**sendQuick®**

SMS Educational Institutions & Services
Reducing Cost & Increasing Efficiency in Communication

# Contents

**INTRODUCTION**

Education in the 21st century is increasingly challenging and exciting. In line with globalization and advancement in technologies, top trends in education includes diversification, mobile learning and personalized training.

With the increase in student and parent expectations as well as a growing pool of competition, educational institutions have to search for ways to be more innovative and efficient to remain competitive.

Technology can be a way to aid in increasing efficiency in communication as well as facilitate new forms of learning that will add to the educational experience. This document will focus on SMS technology and how SMS can reduce cost, increase efficiency in communication as well as foster greater interaction between students, parents and teachers to build a community conducive for learning.

**INTRODUCTION TO SMS**

Short Message Service (or known as SMS or text messaging) are found on all mobile phones across across all technologies, including GSM, CDMA and 3G. SMS is a short message that can be sent from a phone to phone, and pushed to the recipients device when sent. The technology delivers each message as a 'package' of 160 characters but current improvement allow them to be sent as 'long message' (a few SMS to be read and delivered as a single message) which is known as conentrated SMS. Some key advantages of SMS includes, short messages of 160 characters are delivered instantly across all mobile phones and network, good interoperability between networks and technologies (GSM and CDMA), non-intrusive nature, always operational, service is activated by default to all phone users, low cost while most cost less than a normal voice call, sender pays, free for the receiver and messages delivered across networks (roaming) capability.

With mobile phones becoming the dominant mobile device that many people own, SMS becomes the most popular low cost messaging medium for all users. Furthermore, the mobile penetration is very pervasive (countries like Singapore, Hong Kong and Taiwan and more than 100% mobile penetration in their population) and the popularity of SMS (the Philippines send more than a billion messages a day) making mobile phones and SMS the most natural choice for education institutions to reach customers.

**EDUCATIONAL SERVICES TO GO MOBILE**

There are numerous ways SMS can be utilized in the Education Industry and this paper shall look at 4 broad areas namely using SMS for general broadcast of urgent and/or important information, using SMS for relationship management and for more effective communication within the institute.

**SMS UPDATES ON EPIDEMICS**

Recent health threats like SARS (Severe Acute Respiratory Syndrome) and H1N1 has alerted educational institutions of the need for an emergency response system. With sendQuick's SMS solutions, educational institutions can quickly and efficiently send bulk SMS notifications to the relevant parties. This aids in reducing costs and assists parents to quickly be aware of the situation in order to decide on the best course of action.

Benefits to Educational Institutions - quicker way to get the alert out to the masses rather than through calls/emails, reduces effort on the administrator's part this freeing up resuorces to deal with other matters and low cost to apply.

Benefits to Students/Parents - No missed calls - message is available when they are ready and can be read and acknowledged quickly and easily.

**SMS FOR SCHOOL FEES & OUTSTANDING PAYMENTS**

The administration and costs associated with the collection of school fees and outstanding payments can be significant for an educational institution. SMS can help reduce the occurance of financial and psychological stress that may manifest to the administrators and parents during the activity.

Benefits to Educational Institutions - Minimize effort on the administrator's part as SMS is automated, reduces on reminder transaction costs (mail reminder costs about S$1.00 in material costs compared to SMS cost of S$0.05) which translates to a savings of 95%, better financial health with no late payments and paperless approach is environmentally friendly.

Benefits to Students/Parents - Non-intrusive and portable notifications, prompt payments will avoid incurring late penalty fees translating to more savings for students/parents and immediate receipt for execution of payments.

**SMS FOR REMINDERS FOR AFTER CURRICULUM ACTIVITIES & CHANGES IN TIME-TABLE**

Educators often talk about their frustrations in having to remind their students about extra curriculum activities and poor attendance. An automated SMS reminder system would assist to reduce administrative efforts of the educator.

Benefits to Educators - Reduces effort on the Educator's part to call/remind, achieve better attendance and more effective and efficient use of the Educator's time.

Benefits to Parents - Awareness of their child's activities in school which reduces anxiety and places them in a better position to help their child in preparation for the activities.

Benefits to Students - Better attendance, more prepared to aid in the learning process and maximizes on learning opportunities.

**SMS FOR PARENTAL CONSENT**

Chasing for the return of parental consent forms can be a hassle as Educators rely on students to relay the forms to their parents and students may forget. Using SMS to seek parental consent could increase efficiency as it allows the Educators to communicate directly and receive almost instantaneous responses.

Benefits to Educators - Minimizes effort on the Educators part for making calls and reminders, more direct communication with the need to wait for the students to relay the message, reduce on paper costs (about S$0.10), SMS (about S$0.05), translates to savings of up to 50% and being paperless - it is environmentally friendly.

Benefits to Parents - Increased awareness of what their child is up to hence reducing on anxiety and places them in a better position to help their child in preparation for the activity.

Benefits to Students - Reduces the burden of being the message conveyor.

## SMS FOR INCREASED EFFICIENCY IN MONITORING STUDENT PROGRESS & PERFORMANCE

### SMS FOR ATTENDANCE RECORDS

Parents may not know if their children have been skipping school if there were no updates available. With SMS for attendance records, parents can have a clearer picture on the attendance of their child.

Benefits to Educational Institutions/Educators - Automated hence less administrative costs and parents can help ensure attendance in a more fuss free method.

Benefits to Parents - Increased awareness on their child's attendance in school with the ability to carry out disciplinary action when necessary and direct notification from the school instead of being dependent on the child to convey the message

### SMS FOR RELEASE OF EXAMINATION RESULTS

Educators, Parents, Students no longer have to come together at a common date, time and venue to get updated on examination results. With SMS as a secure way of releasing examination results, all parties involved can be updated anytime and anywhere.

Benefits to Educational Institutions/Educators - Reduce on administrative costs and hassle as it can be sent out automatically and save on operational costs as compared to having to meet and release the examination results to the students physically in person.

Benefits to Students/Parents - Convenience as they can be notifed anytime and anywhere, no need to physically queue for the release of results and save on transportation time and costs. (Free to receive SMS)

### SMS FOR PARENTAL ENQUIRIES

When parents have enquiries, they may call the school to enquire about their children. However, the school may not be aware of the individual status of the students. Through SMS, it can be a direct yet unobtrusive way to communicate with the Educator.

Benefits to Educational Institutions/Educators - Direct communication with Parents to further understand parental expectations and need of the child.

Benefits to Parents - Direct communication with Educators & Educational Institutions.

## SMS FOR REMINDERS TO PARENTS & STUDENTS ON ASSIGNMENTS & PROJECTS

One of the common excuses students give for not doing their homework is they forgot. There will be times when Educators might have to call and remind the student and the parents when it becomes too frequent. With this SMS service, students can be reminded to perform the necessary and hand in the required on time. This lessens on unnecessary disruptions to the learning journey as well as frees up the Educators time for other important matters.

Benefits to Educational Institutions/Educators - Reduces time wasted in reminding Students about assignments/projects, better use of resources and lessens the disruptions to conducive learning.

Benefits to Students - Receive better grades with fewer penalty incurred over late submissions and allow them to learn how to manage time wisely.

Benefits to Parents - Be updated on their child's assignments and projects, better equipped to assist their child in preparation when necessary and reduces the anxiety of learning that their child has not been punctual in handing up assignments.

### SMS UPDATES & RELATIONSHIP MANAGEMENT

Happy Parents and Students not only results in a more positive learning environment but also generates good testimonials and referrals for the schools.

### SMS REMINDER ON START OF ACADEMIC YEAR, EVENTS & ACTIVITIES

To remind Students, Parents, Educators of the reporting date and time on the start of the new term especially after a long break.

Benefits to Educational Institutions/Educators - Reduces effort on administration for the Educators and increases/improves on attendance.

Benefits to Students/Parents - Convenience as notifications can be delivered anytime and anywhere which minimizes excuses on forgetfulness or tardiness.

**SMS NOTIFICATIONS OF RELEVANT BOOK FAIRS, INDUSTRY TALKS, INTERNSHIP & JOB OPPORTUNITIES**

Educational Institutions can link up with external parties/alumni and so forth, to establish on a healthy network which can assist Students to be workforce ready.

Benefits to Educational Institutions/Educators - Improve competitiveness by establishing a network of corporate contacts, will be identified as a value added service and also translates as less administrative hassles.

Benefits to Students/Parents - Will be informed and updated and also maximizes on learning opportunities.

**SMS FOR HEALTHY STUDYING TIPS**

A study friendly atmosphere can be enhanced with healthy studying tips.

Benefits to Educational Institutions/Educators - Promotes conduciveness in studying by disseminating useful and necessary studying tips.

Benefits to Students/Parents - Helps Students to study smart as well as hard and saves on time and effort.

**SMS SCHEDULED APPOINTMENTS BETWEEN STUDENTS, PARENTS & EDUCATORS**

Instead of the traditional letters and phone calls that are dependent on the availability of the Educators/Parents to take the phone call (especially with Educators teaching and Parents working), SMS can be a quick and easy way to schedule appointments.

Benefits to all - More direct and instant communication as opposed to passing of messages between Parent and Educator via the Student, hence, it is a more time efficient.

**SMS FOR BIRTHDAY GREETINGS & WELL-WISHES**

A simple gesture can go a long way. This will help foster good relationships with the parties involved in the learning network be it Educators, Parents or Students and it can be implemented at a reasonable cost.

Benefits to Educational Institutions - One available option for building up competitive edge especially in the private education industry. It is also cost effective and can help in creating rapport between Educators, Parents and Students for a better learning environment.

**SMS FOR FEEDBACK/SURVEY FORMS FROM EDUCATORS, PARENTS & STUDENTS**

Quick and concise SMS questions that are fast and easy to deploy and respond to can encourage higher response rates as compared with long surveys.

Benefits to Educational Institutions - Less expensive as compared to surveys done over paper. A printed page costs about S$0.10 while SMS only costs about S$0.05, also results in less administrative hassle for implementation, colation and collection of results, more environmentally friendly and achieve better response rates.

Benefits to those surveyed - Less tedious than filling in long surveys and more convenient and mobile.

**SMS FOR MORE EFFECTIVE COMMUNICATIONS WITHIN THE INSTITUTE**

**SMS FOR INTER-FACULTY/DEPARTMENT COMMUNICATION**

There may be occasions where mass inter-faculty communication is required for notifications.

Benefits to Educators - Be notified instantaneously and message can be read with convenience which is not disruptive while teaching and no missed calls.

Benefits to Educational Institutions - Quicker to mass SMS than to call individually to a large group of recipients and the automated system frees up on administrative resources for other important matters.

**SMS FOR ENTERPRISE IT SYSTEMS NOTIFICATIONS**

At the heart of all enterprises is a reliable IT and network infrasturcture. Network and systems availability is a critical function for any enterprise, from delivering internal corporate services, managing patient data to call centre operations and so forth. The IT support team needs to be informed immediately  when there are critical events affecting the IT network and systems infrastructure.

Using SMS to deliver system and network alert notifications provides instant notification. This enables the IT team to be more responsive and proactive at solving potential problems before services and end users are affected.

**SENDQUICK SMS SOLUTION FOR THE EDUCATIONAL INDUSTRY**

sendQuick SMS gateway is an appliance based SMS system suitable for educational institutions.

As an enterprise class system, sendQuick supports multiple types of configurations, from single server to RAID and High Availability (HA) infrastructure to ensure continuous SMS service availability to users. sendQuick has the following features for educational operations as listed below:

• Interface to back end system via HTTP Post, TCPIP messages, Secure FTP, ODBC and others
• Web interface for direct messaging for different users to send different messages
• Bulk messaging capability
• High throughput via Telco connection via HTTP Post or SMPP3.4
• GSM modem messaging as a backup capability
• 2-way messaging to banking system for transaction enquiry
• IT notification messaging format (SMTP, SNMP Trap and Syslog)
• Database integration via ODBC connection
• Other connection method that can be customized

Unlike normal applications, sendQuick is delivered as an appliance server hence delivering its innate benefits to the IT and application team. sendQuick has a low Total Cost of Ownership (TCO), is maintenance free and helps to reduce support costs. Furthermore, all sendQuick systems comes with one (1) year standard warranty. As an appliance, it is easy and quick to deploy for the standard modules. sendQuick has been deployed in more than 1000 customers worldwide in more than 15 countries across industries in a wide variety of applications including educational institutions.

## TECHNICAL OVERVIEW

sendQuick works on standard TCPIP protocol, connecting to the network using standard 100BT with normal RJ45 cable. For Gigabit ethernet, the server that support this high speed network can be chosen. The schematic diagram is illustrated below:
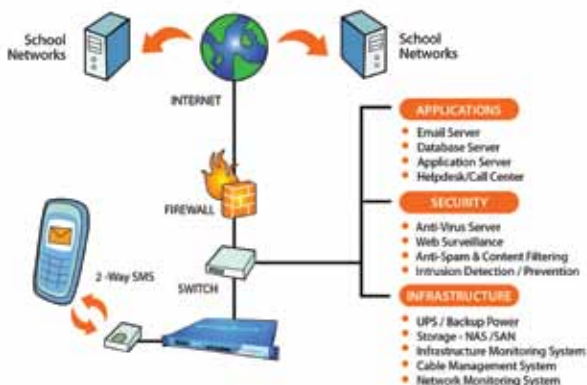


## RETURN ON INVESTMENT (ROI) COMPUTATION

sendQuick presents a good ROI for most organizations. Infact, the ROI can be achieved fairly easily for most organizations. As an illustration, we are using just a few services that an organization may deploy. If the organization deploys more services, the ROI will be shorter (faster).

Assumptions:

Educational Institution has:
- average of 5000 administrative notices and communication to send in a month
- process/handle 5000 calls per month (incoming/outgoing)
- per SMS cost is S$0.05

Cost savings on communication with various parties

i) Cost of sending a notice via normal mail: (5000 x S$1.00) = S$5000
ii) Cost of handling/processing a call in terms of man hours and phone bills: (5000 x S$2.00) = S$10000

Assuming that:
30% of the letters are replaced by SMS
30% of the calls are diverted to SMS
Cost savings from SMS service per month:

i) (30% x 5000 x S$1.00) - (30% x 5000 x S$0.05) = S$1425.00
ii) (30% x 5000 x S$2.00) - (30% x 5000 x S$0.05) = S$2925.00

Possible cost savings in using SMS for a school operation in the educational industry is S$52,200 per annum.

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sendQuick® is the industry's leading appliance based SMS gateway specifically designed for enterprise messaging. Developed in 2004, it has since been implemented by more than 1300 companies worldwide across all continents.

As a low cost plug-and-play appliance that is reliable, scalable and compatible with key mobile technologies like GSM and CDMA, sendQuick® has been applied successfully across various industries. Examples includes banking, finance, insurance, manufacturing, retail, government, logistics, education, healthcare; for purposes like IT alerts and notifications, 2 factor authentication with SMS OTP (One Time Password), marketing campaigns, emergency broadcasting.

sendQuick® is developed by TalariaX Pte Ltd, a Singapore incorporated company focusing on mobile application development specifically on SMS, MMS and 3G technologies. Based on the channel development business model, TalariaX™ takes pride in working with strong partners, distributors and resellers to bring the benefits of SMS to enterprise customers worldwide.