



Adoption of ICT usage in schools through the National School Management and Information System - dotShule®

Adoption of ICT usage in schools is where a school changes from using traditional manual processes/ IT school management system to a modern electronic mean (ICT) of capturing, processing, storing and disseminating of general school information to all school stakeholders following the administrative structures of a given school.

While there is a wide range of Information Technology (IT) systems, there is a need for the education sector to function as a whole through use of modern Information and Communication Technology (ICT). ICT is an extended term for IT which is an electronic mean of capturing, processing, storing and disseminating information to users. This involves a set of technological tools and resources such as; computers, internet and software. Extraordinarily some schools are using stand-alone systems while others are using nearly obsolete systems consequently unable to exploit the educational potential of the emerging technologies. Subsequently, internet usage in schools calls for a standard school internet based system to bridge this information and communication gap especially the gap between Home and School.

dotShule® is a Teacher-Parent-Learner ICT application used by all staff members to capture, store, process and disseminate school information to all stakeholders following the administrative structure of a school to improve on the implementation and operation of the curriculum. It is an internet accessed system based on cloud computing technologies purposely to integrate internet/ICT usage in the school day-to-day teaching and learning activities. The program enables teachers to adopt and effectively use ICT to improve on productivity and efficiency in executing school routines. It also improves on learners discipline and performance through providing of real-time attendance, behavior and other statistical reports to the school administrators and parents with alerts on a learner.

dotShule® is an interactive program for all school stakeholders as it introduces usage of computers/ICT to both teachers and learners. To effect system interaction, a unique ID number (dotShule® account) is assigned to every stakeholder including parents through which the learner's profile and progress is tracked. It is through this account that learners can access the e-learning platform embedded in the system anytime be it during holidays thus supporting effective and efficient educational outcomes. All users are managed by the school administration through access rights.

The program is self-sustaining in view of the fact that multi-user ICT programs sustain themselves. dotShule® meets this fact by parents contributing a termly ICT/E-service fee to the school which contribution helps to supplement the school ICT budget, unlimited internet throughout the year, and system maintenance.

dotShule® manages the school through the 19-points-program as seen below;

1. Real-time school Statistical analysis reports
2. School e-Registers for Taking student school presence and lesson attendances.
3. Benchmarking of students' school attendances for the study periods.
4. Results performance analysis reports and Report Printing
5. Scholar Fees payment tracking and statements with various e-payment means
6. E-learning platform - teachers upload assignments/notes for students/pupils to learn through their individual dotShule® accounts.
7. e-Notice board and e-Suggestion Box – For all school stakeholders' Communications.

8. Medical status reports and files information management.
9. Generation of school custom made Identity Cards & visitors' cards for students/pupils which automatically become invalid once a scholar changes the school even if the ID card expiry date is not due.
10. Seamless Progressive/Continuous assessments.
11. Real-time provision of accurate school Enrollment Reports basing on, class distribution ratios, Gender, Age and Teacher qualifications.
12. Academic profiling of students/pupils.
13. Profiling of students' school responsibilities and behavior reports.
14. Parents monitoring their own child's academic performances, attendances, behaviors.
15. Instant bulk SMS from the school to parents.
16. Head-teacher is able to manage the school electronically.
17. Websites for all schools in Uganda integrated within Schools' E-directory.
18. High Information durability for demographic and identification analysis within the school.
19. Online access to academic performance reports by parents and students.

Entry Level/Implementation Requirements

The program requires at least one computer connected to the Internet as an entry level for schools without any ICT infrastructure. However, having four (4) computers is recommended with a portable computer like a laptop that can as well work as an electronic register for class attendance taking.

The following activities are carried out during the program implementation process.

1. School connection and designing of the School website.
2. Digitalization of school information and taking of scholar passport photos.
3. Training of teachers

Benefits to the School

1. Access to unlimited Internet throughout the year.
2. School ICT infrastructural Development.
3. Listing the school on the National School directory.
4. Laptop computers for staff members
5. Capacity building and training of teachers.
6. School bulky SMS and Email services.
7. Providing and hosting the school website on the **dotSite® platform**. This offers direct advertisement to help the school spread awareness and gain more visibility online.

Benefits to the Parents/Learners

1. Online Maintenance of the Learner's academic profile for future reference.
2. Automated continuous assessments and profiling of other learner's school responsibilities.
3. Access to e-learning platform anytime including holidays.
4. Real-time access to up-to-date school information whenever and wherever a user may be.
5. Improves on the discipline and performance of a learner through providing real-time attendance, behavior and other statistical reports to the school administrators and parents with alerts on a learner.

Parents' Input

Benefactors/Parents contribute a termly ICT/ dotShule E-Service fee per child of a **minimum** of Twelve thousand Uganda shillings (UGX12,000) to the school. The school remits Eight Thousand Shillings (UGX8,000) per child to Dotsaidia if Internet is provided by Dotsaidia or Six Thousand Shillings (UGX6,000) per child if the school subscribes for Internet itself.

Responsibilities of the School

The school ensures that there are computers in place and maintain the relevant school ICT infrastructure to operate the system using the portion of the ICT/ E-service fees retained from the school benefactors.

The ICT infrastructure required at school for the program includes:

1. Computers/Laptops for staff members.
2. A school Local Area Network (LAN) to be used to access the system and the Internet in Classrooms, Staff-rooms, Library, Offices and in the Compound.

The ICT infrastructure remains a school property.

Responsibilities of Dotsaidia Systems Ltd

Upon receiving the payment from the school, Dotsaidia Systems Ltd ensures that there is:

1. Continuous access to the system all the time
2. School access to unlimited Internet throughout the year.
3. Listing the school on the National School directory.
4. Providing and hosting a school website on the dotSite® platform.
5. School bulky SMS and Email services.
6. Continuous support to the school regarding system usage.
7. E-Learning platform for materials such as Revision notes, Exercise and Holiday packages posted by teachers.
8. School E-document store.

Responsibilities of the Ministry of Education and Sports

The Ministry of Education supervises the work of Dotsaidia Systems Limited in schools and also Encourages schools to adopt and use dotShule® to enable teachers effectively use internet/ICT in their day-to-day school teaching and learning activities for better provision of quality education.

dotShule School Connection Cost

S/No	ITEM	DESCRIPTION	AMOUNT
1.	School Connection	Listing the School on the National School Directory, Taking website photos and setting up the School website on the dotSite®Platform	150,000.00
2.	Training School Staff	Training the School teaching Staff and administrators for five (5) days.	250,000.00
3.	Digital Passport Photos	Taking standard digital passport photos for the students and staff members. (School staff members' passport photos are taken without any charge.	1,000.00 per passport photo
4.	Data Entry	Digitalizing student and staff bio and academic information	The cost of Data Entry depends on the number of students in the school. (see table below)

Data entry costing

S/No	Number of Students	Amount (UGX)	S/No	Number of Students	Amount (UGX)
1	1 – 500	300,000	8	2001 – 2250	1,350,000
2	501 – 750	450,000	9	2251 – 2500	1,500,000
3	751 – 1000	600,000	10	2501 – 2750	1,650,000
4	1001 – 1250	750,000	11	2751 – 3000	1,800,000
5	1251 – 1500	900,000	12	3001 – 3250	2,100,000
6	1501 – 1750	1,050,000	13	3251 – 3500	2,250,000
7	1751 – 2000	1,200,000	14	3501 – 3750	2,400,000

dotShule® is a hands-on approach at all levels through which teachers and learners get exposed to the varsity benefits of using ICT/computers in schools and beyond.

The table below shows some of the schools in various districts that accepted to provide a reference to other joining schools.

List of dotShule Model Schools

No.	LOCATION/DISTRICT	SCHOOL
1	RUKUNGIRI	Katurika Senior Secondary School
2	MBARARA	Sentah College, Mbarara Preparatory Primary School and St. Peters' Katukuru
3	MASAKA	Kijjabwemi Secondary School.
4	WAKISO	Mugwanya Preparatory School Kabojja and Alliance High School, Nansana.
5	KAMPALA	Midland High School, Kawempe and Kampala High School.
6	LUWERO	Ndejje Senior School and St. Mary's Senior Secondary school, Namaliga
7	JINJA	Jinja College and Nyanza High School, Muguluka-Kamuli Rd.
8	BUTAMBALA	Gombe Secondary School.
9	BUIKWE	Owen falls Junior School

Dotsaidia Systems Ltd. offers a free trial study term to all connected schools as a grace period to enable benefactors'/parents' adoption of the programme.