

New initiatives to upgrade FBR's Training Establishments

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Many developing countries remain mired in poverty because they are unable or unwilling to take the bold steps required to mobilize revenues on a scale necessary to launch a program of economic development large enough to generate sufficient momentum for a 'big push' that would enable them to 'lift' the economy on to a new, much higher threshold.

To be sure, it is no simple matter to raise revenues in a 'third world' country struggling to design and launch a plan for accelerated economic growth. Typically, developing countries are seriously deficient in 'infrastructure.' The institutions that drive a modern economy are either absent or have stunted development. The labor

force lacks skills and markets do not function properly. Income distribution is often highly skewed and savings rates are way too low thereby seriously limiting investment. The net result is that taxable capacity is deficient making it that much more difficult for the State to raise revenues through taxation.

Pakistan has come a long way since 1947 when the new State broke away from 'mother India' to go it's own independent way. Despite the trauma of 1971 when one 'wing' of the country was ripped away brutally, Pakistan is today a major player in the Muslim world with a GDP approaching the equivalent of (US) \$ 500 billion (PPP) and a sustained growth rate of more than 6% per annum. A growing army of expatriate Pakistanis pump in billions of dollars into the domestic economy annually. Manufactured goods exports are rising albeit not fast enough. FDI, notwithstanding security concerns, shows promise. Although 'per capita' income remains relatively low, thanks largely to a 160 million plus population growing at more than 2% per annum and investment in education is grossly deficient, nevertheless many Pakistani's have acquired skills, knowledge and sophistication that have made it possible for the country to come up with the only Nobel laureate in Physics in the Islamic world and to be the only one to be able to independently harness the power of the atom and join the exclusive 'club' of nuclear weapon capable States with independent, indigenous 'launch' capability giving it's powerful armed forces,

formidable clout. At the same time, on the minus side, Pakistan is saddled with a huge debt burden, a very large 'informal sector' some estimates place it at 50% of the formal economy- and a tax to gdp percentage of just about 10. As Pakistan's export earnings are modestly placed at less than (US) \$ 20 billion and since it has no exportable mineral wealth [like crude oil] of any significance, Pakistan's ability to raise adequate revenues is crucial to it's survival as a sovereign State with a viable economy.

Pakistan is today in the midst of an aggressive program of tax reform that holds considerable promise. Led by a charismatic Chairman, the Federal Board of Revenue is at the centre of a slew of tax reform measures that have been put in place since 2001 to upgrade the federal taxation establishment. At the heart of the reform program is an unprecedented and inspired emphasis on the training of FBR personnel.

FBR has about 24,000 workers on it's payroll. Of these, less than 1,500 are officers in BS 16 - 21[direct and indirect tax jurisdictions] invested with executive and judicial authority to call for, process and audit, tax Returns, raise demand, enforce collection, issue refunds, monitor tax withholding, adjudicate appeals and otherwise interact with taxpayers to complete the complex tax cycle. The balance 23,000 odd of the FBR workforce are support staff BS 1 15, clerical and non clerical.

There has been a marked 'surge' in tax collections since the tax reform measures have started taking effect in 2004-05.

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Two taxes in particular, the Sales Tax and the Income Tax stand out, having out performed other taxes and now running neck and neck in terms of their share in aggregate collection. The 'surge' notwithstanding, the total tax collection is still about 10% of GDP.

FBR plans to eventually Up the 't2gdp' to at least 16% by:

- training, re-training and rightsizing the workforce,
- changing workforce mindset,
- building workforce 'capacity,' and
- putting technology to work as a 'force multiplier.'

Given the strategy outlined above, it is clear that the FBR training establishment(s) for direct AND indirect tax jurisdictions- will be at the forefront of the thrust to raise the t2gdp%.

For a long time the (then)CBR training establish

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EDITORIAL

September has been a momentous month. It started with a salute to the martyr's of the 1965 war. Even after forty two years, the cherished memories of the brave men and women in uniform who rushed to the country's frontiers to thwart the enemy's nefarious designs remain fresh in the nations' collective psyche and re-energize Pakistanis to remain evervigilant.

September is also the month the nation remembers its charismatic founder, Muhammad Ali Jinnah the Quaid e Azam. His brilliant, inspired leadership coupled with an indomitable, iron will, completely outmaneuvered the powerful forces arrayed against the Muslim League and despite

daunting odds forced the colonial authority to concede the demand for a separate homeland for the Muslims of India. We salute the Quaid!

In September the traumatic events of "9 / 11" in 2001 unfolded a tragedy that continues to this day and has resulted in the violent death of thousands world wide. The bloodletting in Iraq the cradle of civilization- is a consequence of '9/11' and continues unabated. Let us hope that sanity prevails and rather than focus exclusively on the 'effects' of 9/11 the world pays more attention to the root cause(s) of such disturbing events.

The second batch of senior officers [BS 20-21] of the FBR completed their six day 'capacity building' program at

LUMS in September. The intensive program of study and active participation will hopefully instill new strategic leadership skills in the participants and help them steer the FBR on to a new, markedly higher threshold of performance.

DOT(DT) was the venue in Sept for a memorable farewell reception arranged by the DG and officers of RTO Lahore in which DOT(DT) probationers and faculty were also invited- for Mr Salman Nabi, the outgoing Member (Direct Taxes), CBR, who has been promoted to Grade-22 and appointed Chairman, Tariff Commission. Good Luck to

Mr Salman Nabi in his new assignment & well done!

The holy month of

Ramadhan started in mid September. For Muslims the world over this is a time for reflection, prayer and ofcourse, fasting. At DOT(DT) as in all government establishments- there is a change in the daily work schedule in this month. That means fewer classes for the probationary officers of the 34th STP currently undergoing training and so somewhat less visible 'activity' at DOT.

The probationary officers faced their first formal 'Exams' in Sept and on the whole they seem to have fared reasonably well. They were also given a rather unconventional 'IQ' test by the DG(DOT) and the top three officers, all with brilliant scores, are --- ladies!!! Well done!

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ments, the 2DOTS - income tax & customs were neglected areas to put it mildly. In fact they had become 'dumping grounds' for those perceived to be 'problem members' of the CBR workforce.

A new CBR management led by the visionary, M Abdullah Yusuf, 'took the bull by the horns' and sought to put right what years of neglect had reduced to a nonentity. The 2DOTS have now been fully integrated into the reform process and fast track career prospects genuinely opened to the members of the training establishments. The results have been no less than an 'adrenaline rush' for FBR personnel in the 2DOTS.

In order to be truly effective in the long run in significantly enhancing the capability of FBR personnel in the field, the training establishments urgently need an upgrade of their existing facilities. Such an upgrade involves:

- Infra structure development;
- Faculty development and

- Program development.

Infra structure development involves mainly an upgrade and augmentation of the existing I.T. facilities. Ofcourse this means more and better PC's, Servers, high speed, intelligent / manageable, Switching systems, high capacity, quick response UPS units, fully integrated networking, much improved internet connectivity (Broadband), data integrity / encryption etc. The I.T. infrastructure also involves new hitherto unexplored areas of activity that hold great promise in bringing about a quantum jump in FBR workforce capability especially in the conduct of effective audit and detection of tax evasion leading to significant additions to declared income that can withstand the demanding test of the appeals process. These areas include:

FORENSIC LAB.

The term 'forensics' is generally perceived to be relevant to the world of criminology and may appear to be out of place in a fiscal environment. In

fact, so far as income taxation is concerned, forensic investigation first came to the fore in the early 1930's when the famous Al Capone case was being investigated by the US Treasury deptt, Internal Revenue wing, for systematic tax evasion. Then it was a matter of relating books of accounts seized from business premises known to be owned by Al Capone to the crime boss himself. Entries in the books were in code and there was nothing to show that these books had anything to do with Al Capone's many business enterprises. An aggressive investigation effort involving law enforcement and specialist US Treasury agents, including accountants, then went all out to establish the vital connection between the seized books and Al Capone and eventually succeeded in doing so, using methodologies peculiar to forensic investigation. Their success is evident from the fact that the case they made against Al Capone stood the vital test of prosecution in a court of law resulting in his conviction and incarceration in a federal penitentiary that eventually

dismantled his business empire.

Forensic investigation in tax matters has acquired a whole new meaning since the use of computing technology has become common place in processing data in organizations, placed both in the private as well as the public sector, world wide. Today, alphanumeric data, that is, (alphabetic) text as well as numbers, and the computer go hand in hand. The reason for this is simple using precisely sequenced 'programs' written in alpha numeric code, the electronic digital computer, processes 'crunches'- data so fast and with such efficiency that it is possible to carry out the most complex calculations and manipulations of huge amounts of data at lightning speed, literally. Paradoxically however, the very pervasiveness of this technology has created serious problems. As most organizations use this technology to process reams of data, situations arise when they can be pitted against government organizations, like those charged with the levy and

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collection of tax on income and/or sales.

The electronic, digital computer is the world's first true 'general purpose' machine and its many possible uses are limited only by the ingenuity of the 'programmer' writing the coded programs (software) that 'run' the machine to achieve specific results. The result is that persons placed in different environments can conceivably use the same machine to achieve different ends. Thus a commercial business organization may use this technology to manipulate data in such a manner as to deliberately confuse and confound the tax authorities and thus derive financial benefit for itself extra legally, of course. It may erase accounting data if it sees a threat of possible 'exposure' there or it may 'hide' data or render it unreadable by using encryption programs. This makes it necessary for the tax authorities to train their personnel to uncover such machinations, safely and effectively. This training is best imparted by specialists using specialized technology. It is here that the forensic lab becomes an invaluable hi-tech tool in uncovering systematic tax evasion.

Typically, a knowledgeable computer forensics professional working in a professional digital forensics lab will ensure that a subject computer system is carefully handled to ensure that:

- No possible evidence is damaged, destroyed or otherwise compromised by the procedures used to investigate the computer.
- No possible virus is introduced to a subject computer during the analysis process.
- Extracted & possibly relevant evidence is properly handled & protected from later mechan-

cal or electromagnetic damage.

- A continuing chain of custody is established & maintained.
- Electronic evidence gathered is properly preserved & authenticated.
- Computer hard drives & other electronic media of seized machines is correctly scrutinized and analyzed.
- Recovery of deleted files, partitions and formatted media can be done effectively.
- Internet investigations, where necessary, can be carried out expertly.
- Expert witness testimony is made possible.

A properly staffed and equipped forensic lab is thus an invaluable tool both for purposes of training of personnel as well as carrying out investigations independently and should have high priority in any program designed to upgrade the 2DOTS.

Simulation Center.

Another extremely important adjunct to the existing IT infrastructure in the 2DOTS would be a Simulation Center able to carry out simulation exercises in various scenarios.

Simulation exercises reproduce real life workplace scenarios and, among other uses, are used to assess demonstrable competencies required for successful job performance.

Besides, in the context of Income Taxation, simulation exercises can involve the use of Algorithms precisely sequenced set of instructions-based on Virtual Reality scenarios that seek to duplicate artificially, real life situations involving data sets that recreate all kinds of financial analysis, including examination of accounts, drawing up of final accounts, the perpetration of financial fraud, tax evasion, Balance Sheet manipulation

and the like. Instruction is imparted in a variety of situations by pre-programming the data set with multiple manipulations involving say financial fraud known to the instructor in advance and the participant in the simulation exercise is then tested to see if he/she is able to detect the manipulation and at what level. This can then be used to grade the participants' competence level and also to design other training modules.

A Simulation Center can be especially useful in Audit Training. Such a center would make it possible to simulate, visualize and analyze alternate audit scenarios utilizing a rule based expert system with a spreadsheet object component that includes data calculations required for the simulation and communication of information so as to provide a dynamic goal based education learning experience.

Video Conference Facility.

Another important component of the 2DOTS upgrade plan would be a state of the art Video Conference facility. Video conferencing uses telecommuting of audio and video to bring people at different sites together for meetings. This can be as simple as a conversation between people in private offices (point to point) or may involve several sites (multi point) with more than one person / group interacting at different sites. Video Conferencing facility will enable the Dte General of Training & Research (Direct Taxes) to have real time exchange of audio & visual information with its sub offices at Karachi & Islamabad, FBR HQ's at Islamabad, DOT (Customs), Karachi & other sites, within & without Pakistan, on matters of mutual interest, especially matters relating to training of Direct Tax personnel. Thus a lecture being delivered at a distant site can be seen and

heard at DOT(DT) Lahore & interactive participation may also be possible. Similarly, training sessions conducted at DOT(DT) HQ's can be transmitted to DOT(DT) sub offices and also to other sites.

The proposed media for this solution is a FIBER OPTIC- IP Link that the 2DOTS can acquire from PTCL or any other third party.

Program Development.

New training programs in line with the initiatives taken to upgrade the training establishments are also required to be introduced. These programs would be for officers who have acquired sufficient work experience in the field say at least five years hands on experience, including handling of audit cases. The following programs would be useful in enhancing the skill level of departmental officers:

- Financial Investigative Techniques Course;
- Financial Forensics techniques Training Program;
- Digital Evidence Acquisition Specialist Training Program;
- Computer Network Investigation Training program;
- Transfer Pricing;
- International taxation Courses and Workshops;
- Management Courses including Leadership and Motivational courses.

In the initial stages, instructors to conduct the cited courses may be hired from (OECD), (IBFD), (JICA), (FLETC) USA, and (IRS) USA, Kennedy school of Govt., Harvard Univ. USA. At the same time 2DOTS will have to develop their own faculty to impart training in these areas subsequently.

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Faculty Development.

In order to transform the 2DOTS into Regional Training Hubs able to provide training facilities for members of the ATAIC and ECO regional groups in which Pakistan is a member, it is imperative that the permanent faculty posted at the training institutes be strengthened by providing them with opportunities to pursue specialized training courses, including degree courses like the MBA program in prestigious institutions abroad like the Harvard University, USA. At the same time the number of permanent faculty members will also have to be increased. The Malaysia Tax Academy has a permanent faculty for imparting training of 60 full time highly trained instructors- most of them with foreign credentials- whereas in Pakistan's DOT(DT) there are only eight full time instructors and none of them has received advanced training abroad.

Research Program.

Serious research in fiscal policy issues has been lacking in the 2DOTS mainly because there was no easy access to a suitable data base. This deficiency has been remedied to a considerable extent insofar as the 2DOTS are now full time members of the IBFD and have ready access to the complete range of IBFD online journals, other publications and compiled country data. However a suitable number of full time researchers need to be assigned specifically to carry out research in fiscal policy areas. The existing faculty is not adequate for the task. It needs to be emphasized that IBFD Membership is expensive and entails an outlay of \$ 15,000/- per annum. It is therefore imperative that the facility be put to use intelligently in order to derive benefit.

Given a suitable upgrade of the FBR's training establishments, the investment made

should start yielding dividends within the next five years, reflected in a marked enhancement in the professional competence of FBR personnel and also in significantly increased tax collection. FBR should aim for a 2% of not less than [20] over a seven year timeframe. There is no reason why this should be seen as too daunting a challenge given the fact that the potential is very much there. Pakistan has a huge informal sector that generates [tax free] income equal to about 50% of the country's reported GDP of (US) \$ 475000 billion (PPP). This translates into the equivalent of something like

(US) \$ 235000 billion. Imagine the boost to the

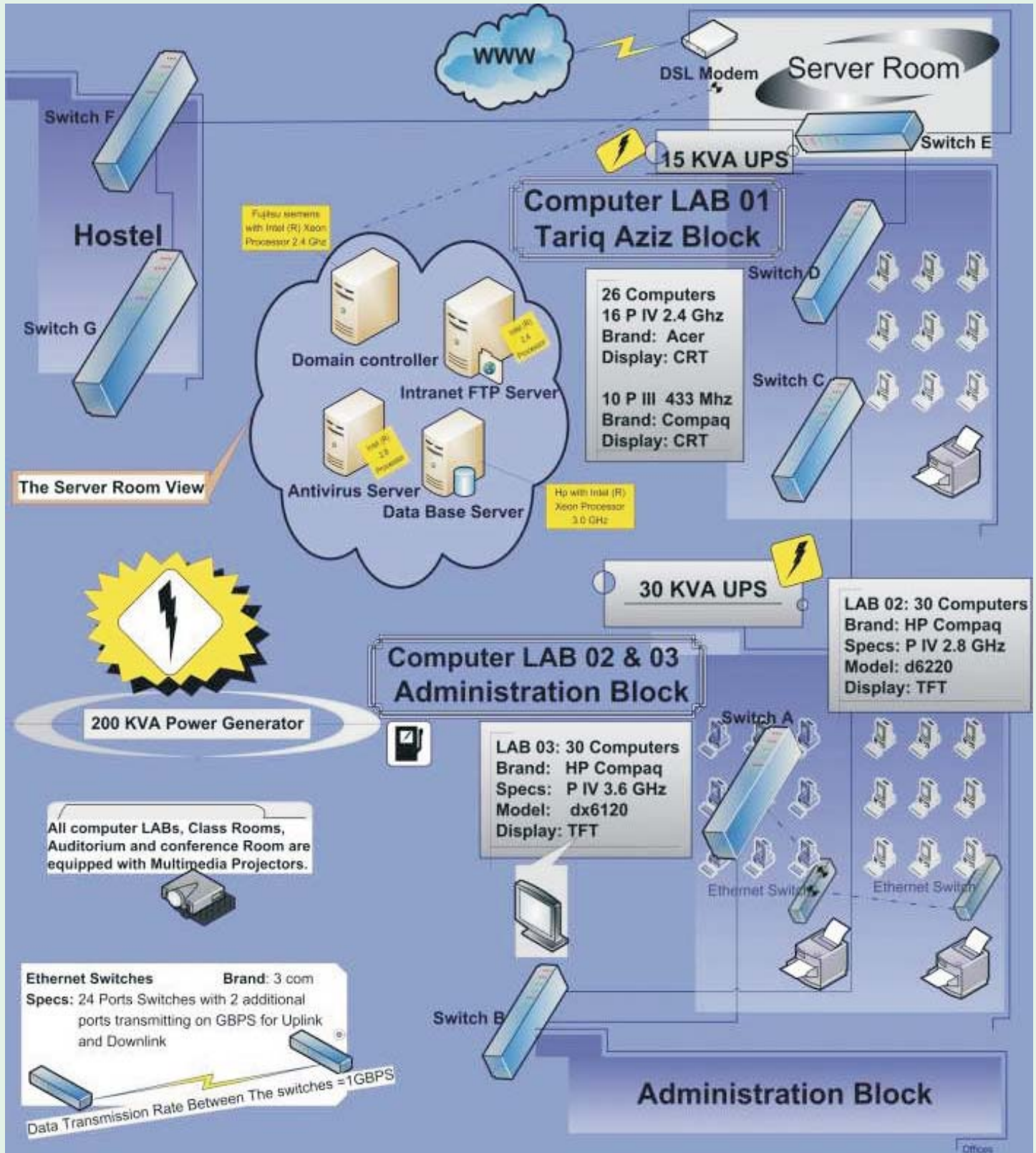
exchequer if even a part of this can be effectively subjected to levy of income tax. Furthermore, the entire agriculture sector that contributes 22% to the overall GDP enjoys blanket statutory exemption from the levy of income tax creating a preference for agricultural income that is wholly unwarranted. There is no reason why a scheme for the taxation of agricultural income cannot be devised to ensure at least that those who do enjoy taxable income are subject to income tax levy. Then again, the wholesale and retail sectors generate something like 17% of the overall GDP and yet contribute hardly 4 5% of the aggregate tax revenue. The

plethora of other exemptions partial as well as complete- listed in the statute further erode the tax base and the economic benefits, if any, of these exemptions now do appear to be dubious and in any case have outlived any utility that they once might have had. It is high time that these problem areas are tackled head on bringing to bear scientific methods and modern technology to detect and bring to tax the hidden income that is there and has avoided due levy of income tax for so long. In this context, a highly trained and motivated workforce, 'armed' with the latest, cutting edge technology is Pakistan's best.



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Schematic Layout of IT Infrastructure at DOT (DT)



Electronic Tax Registers as a Fiscal Device Technology as a “Force Multiplier”

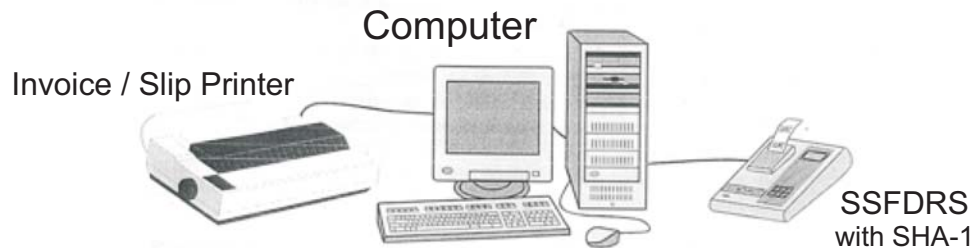
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One of the problems that baffles tax authorities in developing countries is that of chronic understatement of turnover by retailers and wholesalers. They either do not issue sales receipts to customers [cash memos] or when pressed to do so, issue informal receipts not serially numbered / dated / authenticated in any proper manner and these 'katcha' receipts are of no value at the time of tax audit. It is evident that this is an extremely serious problem that has had a highly detrimental effect on tax revenue as understatement of turnover leads inevitably to

understatement of Total Income when the Return of Income is

COMPUTER SYSTEMS AND ESD

Special secure fiscal device for record signed (SSFDRS) with secure hash algorithm (SHA-1)



ADVANTAGES OF FISCALISATION

- Correct Disclosure turnover.
- More jobs for technicians
- More jobs for software houses
- Better control and management of business by traders
- Shorter audit periods by tax department
- Less paper work by traders
- More revenue

filed. Before the enactment of the Income Tax Ordinance 2001 the law did not require that taxpayers maintain books of accounts and when a taxpayer told his assessing officer that his was a “ no accounts case” the assessing officer had no option but to frame an order of assessment to the best of his judgment on the basis of whatever material he had access to. More often than not

the assessing officer had only sketchy reports of the taxpayers business submitted by departmental inspectors deputed to conduct local enquiries and the



result was an assessment order based on semi educated guesswork that had little or no relevance to the taxpayers actual income. In the new I T Ord 2001 the law now for the first

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time since 1947 does require the maintenance of documentation and accounting record by all taxpayers as notified by the CBR for different categories of taxpayers. Although a huge improvement over the position obtaining previously, this alone is not likely to deter taxpayers from declaring understated turnover. That retailers and wholesalers continue to violate the law with impunity is patent from the fact that although the retail and wholesale sector contributes 17%+ to GDP their contribution to the federal exchequer is minimal hardly 4% of aggregate tax revenue.

One solution to this chronic and complex problem is to put technology to work and empower the Commissioner of

Income Tax by a suitable amendment in the Statute to order the installation of so called Electronic Tax Registers [ETR] that would be required to be installed in selected retail outlets like large departmental stores in posh commercial areas [liberty market, Lahore??] and also in selected wholesale dealers [Azam Cloth Market, Lahore?]. These ETR machines are different from ordinary cash registers:

Electronic Tax Register (ETR) is a Cash Register but with Fiscal Memory.

Fiscal Memory is a special Read Only Memory built into the cash register to store tax information at the time of sale.

ETR can be used as stand alone or configured into a

OTHER DEVICES



TELECOMS:

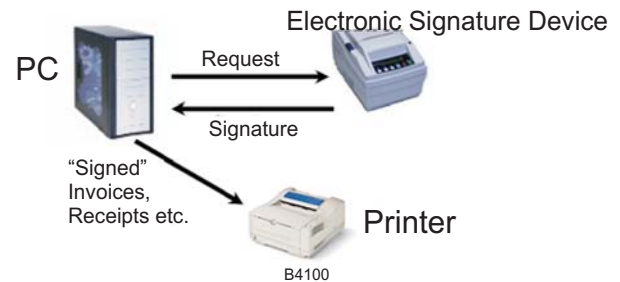
Ethernet & Internet / email enabled cash registers are low cost, stand alone ETRs.

This device may be used by traders with a direct connection to CBR Server to upload their periodical transactions as agreed between the two.

EDI:

Discussions between CBR and Pak Telecom on installation of EDI linkage should take place. The Pilot program should be for the linkage of large companies and traders.

COMPUTER SYSTEM AND ESD



network.

ETR has special security features e.g. seal, memory, serial no., special technical specifications etc.

For optimum benefit to the tax authorities the ETR should be required to be used with other 'fiscalized electronic devices' [FED's] like:

Fiscalised Printers:

These are high Speed Fiscal Printers connected in a computer network to store every sales transaction in its Fiscal Memory while it issues receipts to taxpayers.

Hi Speed Fiscal Printer:

Has two RS232 ports for PC online operation and barcode

Electronic Signature Devices-ESD:

ESD is used in conjunction with computerised accounting systems. Electronic signature validates financial documents. The invoice passes through the ESD and is saved.

ESD operates all financial documents issues a HASH e.g. SHA-1 algorithm (from which the signature is derived) to make every transaction virtually unchangeable.

Retailers on business to business transactions may use ESD for invoices, transport ledgers, credit notes etc.

The Fiscalized Electronic Devices referred to above are already being used in [18] countries viz Italy, Greece, Poland, Ukraine, Bulgaria, Yugoslavia, Russia, Romania, Finland, Cyprus, Malta, Hungary, Serbia, Latvia, Lithuania, Turkey, Brazil, and Kenya.

The FED's have clearly had a beneficial effect on revenue mobilization as is evident from the much improved tax to gdp ratio in the countries using them and it is high time that we take a decisive step in this regard and enact suitable legislation that would make it possible for such technology to be put to use in Pakistan. The use of such technology is bound to be a powerful deterrent to the chronic malady of understatement of turnover by retailers and wholesalers to the benefit of revenue.



Imam Bukhari

(194 265 A.H.)



360 degree view of maqam of Imam Bokhari

After the Sahâbah al-kirâm, Imâm al-Bukhârî ranks as the most eminent of those pious people who have conferred endless bliss upon the Ummah of the Holy Prophet, sallallahu `alayhi wa sallam. The greatest evidence of this is the book of Ahâdith an-Nabawi he compiled, commonly known as Sahîh al-Bukhârî. It is universally acknowledged as the most authentic book after the Holy Qur`ân.

A native of Bokhara, in present day Uzbekistan, Imam Bokhari evinced an intense and abiding interest in the life and traditions of the Holy prophet (pbuh) and became one of the most authoritative Islamic commentators, ever, writing extensively after deep and careful research. Widely traveled, he ranged throughout Arabia, Egypt, Syria and Iraq before returning back to his homeland in central Asia.

A man of profound learning, superb intellect, unassailable integrity and great dignity he was gifted with a prodigious, photogenic memory that enabled him to commit copious text on every subject to memory. Tested many a time, he could never be faulted on the chains of transmission of Ahadith. His sequencing was always perfect.

Imam Bokhari was a committed ascetic and lived frugally. A man of means, he put his wealth to good use spending it on the needy and on his many students and disciples. His piety knew no bounds and he was never awed by the high and mighty nor did he ever seek their favor.

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