



A Study of Implications of ICT on Customer Satisfaction in Banking Services in India

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ABSTRACT

Information and communication technology is necessary for the development & the progress of the bank, which motivates the customer's satisfaction. Before we say that ICT is responsible for the increased need of customers, it is important to understand that there are various ICT services like ATM, phone banking, internet banking, EFTs, etc. This research paper would help the bank management those who are doing traditional banking to know the level of electronic products and services usage as well as improving the level of satisfaction and strengthening the bond between the banks and their customers. The banking sector is becoming more competitive in recent times. Customers are the most significant factor and quality customer service is tool for surviving these competitions. Banks invest in Information Communication Technology and introduce new innovations with the aim of serving the existing customers better and attracting new customers. This study aims to evaluate the effects of Information Communication Technology on Quality Customer Service Delivery in the commercial banks. A multi-stage sampling was used to survey a sample of 476 customers from the selected banks. The analysis revealed that Information Communication Technology has positive effects on quality customers' service delivery in the banking sector. Information Communication Technology has enabled customers to access their accounts at any location at any time, know the transactions that affect the customer accounts through the transaction notification service subscribed by the customer. The study also revealed that Automatic Teller Machine is the most used delivery channel by customers. Challenges face by the banks in delivering service with information

communication technology included the low information communication technology, literacy level of customers, high cost of providing security for data, fraudsters and hackers, and inadequate information communication technology professionals. It was recommended that banks should educate and intensify the campaign on the use of both old and new electronic delivery channels, ensure constant availability of banking services delivered through these channels.

Key Words: *ICT (information and communication technology), ICT services used by customers, ICT benefits for banks and customers*

INTRODUCTION

Information and communication technology is necessary for the development & the progress of the bank, which motivates the customer's satisfaction. Before we say that ICT is responsible for the increased need of customers, it is important to understand that there are various ICT services like ATM, phone banking, internet banking, EFTs, etc.[1,2]

This research paper would help the bank management those who are doing traditional banking to know the level of electronic products and services usage as well as improving the level of satisfaction and strengthening the bond between the banks and their customers.

In recent years, ICT has become inconsistent inside conventional systems as far as improving the effectiveness of financial systems.



Numerous developed nations including India upgrade ICT, business knowledge, and business research to coordinate the vital exchange of different nations. The information technology sector empowers a few industries to keep up a competitive preferred position in the worldwide market through certain development services. In particular, ICT refers to a wide scope of IT technologies that address and oversee electronic information. The effect of information and communication technology (ICT) in the financial economy has become progressively apparent, expanding productivity to reach out into outside investment. Furthermore, a few nations likewise construct political and vital associations with one another and, coming about, become free economies. Information Technology has been one of the most significant factors for the development of humankind. Information and communication technology (ICT) is the major advent in the field of technology which is utilized for get to, process, stockpiling and dispersal of information electronically. In recent times, Indian banking industry has been consistently moving in the direction of the development of technological changes and its utilization in banking activity for improvement of their productivity and customer's satisfaction in this day and age. Banking industry is quickly developing with the utilization of technology as ATMs, on-line banking, Telephone banking, Mobile banking and so forth. Subsequently, exploiting information technologies (IT) is an expanding challenge for developing nations like India. Technological developments have empowered the industry to open up efficient conveyance channels. IT has helped the banking industry to manage the difficulties the new economy presents. Technology is likewise changing the supervisory and administrative scene. It is making new apparatuses for chiefs and new supervisory difficulties. Technology-driven issues, for example, security and the idea of electronic communications have arrived at the cutting edge of the arrangement motivation. Also, the line between electronic banking and electronic commerce is becoming progressively hard to define unmistakably. More than most different industries, financial establishments depend on get-together, processing, breaking down, and providing information so as to address the issues of customers. Given the significance of information in banking, it isn't amazing that banks were among the soonest adopters of computerized information processing technology. Hence, the present study has been conducted to highlight the contribution of ICT in Banking Sector in India.[3,4]

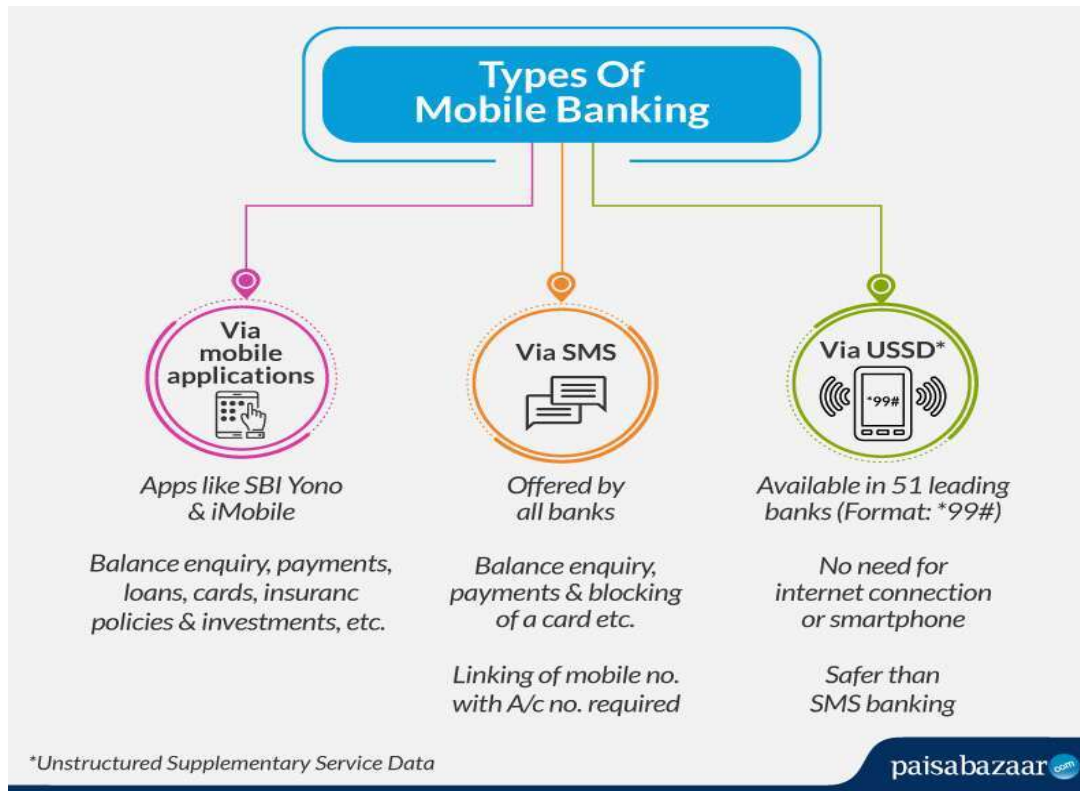
Discussion

Operational Definitions

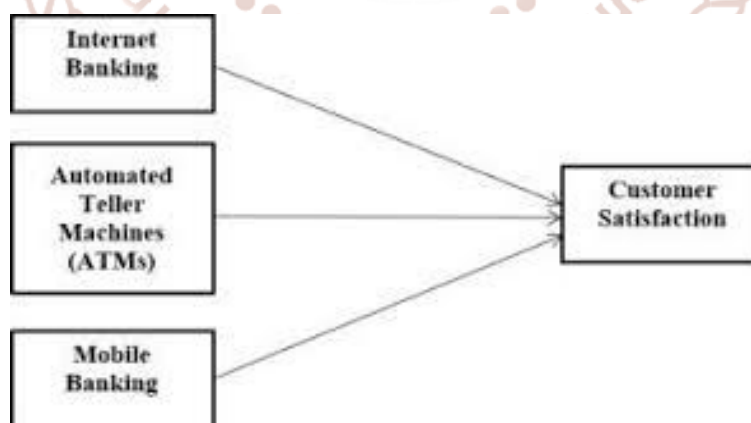
Information and communications technology (ICT) is an extensional term for information and technology (IT) that burdens the role of brought together communications and the reconciliation of telecommunications (phone lines and remote sign) and computers, just as fundamental enterprise programming, middleware, stockpiling, and varying media systems, that empower users to get to, store, transmit, and control information. E-banking is a product intended for the reasons for web based banking that empowers to have simple and safe access to the bank account.

ICT in Indian Banking Sector

Information and Communication Technology (ICT) has become the core of the banking sector in India now-a-days.



The banking industry is the core of each vigorous economy. ICT is helping the banking sector improve its proficiency and adequacy of services offered to customers, and upgrades business processes, administrative basic leadership and workgroup coordinated efforts which reinforce their competitive situations in quickly changing and developing economies. All banks in India have made significant investments in technology stages and systems, constructed numerous circulation stations, including an electronically connected branch network, robotized phone banking, internet banking and banking through mobile telephones to offer its customers convenient access to different products.

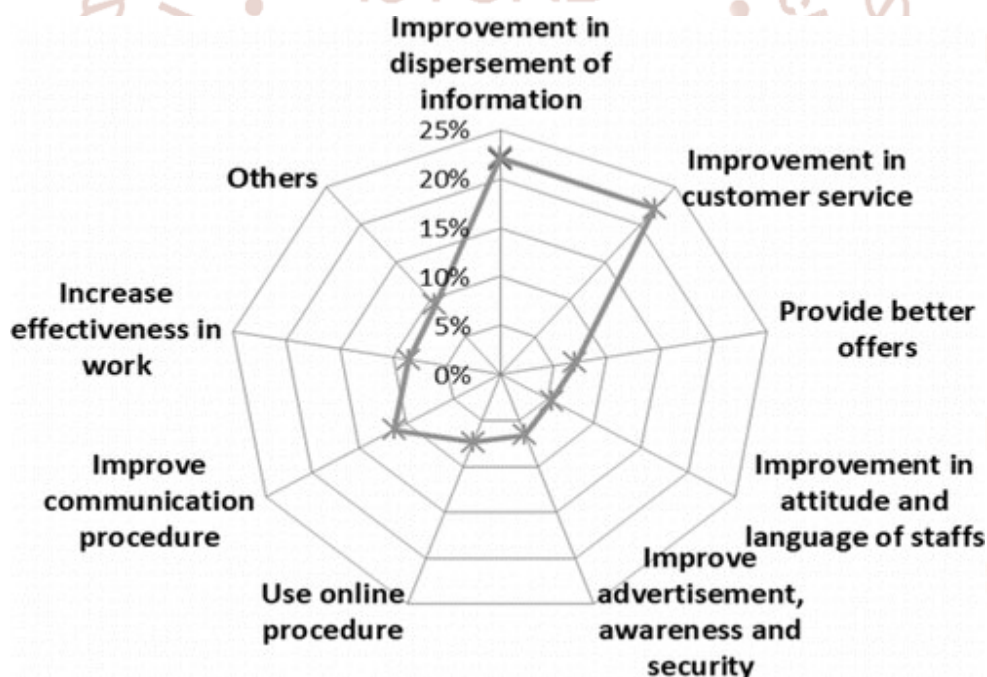


All things considered, the banks have been fruitful in developing imaginative product highlights, reducing working expenses, improving customer service conveyance and limiting inherent dangers. IT encourages all our center business processes and components, and serves to help, continue and develop change and realisation of our key goals at gathering and specialty unit levels. In India, banks have set up their huge ATM and POST networks for providing ATM access for 24 hours for their customers. Other than offering access to ATM network the nation over, they are additionally providing a similar access to their customers worldwide through

the network of VISA/MasterCard. They are additionally setting up and growing their own ATM/POST network. Numerous banks have introduced POS terminals in significant shops, lodgings, deals centres and so on everywhere throughout the nation. A portion of the technology-driven banks are providing internet banking channel with the incorporation of various customer-accommodating highlights. The systems programming is providing the customers access to their records from mobile devices like advanced cells and tablets. The customers are currently ready to do banking from wherever of India whenever. Mobile banking refers to access to accounts, move of funds, rundown sheets and other banking services through dialling a phone number. If there should be an occurrence of mobile banking, banking services are provided to the customers having credit card accounts. Services are provided by the relationship of banks and cell service providers through SMS or WAP empowered mobile instruments. What's more, there are numerous useful sides of ICT and these are Contact/Call Centre, Automated Clearing House System (ACHS), Electronic Fund Transfer (EFT), Online CIB, the Core Banking Solution (CBS), Corporate Intranet System, etc. Customers' awareness can be expanded by directing, promoting and circulating pamphlets/leaflets. Specific preparing on IT security and misrepresentation prevention can be provided to the representatives of banks. Attention to customers can be expanded through proper mobile banking preparing, featuring security issues. Banks ought to guarantee that KYC structures are topped off and confirmed appropriately. Evaluators of the India Bank ought to guarantee that banks properly pursue its rules. Multi-factor/versatile authentication technique can be presented by banks rapidly. Information burglary, bypassing OTP, can be halted by expanding profound quality/morals of bank representatives and expanding inner information security.[5,6]

Results

Contribution and Role of ICT in Banking Industry Banking environment has become profoundly competitive today.



To have the option to endure and develop in the changing business sector environment banks are going for the most recent technologies, which is being seen as an 'empowering asset' that can help in developing student and progressively adaptable structure that can react rapidly to the elements of a quick changing business sector situation. It is additionally seen as an instrument of cost reduction and compelling communication with individuals and establishments related with the banking industry. The Software Packages for Banking Applications in India had their beginnings in 80s, when the Banks began computerising the branches in a constrained way. The mid 90s saw the diving equipment costs and advent of modest and economical however powerful PC's and Services and banks went in for what was called Total Branch Automation (TBA) bundles. The center and late 90s saw the tornado of financial changes, deregulation globalization and so forth combined with quick upset in communication technologies and development of novel idea of combination of

communication technologies, as internet, mobile/mobile phones and so on. Technology has continuously played on significant role in the working of banking establishments and the services provided by them. Care of open cash, move of cash, giving drafts, investigating investment openings, loaning drafts and investigating investment are being provided. Information Technology empowers advanced product development, better market infrastructure, implementation of solid techniques for control of dangers and causes the financial middle people to arrive at geologically far off and differentiated markets. Internet has altogether affected conveyance channels of the banks. Internet has developed as a significant mode for conveyance of banking products and services. The customers can see the records; get account statements, move funds and buy drafts by simply punching on hardly any keys. The keen card's i.e., cards with miniaturized scale processor chip have added new measurement to the situation. A presentation of 'Digital Cash' the trading of cash happens entirely through 'Digital books'. Assortment of Electricity bills and phone bills has become simple. The upgradeability and adaptability of internet technology is after unprecedented open doors for the banks to connect with its customers. Most likely banking services have experienced extreme changes thus likewise the desire for customers from the banks has expanded more noteworthy. [7,8]



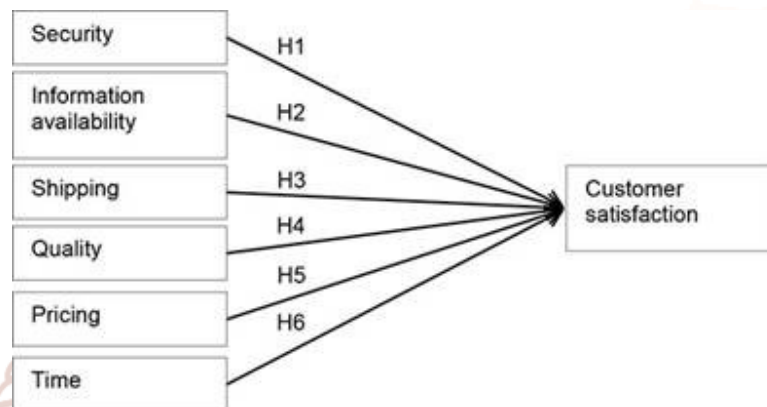
IT is progressively moving from a back office capacity to a prime right hand in expanding the estimation of a bank after some time. IT does as such by boosting banks of pro-dynamic estimates, for example, reinforcing and institutionalizing banks infrastructure in regard of security, communication and networking, accomplishing bury branch network, moving towards Real Time net settlement (RTGS) environment the anticipating of liquidity by building real time databases, utilization of Magnetic Ink Character Recognition and Imaging technology for check demonstrating to innocence a couple. Indian banks are going for the retail banking in a major manner. The key driver to charge has to a great extent been the expanding advancement in technology and the developing prominence of the Internet. The move from customary banking to e-banking is changing customer's desires. Impact of ICT on the Service Quality in the Banking Sector The most obvious effect of technology is reflected in the manner the banks react deliberately for making its powerful use for efficient service conveyance. This effect on service quality can be summarized as beneath: 1. With mechanization, service never again stays a showcasing edge with the huge banks as it were. Little and moderately new banks with restricted network of branches become better put to compete with the built up banks, by coordinating IT in their tasks. 2. The technology has commoditising a portion of the financial services. In this way the banks can't take a lifetime association with the customers as allowed and they need to work continuously to encourage this relationship and hold customer dependability. 3. The technology on one hand serves as a useful asset for customer servicing, then again, it itself brings about depersonalizing of the banking services. This adverse affects relationship banking. A time of computerization can probably never substitute a basic or a warm handshake. 4. In request to reduce service conveyance cost, banks need to mechanize routine customer requests through self-service channels. To do this they have to put resources into call centres, stands, ATM's and Internet Banking today require IT infrastructure coordinated with their business system to be customer centric.[9,10]

Implications

Impact of ICT on Privacy and Confidentiality of Data

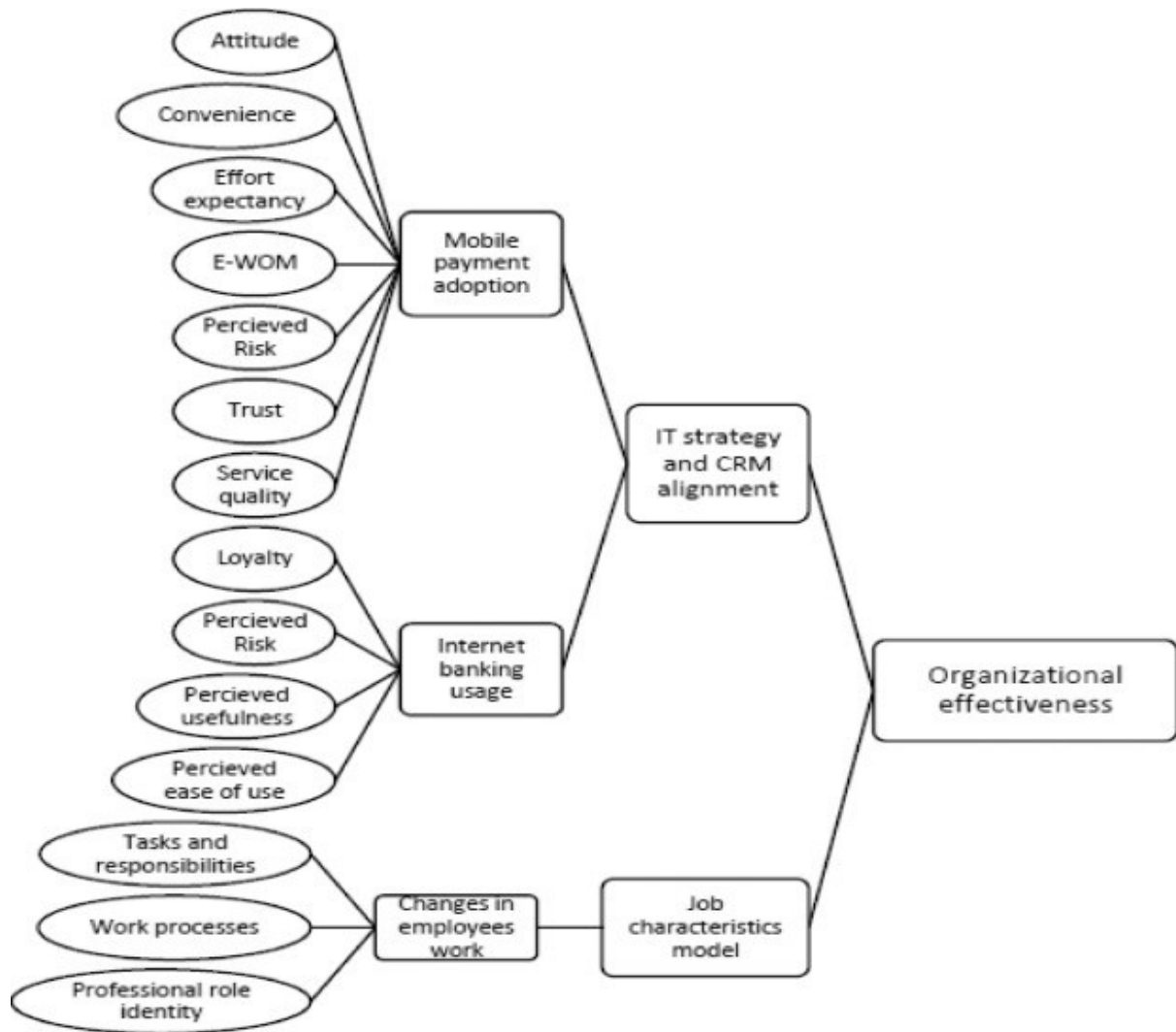
Information being put away in the computers, is presently being shown when required on through internet banking mobile banking, ATM's and so forth this has offered ascend to the issues of protection and confidentiality of information are: 1. The information processing abilities of the computer, especially the quick

throughput, reconciliation, and recovery capacities, offer ascent to questions in the brains of people regarding whether the protection of the people is being disintegrated. 2. So long as the individual information things are accessible just to those legitimately concerned, everything is by all accounts in proper place however the rate of information being cross referenced to make nitty gritty individual dossiers offers ascend to protection problems. 3. Customers feel undermined about the deficiency of security being kept up by the banks concerning their exchanges and connection at computerised systems with doubt. Beside any protected angle, numerous countries regard security to be a subject of human right and believe it to be the duty of the individuals who worried about computer information processing for guaranteeing that the computer use doesn't spin to the phase where different information about individuals can be gathered, incorporated and recovered rapidly. Another significant obligation is to guarantee the information is utilized uniquely for the reason expected.[11,12]



Comprehensively, the degrees of banking services offered through Internet can be sorted in to three kinds: (i) The Basic Level Service is the banks' websites which disseminate information on different products and services offered to customers and individuals from open when all is said in done. It might get an answer to customers' inquiries through email. (ii) In the following level are Simple Transactional Websites which enable customers to present their guidelines, applications for different services and inquiries for them adjusts, and so on, however don't allow any fund-put together exchanges with respect to their records. (iii) The third degree of Internet banking services are offered by Fully Transactional Websites which enable the customers to work on their records for move of funds, payment of different charges, buying in to different products of the bank and to execute buy and closeout of protections, and so forth.

The relentless competition and expanding desire for customers had brought about expanded mindfulness on information technology among the commercial banks in India. The appearance of outside and new banks with their unrivalled technology based services has additionally constrained the commercial banks in India to switch over to the new technology in their everyday activities. The utilization of technology in extending banking sector in India is one of the key center zones for commercial banks as well as for the strategy producers too. The banks in India are utilizing Information Technology not exclusively to improve their very own interior processes yet in addition to improvise offices and services to their customers.



The efficient utilization of technology has encouraged exact and opportune management of the expanded exchange volumes of banks which accompanies bigger customer base. Indian banking industry is extraordinarily profiting by I.T. transformation everywhere throughout the world. It empowered advanced product development, better market infrastructure, implementation of dependable techniques for control of dangers and has caused the financial delegates to arrive at topographically removed and differentiated markets. The Information Technology Act, 2000 has additionally provided the truly necessary legitimate recognition to the creation, transmission and retention of an electronic or magnetic information which can be treated as a substantial proof in an official courtroom, aside from in those regions, which continue to be represented by the provisions of the Negotiable Instruments Act, 1881. By structuring and offering basic, sheltered and secure technology, banks reach at the doorsteps of the customers with a goal of "please customer satisfaction". In fact Information technology has

prevailing with regards to making a success win circumstance for all concerned segments in India.[13,14]

Conclusions

In nutshell we can say that there is a direct role of technology (Internet and mobile banking interchange banking channels) to fulfil the customer or to hold the customer for private banking sectors. IT has changed the general example of banking system. The banking today is redefined and re-built with its utilization and it is certain that the fate of banking will offer increasingly modern services to customers with the continuous product and process developments. Along these lines there is a change in outlook from economically tight market to wide open market. So banks additionally change their approach from "Conventional Banking to Convenience Banking" and "Mass banking to Class Banking". So banks are presently more concentrate on providing esteem added services to customers. In any case, IT can be completely helpful just on the off chance that they

empower to address the difficulties in the present environment. In India it very well may be fruitful just in the event that it is properly implemented in rural zones moreover.[15,16]

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