GOVERNMENT OF MEGHALAYA

IT VISION 2020

Overview-Setting the context

The Government of Meghalaya (GoM) has embarked on an initiative to formulate an IT Vision for the state which would lay the foundation for making Meghalaya an IT Destination and bring about an e-Governance culture in the state so that services are provided to all stakeholders in an efficient and transparent manner.

The envisaged span of this vision, called Vision 2020 will be till the year 2020. The vision is defined directly or indirectly by the various stakeholder groups (identified later in this document) with PricewaterhouseCoopers (PwC) playing the role of a facilitator.

Vision 2020 requires its formulators to take a pragmatic approach and “looking forward to the future” and envision future quantum improvements in the state. However, the vision definition also needs to be tempered by the ability of the state to adopt change. Hence, to develop a useful vision, the formulators must:

• Have the faculty of sight (i.e. must be able to see clearly their current state)
• Know what is attainable in improvement terms
• Have unusual competence in discernment or foresight, to be able to develop a mental image of the future requirements and capabilities

Vision 2020 Formulation Approach

These provide the basic information for the vision formulation.

Stakeholders Expectations

Stakeholders Expectation provides the most important set of inputs in formulation of Vision 2020. The Stakeholders considered for formulating Vision 2020 are:

• Political Leadership of GoM
• Administrative Leadership of GoM
• IT Business Leadership of Meghalaya
• Residents of Meghalaya

Expectations from various categories of stakeholders are identified and graded to arrive at a prioritized set of expectation.
Development Agenda

The development agenda of the state reflects the thinking of the state leadership with respect to developmental issues and hence needs to be considered.

The current development agenda of the state has been sourced from the Tenth Five Year Plan of GoM (http://meghalaya.nic.in/tenplan/contents.htm). While reflecting the collective aspirations of the stakeholders, the vision must also have its focus. Therefore, the wish list needs to be filtered to ensure that it is in alignment with reality.

State Profile and Infrastructure

Relevant Data and statistics related to Profile of Meghalaya (both standalone and how it compares to other North Eastern states as well as nationally) and Infrastructure availability and issues are considered before arriving at a vision that is aligned with reality.

SWOT Analysis

It is essential to understand the strengths of the state and identify the opportunities it can benefit from so as to prepare the state to overcome its weaknesses and threats. SWOT analysis also helps us in understanding the constraints of the state which are acting as stumbling blocks in the path of the state govt in achieving its targets and expectations.

The final outcome of the envisioning exercise is Vision 2020 that is focused and aligned to reality while reflecting the stakeholders’ aspirations.

Performance Measure

Achievement of the vision must be measured against a set of performance measures and targets for each of the vision elements to ensure the vision is a real instrument of and inspiration for change that will be meaningful to everyone. Hence a set of Performance Measurement Parameters are defined against which achievement needs to be judged.

Periodic Review

Any long term vision needs to be reviewed periodically to check against obsolescence. This is especially true for an IT Vision where the rapid rate of change of technology and trends has the capability of rendering a vision and consequently all its associated objectives obsolete within a
relatively short span of time. Hence, it is imperative that the IT vision 2020 be checked for relevance and obsolescence periodically.

**Detailed Plan - Vision 2020**

**Stakeholders Needs and Expectation**

During the process of drafting the vision of the State, needs and expectations of four major stakeholders and process participants were taken into account. These include citizens, business leaders, political leadership, and government departments and related establishments. In the subsequent paragraphs, needs and expectations of these four have been highlighted.

After an initial round of meetings a draft report was finalised, this draft was again discussed with various stakeholders on July 19th, 20th and 21st and expectations were refined.

_Citizens_

Most of the people in the state live in rural areas and are dependent on farming and related activities for their livelihood. The citizens expectation are therefore related to better farm practices, better amenities such water supply, power, sanitation, health and education. Currently citizens have to travel all the way to district headquarters to avail of public services. In a few cases they need to travel up to Shillong to avail of Government facilities and even information about those facilities. Also the quality of service delivered is not of a good quality. Hence, the citizens’ expectation is primarily related to improvement in the quality of service and also that they should be able to get information about Govt. services and schemes at a location closer to their place of habitation.

_IT Business Leaders_

Interactions with business leaders primarily associated with the IT/ITeS sector in the state, revealed their expectation and concerns. Infrastructure particularly the telecom infrastructure of the state is inadequate. What they want is reliable, efficient and cost effective connectivity for their business. Improvement and optimization would be also necessary in road & rail network, energy and power sectors to ensure the growth of State’s Industrial Infrastructure so as to enable businessmen a level playing field with their counterparts across the country.

Land acquisition policy is a major deterrent to expansion of existing businesses and also for setting up of new businesses in the state particularly for non tribal investors. Another common issue raised by the business leaders was that while the state was making many new policies and rules, these were not available at the ground level. In the absence of information, many businessmen are confused as how to avail the rebates and subsidies mentioned in the policies.
Businessmen in the state also feel that there is a need for handholding from the government as currently many of them doesn’t have the technical expertise in the IT/ITeS sector. Many have burnt their fingers in the process of taking initiatives and are therefore hesitant without proper guidance and assistance.

*Government Departments*

Government Departments and related establishments all across the board would like to have access to contemporary and modern tools and technologies to aid in the process of plan and policy implementation, management and monitoring and bringing in transparency in the system. As per majority of the respondents, the lack of manpower resources and modern tools to transact the business are hampering the government officers to effectively manage their respective mandates and this is resulting in common citizens not getting the benefits of various plans and policies. Though some of the departments are yet to realize the benefits of IT, most of the departments in the state are well aware of the benefits that their employees could reap from IT. Currently information technology is used in most government establishments for doing low-end jobs like typing letters and not for decision making or tracking and monitoring activities. Though the department heads appreciate the possibility of using ICT for such purposes, nothing much has happened on ground except in a few isolated cases.

*Political Leadership*

The political leadership of the state is targeting a growth of 8% of GDP and reduction of poverty by 5%. Focus is on providing basic social services like education, health, drinking water and sanitation. They are also expecting to provide economic and social opportunities to all individuals in the state and hope to reduce the economic disparities amongst the various sections of the society by providing gainful employment and increasing literacy rate.

*Development Agenda*

Govt. of Meghalaya has come up with developmental targets as part of the 10th Five Year Plan. However, many of these targets look well beyond the 10th Plan and consequently are important inputs for defining the vision. These are:

i. Reduction of poverty ratio by 5% by 2007 and 15% by 2012
ii. All children in school by 2003; all children to complete 5 years of school education by 2007
iii. Reduction in gender gaps in literacy and wage rates by at least 50% by 2007
iv. Reduction in decadal rate of population growth between 2001 and 2011 to 16.2%.
v. Increase literacy rate to 75% within the plan period.
vi. Reduction in Infant Mortality Rate (IMR) to 45 per 1000 live births by 2007 and 28 by 2012.
vii. Reduction of Maternal Mortality Rate (MMR) to 2 per 1000 live births by 2007 and 1 by 2012.
viii. Increase in forest and tree cover to 25% in 2007 and 33% by 2012
ix. All villages to have sustained access to potable drinking water within plan periods.

To meet the above targets the developmental focus of the state will be in the following areas:

• Agriculture and land management
• Irrigation
• Poverty alleviation and rural development
• Social infrastructure like education, health and water supply.
• Economic infrastructure like power, transport and communications and road connectivity.
• Science and technology
• Forestry and environment programs
• Increasing competitiveness of industries, particularly small scale industries.

Meghalaya is a land of young people. The above table shows that more than 65% of the population of the state of Meghalaya is below the age of 30. Therefore government needs to focus on these youths and provide better employment opportunities to them.

**SWOT Analysis**

**Strengths**

• Large Youth Population
  More than 65% of the population of the state is below the age of 30. Hence, the state has a large young working population giving it a huge benefit.

• Capable female work force
  Meghalaya is the only state in India where a matriarchal society is prevalent. The women in the state are as much outgoing, hard working and entrepreneurial as the men. Meghalaya is among the best performing states in term of Gender Disparity Index (GDI) and Gender Empowerment Index (GEI). This is particularly relevant in the context of IT / ITeS industries. Great potential exists for starting up all-women IT/ITeS industrial units in the state.

• Availability of English Speaking manpower
  Meghalaya has been traditionally known for its education system during the British rule in India. As a result of which Shillong still has some of the best colleges in the whole of North East. These colleges have been producing graduates who have very strong English speaking capability. So voice based ITES companies would find a considerable pool of talented resource in the city.

• Prevalent western culture and cosmopolitan environment
  Shillong has been known for its educational institutes in the whole of North East. This has attracted students from other north eastern states of India. As a result of which a
cosmopolitan culture has developed in the city. Due to the influence of western culture the youth of Meghalaya are better accustomed to the western culture and accent. This is an advantage for youth planning to work in voice based call centres.

- Low Attrition Rate

Traditionally the Government has been the biggest recruiter in the state. Also traditionally the tribal people of Meghalaya are socially loyal. So the culture of switching jobs is not prevalent in the state. Hence the attrition rate would be low in the state.

- Availability of cheaper manpower in comparison to other states.

Meghalaya has a fairly large pool of skilled, semi-skilled and unskilled labour. There is an adequate supply of secretarial staff in most parts of the State. A fair number of management and technical personnel have qualifications from recognised professional institutions and universities of India.

- Good Climate

The year-long moderately cool climate of Meghalaya is conducive to industrial development, particularly for hardware industry. It is also one of the cleanest and pollution free states.

**Weakness**

- Landlocked and limited Market

As a landlocked area, the state has to depend heavily on its road network which is to a considerable extent limited. Since it’s a hilly terrain building railway network in the state is also difficult. The road network is under developed in the East and West Garo districts. Additionally a large rural population in the whole of North East coupled with low per capita income limits the size of local market.

- Poor communication and physical infrastructure.

The whole of state has a low telephone density compared to national average. Though the telephone density in Shillong is higher than the rest of the state but reliability of connection is still an issue. Broadband connectivity is low, costly and unreliable. There are only two ISP providers in the state of Meghalaya and ISP market is limited to city of Shillong only. The state still has vast areas of underdeveloped land and some regions have been untouched by modern development. The road and transportation infrastructure is not well developed which results in poor connectivity between the various parts of the state.

- Poor Healthcare facilities in the state

The death rate in the state is higher than the rest of the country. Life expectancy is also low in the state compared with the rest of India. This is reflected in the fact that only 0.77% of the population is above the age of 70. Healthcare facilities in the rural areas need to be expanded as well as developed.
• Limited availability of skilled manpower
IT companies require engineering graduates while ITES companies look for arts, commerce and science graduates. Voice based call centres look for people with good English speaking capability. Meghalaya or the other north eastern states don’t have many engineering colleges to support the demand created by IT industry. Even the pool of good English speaking resources is more or less limited only to Shillong city. People in the remaining part of the state are not as proficient in speaking English as the people in Shillong. Meghalaya produces 3700 graduates every year. This talent pool is not enough to support big call centres.

• Education infrastructure not adequate to support growth of IT/ITES industry
Absence of any engineering college in Shillong can be detrimental to the growth of IT industry in the region. The number of arts, science and commerce colleges in the state would not be able to support big KPOs and BPOs. The lack of adequate education infrastructure in the state is contributing to the brain drain.

• Lack of Political vision
Due to various local issues the political leadership has not been able to focus attention on attracting investments in IT/ITeS sector. However in the recent past the realization that these sectors have potential to generate substantial economic well being and employment opportunity has crept in and the political leadership is now keen on attracting IT investments.

• State Image dented by insurgency in North East
Even though insurgency in Meghalaya has been low for the last two years, other parts of North East have been facing this problem. As a result of which the outside investors are reluctant to invest in North East and hence Meghalaya is also suffering.

• Bandhs/protest
Though Meghalaya has been peaceful for the last 2 years with no incidence of major insurgencies reported in the state, there have been periodic bandhs and protests which have hampered the local business. In the past 72 hours bandhs have paralysed life and business in Shillong and often local IT companies had to face huge business losses. Moreover such bandhs and protests create a negative image for the state which affects perceptions of potential investors, both inside and especially outside the state.

• Lack of technical expertise among local entrepreneurs
Most of the local entrepreneurs don’t have the technical expertise needed to setup an IT-ITeS industry. Meghalaya doesn’t have any IT park as a result of which there is currently no big player. No national or international big player has ever invested in the state.

• Negative perspective of local investors
The local investors are quite hesitant and sceptical about investment in IT sector. IT Policy not enforced- Despite the formation of IT Policy in 2004, it has not been enforced.
• Level of e-readiness is low
The level of e-readiness in the state is very low. Its rank has been categorized as Below Average Achievers by “India: E-Government Assessment Report 2004”, a study done by Department of Information Technology, Government of India.

• Stringent tribal land transfer laws
Being a tribal state, the land transfer and land acquisition laws are very stringent in Meghalaya. This has been a major hindrance in setting up of industry in many states and Meghalaya would also face the same problems. Govt. needs to look into this matter if it wants to attract investors from outside the state in the IT/ITeS sector.

• Inadequate Social Infrastructure
This results in lowering the quality of life that is demanded by employees associated with the IT/ITeS sector

• High growth of urban population
Meghalaya has a high rate of growth of urban population when compared with the rest of the country. This shows people are moving from rest of the state to the urban centres for better livelihood. This will put pressure on the existing infrastructure of the urban areas. The Govt has to plan to meet the increasing expectations of these people as well as work towards reducing the migration of people from rural areas to urban areas.

Opportunities

• Ample funding agencies
There are ample funding agencies like DoNER, NEDFi, NEC in Meghalaya who have financed IT initiatives in North East in the past. So getting funds for setting up IT/ITES companies in Meghalaya would not be difficult. The funding agencies and financial institutions have been discussed in details under “Present scenario of IT investment in the state”, as well as under “Factors influencing investment in IT sector – Capitals / Investments”.

• Govt. of India “Look East” Policy and Proximity to South East Asian Market
Government of India’s “Look East” policy has helped in building cordial relationship with countries of South East Asia. This "Look East" Policy can also be looked at from a different angle - Reaching Southeast Asia via Northeast India. There is extensive government willingness to further develop the North Eastern India region and integrate it into the Southeast Asian hemisphere. The north eastern states hold great importance for India as they represent the key for achieving closer integration and gaining greater economic access to the other Southeast Asian nations. This has encouraged trade and cooperation between India and these countries. Meghalaya being nearer to these countries is in a better position to gain from this trade and cooperation. The state can attract investors from the South East Asian countries.
• Absence of IT/ITES companies in North East region reduces competition in region
Even though STP Guwahati has been set up in the North East, it has not been in the past able to attract many IT/ITES companies in the region. Assam could not capitulate on the first mover advantage in the region. Current competition from other states in the region is not expected to pose a serious threat.

• Non Resident Meghalayans willing to invest in the state
People of Meghalaya who have left the state are willing to come back and invest in the state. NRIs are willing to invest in Meghalaya. These people not only have the finances but also the technical knowledge and expertise, as well as the entrepreneurialships for start ups.

• E-Government initiatives in progress
Govt of Meghalaya is planning to start its e-governance initiatives. These initiatives once started should give a major boost to the IT investment in the state. E-governance initiatives would create a huge demand for software and hardware in the state which would draw IT companies from outside the state. Local entrepreneurs could gain from their association with these IT companies.

• Different seismic plate from mainland India
As per Seismic Zoning Map of India, Meghalaya resides in a different seismic zone compared to rest of mainland India, making it an ideal destination for Call Centre disaster recovery stations for Tier 1 and Tier 2 cities.

• STPI Shillong coming up
STPI Shillong, which is expected to come up soon, should boost the growth of IT/ITES investment in the state. This STPI would be acting as an incubator and facilitator for small and medium scale IT/ITES companies. The STPI would also solve majority of the issues related to communication and infrastructure. Govt of Meghalaya should persuade STPI to set up a satellite earth station to this effect.

• IT/ITES companies shifting toward small cities
IT/ITES companies are showing increasing interest in setting up delivery centres in smaller cities and in cities not traditionally associated with the IT industry. The cities include Ahmedabad, Chandigarh, Mohali, Jaipur, Mangalore and Coimbatore. Moving into smaller cities has benefited the players by offering lower costs (both infrastructure and employee) and lower attrition rates.

• Ample scope for Tourism Sector
In the year 1994 154977 Indians and 577 foreigners visited Meghalaya. The figure increased to 268589 Indians and 3191 foreigners in the year 2002. Overall in these 8 years there has been 73% increase in Indian tourists and 453% increase in foreigners visiting Meghalaya, though the number of tourist places has not shown any remarkable increase. This shows that Meghalaya
has tremendous tourism potential. It needs to market its tourism in the Indian as well as international market.

**Threats**

- Future competition from Assam and other states in the region
  Assam is the gateway to North East. Even to reach Meghalaya, one has to go through Assam. A STPI has already come up in Guwahati. Though nothing much has been happening with respect to IT in Assam as of yet, but Assam can pose a serious challenge to Meghalaya in attracting IT/ITES companies. Not only Assam other states might also pose challenge to Meghalaya.

- Brain drain
  Call centres all over India have a good percentage of employees who are from north east. Over the last few years Meghalaya has been loosing good educated youth to other Indian states. Due to lack of job opportunity in private or public sector in Meghalaya the youth of the state go out of Meghalaya for their livelihood. With more and more demand being created in other cities of India, more and more educated youths are leaving Meghalaya.

- Future trends in IT/ITES industry
  Technological advancements in the field of computer telephony will result in decentralization of many Call Centre operational activities. Automated Call Distribution technology which underpins call centre operation may soon be upgraded so that it is also possible, using faster data telecommunications channels, to operate a call centre service using workers based at workstations in their own homes. Limited use of home-based call centre staff has been reported in several countries. A report in the UK has recently suggested that ‘virtual call centres’ like this may be an idea which will become increasingly attractive for companies in future.

- Emergence of high-end KPO services may replace BPO as outsourcing trend
  There is a global trend in a shift in the nature of outsourcing activities up the “value chain”. More and more high-end KPO services are being outsourced. Emergence of need of these high-end KPO services may have a reducing (or even replacing) effect on overall BPO activities. Most of India's ITES-BPO work is for voice-based customer services. This service is at the lowest end of the value chain. Even though the revenues in this segment are increasing, the billing rates for these services are on the decline. In order to survive and grow, the sector needs to move up the value chain and start concentrating on high-end services like research and development, content development and data analytics. Companies also need to move towards providing end-to-end solutions to their clients. Required technical expertise to survive in this field is currently lacking in the state.

- Competition from other Tier III cities
  Stiff competition can be expected from Tier III cities. When IT/ITES companies start looking beyond Tier I and Tier II cities they would have the luxury of choosing from more than 10 cities which have better physical and communication infrastructure than Shillong. So to attract IT/ITES investment in the state, the state has to develop at a real fast pace.
• IT/ITeS sector may experience saturation/slowdown
IT/ITeS sector has been showing high rate of growth in the recent past but as the market matures the rate of growth might slow down and reach a plateau. We have also seen dotcom burst where many venture capitalists lost huge amount of money. If this happens then Meghalaya would find it difficult to attract outside investment as well as promote the local IT investors.

While it is absolutely essential to understand the weaknesses and threats, it is the aggregate of strengths and opportunities that infuses the State and its people with sense of optimism for the future.

Synthesis of Needs

In order to arrive at the Vision, it is necessary that needs and requirements of the State are synthesized and evaluated on the basis of the SWOT analysis and the Stakeholders’ expectations as described in the sections above.

The sector-wise needs for the State have been stated as necessitated by the SWOT and also as aspired by various stakeholders.

Health
• Improve basic Curative and Preventive health Services
• Make health service modern, accessible, affordable and available in the rural areas
• Ensure co-ordination at inter-program, intra-department and inter-agency levels

Education
• Take into account localized, contextual conditions during planning
• Make education available to all, contemporary and skill-centric with strong linkages to the changing regional and global scenarios
• Provide training facilities in ICT and BPO areas to enable the youth to get good jobs.
• Take industry needs into consideration while finalizing course for various technical and semi-technical courses
• Promote education as one of the main Revenue earning sectors

Labour & Employment
• Create more work opportunities in different sectors and ensure better work conditions and adequate wages
• Reduce unemployment, underemployment and disguised unemployment in the rural areas by modernizing agriculture and setting up of agro-based industries
• Extend planning beyond the national perspective to acquire a more localized perspective

Agriculture
• Increase productivity by assisting farmers to move to multi-crop farming.
• Provide better irrigation, fertilizers, use of HYV seeds and application of modern technology
• Encourage horticulture, cultivation of vegetables, plantation crops, spices, and orchids.
• Develop agro-based industries
• Facilitate a growth-rate in conformity with the Tenth Plan.
• Provision of sufficient information to the farmers for marketing and selling their produce.

Rural development
• Empower institutions of local governance
• Tackle poverty and food insecurity
• Revive/ develop village level productive resources

Transport
• Expand the reach and network of all operations of Road network in the State
• Ensure all weather connectivity to all villages of the State
• Stronger public transport

Power
• Aim at increasing the generation capacity of the State
• Provide consumers with reliable and assured supply of power
• Provide electricity to all the villages of the State

Urban Development
• Increase the rate of urbanization to effective levels
• Create and empower Urban Local Bodies for development of cities and satellite townships
• Encourage private participation

Industrial Development
• Increase the rate of industrialization
• Create a conducive business climate for accelerated investment in industry and infrastructure projects
• Optimize the processes to facilitate industrial development
Tourism

• Ensure the development of infrastructure that would aid in the development of tourism as an important industry for State
• Make accessibility easier for the people from other parts of the country and the world
• Improve Information availability about tourist destination
• Improve the image of the state through tourism

IT Vision

Based on the Synthesis of Needs as done in the previous chapter and the inputs provided by the respondents during the survey carried out by the PwC team during the study, the IT Vision of Meghalaya for ensuring Good Governance practices and overall economic development reads as follows:

Key Themes

The vision statement clearly articulates the key themes of the Government’s direction, which are:

• Citizen
This is an important focal point for the e-Governance initiatives which the state is likely to take in the next few years. This point establishes that the government’s focus in ICT will be on the statutory requirements, like implementation of RTI Act and other central level schemes, so as to better serve its citizens in the rural hinterland as well as make information readily accessible. At the same time, the fall-outs of these efforts will also be derived by urban and the business community in the state.

• Information and Government Services
While the common person may have a variety of needs, many of these could be improved by use of ICT. Delivery of these would require the government to focus on more convenient and reliable options rather than the standard option of citizen making visits to the Government Offices. The services should be measured on the following criteria

• Accessibility: Customers require a reliable access window through e-Governance to all Government information and services. Citizens expect that e-governance initiatives will minimize the time spent on repeated visits to government offices.
• **Flexibility**: Customer should be able to access the service through a variety of channels of his/her choice.

• **Quality**: The service should be timely and efficient. Correct and up to date information should be readily available.

• **Security**: The service and service delivery should be trustworthy, both objectively and in citizen perception.

• **Transparency**: Information about mechanism of service delivery along with its associated cost should be readily available.

Horizontal Scroll: “To incubate and harness the IT industry for growth of the state economy and employment generation for local citizens & To establish e-Governance with a view to empower the citizens by providing Govt. information and services in a transparent and streamlined manner at a place close to their habitation using ICT as an enabling tool.”

• **Service Delivery**

This indicates the intent of the Government to look at streamlining its procedures such that the number of visits a citizen has to make to the Government office to obtain any one service is reduced. At the same time transparency of the system would increase and it would be easier to monitor and manage Govt. projects and assets. It may necessitate the use of databases extensively so that the data once stored can be reused leading to saving in time and effort.

• **Accessibility**

Communicates the clear roles and responsibilities for all departments and staff with respect to delivering each service. This is also one of the requirements of the Right to Information Act, 2005. The citizens should be provided with easier access to information. This would require the transformation of the government making it more transparent, accountable and efficient. Accountability for delivering the various services and information should be clearly defined and communicated internally within the departments and externally to citizens. It would lead to greater participation by people in government by making it easier for those who wish to contribute. Mechanisms like citizen feedback, grievance handling systems, provision for citizen forums on the web portal and increasing the number and breadth of access channels are some means of attaining this objective

• **Incubation**

The objective of an incubation program should be as follows:
• Nurture and motivate good ideas and brains Encourage entrepreneurship
• Give a robust platform and infrastructure to start up for a kick start
• Have common policy and regulatory framework for a even playing field
• Put a structured approach in place to evaluate projects both long term and short term

**Economic Development leveraging IT/ITeS**

The economic development of the state is very essential for the improvement of the general well-being of the citizens as well as reducing the economic disparity in the state. The government aims to improve the standard of living of the people of the state and decrease the economic disparity in the state. The government wants to use the Information Technology as a tool for generation of employment in urban areas. The welfare measures taken by the government are sustainable in the long run only if they are backed by the economic growth of the region. Government should support IT/ITeS sector in the state as this has the potential to generate employment for the urban youths as well as use ICT for the development of the rural people.

**Objectives**

Keeping in mind the above mentioned Vision, the objectives for Government initiatives can be grouped by the customer segment served:

Encourage investment in IT/ITeS sectors with accompanied employment generation: The initiative must achieve the following for the businesses:

1. Reduce burden on business, provide one-stop access to information on rules and regulations and clearances
2. Reduce the cost of compliance by reducing the instance on the business to report the same data, multiple times to multiple agencies.
3. Help in the growth of the business and support IT industries by providing them with necessary technical and financial help.
4. Generate additional employment in the IT/ITeS sector

Improve service delivery to citizens: The e-governance must achieve the following for the citizens:

1. Provide one-stop, easier access to information and services to individuals
2. Reduce the average waiting for the citizens to avail the services.
3. Provide the citizens with a transparent view of the government processes and timely response to applications.
Improve Internal govt functioning: The e-governance must achieve the following for the internal functioning amongst the departments / its interactions with its employees:

1. Assist the state and local governments to more easily work together to better serve citizens within key lines of business.
2. Provide administrative savings for the government departments.
3. Improving the way that information is shared among all levels of government
4. Reduce the non-value added work for the workers in the government department.
5. Providing enhanced access to high quality training and competency development for state employees through capacity building across departments.

**Performance Measures**

To ensure achievement, a vision needs to be measured periodically against a set of well defined Performance measures. This will enable all the key stakeholders to ascertain the progress made in realising the vision.

In the instant case the following are the Performance measures that may be adopted:

- Increase in Service Delivery Points
- Increase in Service Delivery Channels
- Increase in availability of information on Govt services using e-Government framework
- Increase in number of Govt services being provided using e-Government framework
- Percentage increase in population accessing Govt information and services using e-Governance delivery channels
- Percentage increase in number of Govt personnel delivering information and services using e-Government framework
- Percentage increase in IT/ITeS related investments
- Percentage increase of contribution of IT/ITeS in State Domestic Product
- Percentage increase in employment in the IT/ITeS sector

**Review Mechanism**

As mentioned in the approach, a vision, especially an IT Vision needs to be periodically reviewed to check for its relevance especially in view of the rapid changes in technology to ensure the vision remains relevant. This is especially true for IT Vision 2020 as it spans a time period of fifteen years. However, any review of such kind needs an involved exercise and hence it is suggested that this review be done as part of the state Five Year planning exercise to ensure continued alignment of the vision with both the citizens’ expectation as well as the development agenda of the state.

It is also suggested that the task of reviewing the performance measures as well as the Vision be carried out by independent entities like NASSCOM /consultants to avoid any bias and ensure neutrality.
Conclusion

The envisioning exercise clearly indicates that the State IT department needs to take up the twin initiative as highlighted below. These initiatives are detailed in the e-Governance Roadmap and the IT Investment Roadmap documents.