

Grameen Solutions Centers

(Village Solutions Centers)

ICT Business Solutions for the Developing World



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GSC Executive Summary

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GSC Executive Summary

- **GSL will deploy village solution centers across Bangladesh**
- **Country wide deployment of Grameen Solution Centers**
 - GSC will create technology based jobs across rural Bangladesh while improving lives of people by making technology solutions available, relevant and affordable
- **GSC's service offering includes**
 - E-Education service
 - E-Healthcare service
 - E- Agriculture service
 - E- Government service
 - E-Consumer service

GSC Services at a glance



GSC Objectives

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GSC Objectives

- Increase Technology Penetration and Awareness
- Promote ICT Business Ownership and create technology based jobs for the unemployed
- Increase and promote Female ownership of ICT Business
- Reduction of unemployment through creation of ICT job opportunities
- Increase of investment in ICT in rural areas
- Reduction of migration of rural people to cities for job search
- Increase Access to Healthcare and Health Information
- Offering Diverse E-Agriculture Services
- Efficient Delivery of 'Business 2 Consumer' Services
- Bring Government Closer to People through E-Governance
- Create an Efficient Distribution of Education Services

Raw Data:

**Nationally 2.7 million young people become eligible to enter work force every year.
Only 0.7 (26%) million job opportunities are created against that need.**

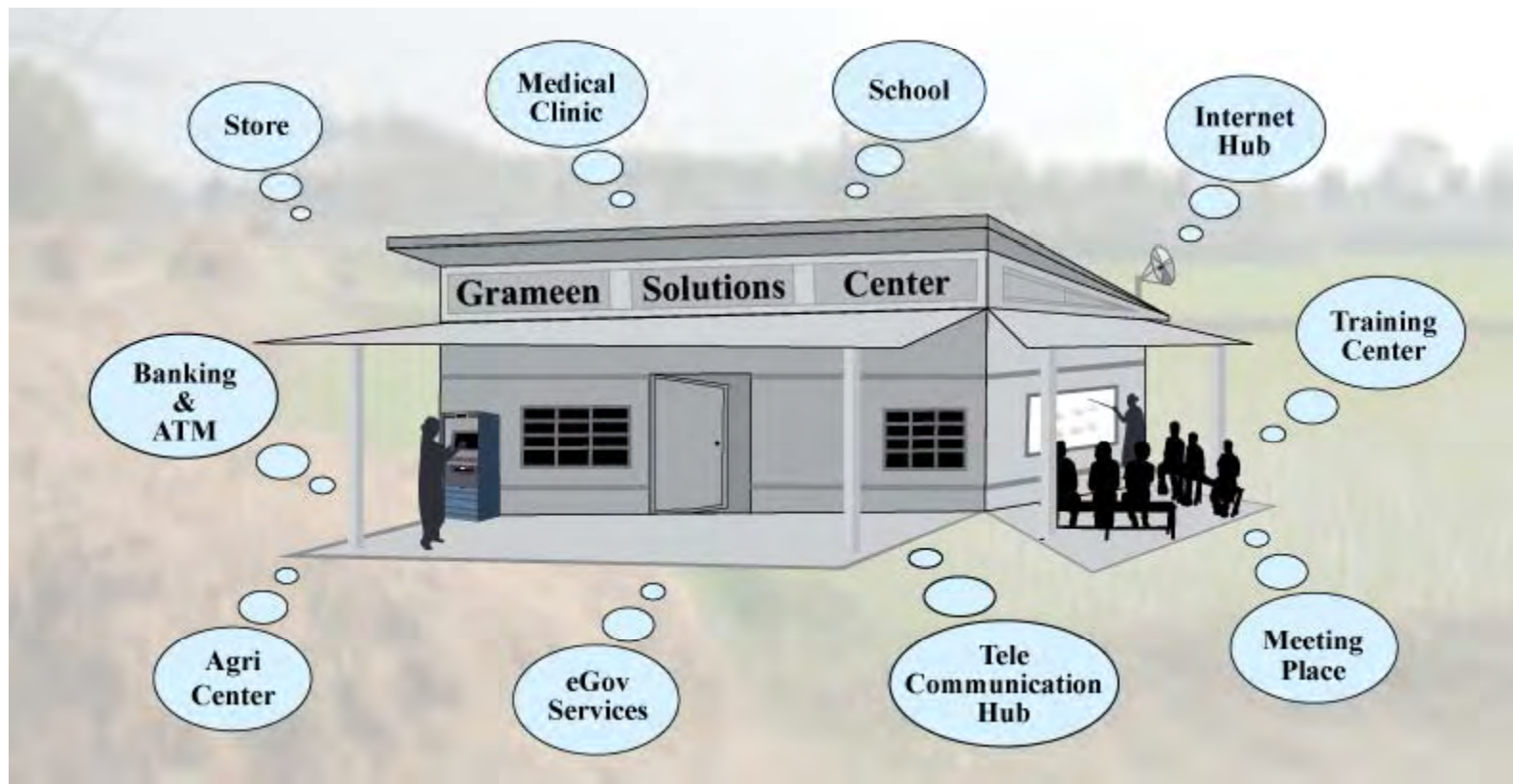
The GSC Network

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GSC Network at a Glance



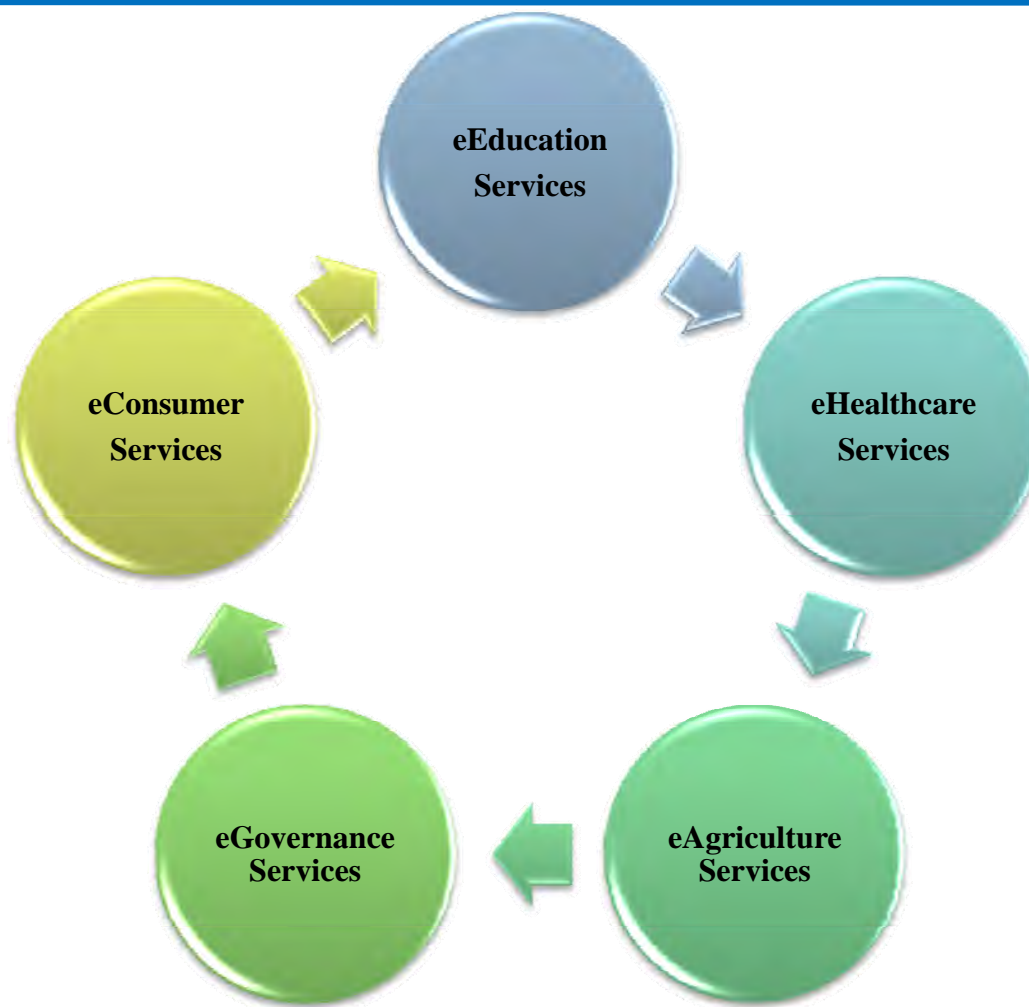
Grameen Solutions Center



Augmented Services by GSC

- GSC will be a center of e-education. So as an augmented service, it may sell books
- GSC will bring people affordable health products and services. So it can also arrange for the sales of medicines, asked by the villagers
- GSC will disseminate information on different agriculture needs. So, in its mission to serve it can sell products like seeds and pesticides
- GSC will inform people about different products through e-consumer services. So it may complete the need by serving as an outlet for those products
- GSC may also serve as a school for the education deprived
- GSC may serve as a medical center for the community
- GSC may serve as a training center
- GSC can serve as a meeting place for the local people

GSC Services at a glance



Objective: Create an Efficient Distribution of Education Services

E - Education



Why E-Education

- Number of schools are inadequate in respect of potential number of students
- Cost of education remains out of reach for average population
- Lack of innovative education programs such as after school programs limits opportunities for additional students
- Lack of job opportunities discourage people to pursue education
- Social, religious, cultural factors at times, hinder female participation in education
- Delivery of education as a whole remains a significant challenge
- Use of technology in transforming education system remains non existent

Raw Data:

Drop out rate from secondary school (6th to 10th grade) is 83.43%

Source: Bangladesh Bureau of Educational Information and Statistics (BANBEIS)

GSC E-Education Services

ICT Based Education

Basic PC Skills, Word processing, and office software

Internet access usage

Computer networking

Local content innovation

Higher Education

Distant Learning Programs. E.g.
Degree Courses

Various Skills Certifications

Vocational/ Industry focused Training

Job Training

Collaboration with local industries

Hardware Support training

Network Training

GSC E-Education Services

Teacher Training

Aiding teachers to use technology as a tool
Providing ICT training for use in
classrooms

After School Tutoring

Distance Learning Programs
Basic Literacy and numeric training
Vocational Training

E-Education: What GSC will do

- 1. Will create e-Education Awareness** - ICT based education services will be promoted through GSCs
- 2. Will encourage awareness of technology** – Citizens will become familiar to using ICT services, as they familiarize with e-Education
- 3. Will improve teaching standards** – GSCs will provide an environment where teachers can use technology to deliver their lessons effectively and efficiently
- 4. Will enhance learning standards** – GSCs will provide a platform for students to learn basic Math, English and Science lessons in a techno-savvy environment
- 5. Will improve literacy rate** – GSCs will provide language lessons and computer training hence driving the improvement of national literacy rate

E-Education: What GSC will do

6. **Will be able to provide distance learning** – GSCs through connectivity and partnerships with institutions will be able to provide distance learning services
7. **Will provide a connected learning platform** – GSCs will provide a connected virtual learning environment through e-Learning Services.
8. **Will provide vocational training** – GSCs will be able to equip graduates with professional skills through vocational training
9. **Will provide network gaming platform** – GSCs provided digital game will make the youngsters familiar with computers, increasing capability in critical thinking which will ultimately contribute to their interest in education

Objective: Increase access to Healthcare and Health Information

E-Healthcare



Why E-Healthcare

- Lack of adequate number of Doctors, Hospitals, Medical information in the rural areas
- Private medical facility remains out of affordability reach of average people
- Due to shortage of community health worker, there is lack of awareness in Food-Safety and Hygiene; hence a high risk of food and water related diseases
- Lack of innovative training process to healthcare worker leaves service providers number stagnant
- Medical distribution and information remains inadequate

Raw data:

Infant mortality rate is 54 per 1000 live births

Number of physicians is 26 for 100,000 population

Number of pharmacists is 6 for 100,000 population

Number of community health workers is 31 for 100,000 population

Public expenditure on health as percentage of gross domestic product is 0.9

Source: WHO statistical information system

GSC E-Healthcare Service

Encouraging Healthy living

Health Awareness Programs

to effectively demonstrate healthy living standards

Remote Online Diagnosis

to provide immediate treatment to patients

Access to affordable health care services and products

To provide health insurance and medicine

Health Worker Training

Provide medical training to create new health work force

GSC E-Healthcare Services

Regional Health Alerts

to caution citizens and take necessary preventative measures

Digital Health Records

enabling service users to maintain and view their medical history

Health Trend Database

enabling doctors and expert analysts to view information on the trend of illnesses individually and cumulative

Health Information Resources

to share and inform vital knowledge to service users

E-Healthcare: What GSC will do

- 1. Will encourage Awareness of Food–Safety and Hygiene** – GSC will bring health and hygiene awareness through health programs held in GSCs according to the region.
- 2. Will provide medical treatment** – GSC will help doctor diagnose the health problem of patient through ICT service.
- 3. Will reduce down the health expenditure** – GSC will provide professional health information at lower rate through ICT.
- 4. Will provide a modern Healthcare information** – GSC will bring update health information, health journals, medical research information, digital health records and regional health alert right in people’s hand.

E-Healthcare: What GSC will do

- 5. Will record health trends-** GSC will be able to maintain and prepare a database of health trends as per the regional information and registration to be used in research purpose.
- 6. Will inform citizens of Contagious illnesses in time–** GSC will make people inform about contagious disease ahead of time to prevent potential epidemics break-out.
- 7. Will reduce difficulty and time constraint to institutional medical service –** GSC will enable rural citizens to make appointment online using ICT.

Objective: Offer Diverse E-Agriculture Services

E- Agriculture



Why E-Agriculture

- Agriculture is the single largest sector of economy, employing around 60% of the total labor force
- Farmers often cannot afford modern technology products and tools
- Farmers do not have access to Government's effort to amount of fertilizer allocation, time frame of distribution and subsidy provision.
- New variety of high-yield hybrid seeds and agro-technologies produced by local R&D remain unused by farmers due to lack of promotion, awareness and inefficient distribution
- Lack of current market price knowledge and opportunities leave the farmers controlled by the 'middle-men'
- Current agriculture practice and equipments are decade old due to lack of dissemination of technology knowledge
- Lack of updated weather information affects the yield

Raw Data:

About 85 to 90% of new hybrid seeds produced by local R&D remain unused by farmers due to lack of promotion, awareness and inefficient distribution

Source: UNDP publication; e - focus

GSC E-Agriculture Services

An essential tool for Agricultural Economy

ICT E-Agro Training Service:

ICT for Farmers Training
Crop and Harvest Management
Seed Management

Industrial Technology and Processes Services:

Latest information on Industry trends
Agro-Experts Service
Prices for Farming Tools and Machinery

Regional Market Prices and Trade Opportunities:

Prices for Regional Agricultural Produce
Movement of Produce (Statistical and Graphical Information Service)
Buyer Information Service

GSC E-Agriculture Services

Pest Control Services:

Regional Pest Control Information

Pest Awareness Program

Regional Pest Alerts

Weather Information Service:

Regional Weather Information
Service

Weather Warning Service and
Protection

E-Agriculture: What GSC will do

1. **Will create awareness of technology** – GSC will promote the various E-Agro services that are available.
2. **Will increase Global companies participation** – GSC can be a key reason to promote global companies participation and bring innovative Agro-services
3. **Will accelerate acceptance of technology** – GSC will train farmers on the various E-Agro services they can avail themselves.
4. **Will transfer knowledge on Industrial technology and processes** – Latest information on industry trends can be shared through ICT in localized content.
5. **Will empower the farmer with business knowledge** – GSC can enable the farmer to maintain competitive knowledge through sharing regional market prices, trade opportunities, regional stock levels, movement of agricultural produce.

E-Agriculture: What GSC will do

6. **Will ensure cost effectiveness and efficiency in agriculture process**
7. **Will create network of Buyers** – ICT can bring all the buyers at one point of contact and farmers can communicate with Buyers directly
8. **Will provide Expert Advise through ICT** – GSC can provide the opportunity to farmers to seek appointments from experts to get advise on farming issues such as crop maintenance, hybrid farming, soil enrichment etc
9. **Will help sharing knowledge on pest control** – Through GSC, farmers will have the opportunity to be aware of seasonal threats to crops from pests and take necessary action
10. **Will disseminate prior knowledge about weather conditions** – ICT can help disseminate regional weather information and also help farmers take necessary actions to protect their crops

Objective: Bring Government Closer to People through E-Governance

E-Governance



Why E-Governance

- Government service rendering office and representative is not readily available in every village
- Dissemination of detail information on government services is not effective
- Corruption level in many public sectors is high due to presence of middleman between citizen-government interaction
- Government service delivery remain inefficient and burdened with bureaucratic process
- Collaboration and interconnection among different government departments are low
- Active participation of people in government decision making is far from satisfactory level

Raw Data:

Corruption level can be reduced to 20% to 30% in some public sectors by inclusion of e-governance

Source: E-Governance discourse: Bangladesh Reality

GSC E-Governance Services

Bringing Government closer to people

Population Management Services

Birth Certificates
Death Certificates
Marriage Certificates

Immigration Management

Passports
Visas
National ID

Road Transportation Management

Drivers License Application and
Renewal
Traffic Information Services
Online ticket Booking Service for
Trains, Buses, etc

Utility Bills Management

Utility Bill Viewing and Payments
Services
Regional Database service for
utility usage

More GSC E-Governance Services

Criminal Management and Law Enforcement Services

Regional Crime and Theft Alerts
Awareness of criminals, thieves, gangs

Land Management

Land Registration
Buying/Trade of Land

Banking Service Management

Online Bank Account applications
Processing online Bill Payments

Health System and Insurance Management

Regional Health Database Service
Health Insurance Applications Service

E-Governance: What GSC will do

- 1. Will Create E-Governance Awareness** - ICT based government services will be promoted through GSCs
- 2. Will encourage awareness of technology** – Need based use of ICT enabled government services will be brought to citizens
- 3. Will inform the citizen** – ICT based government services will be widely available to citizens with increased transparency and accountability.
- 4. Will improve service delivery** – ICT will enable service delivery model, increasing the speed and the impact.
- 5. Will reduce corruption level** - Corruption level in many public sectors will be curtailed due to elimination of middleman increasing citizen-government interaction.
- 6. Will make information available On-demand** – GSCs will be able to provide specific, relevant and up-to date government service information as and when required by the citizen

What GSC will do

- 7. Will increase citizen participation** – ICT will improve citizen accessibility to elect members, making their voice heard and empowering them as true citizen.
- 8. Will record opinions of citizens** – GSCs will enable citizens to give their feedback on the Government services, thus encouraging a people's government.
- 9. Will enhance Public security** – GSCs ICT applications will disseminate security related information and support Regional Law Enforcement officers to better manage crime
- 10. Will encourage diverse E-Gov services** – GSCs will be used to pilot new E-Gov services which will be developed through citizen feedback and research. Thus creating technology jobs and an ICT sector dedicated to E-Governance enhancement

Objective: Efficient Delivery of 'Business 2 Consumer' Services

E-Consumer Services



Why E-Consumer Services

- Majority of businesses operate in major cities excluding rural areas.
- Citizens in rural areas get limited retail services due to:
 - Geographical location
 - Poor Rural economy
 - Limited knowledge of products
 - Low demand of products like televisions, various kitchen appliances, computers etc.
 - Lack of cost efficient service delivery model for Rural Areas
- Application of technology is minimum.
- Acceptation of new technology is low due to lack of awareness on usability and applicability

GSC E-Consumer Services

A fresh rural retail trend

Retail Services

ISP Sales Office
Tourist Information
Electronic Library
Digital Video/Photo Service

Business Services

Business Material Design and
Production
Financial and Banking Service
Documentation Service

COMPUTER USAGE

Network Gaming
ICT Training
Equipment rentals

GSC E-Consumer Services

Mobile Phone Services

Flexi-load Service
Consumer Mobile Phone Package

Internet Service

Web Browsing
Email/Chat
Voice/Video Conference

Bank Services

Bank Account Application
Online Bank Statement Viewing
Service
International Money Transfer Services

E-Consumer: What GSC will do

- 1. Will create awareness of technology** – Rural areas will become aware of various ICT Business 2 Consumer services that are on offer in their region i.e. Network gaming, phone top-ups, tourist information etc.
- 2. Will drive the acceptance of technology** – Rural citizens will have the opportunity to learn how to use internet, chat clients, marketing services, phone web browsing, etc.
- 3. Can empower citizens with business knowledge** – ICT can enable citizens to maintain competitive business knowledge through sharing regional market prices, trade opportunities, online sales of products etc.
- 4. Will create children interest in learning about technology** – ICT Gaming services, internet browsing and soft applications will encourage youngsters to learn about technology. Hence it will increase the number of students going to schools.

E-Consumer: What GSC will do

5. **Will develop a distribution network for major companies** – Rural citizens will be able to have access to financial services, mobile phone services offered by major companies through a GSC; thus bringing to the rural areas a cost efficient service delivery model.
6. **Can encourage use of various mobile phone services** – GSC will support rural citizens to stay connected to their family and friends through phone call services and also consumer mobile phone packages.
6. **Will offer connectivity deals to get regions connected to internet** – Citizens in rural areas will have the opportunity to subscribe to cost-efficient internet through GSCs internet service. GSCs aim to make this WIMAX in the future.
7. **Will prevent rural people from commuting to cities often** – Through GSCs rural areas will have the convenience of communication and enjoy retail products and packages available to urbanites.

Want to learn more?

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