 sound recordings and about 400 video tapes (VHS) from analog to digital formats.

In 1998, TCA initiated a project to digitise its Records (paper documents and photographs). Copies of these digitised formats have been transferred to CDs and are now gradually being migrated to DVDs.

All back—ups taken on various media are also stored off—site in another State of the country.