

NASSCOM®

12th Five Year Plan (2012-13 to 2017-18) – NASSCOM Inputs

April 2011

12th Five Year Plan – Key Challenges Identified by the Planning Commission

- **Enhancing Capacity for Growth** : Driving 9-10% GDP growth through better mobilization/allocation of investment resources; higher investment in infrastructure
- **Enhancing skills and faster generation of employment**: Improve Education and training systems; efficient labor markets for all skill categories
- **Improving access to Quality Education**: Ensuring access, affordability and quality of our Education and training facilities
- **Managing the Environment** - encourage responsible behavior without comprising on developmental needs
- **Securing the Energy future for India –** Equitable and affordable energy consumption
- **Markets for Efficiency and Inclusion –** Encourage open, integrated and well regulated markets for goods and services for inclusion and sustainability
- **Decentralization, Empowerment and Information**: democratizing information, improving the quality of public services
- **Technology and Innovation** – Innovation for higher productivity and competitiveness
- **Managing Urbanization** – Building social and physical infrastructure in smaller cities/towns
- **Accelerated Development of Transport Infrastructure** – efficient and widespread multi modal transport network
- **Rural Transformation and Sustained Growth of Agriculture** – Encourage and supporting villages in improving their livelihood conditions
- **Better preventive and curative Healthcare** – Improving healthcare conditions

Our Approach

- Review of strategy challenges identified in line with our understanding of issues and imperatives
- Each of these were deliberated in detail to identify, include and review any other challenge which was missing (ones identified are highlighted in bold under each theme)
- Primarily focused on areas which are representative of our membership base (IT services, BPO, Engineering Research & Design, Software Products).
- Built a Global perspective on some of the strategy challenges identified
- Review of inputs submitted by our counterparts (CII, FICCI) to avoid any duplication
- Debated/discussed extensively within our Executive council team for developing comprehensive inputs

Enhancing Capacity for Growth (1/2)

Key Challenges	Key Focus Areas
<p>Need to focus on Exports</p>	<ul style="list-style-type: none"> • Create a regulatory environment that is relevant from a service economy point of view (e.g., rationalization of labor laws, liberalization of employment visa rules) • Introduce employment linked incentives for jobs created by services sector
<p>Sustaining India's competitiveness</p>	<ul style="list-style-type: none"> • Help address perceptions about `India risk' by putting together suitable communication (e.g., Incredible India campaign) • Focus on India's global role and emerge as a Thought Leader/ Soft Power through various initiatives <ul style="list-style-type: none"> • Well defined exports strategy – focus on high value exports- facilitates trade balance and reduces vulnerability • People based strategy - Influence through India's Human Capital (e.g., partner with international governments to facilitate student exchange programs) • Government driven thrust (e.g., leverage knowledge of E-governance models/solutions; trade agreements)
<p>Investment and Financing</p>	<ul style="list-style-type: none"> • Encourage Public-private collaboration projects in key priority areas e.g., healthcare, transportation, education, public services • Encourage FDI <ul style="list-style-type: none"> • Rationalization of the tax structure to encourage • Simplification of procedures for flow of funds; transparency of policies • Harmonious policy structure implemented uniformly across the country in a defined time-frame

Enhancing Capacity for Growth (2/2)

Key Challenges	Key Focus Areas
<p>Ensure IT adoption in domestic market</p>	<ul style="list-style-type: none"> • Set up a national CIO office to ensure that government budgets are well utilized, increase collaboration across states, and benchmark intergovernmental functions • Focus on implementation. Create a new IT service cadre to build capabilities within the state and central government • Enact policy reform to encourage investments in technology by domestic user industries and provide incentives for adopting technology in the domestic market (green technologies, SMBs)

Managing the Environment – Mitigation strategies for Climate Change

Key Challenges	Key Focus Areas
Low carbon growth model	<ul style="list-style-type: none"> • Clear roadmap for National Action Plan for Climate Change (NAPCC); NAPCC to be implemented across states and also embrace SMEs • Increase awareness and monitoring with clear self imposed targets; Create protocols for carbon credit/energy efficiency in country
Limited focus on technology	<ul style="list-style-type: none"> • Need for Standardization - need for interoperable open standards for all the devices including networking equipments which is a prerogative of BEE and DIT. Standardize IT equipments and also set up benchmarks for Data centres • Establishment of mutually agreeable standards between BEE and IT industry, mandatory in all the government purchases
Innovation for green technologies	<ul style="list-style-type: none"> • Setting up COEs in the top technical institutions/Universities - testing grounds and prototype/pilot evaluation stages for the Green (Clean) technologies; Incentivize innovations in this area • Institutionalise “green” policies and continue to tap the global energy-efficiency market
Funding and Investment	<ul style="list-style-type: none"> • Make upfront investments in smart technologies such as smart buildings and grids • Extending accelerated depreciation benefits to projects under NAPCC, Jawaharlal Nehru Solar Mission • Introduce tax Incentives for the production and usage of cleaner technologies
Business transformation to Green technologies	<ul style="list-style-type: none"> • Introduce new financial instruments to support transactions around carbon trading

Markets for Efficiency and Inclusion

Key Challenges	Key Focus Areas
Spreading/extending the reach of key services to rural areas	<ul style="list-style-type: none"> • Set up a nodal agency with the mandate to strengthen and implement ICT solutions in healthcare, education, financial services and public services <ul style="list-style-type: none"> • Create standards; develop delivery platform; more effective centre/state working model with greater accountability • Lead and catalyze the development of a legal framework for remote healthcare and consultation and electronic health records
Increasing Organized sector employment	<ul style="list-style-type: none"> • Review the current labor law requirements making them less onerous and flexible • Introduce comprehensive measures to include socially and economically weaker sections <ul style="list-style-type: none"> • Promote skill development from the primary level • Incentives for setting up operations in marginalized districts • Promoting entrepreneurship - financial aid
Equitable market for goods and services	<ul style="list-style-type: none"> • Increase efficiency and effectiveness of the government – central, state, district; develop a government reform agenda • Improve supply value chain – starting at the point of origin – create clusters of villages; improve access to technology

Decentralization, Empowerment and Information (1/3)

Key Challenges	Key Focus Areas
Limited connectivity to villages/rural areas – mobile, internet, broadband	<ul style="list-style-type: none">• Continue to provide incentives for broadband rollout (e.g., USOFG); establish stricter norms for rollout with defined timelines• Develop a policy framework focused on public access (e.g., inexpensive rural broadband access)• Foster collaboration and community networks for formal and informal solutions built on ICT infrastructure• Provide incentives for developing low-cost computing platforms that facilitate technology adoption in rural areas• Promotion of cyber centres (post offices, CSC's) as multipurpose centre points• CSCs/Post office to be set up in all 600,000 villages; connect panchayats to national broadband infrastructure
Implementation and execution of national E-governance plan	<ul style="list-style-type: none">• Streamline and expedite procurement process across central and state government departments• Fast-track implementation of all approved e-governance projects• Create platforms for inter state collaboration and operations; reuse of IP and sharing best practices/learning's across states• Standardise delivery model – minimum customisation at state level except language

Decentralization, Empowerment and Information (2/3)

Key Challenges	Key Focus Areas
Need to improve hard and soft infrastructure	<ul style="list-style-type: none">• Build capacity for decentralized planning – capacity building in government offices (commerce, trade, foreign relations)• Develop a policy framework focused on public access - inexpensive rural broadband access, low cost computing platforms• Introduce Inter-operable applications and standards - customised, easy to use interface <p><u>Education</u></p> <ul style="list-style-type: none">• Implement new Education policy; build English language capabilities; link education to employability at various levels (elementary/high school/higher education)• Develop and catalyze incorporation of basic IT literacy programs in all primary and secondary schools in collaboration with state governments• Encourage computer based educational programmes and training for teachers (by the State Boards and SCERTs)• Leverage ICT for remote delivery of education - Empower schools and colleges with broadband in urban and rural areas <p><u>Healthcare</u></p> <ul style="list-style-type: none">• Empower all CSCs, PHCs and CHCs with broadband• Provide high-speed broadband connection to all rural telemedicine centers• Automate all processes of PHCs and CHCs so that IT can be used to increase the efficiency of the system

Decentralization, Empowerment and Information (3/3)

Key Challenges	Key Focus Areas
Sustainability of internet business in India; promoting e-commerce	<ul style="list-style-type: none">• Ensure facilitation of usage of credit /debit cards & internet banking facilities by all scheduled banks in India• Leverage IT for greater functionality and convenience in online payments marketplace• Reduction of transaction fees in debit cards in India – pushing greater volumes at lower price
Inadequate information available to the masses	<ul style="list-style-type: none">• Creation of National Data Bank for collecting and sharing vital information from local communities and governments<ul style="list-style-type: none">• Identify key focus areas – healthcare, hygiene, food, agriculture• Leverage mobile as medium for speedy delivery of information to the citizens

Technology and Innovation (1/4)

Key Challenges	Key Focus Areas
Innovation as a tool for growth	<ul style="list-style-type: none"> • Identify key areas of innovation which would lead to maximum impact on society and economy; Allocate around 2% of GDP for R&D • Increase number of Ph.D. holders per million population by at least 5 times
Lack of Knowledge Parks and incubators	<ul style="list-style-type: none"> • Build Thematic Innovation Clusters specifically for developing new and innovative solutions for mobile applications, healthcare, climate change solutions, integrated design and manufacturing hubs for automotives. • Identify 3-4 cities as emerging innovation hubs and build an integrated plan to develop and promote these; SEZs for Aerospace, Automotive Semiconductors
<p>Effective use of government resources</p> <p>Lack of collaboration of ER&D with Defense & Aerospace/Govt Labs</p>	<ul style="list-style-type: none"> • Build a Industry Defence Working Group to identify working relationships with the private sector • Build complete product development ecosystem <ul style="list-style-type: none"> • Structured utilisation of Defence labs and equipments by the private sector; Creating Defense specific technology cluster and infrastructure; Creation of Aerospace / Defence specific certification labs • Government participation in offsets program <ul style="list-style-type: none"> • Specifying minimum offset percentages for Engineering Services in defense and aerospace sector • Creation of National Center for Strategic Information Technology outside the ambit of Ministry of Defense - advice DPA / DOFA to identify and categorize dual-use technologies for usage in commercial applications

Technology and Innovation (2/4)

Key Challenges	Key Focus Areas
	<ul style="list-style-type: none"> • Mobilize Funds for financing technology development and infrastructure creation in Defense <ul style="list-style-type: none"> • Financial assistance to SMEs to take up design and development work in the defense production • Share a percentage of commercial risks with Indian organizations working on defense projects. • Support the Indian private sector to acquire defense manufacturing technology • Facilitate creation of vehicle for providing financial and legal assistance for organizations to acquire IPs created by universities and R&D Clusters • Put together a mechanism to ensure the rapid commercialization of (non-strategic) technologies developed in Government labs.
Creation of innovation infrastructure	<ul style="list-style-type: none"> • Create innovation infrastructure - Huge requirement for Measurement, Standardization, Testing and Quality centers across the country requiring substantial capital investment . Government to create and collate these with premier education colleagues and allow industry to use on a pay-per-use basis. • Collaborate with academia through PPP for setting up labs

Technology and Innovation (3/4)

Key Challenges	Key Focus Areas
Leveraging technology to manage security & crime	<ul style="list-style-type: none">• Invest in security to manage borders; address national security concerns; equipping law enforcing agencies• Encourage public-private partnerships to focus on research• Facilitate the development of common data centers by institutions by sharing costs• Institutionalize a framework to keep pace with technology evolution and adapt rules and regulations for the industry
Need to encourage MSMEs	<ul style="list-style-type: none">• Introduce Made-in-India tax benefit for MSMEs in the industry; ensure that it is sufficiently funded and properly administered• Create national level PPP to encourage SME's<ul style="list-style-type: none">• Monetary support for early stage, pre-proof-of-concept research , late stage development /commercialisation of new indigenous technologies• Development of innovation clusters/technology parks - encouraging cooperation between different constituents of a cluster, simplified guidelines• Mentor innovative and emerging technologies/entrepreneurs• Assist new enterprises to forge appropriate linkages with academia and government

Technology and Innovation (4/4)

Key Challenges	Key Focus Areas
Promote Indigenous innovation	<ul style="list-style-type: none">• Reduce reliance on foreign technology and hardware specifically to provide security for sensitive establishments like banks and defence<ul style="list-style-type: none">• India to develop its' own computer operating system, anti virus products, search engine; integrated policies on source/access codes
Enforce intellectual property framework and incentives	<ul style="list-style-type: none">• Creation of a fund to provide grants to SMEs for global patenting and copyrights• Ensure faster legal mechanism to settle issues; protecting IPR

Managing Urbanization/development of transport infrastructure

Key Challenges	Key Focus Areas
Under investment in urban infrastructure	<ul style="list-style-type: none"> • Promote the creation of integrated physical and social infrastructure in 10-15 Tier II and Tier III cities with high potential to serve as hubs for the industry
Lack of planning	<ul style="list-style-type: none"> • Developing and enforcing master plans for long term urban planning • State government to set up a special CEO-led nodal agency to understand industry requirements and ensure development of new townships and improvements in existing cities
Ineffective governance	<ul style="list-style-type: none"> • Encourage PPP for urban infrastructure provision, operation and maintenance
Capacity constraints on other resources – public transport	<ul style="list-style-type: none"> • Develop robust public transportation system – capacity creation and capacity utilization <ul style="list-style-type: none"> • Using technology for efficiency and productivity – Toll collection, RFID, GPRS

Talent and Education (1/2)

Key Challenges	Key Focus Areas
Lower employability	<ul style="list-style-type: none"> • Creation of specific Sector Skill Council for skill development and Training
Investment and Financing	<ul style="list-style-type: none"> • Encourage students and working professionals to pursue further education for skill enhancement by providing tax incentives. <ul style="list-style-type: none"> • Set up a student financial aid agency (such as the Federal Student Aid in the US) for demand-based funding of tertiary education • PPP's in higher education; ease regulations supporting entry and operation; offer coordinated scheme of incentives
Education/training/skills linked to shortage of skills	<ul style="list-style-type: none"> • Deploy National Faculty Development program in consultation with the industry, both for Engineering and non Engineering colleges, for the short ,medium and long term • Leveraging capabilities across states to realise the full potential of India's human capital; sharing of best practices and IP across states
Building Domain specialisation	<ul style="list-style-type: none"> • Launch and scale up technology specialisations across all vocational training institutes (Industry Training Institutes/Industry Training Centres). Industry would continue to provide vertical specific training and can carry out strategic acquisitions to facilitate that. • Build domain specialisation in research and education institutions

Talent and Education (2/2)

Key Challenges	Key Focus Areas
<p>Strengthening the Education system</p>	<ul style="list-style-type: none"> • Under Graduate and Post Graduate programs to be ‘Credit’ based and standardized nationally. In addition allow policy for introducing electives and add-on programs (employment oriented) in colleges affiliated to universities to be less constrained and to be executed in a shorter period of time by all BOS (Board of Studies). • Implement recommendations made by the National Knowledge Commission on changes in the governance structure in universities. • The Government has drawn up plans to establish 20 new IIITs and 8 new IITs. These need to be implemented with world class faculty and in partnership with the private sector. • Address gap of 1,500 universities by upgrading top-performing colleges to affiliating universities and/or by establishing Greenfield universities • New technologies of pedagogy, such as ICT, broadcasting, etc. must be introduced to provide wider access to high quality education, to overcome the shortage of teachers and to increase capacity. • All non-formal education courses/programs including apprenticeships programs, to be standardized across the country for inter-operability; from the non-formal to the formal stream and from the unorganized to the organized sectors

NASSCOM®

Thank You