eGov@Gujarat

- An e-Governance Bulletin from GUJARAT INFORMATICS LTD.

MAGIC

Courtesy By

T. Natarajan , (IAS)
Commissioner
Geology and Mining

MAGIC

Introduction:

The Commissionerate of Geology and Mining in Gujarat is responsible for Mineral Administration Management. Until the implementation of this solution, mineral administration was a done manually with the help of a massive amount of paper work and resource intensive procedures.

Needs of Magic:

The Commissionerate of Geology and Mining in Gujarat was set up to manage the Mineral Administration system in the state which provides several G2B services to the mining industry.

With more than 64% of the state's total area falling under the category of mineral probable area, mineral resource development has been one of the most important yardsticks to measure overall economic development of the state which has impacted all sections of the society. Over the years, the mineral processing industry has developed into a $2 billion industry with 14000 workers indulging in mining of over 19000 million tons of minerals state wide.

Inspire of the scales involved, the entire system of administration was being managed by a mere 400

staff strength at the CGM and via the conventional pen and paper method. It would be needless to highlight the problems associated with managing a massive system such as this by manual paperwork. Moreover, the speed of administration carried out in such a tedious manner would tend to slow down the government machinery and the effect would trickle down to not only impact the investment climate but also the end users of mineral industry products.

- The CGM is expected to perform the following functions as a part of its mineral administration responsibility:
  - Royalty collection from lease holders by manual stamping of royalty receipts, reconciliation with treasury and MIS reporting of the same.
  - Stamping of royalty pass book.
  - Collection of monthly returns and scrutiny of the same to prevent leakage.
  - Maintaining physical demand registers to keep track of all lease holders and their activities and to keep track of mineral stocks.
  - Monthly accounting
  - Managing lease permit applications.
  - Tracking transportation of mining products to prevent mischievous diversion of resources away from target industries

- Until the implementation of MAGIC, each of the above was managed and tracked manually by department resources. Not only was this a man power intensive system, the scope for slips, leakages, mistakes and errors was huge, needless to bring up the problems with managing physical records for the same.

- It is also imperative to point out at this stage that out of around 90 mineral occurrences country wide, close to 33 of the major minerals and 17 minor minerals have substantial occurrences in Gujarat which basically puts the state right at the heart of the industrial development revolution that has contributed to the national economy over the years.
- Any imperfections in mineral administration had the potential to magnify in appearance through the various stages in the mineral processing industry. Hence, it was most essential to move towards a system that supported the following:
  - Enhanced speed of service delivery
  - Leak proof system

- Minimum scope for errors and mistakes
- Reduced effort and expenditure on routine tasks
- Reduced turnaround time for each procedure

Strategic approach:

- In a time when the government machinery has often come under criticism for policy roadblocks and government red tape, the CGM led from the front in using ICT to establish an end to end state of the art solution to manage the entire mineral administration procedure in a transparent and cost-effective manner.
- CGM identified the key aspects of mineral administration such as stakeholders, processes, quality of service, turnaround time, costs and transparency and worked towards establishing an IT enabled system which would help to improve the status of the above parameters.

- The primary objective of the initiative was to reduce human intervention at various levels by putting in place an automated service delivery mechanism which would in turn improve transparency and bring about a drastic reduction in turnaround time. Moreover, it would reduce the burden of manual work on the department to a bare minimum allowing it to focus more on developmental activities than on daily routine tasks.

- CGM hired (n)Code Solutions as a technology partner to implement an Integrated Lease Management System and web modules to handle royalty, passes, delivery receipts, demand management, lease applications etc. This would help to bring together all aspects of mineral administration.

- Further, they identified the core procedures of the department which needed modernization and the manner in which service was being delivered through these mechanisms:
  - **Royalty collection** – Lease holders had to procure a paid treasury chalan receipt from the district office and get it signed. Following that the lease holder would initiate payment via their own bank.

  - **Royalty pass** – The lease holder would have to come back to the district

offices after payment of royalty to get the royalty pass and get it stamped on all pages by department officials.

- **Monthly return filing** – Lease holders had to submit monthly returns to CGM giving complete details of their activity for the month such as quantity of mineral, labor, royalty paid, monthly sales etc.

- **Demand Registers** – Department officials maintained track of mineral stock in various areas and the functional lease holders in the area as a part of monthly MIS activity. CGM would track interest, dues, and royalty payments via these demand registers.

- **Reconciliation of delivered minerals** – Lease holders had to get each delivery receipt stamped and verified by CGM for reconciliation at the end of the mineral transport lifecycle for reconciliation.

- **Lease Application** – Lease application was tedious manual process where written applications had to be submitted and tracked at the district office manually.

- **Mineral Weighing** – The transported mineral had to be weighed at the time of loading and unloading to track prevents leakages. Moreover the excess weight would require royalty payments to be initiated for excess goods.

- To bring about a significant reduction in turnaround time and effort, an end to end ICT solution was envisaged for this administration.

- Each of the above process was mapped to e-modules which would allow all stakeholders to function in a more efficient and cost effective manner. Since all procedures could be initiated and tracked online, lease holders need not visit the district office and can continue functioning from their remote location thus saving effort and time for everyone involved.

- More importantly, physical records for each activity need not be maintained as all relevant information related to each mining lease and activity would be filled

online. Any information required would be a click away for CGM which will also ensure information required for policy making is available easily.

Development:

- The development of a web based mineral management system is not rocket science. The innovation lies in envisioning the extent to which transparency can be introduced into the system. Mining of mineral resources, that too in a mineral rich area, is definitely a lucrative business for private vendors. However, contractors fighting for margins use devious means of diverting mined resources or mis-representing mining volumes to avoid royalty.

- More importantly, in the conventional method via which mineral administration is managed, there is excessive scope for both intentional and unintentional errors. This combined with the difficulty in compiling monthly reports for policy formulation and regulation leaves open several loop holes at all levels of the system.

- It was essential to do a detailed ground level analysis to understand the number of actors involved from the time that a lease application is made to the time the mined product is unloaded at the target industry. Further, it was essential to locate the leakage points in each procedure so that they can be sufficiently covered by the solution being implemented.

- The idea of a web based solution helped to simplify all the pain points and the result is visible today – a transparent, accountable, error free system with improved service delivery.

- CGM indulged in a one to one mapping of each service it was providing into a corresponding e-service module accessible from a web portal to service users.
    - **Royalty payment was mapped into E-Payment & Cyber Treasury** – Royalty payments and pending dues were transferred via electronic fund transfer to government bank accounts by lease holders from their remote location as well through online internet banking of State

cyber Treasury Portal. The records of the payments made were also captured which made reconciliation and reporting easier. This module was capable of supporting 9 types of payments and Three Banks namely State bank of India, Bank of Baroda, Dena Bank is integrated into with Portal of Geology and Mining.

- **Royalty pass stamping was mapped into All Time Royalty Pass** – Royalty passes were issued real time with barcodes and accessible at the lease site. This not only reduced the effort for the lease holders and department but also helped in identification of royalty passes. These passes were integrated with weighing bridge to ensure that the quantity of mineral actually mined and transported matched the claims of the lease holders. The passes store information such as mineral category, destination, weight, vehicle details etc.

- **Monthly return filing was mapped into E-Return** – This allowed lease holders and Mineral stockist to submit e-returns in a timely fashion online where the required information for filing returns was captured and used for MIS reporting and record keeping.

- **Demand Register maintenance was mapped into E-Demand Register** – This module picked up the necessary information from the E-return module enabling department officials to manage and keep track of royalty paid, pending dues, overdue amount etc. It also made easy the process of carrying over the account status to the next month which was previously done manually.

- **Manual lease application was mapped into Online Lease application** – Lease holders were able to submit applications for mining leases online and also track the status of the same online instead of doing the same through the district offices.

- **Delivery receipt was mapped into an e-delivery receipt module** –

- **Weigh bridge module was mapped into Online weigh bridge** – Instead of half monthly reconciliation of royalty differences, auto deduction of pending

royalty dues was set up for each e-Royalty pass.

- To go ahead with implementation, a 3 pronged approach was adopted:
  - **Phased rollout**: The CGM did not adopt the big bang approach. Instead it rolled out the modules in a phased manner. This allowed all stake holders to adapt to the changes. An all out approach would be anyways difficult to implement with limited staff availability.

  - **Implementation**: (n) Code Solutions, a division of Gujarat Narmada Valley Fertilizers Company Ltd., was roped in as a technology partner for end to end implementation of the solution. Apart from the web based solution, the CGM introduced the use of hand held devices to field support staff and lease holders which would help them stay connected on the move to the Integrated Lease Management System. Real time checks during transportation could be done by tracking the royalty pass which would show all the information related to that pass for verification.

  - **Training**: The success of such an ambitious program largely depended on the quality of training provided to all stakeholders and the number of stakeholders covered.

- The lease holders involved as stakeholders varied from small time contractors to sector giants. Hence, it was important to understand the level of response that each stakeholder would have to the new system and plan a comprehensive training schedule to meet these requirements accordingly.

Implementations:

- For a complete transformation of any system such as this, it was extremely important to identify the stakeholders in order to assess the impact that this change would have on each of them. Further, it was essential to lay down well defined roles and responsibilities for each stakeholder so that all factors could be considered in development and modification of the ILMS.

- At the time of kick off, close to 7400 core stakeholders were identified, each of which had a significant role to play in this transformation.
    - **Commissioner of Geology & Mining:**
        - Responsible for driving overall implementation of initiatives Policy formulation as per feedback from stakeholders and promoting the use of ILMS
    - **District Geologist:**
        - Grass root level implementation of ILMS
        - Ensuring an easy switch from existing procedure to use of ILMS for a smooth rollout
        - Providing feedback based on experience with ILMS
    - **Lease holders:**
        - Put forward challenges faced while using ILMS or while transitioning from conventional method to ILMS
    - **Weigh Bridge holders:**
        - Responsible for providing thorough feedback on challenges faced in ILMS
    - **Mineral Stockiest:**
        - Responsible for providing feedback on delivery receipt modules and on challenges faced
    - **Partner Bank:**
        - The Govt. has identified the three more banks i.e. (1) State Bank of India, (2) Bank of Baroda, (3) Dena bank and take their support for the development and integration of Cyber Treasury Portal with Portal of geology and mining.
    - **(n)Code Solutions:**
        - Understanding requirements based on feedback
        - Implement and support various software modules as per requirements of stakeholders

- To move forward in collaboration with close to 7400 direct stakeholders and consider each feedback for continuous improvement was in no way an easy task. However, this was much needed to ensure that all requirements are sufficiently met.

- **Hand Held Terminal** - To facilitate Lease Holder to avail Royalty pass for in Remote areas where Low Connectivity and Irregular Power supply are available. Simple Procedure to input data in device and generate royalty passes through GPRS Connectivity. Real time Royalty deduction and integration with ATR makes device Robust and Easy to use.

Pro's	**Con's**
Portable Handy Device to Generate e-Royalty Pass	Battery Backup
Requires only GPRS enabled SIM Card	Triplicate Pass Length
Easy in Operating	Maintenance of Device
GPS Authentication (Latitudes / Longitudes) for Generating Pass within the lease Area	
	

COMMISSIONER OF GEOLOGY & MINING
INDUSTRIES AND MINE DEPARTMENT
(Government of Gujarat)
Distr.:PANCHMAHALS

Royalty Pass

Copy for :Leaseholder

Issue print-1

Royalty Pass No:
QP14020010090000003

Leaseholder:QP1402001009 - L & T Ltd. - BEDHIYA - 41 - 4.44.14 - 30000Ton

Issue Dt. & Ti.:
8/30/2011 8:18:00 PM

Dist.:PANCHMAHALS

Tal.:KALOL

Mineral Name(Grade):
Murrum(NORMAL)

Quant. (MT):10.0000 (Ten)

Jr. St. Dt.:
8/30/2011 8:11:45 PM
Jr. En. Dt.:
9/3/2011 8:11:45 AM

Dist.:500.0000Km
Dur.:3 Day(s) 12 Hour(s)

Driver Name:DR
Driver's Licence No.:WTP6543210

Veh. Type:Trailor
Veh. No.:GJ 1234

Weigh. Name:Int_Internal_Kalol

Dest. / Addr.:Pragna Mininge, Madhvas.

Commissioner of Geology And Mining
Industries and Mines Department (Govt.of Gujarat)

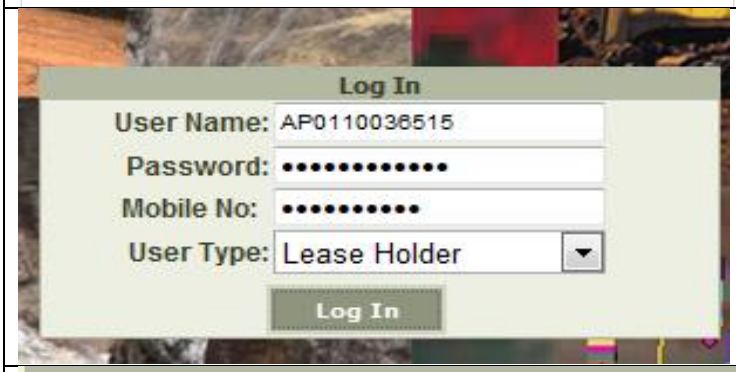
ઈ-પેમેન્ટ સાયબર ટ્રેઝરી માર્ગદર્શિકા (લીઝ હોલ્ડર)

e-payment Cyber Treasury

- ✓ કમિશનર ભુસ્તર વિજ્ઞાન અને ખાણની વેબસાઈટ (cgm.ncode.in) ઓપન કરી ઈ-પેમેન્ટ સાયબર ટ્રેઝરી ઉપર ક્લીક કરો .

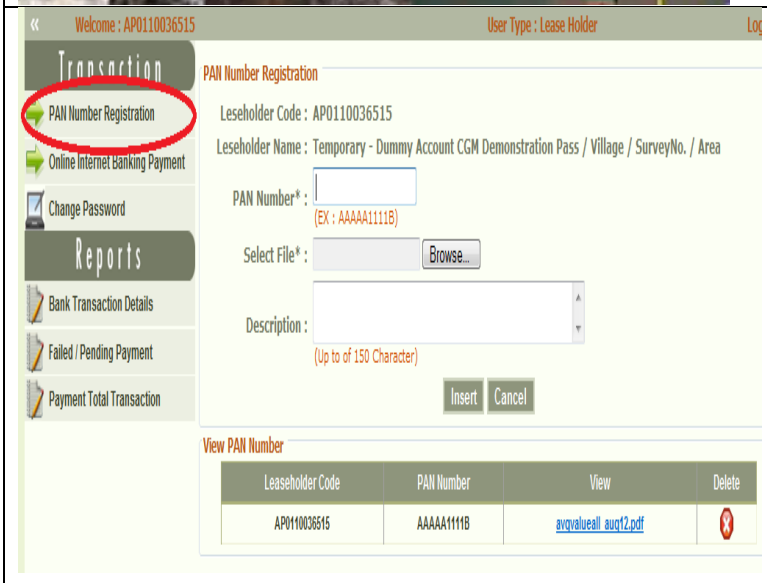
અથવા

- ✓ cgmepay.ncode.in/epayment_cgm બ્રાઉઝર ઓપન કરો



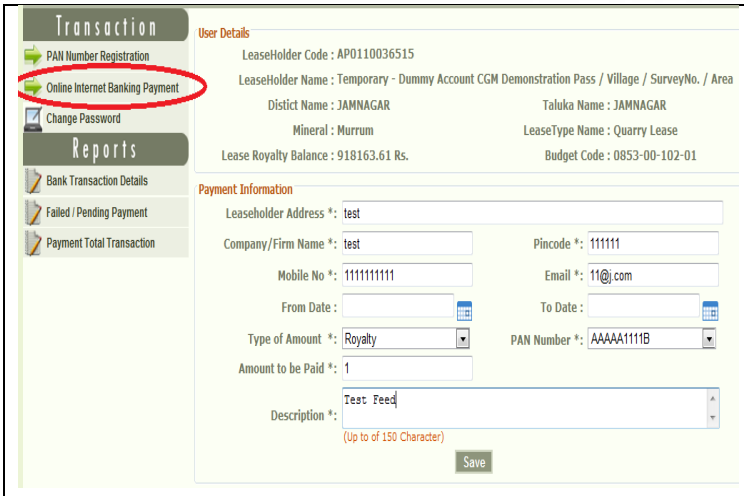
Log In

- ✓ રજીસ્ટ્રેડ યુઝર નેમ, પાસવર્ડ અને મોબાઈલ નંબર લીઝ હોલ્ડરનું લોગીન કરો.



પાન નંબર રજીસ્ટ્રેશન

- ✓ લીઝ હોલ્ડર પાન નંબર રજીસ્ટ્રેશન અને ડોક્યુમેંટ અપ્લોડ કરો. (વન ટાઈમ રજીસ્ટ્રેશન)

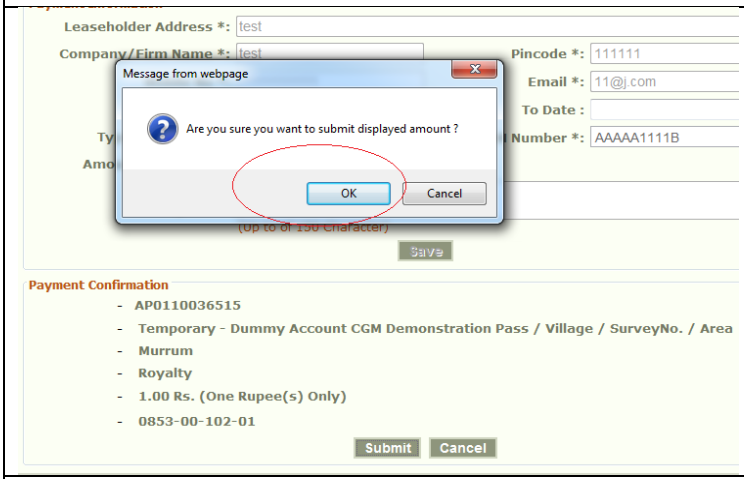


ઓનલાઈન ઈન્ટરનેટ બેંકીંગ પેમેંટ

- ✓ યુઝર ડીટેલ ચેક કરો. (યુઝર રજીસ્ટ્રેડ માહિતી ચેક કરો)

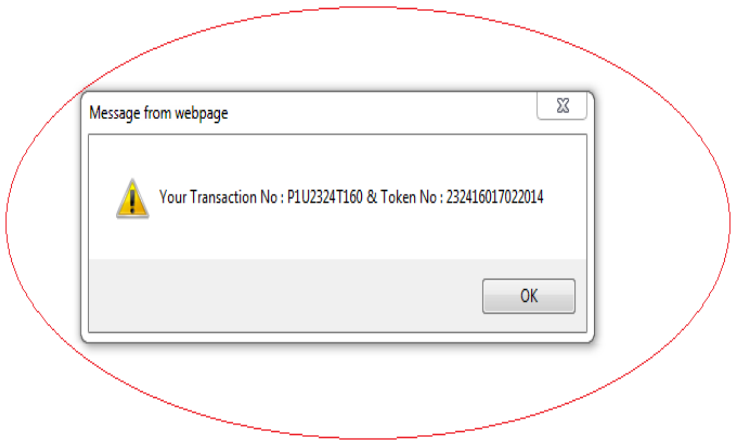
Payment Information

- ✓ પેમેન્ટ ઈન્ફોર્મેશનમાં માંગલી માહિતી ફિલઅપ કરો Save બટન ક્લીક કરો.



Payment Confirmation

- ✓ પેમેન્ટ કન્ફમેશન ચેક કરી **Sabmit** બટન ક્લીક કરો.
- ✓ મેસેજ પોપ થશે તે વાંચી **OK** બટન ક્લીક કરો.



Message from Webpage

- ✓ સીસ્ટમ જનરેટેડ ટ્રાંજેક્શન નં અને ટોકન નં જોવા મળે છે
- ✓ ટ્રાંજેક્શન નં અને ટોકન નં ની નોંધ લેવી.

Cyber Treasury

- **Receipt Under Commissionerate of Geology and Mining**
- ઈ-પેમેન્ટ ફોર્મ, સરનામાનું સ્થળ, અધર માહિતી, રીમાર્ક, પર્પસ, બજેટ કોડ, અમાઉન્ટ, ટોટલ રકમ, રકમ શબ્દોમાં લખેલી હોય છે, બેન્કનું નામ પસંદ કરો Confirm બટન ક્લીક કરો અને થોડી વાર પછી Submit બટન પર ક્લીક કરો

બેંકની પ્રોસેસ ચાલુ છે પેજ બંધના કરતા પેજ રીફ્રેજ થાય છે.

Gujarat Cyber Treasury Online Payment

Divide Two Category

- રીટેલ યુઝર(Retail User) અને કોર્પોરેટ યુઝર (Corporate User) યોગ્ય ઓપશન પસંદ કરો.

Login to Baroda Connect

- બેન્કનુ ઈ-પેમેન્ટ માટેનું લોગીન પેજ યુઝર આઈ.ડી(User Id) ખાલી બોક્સમાં ટાઈપ કરી Enter બટન ક્લીક કરો એટલે યુઝર નામ (Party Name) વાળું પેજ ઓપન થશે
- પાસવર્ડ ટાઈપ કરી Enter બટન ક્લીક કરો.
- નોંધ:- કીબોર્ડની સુવિધા આપેલ છે તેનો ઉપયોગ કરી શકો છો.
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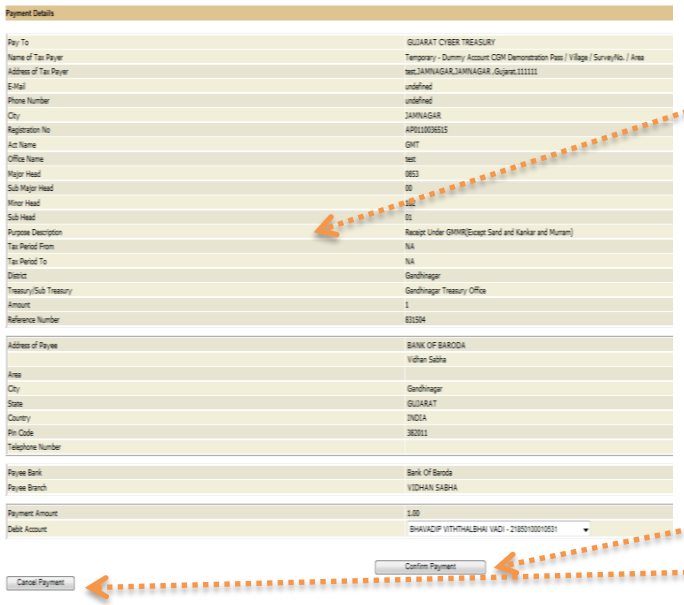
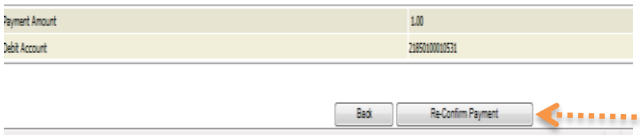


Payment Details :

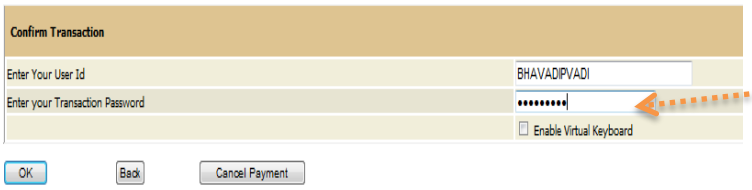
- નાંણા લેનાર શાખા, નાંણા આપનારનું નામ,એડ્રેસ,ઈ-આઈ.ડી, ફોન નં, શહેર, રજીસ્ટેશન ન., એક્ટ નામ, ઓફિસ સરનામું, નાંણા ચુકનાર બેન્કનું નામ, સરનામું, શહેર, જીલ્લો, દેશ, પિન કોડ, ફોન, નાંણા ની રકમ, ડેબીટ અકાઉન્ટ નામ માહિતી જોવા મળે છે બધી માહિતી ચેક કરી **Confirm Payment** બટન પર ક્લીક કરવાથી આગળની પ્રોસેસ થશે અને જો **Cancel Payment** બટન પર ક્લીક કરવાથી ઈ-પેમેન્ટપ્રોસેસ અટકી જશે.

Second Page

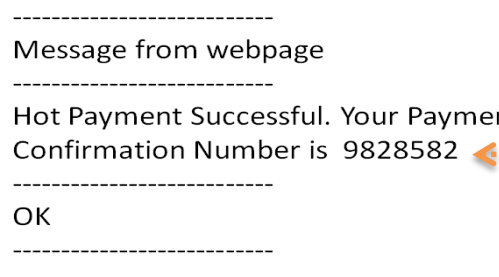


- **Confirm Payment** બટન ક્લીક કરોશો એટલે બીજુ પેજ ઓપન થશે ત્યાં તમારી બધી માહિતી સાચી છે **Re-Confirm Payment** બટન ક્લીક કરો અને ખોટી માહિતી છે તો **Back** બટન ક્લીક કરો.

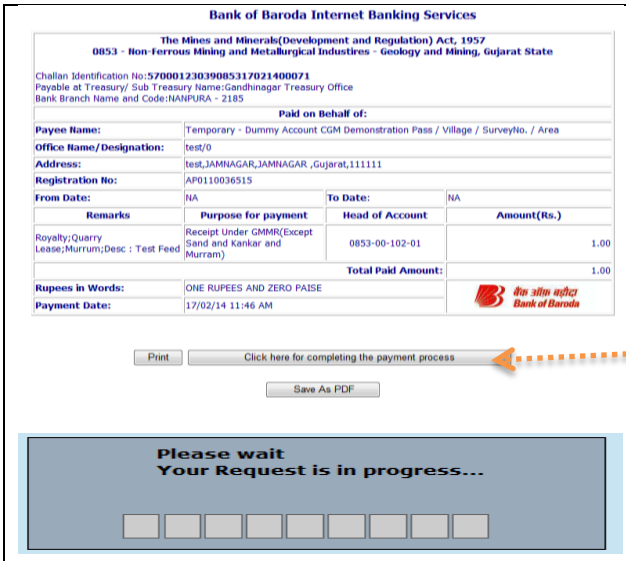
Confirm Transaction (Security Reason)



- યુઝર આઈ.ડી.**(User ID)** અને ટ્રાંજેક્શન પાસવર્ડ ટાઈપ **(Transaction Password)** કરો **Ok** બટન ક્લીક કરો અથવા **Back** બટનથી પાછળ જવાશે અને **Cancel Payment** ઈ-પેમેન્ટ અટકી જશે.

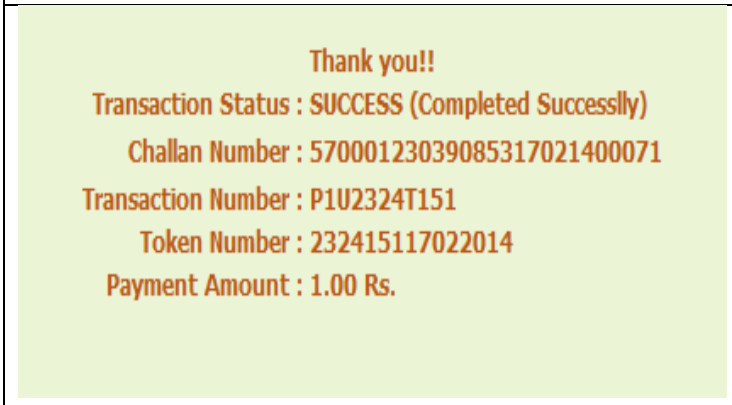


- Ok બટન ક્લીક કરવાથી પેજ ઉપર મેસેસ આવશે ઈ-પેમેન્ટ સફળ થયુ છે. Payment Confirmation Number જનેરેટ થાયે છે.



Bank of Baroda Internet Banking Services

- બેંક ટ્રાંજેક્શન સંપૂર્ણ સફળ થઈ ગયું છે
- બેંકનું ચલણ સ્લીપ ની **Print** બટન પર ક્લીક કરી મેળવી શકો છો **Save As PDF** બટન ક્લીક કરવાથી PDF માં ફાઈલ સેવ કરી શકાશે. **Click here for completing the payment Process** ક્લીક કરવાથી પ્રોસેસ આગળની થશે.



Thank You!!! (આભાર)

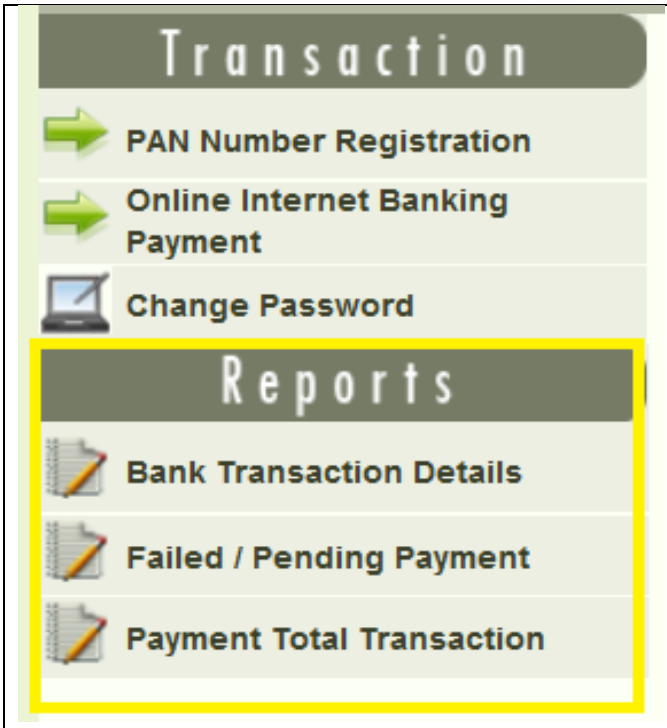
- સાયબર ટ્રેઝરીથી ઈ-પેમેન્ટ ની ટ્રાંજેક્શન સંપૂર્ણ સફળ થઈ ગયું છે.નાંણા જમા થઈ ગયા છે તેના રેફરેન્સ માહિતી આપેલ જોવા મળે છે.ટ્રાંજેક્શન સ્ટેટસ, ચલણ નંબર, ટ્રાંજેક્શન નંબર, ટોકન નંબર, ચુકવેલી રકમ જોઈ શકાયે છે.

ઈ-પેમેન્ટ ટ્રાંજેક્શન ચેક કરો

- કમિશનર ભુસ્તર વિજ્ઞાન અને ખાણની વેબસાઈટ **(cgm.ncode.in)** ઓપન કરી ઈ-પેમેન્ટ સાયબર ટ્રેઝરી ઉપર ક્લીક કરો .

Log In

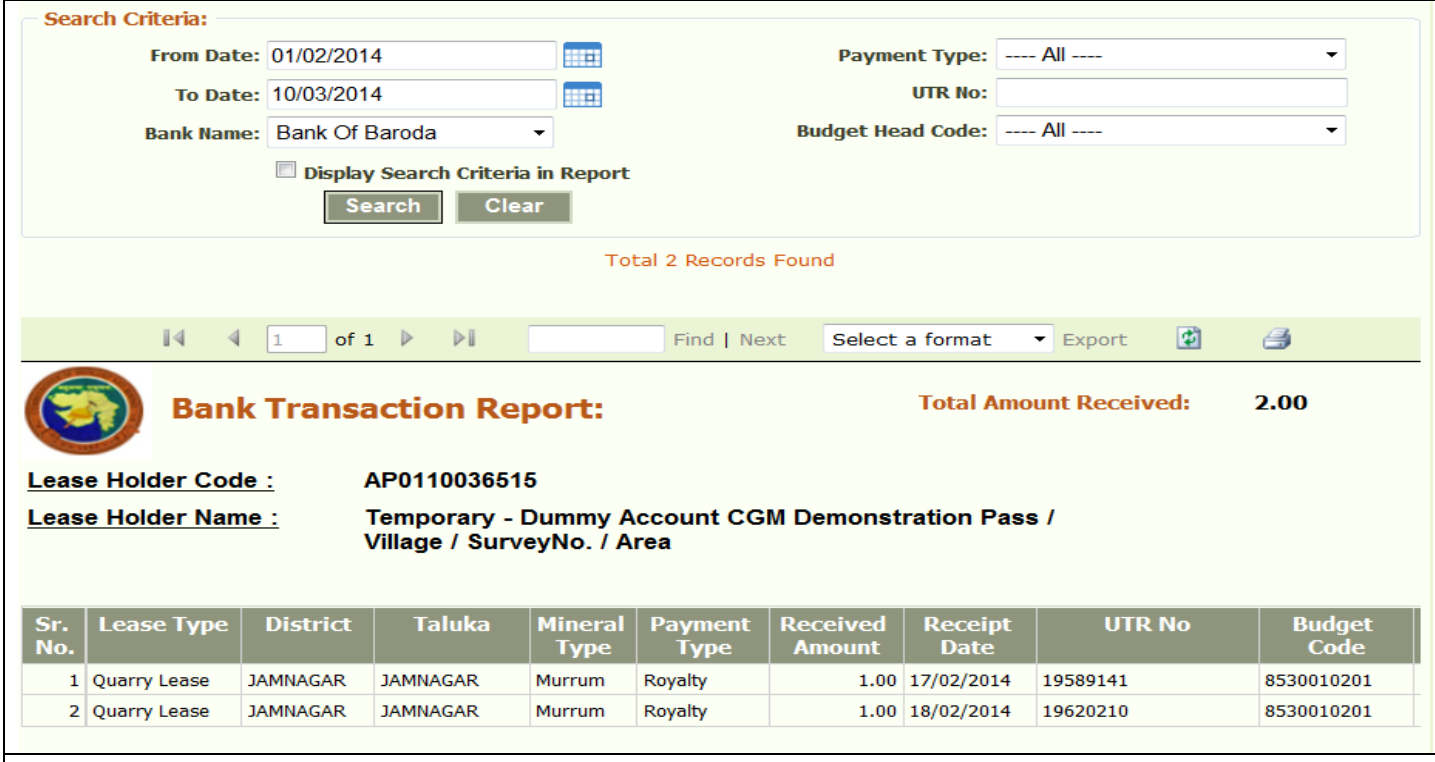
- રજીસ્ટ્રેડ યુઝર નેમ, પાસવર્ડ અને મોબાઈલ નંબર લીઝ હોલ્ડરનું લોગીન કરો.



Reports Divide tree Category

રીપોર્ટને ત્રણ ભાગમાં વેચવામાં આવ્યાં છે.

- બેંક ટ્રાન્જેક્શન ડીટેલ :- સર્ચ ક્રાઈટેરીયા માંગેલી માંહિતી ફિલઅપ કરવાથી બેંક ટ્રાન્જેક્શન ડીટેલ જોવા મળે છે.
- ફેલ્ડ/ પેંડીગ પેમેન્ટ:- સર્ચ ક્રાઈટેરીયા માંગેલી માહિતી ફિલઅપ કરવાથી ફેલ્ડ અને પેન્ડીગ પેમેન્ટ માહિતી જોઈ શકાયે છે.
- પેમેન્ટ ટોટલ ટ્રાંજેક્શન :- સર્ચ ક્રાઈટેરીયા માંગેલી માહિતી ફિલઅપ કરવાથી પેમેંન્ટ ટોટલ ટ્રાંન્સકશન જોવા મળે છે.



Sr. No.	Lease Type	District	Taluka	Mineral Type	Payment Type	Received Amount	Receipt Date	UTR No	Budget Code
1	Quarry Lease	JAMNAGAR	JAMNAGAR	Murrum	Royalty	1.00	17/02/2014	19589141	8530010201
2	Quarry Lease	JAMNAGAR	JAMNAGAR	Murrum	Royalty	1.00	18/02/2014	19620210	8530010201

નોંધ:- સર્ચ ક્રાઈટેરીયા માંગેલી માહિતી ફિલઅપ કરવાથી પીક્ચરમાં બતાવ્યાં મુજબ રીપોર્ટ જોવા મળે છે.

Resources:

- Being a state government initiative, the capital expenditure on the implementation was made by the State Government entirely from the IT budget. The costs included implementation, network & infrastructure management and hardware procurement.

- Recurring expenses made on IT infrastructure and support personnel was also borne by the State Government. The approximate cost of implementation was $ 483,000 inclusive of capital expenditure, post implementation hand holding expenses and routine maintenance of hardware & software used.

- The lease holders/mineral stockiest/weigh bridge owners were responsible for setting up necessary hardware and network infrastructure at their end such as computers, printers, internet connectivity etc. However, this was a onetime expenditure and a pretty good one considering the amount of time and effort that the ILMS would save them in the future.

- The human resource costs associated with the project were bare minimum and included in the total cost of the project. The project monitoring committee comprised of officials from the Department of Industries and Mining and representatives from the Commissionerate of Geology and Mining.

- The project management committee consisted of representatives from the Technology Partner handling various aspects such as business analysis, network administration, software development, web designers etc. The costs for the same were included in the cost of implementation.

Outputs:

- **Participation**:
  - Around 14000 lease/permit owners have initiated 237,980 online transactions.
  - 7600 lease owners are using the e-royalty system generating 25 million online transactions.

- 3800 mineral stockiest are registered in the system generating 5 million online delivery passes.
- Out of 1500 registered weigh bridges, currently more than 250 have been integrated for real time royalty deductions.

- **Growth:**

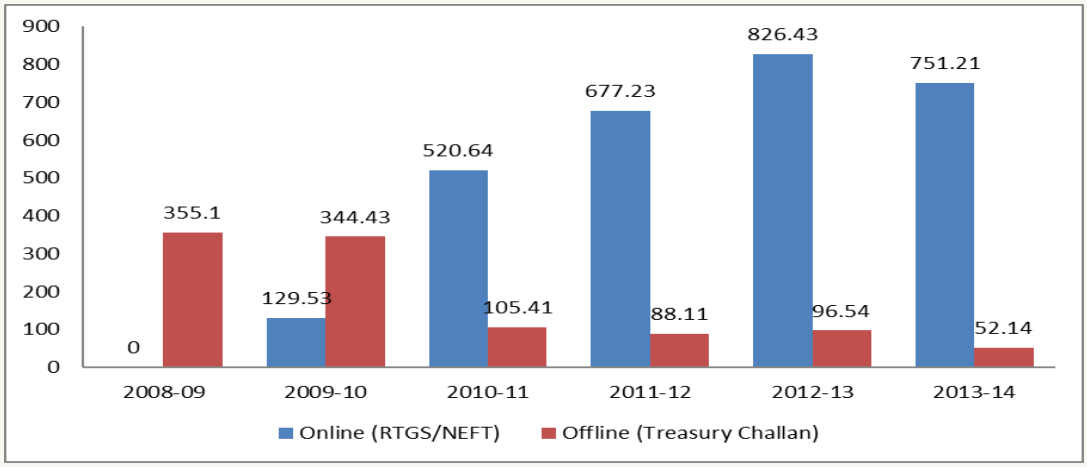
  Since the establishment of this system, the state has witnessed a considerable growth in mining activities. The ILMS operations were started in 2010. CGM has witnessed a close to 320% increase in e-royalty pass transactions until now.
  - E-payments have increased by close to 60 %
  - 800 % increase in monthly e-return has been observed.
  - E-delivery pass transactions have increased by 750 %
  - There has been a 210% increase in weighment transactions since 2010.

  Stakeholder participation has also seen a manifold increase since 2010 from 1670 online participants to 5630 online participants. The number of online mineral stockiest has gone up to 835 from none in 2010.

- **e-Payment:**

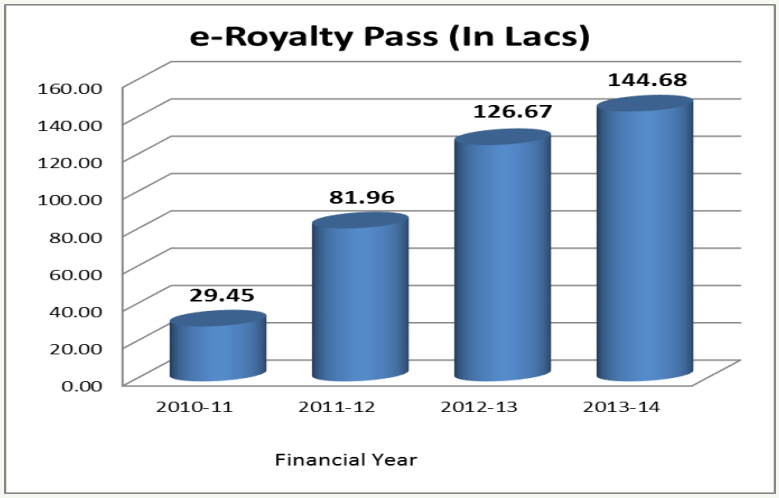
Royalty payments collected (in Cr. Rs.)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Online (RTGS/NEFT)	0	129.53	520.64	677.23	826.43	751.21
Offline (Treasury Challan)	355.1	344.43	105.41	88.11	96.54	52.14
Total	355.1	473.96	626.05	765.34	922.97	803.35



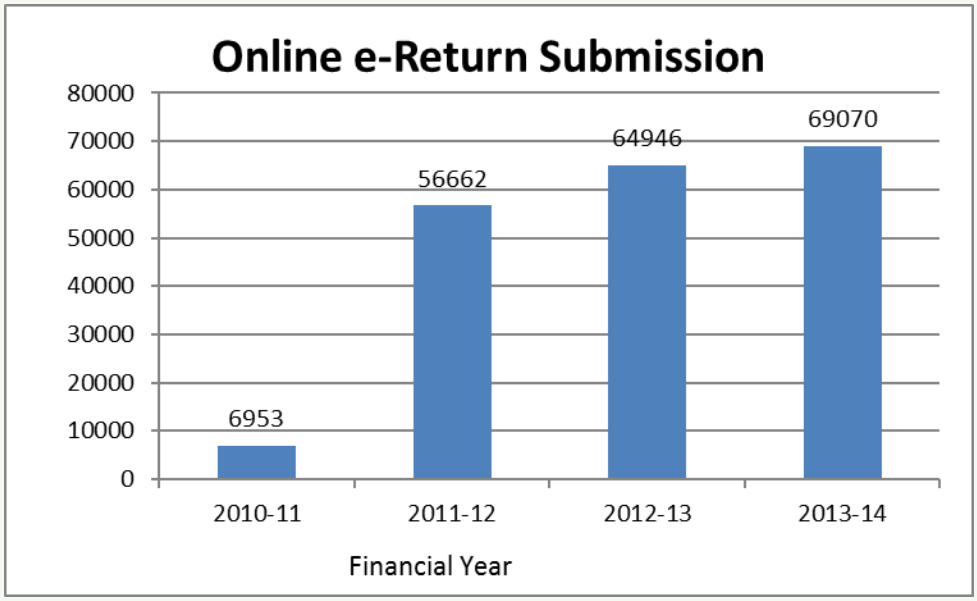
E-Royalty Pass (All Time Royalty pass)

Financial Year	e-Royalty Pass (In Lacs)
2010-11	29.45
2011-12	81.96
2012-13	126.67
2013-14	144.68



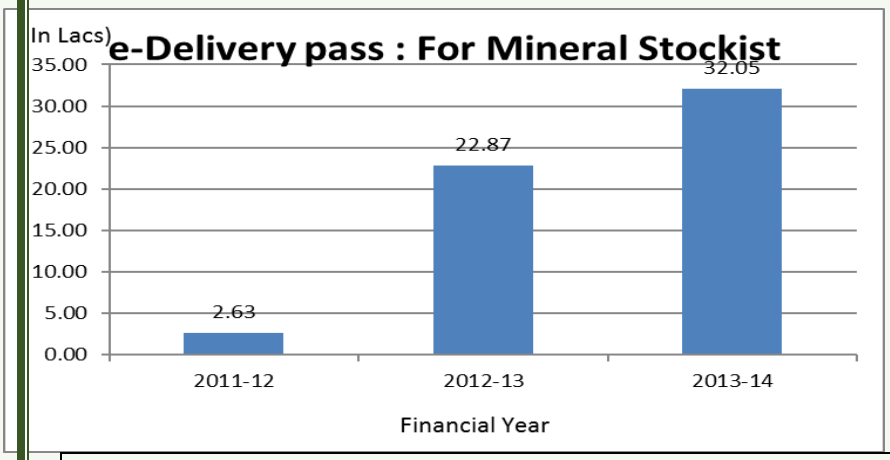
Monthly e-Return:

Financial Year	Online e-Return Submission
2010-11	6953
2011-12	56662
2012-13	64946
2013-14	69070



e-Delivery Pass: To support the second mode of mineral transportation

Financial Year	e-Delivery pass (In lacs)
2011-12	2.63
2012-13	22.87
2013-14	32.05



Overall Progress So far….. (Year Wise)

e-Transaction Provided	Year 2010-11	Year 2011-12	Year 2012-13	Year 2013-14	% INCREASE From (2012-13 To 2013-14)
e-Royalty Pass Transaction (in Lacs)	29.45	81.96	126.67	144.68	14.22
e-Payment Received(Rs. In Crore)	520.66	677.23	826.43	751.21	-9.10
Monthly e-Return Received (Lease Wise)	6953	56662	64946	69070	6.35
e-Delivery Pass Transaction (in Lacs)	0.00	2.63	22.87	32.05	40.18
Weightment Transaction at Weigh Bridge	2.16	5.05	6.70	5.50	-17.96

Statke Holder Participation	Year 2010-11	Year 2011-12	Year 2012-13	Year 2013-14	% INCREASE
Lease Holder	1678	3385	5631	6589	17.01
Mineral Stockist	0	322	835	935	11.98
District Offices	15	24	25	32	28.00
weighment Users	118	198	316	328	59.60

- **Benefits:**

  While the statistics above purely show how participation of stakeholders has gone up over the years, the statistics below clearly show why participation has gone up and

why investors were attracted towards this business. Variable costs associated with travelling to district offices reduced significantly because of the following:

- Facility for online payment.
- Facility to apply for lease, procure royalty pass, delivery receipt etc was made available online.
- Monthly returns could be filed online from remote locations instead of visiting district offices.

- All of the above were covered by onetime initial costs of setting up basic hardware such as computers, internet connections etc. at mining sites. While reduction in monthly costs and hassles was a big enough incentive for small time players, an even bigger incentive for all stakeholders was a reduction in direct contact with government points of service in district offices.

- Each visit could last for more than a day for any procedure. One does not intend to blame the government for this but the sheer volume of transactions and paper work involved was enough to keep officials busy throughout the day. The ILMS has helped all requests to be channeled in an extremely systematic fashion which allows the department to function promptly and reduce turnaround times by a significant amount.

Evaluation:

- Regular monitoring and evaluation is important to move towards perfection. The best way of evaluating the system was to collect feedback from all the people involved in mineral administration on a regular basis. This helped in identifying challenges and further requirements at an early stage.
  - A periodic review of e-system modules and progress report was present at the end of each month
  - To ensure that the services made available online were used by all involved in the workflow, appropriate government orders were issued in the department
  - Regular feedback was taken from all stakeholders involved such as lease holders, mineral stockiest, weigh bridge owners and district officials. This helped to bring everyone's views on the table and select the best possible

option.

- The CGM also hired external agencies to evaluate and monitor the project:
  - The qualitative study on "use of e-Governance in Mineral Administration" was done by Technocrat Consultants.
  - The impact of this initiative was reviewed by a third party agency viz. Ernst & Young Pvt Ltd

Obstacles:

- The biggest challenge in implementation of such a system was to bring together the opinions and requirements of more than 7600 stakeholders to ensure that a near perfect system is put in place. Improving the acceptability of this system amongst small time players and those not so well educated was also a major challenge.

- Then came the question of availability of service. In remote areas where mining activities are carried out, internet connectivity is difficult to obtain. Moreover, with frequent possible power cuts, ILMS may not be available at times causing operational hurdles or complete shutdown of mining activity. This urged the department to introduce hand held devices with GPRS connection so that even in remote areas without electricity and internet connection, ILMS would be accessible at all times.

- A common challenge which is faced in most government transformation activities is that of capacity building and training. This hurdle was overcome by extensive training programs educating everyone involved on the usage of ILMS and the facilities available. Operational manuals were designed and micro level training programs were introduced. Further, demo case studies were designed and used for training.

- A significant bit of government process re-engineering was also required to completely utilize the system's potential to improve operational efficiency and ensure seamless delivery of service. One must understand that the transformation

process is even more complex when dealing with an organization that has had the same way of operating for years and is not used to change. A drastic change must be brought in well to ensure that there are no question marks regarding change of roles & responsibilities, change in importance of each role and most importantly the future. This transformation was managed well.

Benefits:

The impact of this end to end transformation can be projected in 3 ways.

- **Turnaround Time Reduction**:
  - Royalty payment possible in 30 minutes as compared 2 days previously
  - Royalty pass generation possible in 2 minutes as compared to 3 days before
  - Return filing possible in 15 minutes as compared to 2 days before
  - Delivery receipt issued in 2 minutes as compared to 1 day previously
  - Mineral stock application approved within 10 minutes rather than 3 days as done previously
  - Reconciliation procedure for excess royalty deduction possible within 2 minutes as compare to 1 week before

- **Cost Reduction**: Considering that on an average the district office is around 100 miles from the mining site, lease holders were able to do away with regular commuting costs for good. Since all facilities were available online, a "visit free" system was set up. The only costs incurred by lease holders were
  - Fixed onetime expense on basic IT infrastructure at remote sites
  - Rs 5-25 in initiating electronic fund transfer for payments
  - Average cost of Rs 3 per transaction in royalty pass issuance
  - Average monthly cost of Rs 5 for filing returns

  A significant reduction in operating expenses was an attraction for small time contractors.

- **Improved transparency**:
  - With close to zero contact with the department, there was very little scope for collaborated malpractice in mining activities

- All applications were made online and the receipts for the same were available online
- Any difference in claimed weight of mined minerals and actual weights was detected and deducted immediately
- Scope for errors reduced significantly with digitization of procedures

Some all round positive impacts of this initiative were also identified:

- Increased speed of delivery with standardized procedures.
- Increased business performance of all stakeholders
- Reduction in paperwork and manual handling of records
- Development of an Integrated Database
- Accurate and quick MIS report generation
- Improved productivity of the entire system
- Overall growth of the industry

The positive impact of this initiative was also confirmed by direct feedback from various organizations that have been involved in this industry over the years.

- **Tata Chemicals Group of Companies** – "Found this system user friendly and more convenient than old system of manual issuance of Royalty Passes. TCL expresses it gratitude to the Government for introducing the state of art technology."

- **Larsen & Toubro Ltd** – "Issuing royalty pass has become very user friendly and hassle free"

- **Individuals** – G S Patel Mines:" With help using this system I increased my production 5 times and in last 18 months I have paid 108Lacs as royalty to the Government and in last month Rs.15Lacs."

- **Amreli Black Stone Quarry Ind. Association** – "By introduction of e-Governance, the number of visits to CGM office and human efforts has reduced, resulting in saving to time which is very much appreciated."

- **Bharuch Black Trap Quarry owners Association** – "CGM has initiated e-

Governance which has resulted in easy payment of Royalty, bringing in transparency and accountability. Moreover, the visits to CGM office have reduced."

Sustainability:

- As far as financial sustainability is concerned, apart from the capital expenditure made, the only expenses being made by the State Government is the maintenance cost of the IT infrastructure that has been set up. This is in no way a burden for the state due to the centralized architecture of the new system. Maintenance expense for hardware established by lease holders at remote locations is negligible.

- The overall sustainability of the system is confirmed by the drastic reduction in cost and effort that it introduces for all players. The government has released a resolution towards continuation of this service for its stakeholders through the outsourced IT partner.

- CGM had also considered sustainability enhancement inputs provided from stakeholders during the design and implementation stage of the project.
    - **Relevance**: The services were analyzed and designed to ensure that each services must be pushed towards stakeholders. This was achieved by the real time electronic fund transfer, online royalty pass, e-return etc.

    - **Acceptability**: With services being pushed to miners, the acceptability of the administration and its procedures increased. This is visible as 80% of the mining activities are being conducted through the online system. The acceptability was also visible from the feedback from various mineral mining associations.

    - **Post-implementation operation and maintenance**: An in house IT team was deployed to carry out day to day maintenance of the new system and for field level support. The initiative has been appreciated at the national level and several awards have been conferred on the same.
        - National Awards for Exemplary Implementation of e-Governance

Initiatives 2012- 13 by Department of Administrative Reforms and Public Grievances, Govt. of India for "MAGIC – (Mineral Administration and Governance Using ICT)" – Received in event held at Jaipur in January 2013

- "e-Governance in Mineral Administration in G2B (Govt. to Business) Category" from Computer Society of India, CSI – Nihilent award 2011
- "E-Governance in Mineral Administration in G2B services in Public Choice Category "from eIndia Award 2011.
- Manthan Awards 2013 received for 'Certificate of Recognition' for MAGIC (Mineral Administration and e-Governance Using ICT)

- Further, the efficacy of this transformation was recognized at a national level when some of the most forward states of India decided to replicate this system of mineral administration. Central Coordination-cum-Empowered Committee (CEC) Minutes of Meeting (22/12/2010) – "Secretary (Mines) suggested that all States could adopt the same or similar system so that there was uniformity across the States.

Future scope:

- The lessons picked from this are simple and straightforward. Transparency in government functioning is the need of the hour and hence the onus lies on each organization to strive towards such solutions. Such initiatives are sometimes not taken up because the system is considered too complex to be replicated by an IT solution. Organizations tend to feel that a complete and drastic restructuring of procedures may change too much for everyone's comfort and the end result may not be worth the time and effort that has been put it.

- This solution simply shows that once you get past the initial apprehension of drastic change, it is not an impossible thought to implement such a solution. The project serves as a landmark in the history of mineral administration of not just

the state of Gujarat but the entire country and the interest shown by other progressive states to take up this initiative is testimony to this claim.

- Considering that mineral administration is just one aspect of governance, there is massive scope for transformation in other such verticals which are currently clouded with complexities, confusion and government red tape. Public service delivery channels need to be closely examined and the fault points need to be identified. End users of services need to be identified and involved in the transformation process. Be it a business organization, a not for profit organization or an individual citizen themselves, feedback of end users is important to ensure that the change is proceeding in the right direction. Hence an effective feedback mechanism needs to be put in place and used throughout the transformation process.

- Business organizations have used ICT over the years to get that little edge in the competition and some have succeeded. The important idea to pick from here is that the use of ICT is capable of adding substantial value to an organization. If that is true, why not use ICT to add value to public service delivery channels and benefit the masses?

- That would be the most important lesson to pick from this project.

eGovernance News

- The National UP Education Awards – 2013 awards would celebrate and acknowledge unique and innovative initiatives in Governance, Education and Health sector across the country. The applicants will be required to fill in a Self-Nomination form. Each of the nomination will be adjudged under a Jury Choice Award.

- **Jury Choice Award**: Nominations will be screened by an eminent panel of jury members, who will then choose the best project from each category. The selected project will receive the Jury Choice Award. Gujarat has won the following major awards:

Sr. No.	Winner	Category
1	Gujarat Higher Secondary Education Board	Best Software Application Development for comprising school, Teacher & Student Registration"
2	University	Best Software Application Development for Universities

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Contact Address:

Gujarat Informatics Ltd.

Block No. 1, 8th Floor,

Udyog Bhavan,

Gandhinagar – 382010

Phone: 079–23256022

Fax: 079-23238925