CHAPTER II

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Commercially, use of computer in India started in mid sixties when a few big organisations like Tatas, Mafatlals, etc., had IBM 1401, 1620 and ICL 1900 series computer systems for their own use. Computers for Government organisations in India were introduced in end 1967 when M/s Honey Well Inc. of U.S.A. donated 10 Honey Well 400 machines to the Government of India. Out of these ten, one computer was given to the O.N.G.C., one to the R.B.I., 5 to the Defence Ministry and three to the Department of Statistics, Delhi which was used by other Government Departments also.

M/S Honey Well Inc. also sent a team of six experts to India to install the computers and to impart training to selected Indian Officers and Engineers in hardware and software. Among the participating organisations in this first training programme in the country, Income-tax Department was one. Thus the Income-tax Department is one of the few organisations in the country which had the earliest contact and exposure to computers. Now after a lapse of more than a quarter of a century, one may not be wrong if one comments that the Income-tax Department does not appear in the computer map of India.

Income-tax Department wanted to introduce computers in only those areas where the manual system was monotonous and time consuming during 1967-68. The Directorate of Research and Statistics of the Department was chosen for computerisation. The function of this Directorate was collection and compilation of statistics for the Department. Two officers of this Directorate including the Statistician were deputed to get the training from the Honey Well team. These two officers of the Income-tax Department took software training in the first of the three batches trained directly by the Honey Well
After the training was over, it was decided that the first job to be undertaken was compilation of All India Income-tax Statistics and accordingly a systems study was conducted with the help of Mr. Belmont, an expert of the Honey Well Group and the software was developed. The first batch of processing was started in 1968 itself and was implemented in the Computer Centre of Government of India, Department of Statistics, situated in East Block, R.K. Puram. The arrangement continued till 1988-89 when the Department of Statistics decided to use their computer entirely for their own purpose and stopped allowing other organisations from using it.

Prior to Honey Well computers, statistics used to be compiled in the Unit Record Machines owned by the Department. The Income-tax Department's unit record system was one of the oldest among the Government offices in Delhi and in size it was probably next only to the Defence Organisations. The data used to be collected in prescribed forms called IT 30 (ITNS150A) from the field formation in batches. These data were punched in punch cards in the unit record machines. The unit was manned by about 100 technical persons consisting of punch operators, verifiers, machine operators, and tabulation officers, etc.

After the Honey Well computer stationed in R.K. Puram was used by the Department for preparation of statistics, out of the existing technical staff, only the punch operators and verifiers could be kept engaged in technical work. Other staff were kept busy in the work of taking data from the Income-tax office at Hans Bhavan to the computer centre at R.K. Puram. They used to take punch cards from Hans Bhavan to R.K. Puram in trucks. The work-load of the Income-tax Department was so heavy that at times the entire computer at R.K. Puram would be busy in processing Income-tax data only. There were night shifts also and people would come at night to do Income-tax
work. Sometimes when computer time was not available at R.K. Puram, computer staff used to go to O.N.G.C. Honey Well computer at Dehradun. When carrying cards became difficult, they purchased one key-to-tape unit for carrying the tape instead of bulky cards.

In 1988-89, after the Department of Statistics stopped entertaining other Departments, a small computer facility was installed in the Income-tax Department at Hans Bhavan, ITO in collaboration with the NIC. It consisted of 8 to 9 PCs. The earlier system was modified to suit the new hardware. After the advent of the PCs, the unit record system was sold as scrap. Data were entered in PCs only in floppies. Gradually most of the staff of the Directorate could not find sufficient work, because the number of machines was only 8 to 9.

Meanwhile, because of the deterioration in the general functioning of the field, the flow of forms (data sheet) became irregular and low. There was great timelag, sometimes as high as four years, between the relevant year to which the data pertained and the year of receipt of data sheets (forms). As a result statistics lost its utility. Inspite of 8 to 9 PCs, the situation worsened because the malady lay in non-receipt of inputs from the field formation.

As mentioned earlier, the 100 strong staff of the unit did not have enough work in the new situation. Their cadre was separate from the general Income-tax cadre of Delhi, so they could not be transferred to the field formation. As a result, there was widespread discontent among the staff of this unit. They abused the Director which led to the suspension of some members of staff. It would be apparent from the discussion in the foregoing paras that there are historical reasons for this discontent.

Now after long 30 years and with the use of computers, the statistics section should have been streamlined. But the scene is different. There is a total slump in activity. The
staff is surplus and disgruntled. The performance of the Statistics Section is now so poor that it invited open wrath from the Finance Minister and the Revenue Secretary when in a particular year the collection fell short by about Rs.1000 crores of the estimate. Various reasons were advanced for failure to properly estimate the collections. But the real reason seems to have been overlooked. The Statistics Centre lived on the inputs from the field in respect of sample tax payers. If the Department could have maintained the timely flow of inputs from the field and obtained good samples, there would have been enough work for the employees as with increase in population workload would have increased. More recent statistical techniques would have been applied to project econometric models for the Department. The staff could have been better utilized.

Coming to other areas where computers have been used, during the period 1967 to 1975-76, isolated attempts were made by Commissioners in charge of salary circles in the cities of Bombay, Ahmedabad, Madras, Bangalore and Pune for the processing of Annual Return of Tax Deduction at Source from salary under Section 206 of the Income-tax Act. It was realised that this work was so stupendous that it could not be done manually. These jobs were done with the help of some consultancy houses (such as TCS) who had their own computers. These houses developed the system, but did not give the system to the Department. They used to charge for systems development and for each entry. These jobs were done in a haphazard manner. So these isolated computerisation efforts did not have any decisive impact on the functioning of the Department.

Installation of a H-P (Hewlett Packard) programmable calculator system in the office of the Director Organisation and Management Services in December, 1975 may be said to have formally heralded the age of computerisation in the Income-tax Department. It is said that one of the Chairmen, Central Board of Direct Tax (CBDT) went to Germany on an official visit and was impressed by the use of small electronic machines in the
Tax Department of Germany. On return he desired the Director Organisation & Management Services to take steps to introduce these machines in the Income-tax Department in India. And that is how the Hewlett Packard machine was acquired.

This computer installed in the office of the DOMS (Directorate of Organisation and Management Services) was used for calculation of taxes accurately in high revenue yielding cases at the pre-assessment stage at Delhi and in other centres in the post assessment stage. In other words it was intended to be used as a tool to audit the calculation of taxes to detect wrong calculations. This first regular computer set up of the Department was installed in 1975 with a staff strength consisting of one Assistant Director (Programming), two Programmers, two Programme Assistants and one LDC. This unit was known as "PC Unit". (PC - Programmable Calculator).

The area of operation of this PC unit was 8 Commissioners charges of North India. The machine in course of its working from 1975 to 1981 had detected short calculation of tax to the tune of Rs.92 lakhs. After a small training initially imparted by the Vendors, M/s Blue Star, the entire system was developed in-house by the PC unit. The system was working satisfactorily. In 1981 this machine had to be abandoned due to paucity of spares.

Meanwhile towards the end of 1976 a study was conducted by the DOMS (Directorate of Organisation and Management Services) to explore the possibility of introducing mini computers instead of programmable calculators at different places. Another feasibility study was conducted regarding the areas in which computers would be introduced. The areas identified were:

1] Allotment of Permanent Account Numbers (PAN)
2] Processing of challans
This proposal was sent to the Department of Electronics which approved it and suggested a Systems Development Team comprising a Systems Advisor, two Deputy Systems Advisors, eight Systems Officer and supporting staff. The Systems Development Team was formed in 1977 (August-September) with the staff of one systems Advisor, two Deputy Systems Advisor and two Systems office. The "PC Unit" was given to the charge of the Systems Advisor.

To start with, processing of Annual TDS salary returns was chosen to be taken up first at the instance of various metropolitan Commissioners. A system of Tax Deductors at Source Number was developed.

Tata Consultancy Services was appointed for software development, programming, systems implementation and processing of data at the four metropolitan cities of Calcutta, Delhi, Bombay and Madras on their own computers. They developed the system, showed the test output. Chairman was to formally inaugurate the actual processing work at Calcutta on 15th March 1979. But the Employees Associations were dead against computerisation. They staged dharna at Calcutta and other places.

As a parallel exercise the Department was trying to have a few scholarships from the Department of Electronics to train their persons in handling the systems work. The Department of Electronics had agreed to provide four scholarships in Germany. Accordingly this was circulated in the Department for officers to ply for the training. Aptitude test was to be conducted at different places in the first week of March 1979. Mr. Shankar Gupta, Assistant Director went to Calcutta to conduct the test. Suddenly Mr Gupta got a telephone call.
from Delhi from the Systems Advisor Mr Brahma to come back to Delhi immediately as the entire computerisation project was directed to be stopped.

After coming back to Delhi, Mr Gupta saw a file where the then Deputy Prime Minister and Finance Minister Mr Charan Singh had noted that there was no need of computerisation in the Income-tax Department and hence it should be stopped immediately.

The System Development Team was wound up. The T.C.S. demanded compensation of Rs.2.5 lakhs. The matter was settled after making a payment of Rs.50,000/-. Thus ended the first phase of computerisation in the Income-tax Department in March 1979.

SECOND PHASE OF COMPUTERISATION

After the fall of the Janata Government, a fresh attempt was made in 1981 to introduce computers in the Department. A paper was submitted by the Director (Budget) to the Board regarding introduction of computers in the following areas:

a] Allotment of Permanent Account Numbers
b] Processing of challans
c] Processing of TDS salary returns

This proposal was accepted in the Board meeting held in June, 1981. It was also decided by the Board that a new post called Director (Systems) of the rank of Joint Secretary to the Government of India should be created. The Director (Systems) would be responsible for the computerisation of the entire Department. This proposal was approved by the then Finance Minister. The F.M. also directed that a detailed feasibility study should be conducted by an outside agency before introducing computerisation in the Income-tax Department. Accordingly a meeting was held in the chamber of
Secretary (Revenue), which was attended by Secretary, Department of Electronics; Chairman, CMC; Chairman CBDT; Director O & M Services, Income-tax Department. CMC was entrusted with the feasibility study desired by the F.M. CMC was to collaborate with officers and staff of the Income-tax Department at various centres. DOMS was to co-ordinate all this work.

CMC submitted its report in 1983. The report was accepted by the Board and in 1984 a Standing Committee was formed to recommend steps for implementation of the report. The Standing Committee was headed by Sri S.R. Jha, Commissioner, Bombay and included Commissioners of Madras, Delhi and Calcutta, and the Director (systems).

The Computer (Programmable Calculator) of the PC unit became sick for want of parts. A new machine ORG 2001 (mini computer) replaced the old machine and was installed in the DOMS in 1983. With the new machine the following works were started:

a) Processing of Challans
b) Allotment of Permanent Account Numbers
c) Work of P.C. unit in checking the accuracy in the calculation of tax in high revenue yielding cases. The programme was done in-house.

A significant point need be mentioned here. It may be remembered that the main work of the PC unit when it was set up in 1975, which continued for over six years, was checking of tax calculations before assessment in big cases (pre-audit) and after assessment in other cases - (post audit). There was a rethinking on this objective. A line of thinking developed that the PC unit was only duplicating the work of the Internal Audit Wing of the Department. Accordingly, it was decided that PC unit would stop doing this work barring the few cases which still trickled down.

It may be necessary to comment on this reversal of
policy. By abandonment of the tax calculation work, whatever expertise was gained during all these six years working of the PC unit was totally lost. The evolution of computerisation in a certain right direction was abruptly stopped. The PC unit was doing the very important work of checking the tax calculations. Manual calculation of tax is tedious and monotonous and is prone to mistakes. Use of computer in tax calculation would ensure speed and accuracy in tax calculation and would save substantial time of the staff. Its benefits would have been visible by the staff. This would have slowly paved the way for acceptance by the staff of computerisation of processing of tax returns. The right course at that time would have been to use computers in audit work, provide more computers to the Internal Audit party instead of withdrawing computers from audit work on the plea of duplication of work. Even now audit work is one of the most neglected works of the Department. The workload is heavy, officers and staff are unwilling to be posted in these boring posts. The targets of cases to be audited are never achieved; there is heavy backlog. This was an area where computer could have been progressively introduced without any opposition from staff. A great opportunity of modernisation was lost.

Reverting back to the performance of the Standing Committee, set up to implement the CMC report, the Committee discussed the computerisation programme with officers and unions and found that considering the prevailing atmosphere, Madras was the only place where computer could be installed immediately. Computers could be set up in other places in phases. The Committee recommended that the following should be the only areas of work for computerisation:

a] Allotment of Permanent Account Number (PAN)
b] Processing of Challans
c] Processing of TDS Salary returns (Form No. 206)

The Committee laid emphasis on training of staff and removal of their misgivings through discussions. A Member of
the Committee even recommended setting up of computer clubs in different commissioners offices where popular computer magazines and films would be displayed.

Thereafter a Computer Evaluation Committee was set up for purchase of a computer system for Madras. After considering different tender applications and after conducting bench mark test, SN 23 (subsequently upgraded to 73) mini computer was purchased from Hinditron and was installed in Madras in September 1985 and became operational in November 1985. Among the conditions of purchase, the vendors were required to develop and implement the software for the following jobs:

a] Allotment of PAN and maintenance of a Directory of tax payers.

b) Processing of income-tax payment challans and refunds ultimately with a view to maintaining an individual ledger account for each tax payer.

c) Processing of TDS salary returns.


A team from the Hinditron was entrusted with this project. A team from the Income-tax side under the guidance of a Commissioner of Income-tax was formed to interact with and advise the vendor team. First system introduced was processing of challans which was followed by allotment of PAN. Thus the computer in Madras was the first computer installed in the field formation in the country.

In 1986, Madras Centre on their own wanted to introduce computer in summary assessment work. With the approval of Board, they engaged TCS (Tata Consultancy Services) to develop the software at a cost of Rs.50,000/. In 1986, summary assessment started in Madras.

Before proceeding further on the expansion of computerisation to other parts of the country in the Income-tax Department, mention may be made of some parallel activities undertaken to computerise some aspects of work.
(1) **Processing of salary returns** - In 1970-71 an attempt was made to process salary returns on computer. Since the Department did not have its own computer, help was taken of the computer centre at R.K. Puram. The programming, systems design and even implementation of the project was done by this computer centre. The Income-tax Department was only involved in checking the accuracy of data, test outputs and control over the flow. Since no officer of the Department was closely involved in the programming, the system developed was faulty. As a result most of the outputs were wrong. Accordingly no demand could be raised on the basis of computer outputs. In subsequent stages so much efforts were needed to check the computer outputs, that it was thought better to do away with this experiment and go back to the manual system. This experiment was done for only a short time.

(2) **Career Management Unit (CMU)** - In 1970-71, the then Home Secretary Mr L P Singh suggested that career profile of all cadered officers should be maintained on computers to enable selection of right officers for right jobs including deputation, training, etc. without any bias. The system was first introduced to the IAS and IPS officers of his Ministry and subsequently it was introduced in the Income-tax and Customs Departments. It was a comprehensive system covering the qualification, experience and specialisation of officers. The particulars would be noted at the entry of the officer into service and would be updated every year through a special form devised for this purpose.

A career management unit was formed under the Board which was headed by an Under Secretary and had a Section Officer, three Assistants, a few UDCs, typists, and stenographers and a technical assistant from the DOMS.

The Department's role was mainly to collect the initial data from the National Academy of Direct Taxes, Nagpur when the probationers came for their first training and send them to the computer centre at R.K. Puram and get a print out of
the stored data in the form of a directory. They even introduced a code number for each officer. It consisted of six digits, to represent the year of allotment, last name of alphabet, etc. The CMU was also circulating the updation form every year to the field officers.

It is interesting to note that this way of computerisation of data subsequently was not very much liked when for some prize postings, known persons were excluded from the list coming out of the computer on the basis of objective criteria.

Gradually due to disinterest of the National Academy of Direct Taxes (NADT) to collect the initial entries and the CMU to collect the updations, the work became very less. The last blow was given by the Staff Inspection Unit. It wanted account for 1800 working hours in a year which could not be given. The entire unit was scrapped in 1977. The system was given to the PC unit.

With a small ORG 2001 system, the PC unit tried to maintain an updated record of officers in the 2001 system. They could not get the stored data from R.K. Puram unit in electronic form as it was not compatible with their system. That data was lost. They entered the new cases still coming from the NADT in the 2001 system and print outs were taken as supplements to the Directory earlier printed. In course of time with the lack of update information from the field, the entire data became obsolete. The system met a total decline around 1983-84.

The system was again revived in a truncated form in 1986 with the installation of a PC XT in the office of the Director (Hqrs) CBDT (earlier designated as OSD to Chairman, CBDT). It was decided that data of officers of the rank of Deputy Commissioners and above would be maintained in this computer while the profile of the Assistant Commissioners who form the bulk of the Group A work force would be maintained in the ORG
2001 system of the D1 (system). By 1987-88, ORG 2001 system became obsolete. As a result no data could be maintained for the Assistant Commissioners. The system developed (it was developed in-house) in the PC of Director(Hqrs) is working satisfactorily though data of about 10% of the officers is still not available there due to lack of feedback from the field. This system should not be allowed to decay. It needs upgradation and also more manpower to chase the data forms from the field.

(3) Computerising salary challans:-In 1986-87, a newly posted Commissioner in charge of salary circle took keen interest in computerising salary challans in his circle. At his instance, TDS numbers were allotted to each tax deductor at source and coloured challans were introduced for salary circles so that they could be identified immediately. The TDS deductors were required to take their challans from the salary circle and prepare a rubber stamp of their TDS numbers and put on the challan to make it legible for all data entry operators. Programming was done inhouse and processing was done in the old system 2001 of DIT (Systems). The scheme took a good start and was doing satisfactory progress. But before the system could be established properly, the concerned Commissioner was transferred. His successor did not take that interest. The scheme met an end.

(4) Judicial Reference System:- The officers of the Department, while discharging their quasi judicial functions of assessment are bound by the decisions of the Supreme Court and the jurisdictional High Courts. Tax payers also plead their cases citing various judgements naturally which are favourable to them. The assessing officer should be aware of the contrary judgements also. The judgements of the High Court and Supreme Court are reported in the Income-tax Reports (ITR). But it becomes difficult to go through all the ITRs to find out the judgements on a particular point. There was one publication of the Department called Hicogist containing these judgements, but it was not serving the purpose due to large time lag and
irregularity. It was felt that there was need to develop a system whereby the gist of case laws could be computerised and provided to the officers who could instantly recall the relevant case laws on a particular issue.

Mr. Narsingham, Director of the Administrative Staff College of India, in course of his meeting with Chairman offered to develop a system for the Department and implement at Hyderabad. A senior consultant of ASCI Mr. Nirmal Singh was sent to finalise the modalities. It was agreed that ASCI would develop the system for Rs.2.5 lakhs. They received an advance of Rs.1 lakh. It was in 1985.

It was decided that only ITRs would be the source documents, and some retired officers would be engaged to prepare the gist of the judgements which would be fed into the computer. Hyderabad computer centre was given a larger disc storage of 300 MB for this purpose.

The ASCI completed the system in 1987 and it was tested. The Department was not satisfied with the system as the query system was cumbersome. The ASCI made efforts to rectify the defects and gave a second demo. It was also not satisfactory. ASCI thereafter informed that no more modifications could be possible. It took the stand that designated officers of the Income-tax Department were all along associated in the development of the system. and therefore, they were not responsible if the system was not fully upto the expectation of the Department. They demanded balance payment of Rs.1.5 lakhs as per the contract. There was some inclination to accept that argument and a Commissioner Mr Anantharaman was authorised to certify that the system was workable before the final payment was made. He certified that the system was not workable. And this has been the end to the Judicial Reference System and there has not been any further progress.

(5) **Processing of U/S 800 applications** - A successful application of computer has been the processing of applications made under
Section 800 for approval of agreements for rendering technical and processional services outside India. At that time approval of such agreements were to be done by the Board. Such applications were piling up and in 1983 the then J.S. (FTD) Sri C K Tikku sought the assistance of the computer system under the Director (Systems). A system was developed in house. Board used to send applications in bundles to the office of the DIT (Systems) and data were fed from these forms. Computer used to determine the eligibility and print the approval order on pre-printed stationery. As a result of computerisation the whole backlog was cleared in one year and subsequently the approvals could be given within a matter of days. Thereafter the law has been changed and Board’s approval was not necessary.

(6) Other Systems - There have been other systems also at different places. Chairman’s PC monitors public grievances. Pay roll package has been successfully utilized in Delhi. Many charges are using the TDS package. But all these have been scattered and no uniformity has been achieved in applications.

Reverting back to the main computerisation of the Department, it has already been mentioned that a mini computer was set up in Madras in 1985 and started processing of challans, allotment of Permanent Account Numbers and summary assessments.

In 1986 Board decided that similar systems would be installed in 14 other cities - Ahmedabad, Hyderabad, Bangalore, Bombay, Delhi, Pune, Kanpur, Lucknow, Surat, Calcutta, Meerut, Amritsar, Rohtak and Jaipur. Hinditron was again selected as the vendor. They were supposed to develop the relevant softwares including the updation of the Summary Assessment software developed in Madras with the TCS. They were also required to impart the requisite computer training to the Department officers and staff. The systems were S.N. 73 systems. The cost of the machines depended on the number of data entry machines, disc capacity, magtapes and printers.
also. The price ranged from Rs. 7.25 lakhs to Rs. 22 lakhs per system.

Computer was installed in Delhi in 1987 June, in Bombay were completed in 1988. Thereafter computers were purchased for 21 in 1987 June and Calcutta in August, 1987. Most installations were centres - thus computers were installed in 36 cities in the country. All centres became operational by 1989 except Ranchi which started functioning in 1990. In 1987 June and Calcutta in August, 1987. Most installations was installed in each Commissioner's charge in the country by 1988-89.

**COMPUTERISATION POLICY OF THE DEPARTMENT**

Government has made announcements at different times in Parliament clarifying the policy on computerisation. The replies are reproduced (based on a document prepared for a meeting of Chairman with Staff Unions in 1990).

In July 1984, Government gave the following reasons in the Parliament for reintroduction of computers in the Income-tax Department:

(a) Improving administrative efficiency for managing the amounting volume of workload and thereby releasing scarce manpower resources for intensifying efforts to curb tax evasion and consequent raising of higher revenue.

(b) Ensuring speed and accuracy in processing and thereby improving public relations.

(c) Relieving the staff of the drudgery of repetitive and monotonous nature of job.

Government gave the assurance that computerisation was not likely to lead to any shrinkage of employment potential, retrenchment of employees and eventual joblessness. In April 1985, Government also assured the Parliament that computerisation would not lead to decrease in employment
opportunities, and promotional prospects. In December 1988, in the Lok Sabha, while naming the cities where computers are likely to be installed, the Government gave the categorical assurance that computerisation did not aim at affecting employment and promotional avenues.

In March 1989, a specific question was asked whether Government proposed to cancel summary assessment scheme on computerisation. Government categorically answered in the negative. It was further replied that it was much more administratively convenient to complete the routine checking of returns through computers rather than through manual process.

Subsequently Government again stated in the Parliament that computers in the Income-tax Department were handling the following types of work:

a. Processing of tax returns under the summary assessment scheme.
b. Processing of challans.
c. Allotment of Permanent Account Numbers (PAN).

Chairman’s letter dated 25.10.1989 to all officers and staff through the Chief Commissioners.

Chairman wrote a letter to all the Chief Commissioners asking them to explain to the officers and staff the scheme of computerisation of the Department in order to allay any misgivings. Chairman made the following points in this letter:

(i) The broad objectives of computerisation of the Department were outlined as under:

a. Improving administrative efficiency for managing the mounting volume of work load and thereby releasing manpower for intensifying efforts to curb tax evasion and consequent raising of higher revenue.

b. Ensuring speed and accuracy in processing and thereby
c. Relieving the staff of the drudgery of boring, monotonous and repetitive work and giving them opportunity to use their talents effectively and thereby providing them greater job satisfaction.

(ii) The Department had decided to use computer mainly in two areas of work - processing of returns u/s 143(1)(a) and processing of challans. In processing of returns the computer had been assigned a limited function. The power of the officer to determine the total income continued to remain with him. Similarly the function of the staff to check the correctness of the payments and to determine the correct refund after adjusting the outstanding demand remained. The staff continued to be fully involved in the receipt of returns and despatch of intimations and refunds and collection of demands. The computer only performed the routine and monotonous part of the job of computing the tax and preparation of intimations, challans and Demand and Collection registers.

(iii) There has been considerable deterioration in the record management of the Department. This could not be attributed to the increase in the volume of work alone. With advancement of technology man became exposed to new ideas, and he loathed to perform monotonous works which he was happily doing decades ago. Therefore, merely supplementing the manpower was not going to improve the record management in view of the inherent limitations of the manual system. Use of computer alone could clear the cob webs.

(iv) Chairman again assured the officers and staff that there would be no retrenchment and promotion prospects would not be affected. On the contrary, computerisation would assist the expansion of the Department. Relieved of the drudgery of repetitive work, the officers and staff would devote more time to improve the quality of their work. More information could be collected about taxpayers from different sources and could
be effectively verified resulting in new assesses and widening the tax base which would generate more work. More attention could be given to collect the mounting arrears. More efforts could be made to make deterrent quality assessments and prosecute tax evaders.

The above discussions would show that computer was intended to improve the operational efficiency of the Department. The progress in three key areas can be summarised as follows:

**ALLOTMENT OF PERMANENT ACCOUNT NUMBERS**

Every tax payer is given a code number called Permanent Account Number which would uniquely identify him in all returns and correspondence. The scheme was evolved in 1970. Each tax payer was to be allotted a unique 11 digit number. The scheme was conceived when no computers were introduced in the Department. Initially some PAN Directories were prepared with the help of outside agencies. Thereafter inspite of repeated exhortations from the Board, Department has not been successful in completing the allotment of a unique PAN to each tax payer.

These newly installed computers were given the job of allotment of PANs. Even though due to initiative of individual officers, in a few small places like Pune, Jaipur, Bhopal, etc., allotment of PAN has been more or less complete at those places, the position is far from satisfactory in the metropolitan cities. In Calcutta computer centre printed a few lakh cards to be sent to the tax payers to intimate their PAN, but they were not despatched. Similarly in Delhi and Bombay allotment and intimation of PANs could not be completed inspite of several deadlines. That the Department has not been able to complete such a simple job with the help of computers indicates the difficulties faced in any policy. Failure to allot PAN also retards the progress of computerisation of other works. A very important section of the Income-tax Act
(139A(6)) enjoins on the tax payers to quote their PANs in all correspondence with the Department and more significantly in financial transactions to be specified in rules. If PANs are quoted in all these financial transactions, it would enable the Department to cross check the information about the financial transactions of the employees collected independently through its survey teams with the information furnished with the Income-tax return.

On account of the failure of the Department to allot PANs to all the tax payers, the Department has been unable to frame rules specifying the financial transactions of the tax payers where quoting the PANs would be compulsory. Thus even though this provision has been in the statute for more than 17 years, no rules could be framed in accordance with this statute during all these years and the provision of law has accordingly remained inoperative. In consequence the Department has not been able to evolve a proper system for third party matching of information.

PROCESSING OF CHALLANS

According to the procedure of tax collection, the tax payers are required to deposit the tax in designated banks alongwith a challan form. The banks send those challan forms to the Department. The Department sorts these challans tax payer wise and credit is given to the tax payer about the tax payment on the basis of a challan. Before computerisation all these challans were being sorted manually. The entire process was extremely time consuming. It used to take months before the challans reached the Assessing Officer. Often it would take more than six months. So much delay in accounting individual collections seriously hampered the collection. Tax payer was also not getting credit for non availability of challan in the ward. It was hoped that with the advent of computer the process would be speeded up.

As told earlier a challan processing package was
developed by Hinditron and was implemented in Madras. Subsequently this package was implemented at other centres. This system was in operation at different centres for quite sometime, the longest period being in Madras. Spot inspection of a few Income-tax offices in Madras in 1989 showed that the computer print outs of daily collection registers sent by the computer centre were not at all being used by the field offices. In the manual process, challans were sent to the field office on the basis of which the field office was preparing the daily collection register. Computerisation was intended to save this work by printing the daily Collection Register. What was actually happening in the particular ward was that no reliance was being put on these computer print out of daily collection registers. The staff did not know how they were to be used. So they were writing daily collection registers again by hand on the basis of the challans. Thus in effect, all the work done by the computer was going waste!

Many other deficiencies in the old package were discovered. A new modified challan processing package was devised. It was felt that physical distribution of challans was causing delay in giving credit to tax payers. Since whatever information is there in the challan is available in the daily collection register in the modified challan processing system, there is no need to physically distribute the challans. Challans could be centrally stored. It was also decided that since one set of challans would now be centrally stored, one counterfoil of challan could be dispensed with which would result in substantial saving of Government expenditure.

Subsequently it was decided to introduce this system as a pilot project in four centres. Thereafter even though the modified system was adopted, the physical distribution of challans was not stopped. Thus under the present system followed by the Department, while computer is being used for processing the challans, after they are processed, the challans are physically sorted and distributed among the
assessing officers. As a result the advantages of computerisation are lost. Physical sorting is a very monotonous and time consuming process and in the context of computerisation is a totally unnecessary and avoidable exercise. It is learnt that C&AG has now permitted giving credit on the basis of computer printouts.

**PROCESSING OF RETURNS**

Processing of Income-tax returns is one of the most important functions of the Department and success in computerising this work is the key to improving the efficiency of the Department. Because processing of about 70 lakh returns takes away bulk of the time of the officers and staff of the Department leaving them hardly any time to do any qualitative investigative work. This work is a routine and monotonous function, though a necessary function and can easily be taken over by the computer. If this work is computerised, the officers and staff would save enough time to do other important works which are neglected at present. Computer would speed up the work of processing, ensure accuracy of work, help issue of refunds quickly and as a consequence reduce public grievances. The contact of the staff with the public would be minimised resulting in less harassment to the public. If all the returns are processed on computer, automatically a reliable data base can be created.

As mentioned earlier, the need of computerisation of processing of returns has been felt in this Department quite early in 1986 when the first computer was set up in Madras. Madras on its own got the software prepared with the TCS and started processing the returns. But from the beginning the method was defective. They attempted to capture all the items of information from the Income-tax return and check the accuracy of data. Obviously then the process became very slow. They could not process many returns and bulk of the returns had to be processed manually.
Thereafter came the Amnesty Scheme under which a large number of returns were filed in different places particularly in Bombay. Processing them manually became almost impossible and in Bombay they had to take the help of PC XTs and outside consultants and could process about 6 lakh returns within a period of a few months.

The first systematic step toward computerisation of processing of returns on all-India basis was taken in 1989. A simple data entry sheet was devised which was required to be filled up by the officers and staff in respect of each return to be processed. The data entry sheets were to be sent in bunches to the computer centre. Computer would calculate the tax, additional tax and interest and print the notices and registers. A detailed step by step procedure was devised for computerised processing of returns and was circulated among all the officers and staff of the Department. Next year the acknowledgment form of the Income-tax return was modified to incorporate the data entry sheet. This obviated the necessity of the staff filling a separate data entry sheet and further saved their time. So the Board issued a complete, detailed complete step by step instruction and designed a perfectly workable system for processing of returns. But the staff unions were strongly opposed to computerisation of processing of returns.

The attitudes of the Chief Commissioner was ambivalent. Some of the Chief Commissioners could be able to persuade the staff unions and do excellent work on processing of returns. Notable among them were the Chief Commissioners of Patiala, Delhi, Pune, Kanpur and to some extent Madras. In a particular year Delhi could process about 2.4 lakh returns on computer. But the same was not the case with other Chief Commissioners. In a crucial meeting of the Chief Commissioners in 1989, the subject of processing of returns on computer came up for discussion. Though some of the Chief Commissioners desired that the Department should insist on full computerisation of processing of returns, some other Chief Commissioners said
that they would not be able to enforce computerisation of processing of returns. As a result the conference took the crucial decision that computerised and manual processing of returns would go on simultaneously and it was left to the respective Chief Commissioners to decide whether to process the returns manually or on computers. This was rather a reversal of the policy spelt out in the earlier detailed instruction of the Board that all returns would be processed on computer.

Negotiations were on with the staff unions on this issue of computerisation of processing of returns. The matter was in the full knowledge of the Secretary Revenue also. The stand of the staff unions was that computerisation would adversely affect the service condition of staff and would lead to surplus manpower. Board had given categorical assurance that it would not lead to retrenchment and would not affect the service conditions adversely, but the staff unions did not accept it. It was then agreed by both the Government and the staff unions that the entire issue should be referred to an independent third party. Accordingly the matter was referred to the Indian Institute of Public Administration (IIPA) and two Professors of this institute, Prof. J C Kapur and Prof. O.P. Minocha were entrusted with the task of examining whether computerisation was leading to surplus of manpower. After an exhaustive analysis of the working of the Department, these two professors gave the finding that computerisation of different areas, particularly processing of returns, would not lead to any surplus of manpower and would not adversely affect the career prospects of the staff. They strongly recommended that the Department should go ahead with computerisation of processing of returns.

After this report the issue stood decided. It was incumbent on the staff unions to abide by its findings and cooperate in the computerisation of the processing of returns, and it was also incumbent on the Government, now strengthened with the finding of the arbitrator, to enforce its
instructions. But nothing happened. The staff unions backed out of their earlier commitment. They did not accept the report and continued with their non-cooperation. Board also failed to impose its will.

As a result, the matter now hangs on. The initial tempo of some charges to do processing of computers (in one year about 5 lakh returns were processed and the system was working perfectly) has died down. Now the returns are being processed manually.

Later, the Department felt that the mini computer systems installed at different places are inadequate, especially in the metropolitan cities. National Informatics Centre (NIC) was entrusted with the task of preparing a feasibility study for installation of bigger systems in Delhi and Bombay. It suggested that in these metropolitan places there should be a big central system for challan processing and each commissioner would have a separate computer for his charge. NIC report was initially accepted by the Board. But subsequently some deficiencies were found in this proposed system and another Working Group was constituted. The Working Group has completed its report and much larger systems are in the process of being installed in Delhi, Bombay and Madras.

We have journeyed through a period of about twenty five years during which the Department made various attempts to computerise its different functions. Now at the end let us take the balance sheet. What have been the tangible achievements? The Department has not been able to allot Permanent Account Numbers to all tax payers. It has not been able to make any breakthrough in processing of challans. Long delays continue to plague challan processing work. Processing of returns has virtually stopped. Statistics is in shambles. Department has not been able to derive any worthwhile benefit from computerisation.
The contracts for Computerisation of I-tax offices at Delhi, Bombay, Calcutta and Madras will be finalised by month-end, said finance ministry sources. This follows the acceptance of the recommendations of the Committee on Modernisation set up by the Income-tax Department. "By June-end orders will be placed for installing the computers" the sources said. The committee has recommended a three-tier Computerised structure for the income-tax department. The second would be that of assessing officers and third tier would be that of service window for the tax-payer.

The Government had received a global response for the tenders to fully Computerised the Income-tax offices. Among the Companies which had submitted the tenders were TISL (a Tata IBM joint venture), Digital Equipment Corporation (USA), HCL-HP (India), International Computers Limited (UK), Tata Elxsi, The four companies which have been shortlisted are IBM, Tata Elxsi, Digital Equipment (India) Limited, DCM Data Systems.

"We envisage rebling our tax net from the present 10 millions to 30 millions people in three years time through the installation of Computers. Moreover, we hope to increase our revenue from 20,000 Crores to 50,000 Crores inspite of the reduced level of the level of the Income-tax rates. We want to create a network which will compel the tax-payer to pay up." said BK Sinha, Chairman of the Committee and Member CBDT.

The entire operation of the income-tax department will be computerised within a period of three years. The latest techniques of centralised processing and databases with the provision of terminal banks in all major cities in India will be used. This, the Department claims, would boost present revenue Rs.20,000 crore to Rs. 50,000 crore by 1996-97. The main aim is to ensure improved efficiency and effectiveness of tax administration, provide timely and accurate information to
the management and enhanced equitable treatment to taxpayers. In short it is a one-point service. RR Singh Director (Systems) said. "Once the network is ready it would cut the cost of tax collection which is at present 1.6 percent of the total collection."