

- Payment gateways(PG) and SMS gateways(SG)
- WELCOME

From:

Prof V.A.Dixit

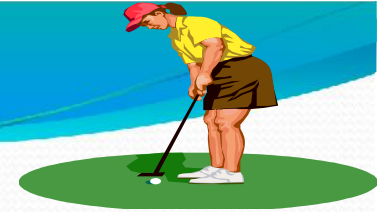
Mob:9881137135

vitthal_dixit@yahoo.com



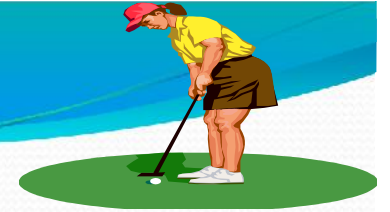
Agenda

- Need for payment gateways.
- Architecture of payment gateways.
- Working of payment gateways.
- Benefits of Payment gateways.
- Working of SMS gateways
- Use of SMS gateways.
- Q & A
- Close out



Background

- What is internet?
- What is WWW?
- What is E-commerce?
- What is E-Governance?



Vision for E-Governance in Maharashtra



- Transforming Governance and enriching lives through ICT.
 - Continuous innovation and evolution
 - Transparency
 - Cost effective and streamlined governance
 - Improve service delivery-Citizen centric.
 - Enhance people participation in policy making

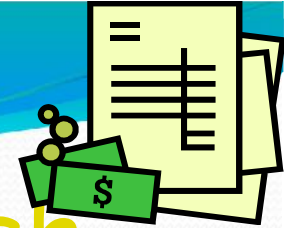


Translation of Vision - Six pillars



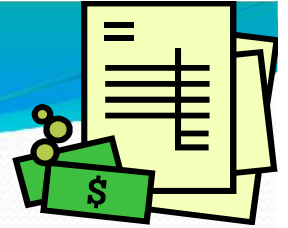
- Establishment of Policy/Legal framework.
- Develop strong capacity building framework.
- Facilitate abundant funding.
- Institutional framework.
- Build common core e-Governance Infrastructure-PG/SG
- Develop common state wide projects-PG/SG

Receipts and Payments



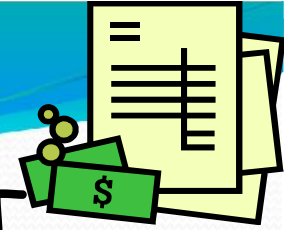
- <http://www.youtube.com/watch?v=KtcUGD42zYo>
- <http://www.youtube.com/watch?v=gG5kLlfZcik>
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Need for Payment gateways



- Delay in credit-Citizen/Govt
- Leakages in revenue/Payment-Frauds
- Delay in reconciliation/Audit
- Increase in cost-Human/paper
- Lack of consolidated position for MIS/Budget
- Increase in complaints from customers.

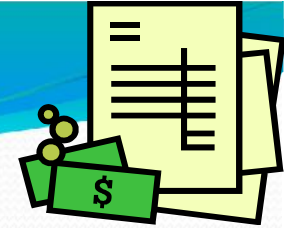
Need for Payment gateways



- Proliferation of E-commerce and ICT during last more than decades all over world.

- Virtually all e-commerce sites accept credit cards as their primary form of payment. To accept credit cards, you need a merchant account with a bank..

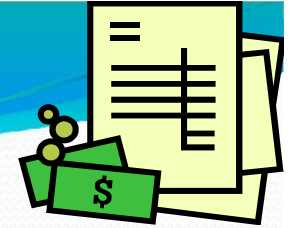
Definition of Payment System



.Payment system- Financial system supporting transfer of funds from payers to payees.

- In India, the payment and settlement systems - regulated by RBI -under Payment and Settlement Systems Act, 2007(PSS act 2007)

Definition of Payment Gateways



- A payment gateway is an e-commerce application that authorises payments for e-services like B to B, B to C, G to C, G to B which is integrated with banks.
- It connects your Web site with the bank - it is - a way to take payments online
- It has provision to accept payment by
 - Credit card
 - Debit card
 - Net banking
 - Bill Desk
 - Cash card wallet.

Working of Payment Gateways



- Payment Gateway protects credit card details by encrypting(SSL-secured socket layer) sensitive information during entire journey from customer to merchant to bank.

. It is similar to the difference between sending a post card and a tamper proof sealed envelope.



Working of Payment Gateways



- Govt Of Maharashtra has two payment Gateways for e-payments.

- Govt receipt accounting system (GRAS) - Rs.20,000/- crore.
- Maha online Payment gateway. - Rs.40/- crore.



Working of Payment Gateways

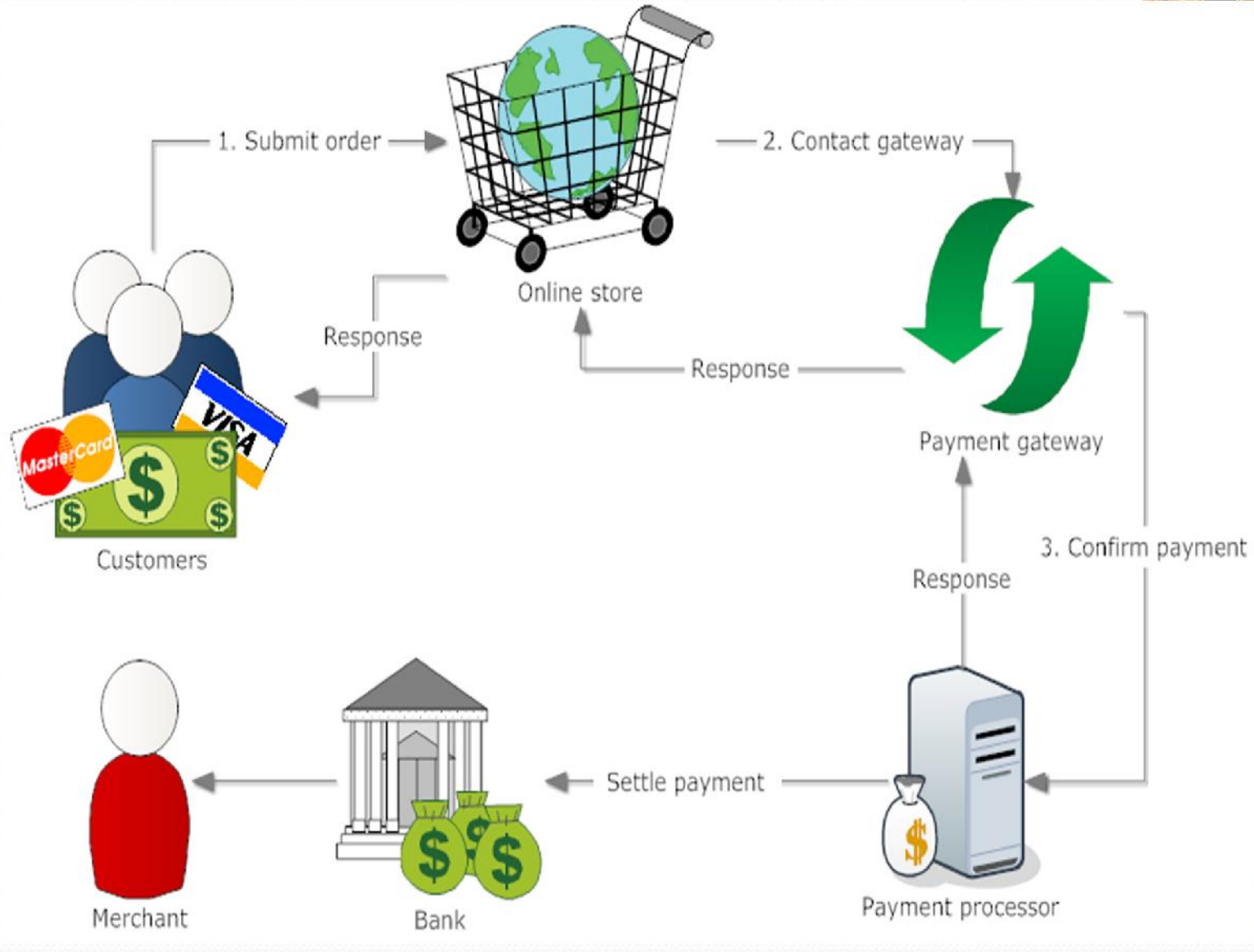


- Typically, when a customer enters credit card details on your Web site, those details are sent to the payment gateway, which then does some hard work in the background and processes (or rejects) the transaction.
- It then tells your shopping cart whether the payment was accepted or rejected. All this happens in a few seconds while the customer is waiting.

• <http://www.youtube.com/watch?v=-fJj-kfa50o>



Working of Payment Gateways

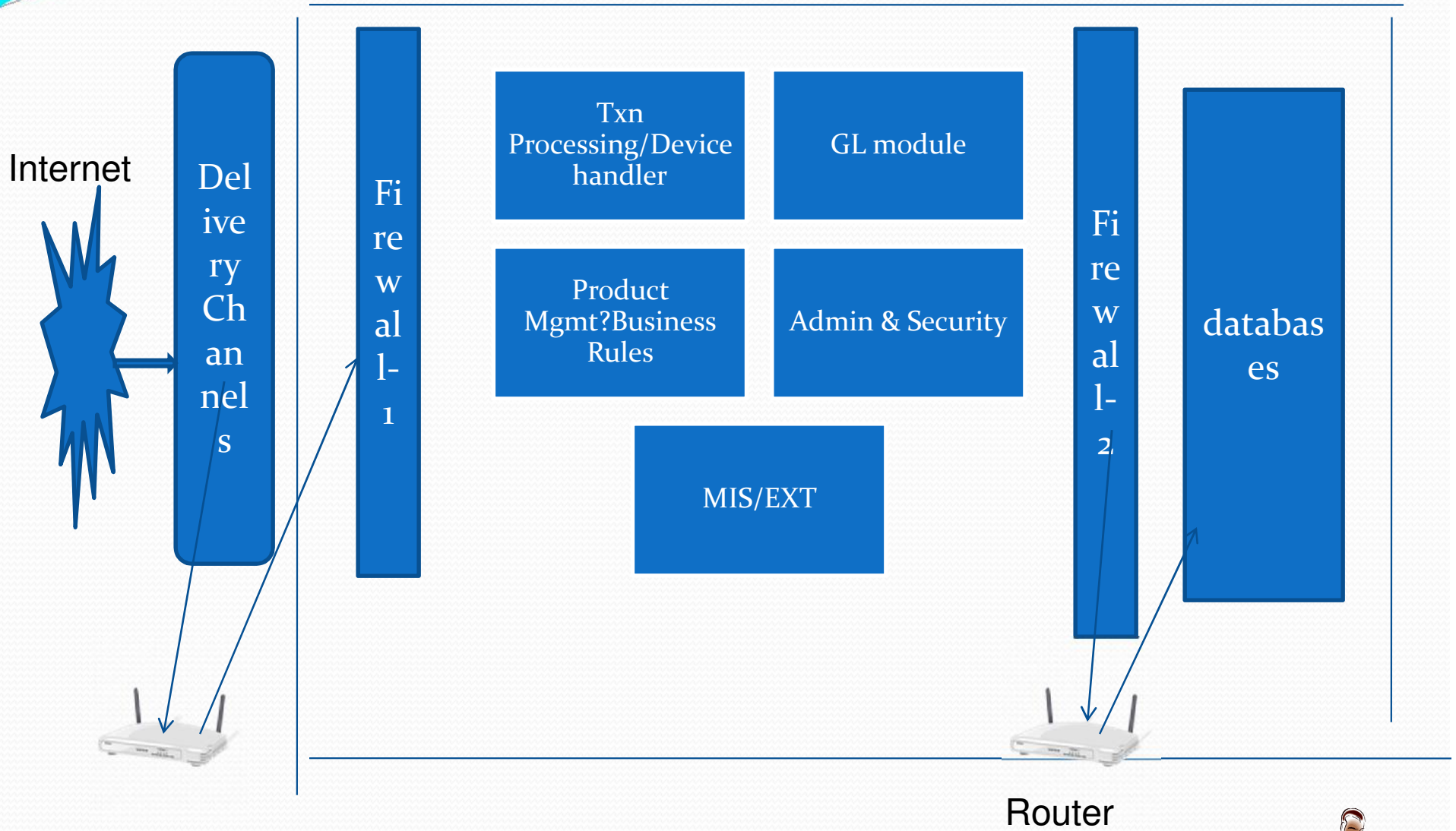


What is Core Banking?



- CORE stands for "Centralized Online Real-time Exchange". This basically means that all the bank's branches access applications over network from centralized data centers on real time basis.
- Core Banking Solution (CBS) is networking of branches, which enables Customers to operate their accounts, and avail banking services from any branch of the Bank on CBS network, regardless of where he maintains his account.
- The customer is no more the customer of a Branch. He becomes the Bank's Customer. Thus CBS is a step towards enhancing customer convenience through Anywhere and Anytime Banking.
- Pre-requisite-i) Data centre connected with all branches. ii) DRP and ISMS in place iii) Mind set change

Network for CBS



Router



Benefits to customers & Banks



Customers

- **To avail**
 - **cash payment**
 - **deposit cash**
 - **deposit cheque**
 - **Get statement of account**
 - **Balance enquiries**
 - **Utility Bill Payment**
- **at any of CBS branches of bank**
 - **Customer is linked with entire bank and not just parent branch.**
- **24X 7 service at ATM/Phone banking/Mobile banking/Internet Banking/KIOSK Banking**
- **Freedom from Ques, Time, location.**
- **Direct credit of Govt subsidies in a/c.**



BANKING – ATM & Plastic cards

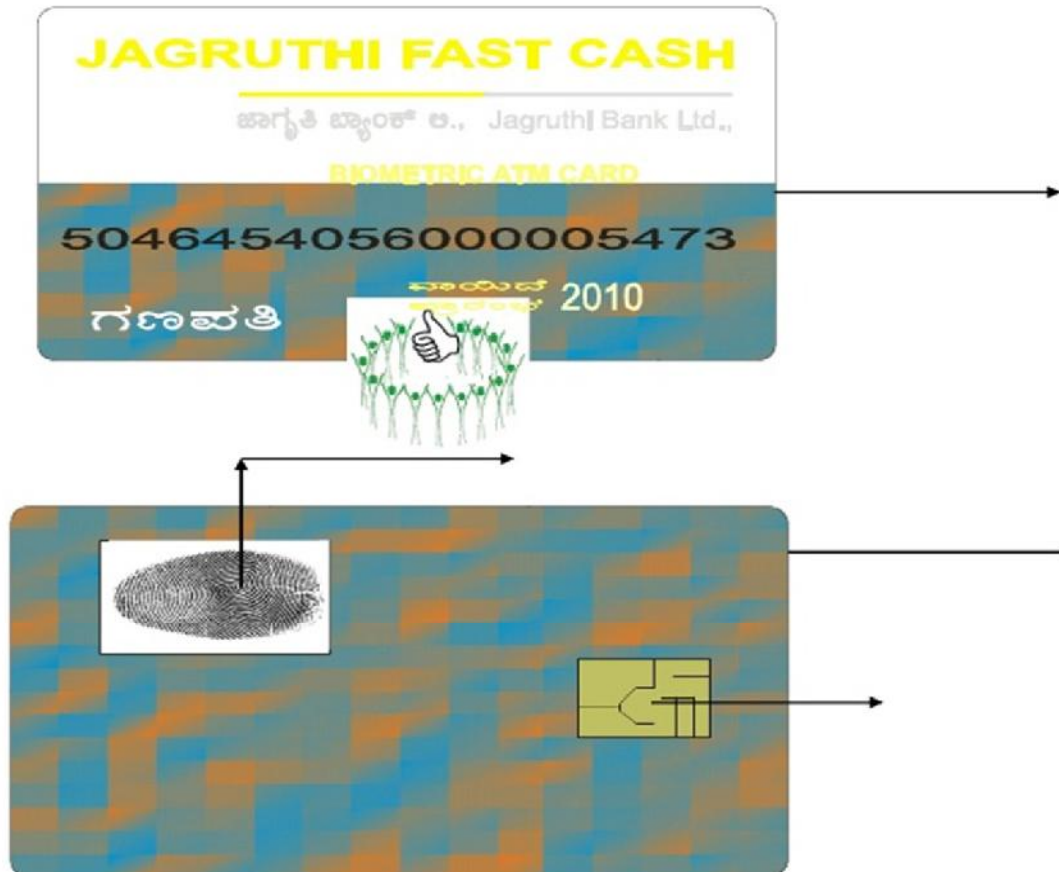


Benefits to Customers after CTS 2010

- Cheque Image scanner - Scans 191 cheque images per minute. Images are then sent to RBI after validation. necessary data entry



Biometric ATM Model



Biometric ATM Model



Biometric POS Model

Ekemp
Smart Industry



<http://www.ekemp.com.cn>


Other E-Payment methods

- NEFT: Min Rs. 1.00 no maximum.
- RTGS Min Rs. 2.00 lakhs no maximum.
- | | NEFT | RTGS |
|----------------|---------------|----------------|
| Timing (M - F) | 06.00 - 19.00 | 09.00--- 16.00 |
| SAT | 06.00 - 13.00 | 09.00 - 13.30 |

Charges

- NEFT- Upto Rs.1.00 lakh- nil
- 1-2 -Rs 15 _+ Service tax
- above Rs. 2 lakhs -Rs.25 + service tax
- RTGS- (Rs. 2 lakh to Rs. 5 lakh - not exceeding Rs. 30 per txn.
Above Rs. 5 lakh - not exceeding Rs. 55 per txn.)

Other E-Payment methods requirements


SESHAANI (M)/CTS-2010	 बैंक ऑफ महाराष्ट्र Bank of Maharashtra	00243 PUNE PAUD PHATA PAUD PHATA PUNE PUNE 411038 EX -SERVICEMEN COLONY 48 IFSCCode:MAHB000243	<table border="1"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> <tr> <td>D</td><td>D</td><td>M</td><td>M</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td> </tr> </table>									D	D	M	M	Y	Y	Y	Y
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CBS

Date.....

SECURITY PRIMER OF EDP&R P.V. LTD.	PAY	या धारक को OR BEARER
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Electronic Clearing system(ECS)

- ECS-Debit-Utility Bills payment.
- ECS-Credit- I tax refunds,
Sales tax refund.

Security of Payment Gateways

- As per payment system act , security of gateways is to be maintained coupled with periodic security audit.
- Back up site needs to be maintained with well driven Business Continuity Planning.
- Vendor has to take permission from RBI/NPCI before offering payment gateway services to its clients.
-

SMS Gate way

- SMS is defined as text messages, up to 160 characters in length, sent to mobile phones.

- **Benefits of SMS**

SMS is a convenient, cost effective alternative to voice messaging. SMS popularity has grown as a result of:

1.) Cost - SMS is less expensive than the airtime used for voice calls or web access.



• Im



SMS Gate way



- **2.) Non-intrusive** - messages are received in a discrete fashion and do not interrupt an individual if they are in the middle of a meeting

3.) Integration Capabilities - many software programs can be set up to send text alerts to mobile phones when urgent conditions exist.

- **Short Messaging Explained**

Short messages can originate from other phones, personal computers or the Internet. Consumers and businesses alike use SMS for remote communication, allowing for staff to be mobile and stay in touch with those who matter.



SMS Gate way



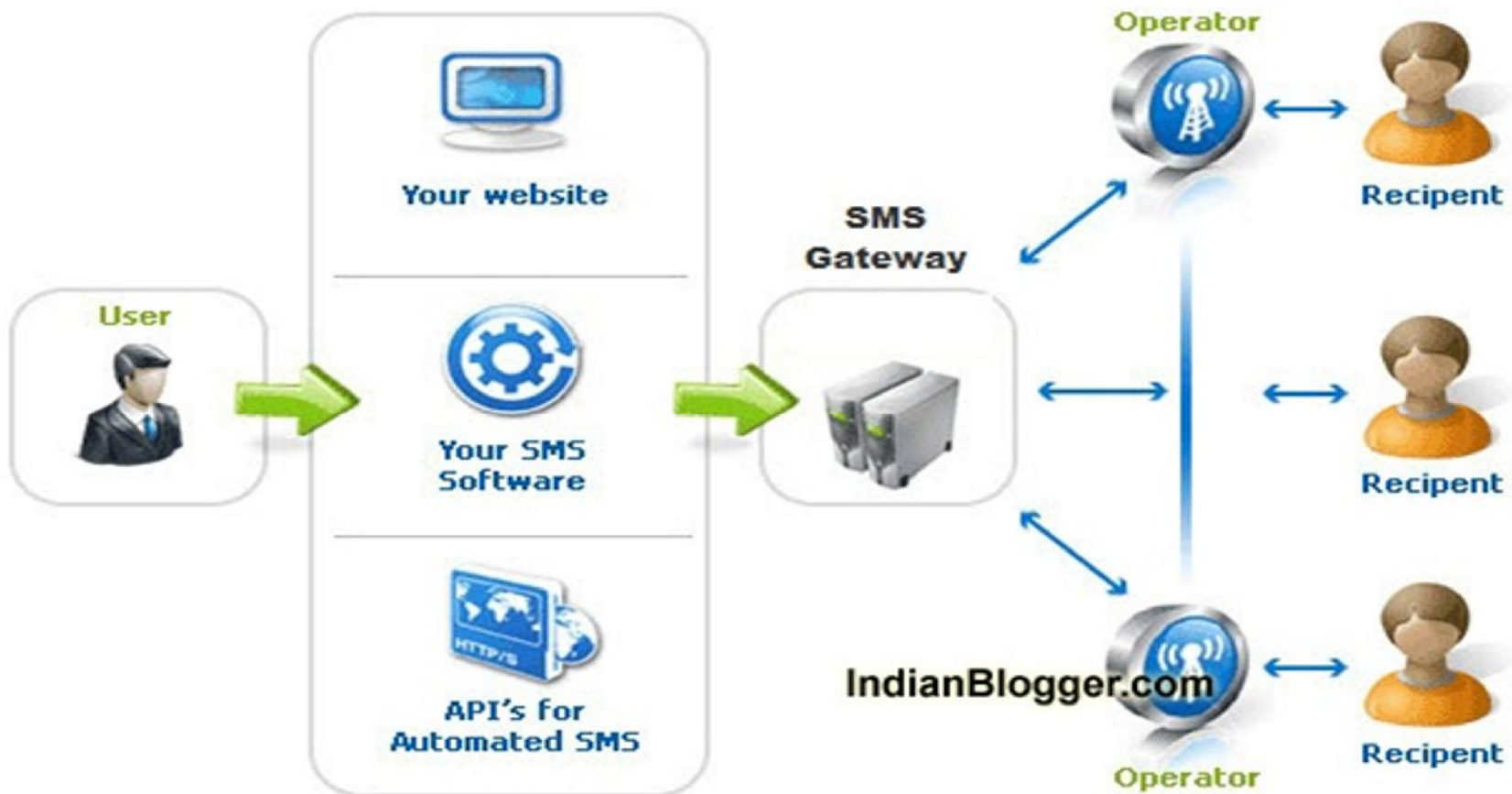
- *SMS Software*

The most popular way to send text messages is using software. When using software there is no cost associated with the sending of messages. Depending on the carrier that you are sending to messages can be sent any number of ways.

- Software is flexible and often allows for group or scheduled messaging. Another benefit of software is the ability to automate processes, sending SMS alerts when specific conditions exist often without the need for human interaction.



SMS Gate way



SMS Gate way-Usage

- Online updates to citizens about their application and acknowledgement -25 services made online e.g birth certificate, caste certificate etc from CSC/Sangram/e-seva kendras.
- Important warnings/alerts in case of natural calamities-water shortage, flood, earth quakes, dengue/epedemics,arrival of ration at ration shop.
- Reminder and receipt of various bills like, electricity, property tax,telephone,exam fees,due dates for submission of returns,forms,results,asking for incomplete information in any submitted forms etc.



SMS Gate way- Benefits

- Saving of time, money, energy for citizens and Govt-low cost of SMS.
- All depts of govt can use this facility and become more citizen centric and offer newer services by thinking out of box.
- Citizens are delighted and no exchange of hot words across the counter.
- No need of enquiry counter-saving of manpower or diversion to other productive purpose-may be supported by KIOSKS.
- Minimising loss in case of natural calamities
- Appointment reminders to various visitors to mantralaya,collectors officces etc.



SMS Gate way- Benefits

- Weather forecast to farmers.
- Price updates to farmers from Mandis.
- Kissan call center.
- <http://www.youtube.com/watch?v=sKJFpEX12gg>



Future challenges-



- Increase in electronic transactions.
- Paper less office
- Rising demands from customers-24X7 service at their door steps-mobile services
- More proliferations of CSCs.
- Constant need for sharpening skills by the employees.



-Computer savvy, Project management, Risk Management, domain knowledge, redefining processes.

- Move towards Knowledge based Governance



Thank
you