

DCD

EDUCATION TELEPRESENCE NETWORK SOLUTIONS & SERVICES

Nov, 2019

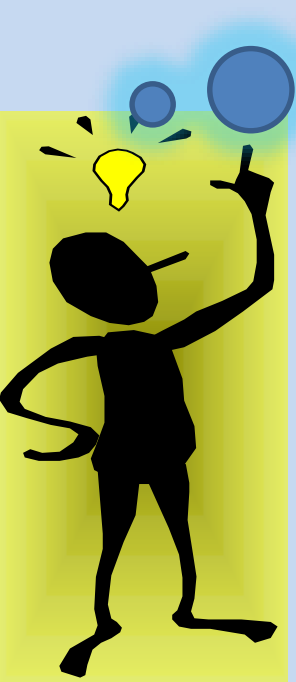
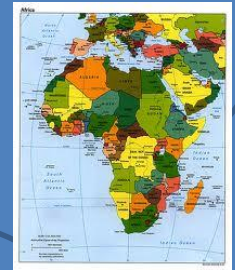
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www.dcduganda.com



**EDUCATION SHARED
SERVICES NETWORK.
(ESSN)
INFRASTRUCTURE**

OUR ESSN VISION is....

“....interacting Learners with
the Best Educators,
Resources and Content at
Affordable Price, Anytime,
Anywhere....”



EDUCATION SHARED SERVICES NETWORK (ESSN)

SHARED SERVICES

- Distance Teaching Shared Resources and Services
- Shared eLibraries and Knowledge Database Resources and Synergies
- PTA Online Services: Quality of Education (QoE) Forums and Co-ordination
- QoS Benchmarking and Performance Management Services

SERVICE PROVIDERS

- Text Book Writers, Editors and Suppliers ePortals
- Private and Public School Teachers
- Licensed Freelance Educators and Trainers

SERVICE PURCHASE AND OPERATIONS

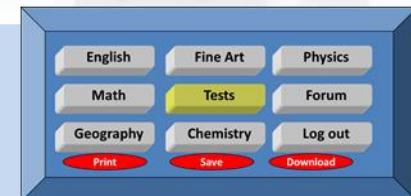
- ESSN Built and Operated by DCD
- Service Purchase: Prepaid and Customer SLA

SERVICE DELIVERY POINTS IN DCD NETWORK

- School ICT Labs and eClassrooms
- Pupils, Students and Parents ePortals & mPortals
- Educators & Education Managers ePortals & mPortals

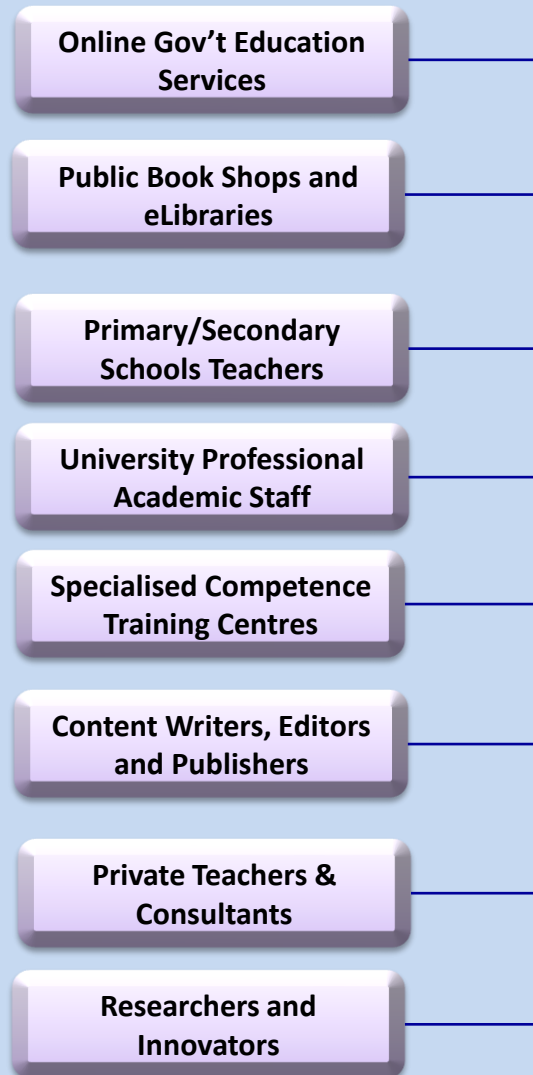
DCD ROLES

- Builds, Operates and Maintains ESSN 24/7.
- CRM (Customer Relationship Management): Tools & Processes,
- Transaction Billing/Payment Management: Subscriptions, Prepaid
- Contract Management: Content & Resources,
- Teacher Performance & Quality Management,
- Content Database Management,
- End-user Electronic and Mobile Portals .



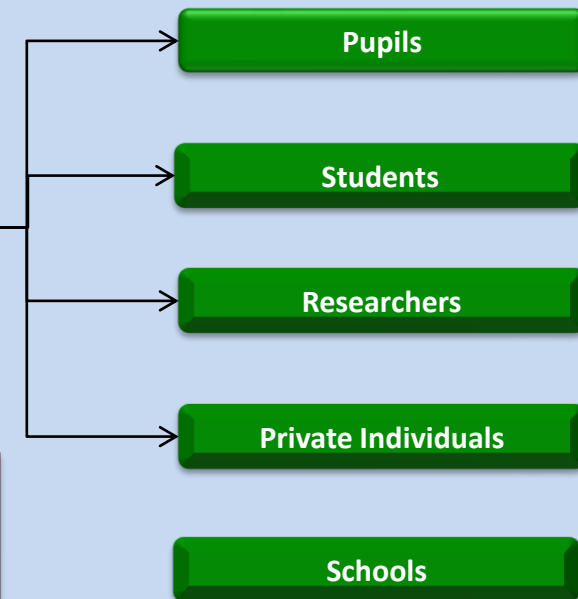
EDUCATION SHARED SERVICES NETWORK STRUCTURE

SERVICE PROVIDERS



- Multi-audience Access and Learning Interaction Environment Designed for Value Creation And Innovation
- 24/7 Mobile Broad Band (MBB) Education and Professional Training VAS Services,
- Easy Access Learning Points – Savings from shortened distance and time
- End-to-End Diversity And High Quality Learning Services
- Shared CAPEX & OPEX, Affordable Pricing And Efficient Delivery,
- High Sales Volumes at Very Low Costs
- Guaranteed Exceptional Learner's Experience and Satisfaction

CUSTOMERS



DCD ESSN (Education Shared Services Network) aims at having the best teachers and material for their customers at affordable subscription fee.

PARTNERSHIP OPPORTUNITY: BUILD ESSN TOGETHER

Content
& Service
Delivery



**EDUCATION
SERVICE
PROVIDER**

**DISTANCE
EDUCATION
SERVICE
&
eCONTENT**

+

DCD

**EDUCATION
TELEPRESENCE
VALUE ADDED
NETWORK
SERVICES
&
OPERATIONS**

=

ESSN

**COMMERCIAL
EDUCATION
SHARED
SERVICES
NETWORK**

Billing
& Payment
Transactions



DCD ESSN MANAGEMENT SYSTEM

Access Media



DCD
Call Centre



mPortal



Web
ePortal

Web Self-Care

Email

Web

Contract Management

Billing / Payment
Management

Educators DB
Management

Content
Management

Customer DB
Management

Call Data Records (CDR) Management

CDR Collector

CDR Parser

Consolidator

CDR Analyzer

Logger

CDR Writer

Provisioning

Online
Provisioning

Bulk / Single
Provisioning

Sequencer

Mobile Number
Portability

Alarms

Logger

Multi-
Network
Node
Integration
to
IN,HLR,VMS,
AIR ,MMSC
etc.

Customer Care

Trouble Ticket
Logging

Alerts / Reminders

Scripts / Checklist

Subscriber Data Viewer

Subscriber
Maintenance

Access
Control

Automatic
Reporting

Workflows /
Escalations

Broadcast /
Ticker Tape

CTI
Integration

Inbox

Bulk
SMS/Email

VAS
Integrator

Campaign Management

Subscriber
Profiling

Campaign
Creation

Campaign
Execution

Subscriber
Behavior Model

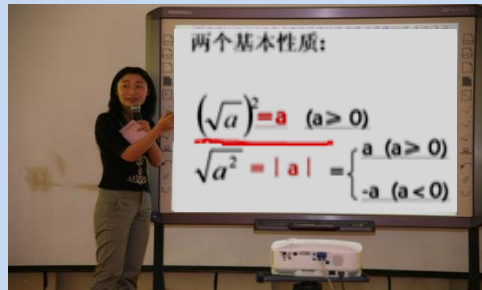
Promotion
Delivery

Reports & MIS

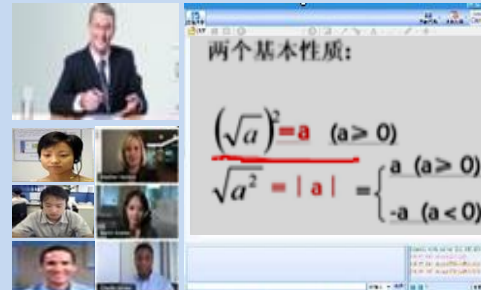
**EDUCATION
TELEPRESENCE
MULTIMEDIA VALUE
ADDED SERVICES**

COLLABORATIVE TEACHING AND TRAINING PLATFORM

Teacher



Multifunction Digital Board



Desktop

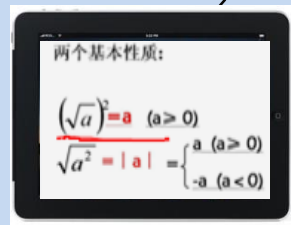


eClass Server



eClass Terminal

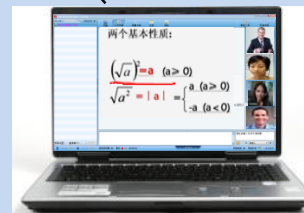
Student



PAD



Smart Phone



Desktop Terminal

FEATURES AND HIGHLIGHTS

VIDEO AND AUDIO SHARING

- Share resources – LIVE!!
- Remote control of screens.

COLLABORATIVE TEACHING

- Electronic whiteboard integrated,
- Physical whiteboard integrated,
- Desktops and application sharing,
- Video courseware,
- Instructional notes sharing.

INTERACTIVE TEACHING

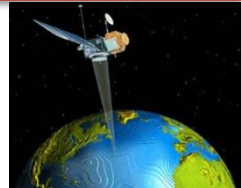
- Free Q & A,
- Group discussion,
- Quizzes,
- Instant message,
- etc.

RECORD AND PLAY

- Records classes LIVE.
- Supports courseware-on-demand.

2,000 concurrent users can interact and collaborate with teachers - same time.

ESSN TELEPRESENCE: PRIVATE EDUCATION (1/2)



SERVICE PROVIDER
TEACHER, LECTURER
TRAINER, COACH
MENTOR, CONSULTANT



SERVICES
 ➤ **TEACHING**
 ➤ **CONSULTING**
 ➤ **TUTORING**
 ➤ **TRAINING**

CUSTOMER
PUPIL
STUDENT
TRAINEE

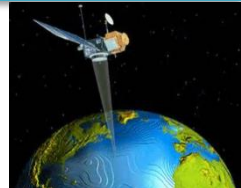


ACCESS
 ➤ **SMARTPHONE**
 ➤ **TABLET**
 ➤ **LAPTOP**
 ➤ **PC**

DCD
 ■ **NETWORK**
 ■ **OPERATIONS 24/7**
 ■ **TRANSACTION BILLING**
 ■ **CONTENT MANGEMENT**
 ■ **CRM (CUSTOMER RELATIONSHIP MGT)**
 ■ **CONTRACT MGT**

ACCESS
 ➤ **SPHONE**
 ➤ **TABLET**
 ➤ **LAPTOP**
 ➤ **PC**

ESSN TELEPRESENCE: PRIVATE EDUCATION (2/2)



SERVICE PROVIDER
 TEACHER, LECTURER
 TRAINER, COACH
 MENTOR, CONSULTANT

SERVICES
 ➔ DISTANCE TEACHING
 ➔ DISTANCE TUTORING

CUSTOMER
 PRIVATE CLASS



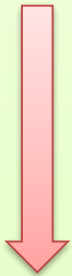
ACCESS
 ➔ SMARTPHONE
 ➔ TABLET
 ➔ LAPTOP
 ➔ PC

DCD
 ■ NETWORK OPERATIONS 24/7
 ■ TRANSACTION BILLING
 ■ CONTENT MANGEMENT
 ■ CRM (CUSTOMER RELATIONSHIP MGT)
 ■ CONTRACT MGT

ESSN TELEPRESENCE: PUBLIC EDUCATION (1/2)



SERVICE PROVIDER
TEACHER, LECTURER



ACCESS
 ➔ SMARTPHONE
 ➔ TABLET
 ➔ LAPTOP
 ➔ PC

SERVICES
 ➔ DISTANCE TEACHING
 ➔ DISTANCE TRAINING



DCD
 ■ NETWORK OPERATIONS 24/7
 ■ TRANSACTION BILLING
 ■ CONTENT MANGEMENT
 ■ CRM
 ■ CONTRACT MGT

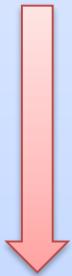
CUSTOMER
SCHOOL
UNIVERSITY
TRAINING CENTRE



ESSN TELEPRESENCE: PUBLIC EDUCATION (2/2)



SERVICE PROVIDER
TEACHER, LECTURER

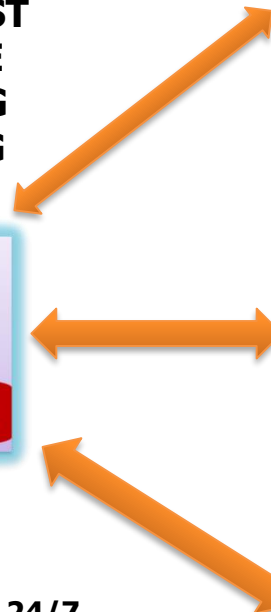
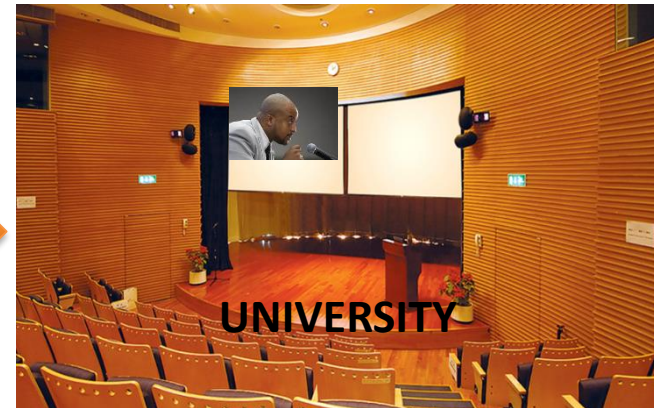


ACCESS
 ➔ SMARTPHONE
 ➔ TABLET
 ➔ LAPTOP
 ➔ PC

SERVICES
 ➔ MULTICAST
 DISTANCE
 TEACHING
 ➔ TRAINING



DCD
 ■ NETWORK
 OPERATIONS 24/7
 ■ TRANSACTION
 BILLING
 ■ CONTENT
 MANGEMENT
 ■ CRM
 ■ CONTRACT MGT



ESSN TELEPRESENCE: MULTI-ACCESS TO eLIBRARIES & eCONTENT

CUSTOMERS



SERVICE CONTENT

- eBOOKS
- eTUTORIALS
- eJOURNALS
- eHomework
- etc.



DCD

- NETWORK OPERATIONS 24/7
- TRANSACTION BILLING
- CONTENT MANGEMENT
- CRM
- CONTRACT MGT



ESSN TELEPRESENCE: COMMERCIAL NON-EDUCATION SERVICES



On the move

AUDIENCES

- CENTRAL GOV'T
- LOCAL GOV'T
- NGOs
- CORPORATES
- SMEs

SERVICES

- eCONFERENCE
- eMEETINGS
- eSEMINARS
- eWORKSHOPS

SPEAKER

- CENTRAL GOV'T
- LOCAL GOV'T
- NGOs
- CORPORATES
- SMEs

Multimedia Classroom in a school



ACCESS PORTAL

- SMARTPHONE
- TABLET
- LAPTOP
- PC

DCD

- NETWORK OPERATIONS 24/7
- TRANSACTION BILLING
- CONTENT MANGEMENT
- CRM
- CONTRACT MGT



At Home with Tablet

**EDUCATION
TELEPRESENCE
END-USER TERMINALS
& ENVIRONMENTS**

DCD END USER CUSTOMER ePORTALS



ATML



Smartphones



WiFi Projectors



WiFi Laptops



eWhite-Boards



PCs



Multi-Functional Screens



Tablets



Wi-Fi Video Camera

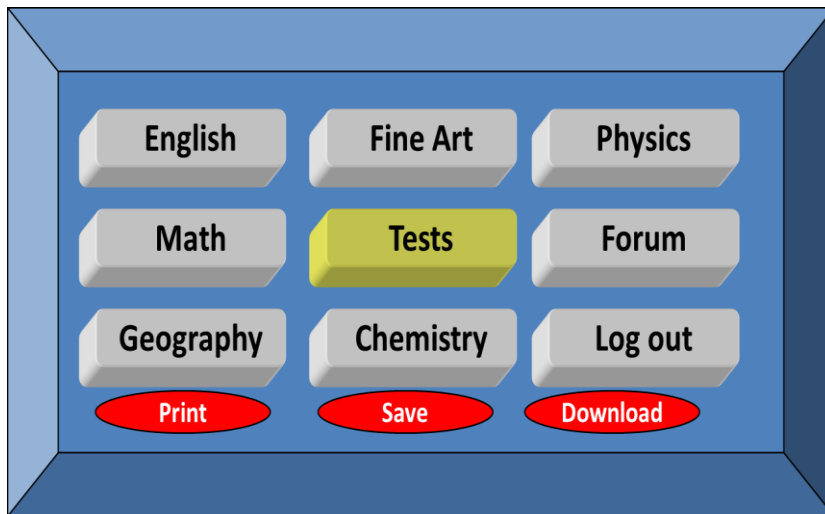


- ◆ ePupils
- ◆ eStudents
- ◆ eEducators
- ◆ eMedical Specialists
- ◆ eGovernment
- ◆ eSocial Education
- ◆ eVeterinary Research
- ◆ eMedcial Resacrh
- ◆ eHealth Care
- ◆ eSafari



ESSN LOW-COST ACCESS

A Pupil/Student/Teacher should be able to **download** the material required to do Homework/Tutorials or Other Class Preparations within **10 min** (max): e.g.



- Login the ePortal or mPortal, Anytime, Anywhere.
- Select Subject
- Select Text Book
- Select the pages needed by the Teacher/Student or Pupil
- Print the pages, or save them on disk or send them to your email box
- Log out of the portal



ESSN
Subscription
Fee:
\$--US/Mth

The Student /Teacher can work off-line and then **upload** content after preparations. **Both download and upload operations together ought to take ≤ 20 min login time.**

ESSN ACCESSIBILITY IN PUBLIC PLACES

PETRO STATIONS



**DCD
Wi-Fi**

Internet Access: \$--US/HR
INT VoIP Call: \$--US/Min
Adverts: \$--US/Day



**DCD Wi-Fi
INetwork**



**DCD
NETWORK
OPERATING
CENTRE**

SHOPS, HOTELS, RESORTS



**DCD
Wi-Fi**

VoIP Call: \$--US/Min

Tutorial Downloads:
\$-US/Mth

**DCD Wi-Fi
NETWORK**

**DCD Wi-Fi
NETWORK**

Internet Access: \$--US/30min

Tourist info: \$-2US/30Min

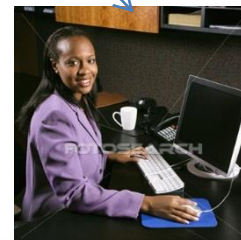
Adverts: \$-US/Day



STUDENT PORTAL ACCESS
Subscription: \$-US/Mth



CITIZEN'S PORTAL ACCESS
Subscription: \$-US/Mth



TEACHER'S PORTAL ACCESS
\$-US/Mth



WORKER'S PORTAL ACCESS
\$-US/Mth

ESSN ACCESSIBILITY IN EDUCATION PREMISES

Wi-Fi Access: \$-US/HR

Competence Training & Workshop Lounges

Wi-Fi Access: \$-US/HR

Internet Education Café

eMeetings Rental: \$-US/Min

Video Conference Rooms

eClassroom: Free Wi-Fi Domestic Use

eTraining Rental: \$-US/Min

Before *After*

Distance Teaching eClassrooms

DCD NETWORK OPERATING CENTRE

eLibraries Access, eTutorials, eForums, eHomework: \$-US/Mth

Education Shared Services

Real Estate

Onsite Accommodation Services (Hostels)

Wi-Fi Access: \$-US/Day

eBook Store: \$-US/Mth

VoIP Call: \$0.16US/Min

Wi-Fi Access: \$-US/HR

Office Environment

SCHOOL ICT LAB: Free Wi-Fi

**EDUCATION
TELEPRESENCE
CUSTOMER BENEFITS**

NEW REVENUE OPPORTUNITIES AND STREAMS

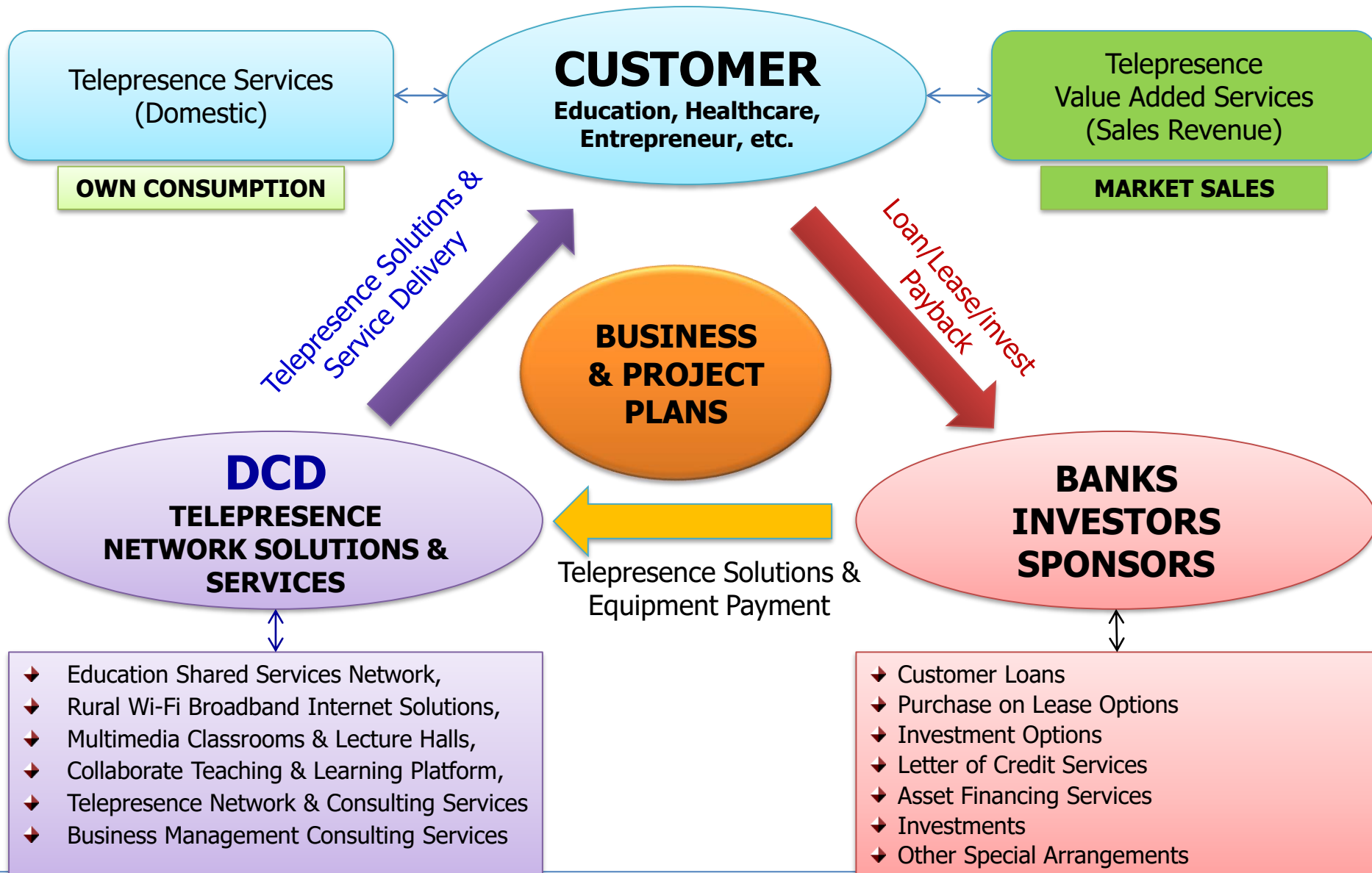
- **Building Wi-Fi Multimedia Facilities in schools like eClassrooms leads to:**
- **The availability of Internet Access and Value Added Services like Video Conferencing, eMeetings, eSeminars, eWorkshops and eTraining; all that leads to Customer Needs for:**
 - Accommodation,
 - Food consumption,
 - Leisure & Tourism.
- **The School can invest in setting up services to meet those Customer Needs, and that leads to new revenue streams from:**
 - Hotel services,
 - Gastronomic Services,
 - Sports Facilities
 - Sight Seeing Facilities, etc.,
- **The targeted Customers are:**
 - Local Gov't,
 - NGOs,
 - SMEs and Large Corporates.

BENEFITS FOR EDUCATION ORGANIZATIONS

- **Open unique opportunities for learners and educators to share knowledge, highly skilled resources and professional expertise internationally.**
- **Share teaching and learning tools, resources, expertise, knowledge data bases and best practices.**
- **Narrow the “Teacher Demand Gaps” through sharing distance teaching services.**
- **Reduce and eliminate time-wastage and distance costs for learners and educators.**
- **Earn valuable supplementary income from sales of Internet Access and Value Added Services like Video Conferencing, eMeetings, eSeminars, eWorkshops and eTraining.**
- **Open new revenue streams that cater for Customer needs like hotel accommodation, leisure, tourism, etc.**
- **Achieve sustainable financial independence over the long term, by generating new revenue streams.**
- **Enhance high-tech rural communication development to help reversing the catastrophic “rural to urban” migration trends.**

**EDUCATION
TELEPRESENCE
PROJECT FINANCING
OPTIONS**

DCD CUSTOMER PROJECT FINANCING OPTIONS



PROCEDURE FOR FINANCING

With DCD's help, the Customer:

- **Chooses Network Site Location(s), where to setup Telepresence Multimedia Service,**
- **Prepares the Business Plan for Telepresence deployment in the chosen site location(s),**
- **Setups a Pilot Project Specification Plan based on the Business Financial Plan,**
- **Presents both the Business Financial and Pilot Project Plans to Financers,**
- **Gets the funding in place for pilot project rollout,**
- **Implements (Roll-Out) the Pilot Project as planned,**
- **Conduct s Risk Evaluation and Assessment based on the Pilot Project,**
- **Reviews both the Business Financial Plan and the Project Specification Plan,**
- **Make decisions for further project activities,**
- **Considers additional business for value added services like: accommodation, gastronomic services, leisure & tourism services, etc.**

DCD-CUSTOMER PARTNERSHIP VALUES

DCD-CUSTOMER PARTNERSHIP VALUES

CUSTOMER+DCD

=

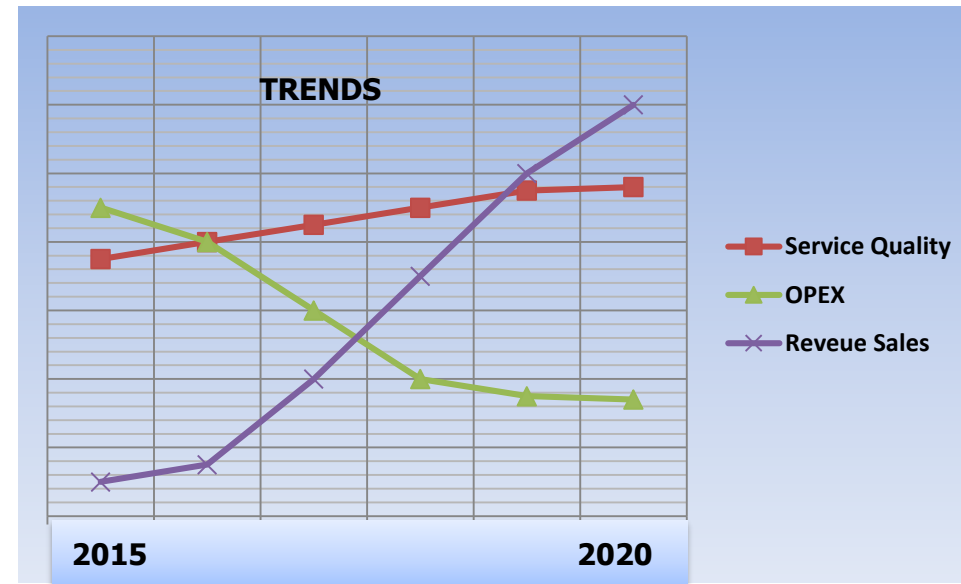
**Better & Affordable
Education Shared Service
Quality**

plus

**More Self Financing &
Economic Independence
Opportunities**

at

**Minimum Investments
& Less Operating
Expenses**



DCD 3ARMS BUSINESS MODEL
"...DCD Telepresence Solutions and Services are designed to enhance High Quality of: Availability, Accessibility, Affordability, Reliability, Manageability and Suitability (3ARMS) of Service Delivery in Education and Healthcare..."

WHY CHOOSE DCD?

DCD VALUE PROPOSITIONS ARE:

- Complimentary and add unique values to our Customers' existing and future ICT Programs, projects and operations; that enhance higher quality of service delivery at lower costs and revenue generation;
- Designed to facilitate the improvements on quantity and quality of Telepresence Network Operations and Services at Customers' Sites; through deployment of wireless broadband solutions; only when and where unique value can be added.

DCD CAN AND IS READY TO:

- Help our Customers reduce Time-To-Customer (TTC) and the costs of service delivery, through deployment of TelePresence Solutions with the right Technology and Expertise;
- Enable our Customers to improve on the quality of the 3ARMS of service delivery, while generating new profitable revenue streams;
- Get our Customers connected locally and globally, hence expand their arenas for business & market growth;
- Boost the Customers' long-term plans for financial self-sustainability, competitive business and market growth;
- Work with Customers' ICT Teams and their affiliates as one Team with focus on the mutual goals and objectives set and agreed on;
- Work effectively and smoothly in a multi-vendor environment with other ICT/Telecom companies having assignment contracts with the Customers;

Contacts:

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