RailMadad

Indian Railways

Case study on "RailMadad" Grievance Redressal platform of Indian Railways

Table of Contents

1. Overview

RailMadad is a grievance redressal system by Indian Railways. It has unprecedented reach, speed and efficiency. RailMadad can be accessed by any railway customer (passenger, parcel or freight customer) who has a grievance with service delivery of Indian Railways (inside or outside India). There are multiple means of using the services of RailMadad such as, the option of logging in on a web-portal through a search engine, Integrated Railway Helpline number 139 (duly supported by a call centre 24*7), MobileApp (Android and iOS), Email, Social Media, access through SMS and Manual Dak. Integrated Railway Helpline number 139 extends full conversational capability in ten (10) major Indian languages, besides Hindi and English.

RailMadad provides real-time assistance and grievance redressal for about 8000+ stations and 12000+ trains. As the system is integrated with National Train Enquiry System (NTES), it sends alerts to the concerned field unit directly responsible for providing relief. Efforts are made to redress real-time complaints, both on the train and the station itself.

All those users having access to telephone and internet have both immediate and direct access to RailMadad. There is no insistence on a Smartphone; an ordinary phone user can also access round-the-clock RailMadad services by dialling 139. The Remaining group of users can avail services through manual desk wherein they can register complaints manually.

2. Context and Background

Following scenarios, all real, have been put together to understand the need for a platform like RailMadad.

Scenario 1

This Scenario details a real rescue story of two girls from traffickers in Brahmaputra Mail.

On 16th February 2020, at 1952 hours, a call was received on the Integrated Railway Helpline number i.e. 139, where the caller said *"15955, iss train main ek ladki bina parents travel kar rahi hai".* Immediately, the call centre agent registered this information on the RailMadad system, and the complaint directly got assigned to the security department of that train. The concerned security department further investigated and found that the girl was travelling with other passengers who were the traffickers. In this case, both the suspects, minor girl child and her carriers were identified by the train escort party and brought to RPF post New Jalpaiguri Junction.

RailMadad helped in transferring this information quickly to the concerned field unit of the running train, due to which security team was able to rescue the girls within 3 hours at New Jalpaiguri Junction.

Scenario 2

This scenario details how a young lady saved herself from harassment onboard.

Niharika Singh was visiting her family in Nagpur and was travelling in an outstation train in Maharashtra when she found herself stuck in an unfortunate situation. She felt harassed by the behaviour of a male passenger and was very scared as she was travelling alone. She decided to call for help but she was hesitant to make a call. She then reached out to the social media platform of RailMadad i.e. @RailMinIndia on her phone. She opened her Twitter application and posted a tweet directed to the Ministry of Railways' handle. She tweeted at 6:59 pm when the train was passing through Shegaon railway station.

"@RailMinIndia plz plz help in train no 18030 one male passenger harassing me at Shegaon I am in train terrified" — Niharika Singh (@niharikasingh1)

A senior officer Central Railway took note of the tweet instantly and contacted her for help. As Niharika had not provided all the required details for adequate support to reach her, they asked for her PNR number through a tweet. On receiving the details, railway officials came to know that her train was about to reach Bhusaval Railway Station and they assured her that she would get help there.

40 minutes later, as soon as the train stopped at Bhusaval railway station, RPF jawans reached out to Niharika. The male passenger was shifted to another coach as he had a valid ticket. Niharika finally escaped all the trouble she had faced in the train and further extended her appreciation for RailMadad social media team by tweeting.

@pra_shri80 @RailMinIndia I am now safe, thanks for that immediate help. — Niharika Singh (@niharikasingh1)

Scenario 3

This scenario details how a teacher helped his students travelling in the train when train got delayed and stuck for 7 hours straight.

27 students of Asian School, Dehradun, were on their way to Howrah through Kumbha Express on a school trip. During the journey, the train was diverted to another route due to maintenance work on the tracks, and the students were left stranded for seven hours on the delayed train. They did not have anything to eat or drink because of the absence

of a pantry on that train. A teacher accompanying the students reached out to RailMadad application on his phone to seek help from the authorities in that dire situation. He filed a complaint under the train complaint section of the application, filled out all the mandatory details and uploaded a picture of the location where the train was stationed along with a comment -"sir plz arrange food for school students in train 12370(B-1, Seat No. 53) because of 7 hours delayed, route diverted, No Pantry. Please contact on 98XXXXXX10 "

This request got re-directed to the Ministry of Railways. They further reached out to the teacher on his mobile phone and assured him for the help. Further, the ministry informed the Divisional Authority at Varanasi about the incident and without wasting any more time, officials of Northern Railways reached Pratapgarh, where the train was reported to be stationed. They provided food packets and water on concession rates to all students and teachers.

The spontaneous response and help received through RailMadad app team was greatly admired by all the passengers on the train.

3. Challenges and Solutions

Before RailMadad came into existence, Passenger Grievance Redressal on Indian Railways was beset by a number of shortcomings which have now been taken care of. Following are some of the challenges or shortcomings in the system, which were addressed by RailMadad:

1) Top-down approach

Given the top-down approach in the previous system, complaints were sent to branch officers (divisional heads) who then forwarded the complaints to dedicated manpower deployed to direct the complaints to concerned field units for redressal. This added considerably to the redressal time of grievances and the multi-layered approach bred delays and wrong alerts too.

Solution: In RailMadad, grievances are sent directly to the field unit, hence, eliminate 'delaying' in the first stage itself. As a by-product, it also substantially mitigates manpower required to redress complaints.

2) Unique complaint registration

Earlier none of the channels used to provide a complaint registration number. As a corollary of this, it made nearly impossible to trace and track the status of the actions taken.

Solution: RailMadad generates a unique Complaint Registration Number (CRN) which is shared transparently with the complainant (as an acknowledgement) as well as with the Public Grievance (PG) managers. This keeps everyone on the same page and reduces ambiguity as tracking is possible for each complaint.

3) No real-time redressal

Earlier the system did not have enough time for the complaint to be handled within the journey time. The response time used to be in days.

Solution: RailMadad has made the transition for Rail users and Rail PG Managers from days to hours possible.

4) Wastage of manpower

Traditionally, the Divisional Control Centres (DCC), the nerve centres of train operations were not being used for grievance redressals. A different office-based machinery was deployed by most stakeholders who would look after grievances during office hours.

Solution: RailMadad has very successfully integrated the control centres of various departments into round-the-clock working agile response team. All this has been achieved without adding a single manpower to the DCC.

4) No convergence

Earlier, there was no convergence among the various channels. Complaints used to come from various channels, like Dak, Social Media, SMS, Email, Web & App. In addition, Railways also had seven different helplines for various kinds of complaints. There was no common portal into which all complaints could flow. Hence, accountability and redressal of complaints was difficult. The same complaint could have gone into more than one channel but there was no way of weeding such cases out, because there was no unique identifier.

Solution: RailMadad acts as a convergence of all the grievance redressal platforms being offered by the Railways. It can be accessed either by logging in on a web-portal through a search engine, or through Integrated Railway Helpline number 139 (duly supported by a call centre 24*7), or MobileApp (Android and iOS), or Email, or Social Media, or through SMS or Manual Dak.

5) Registration process cumbersome

In earlier channels and systems, a lot of information was asked which made the complaint making process cumbersome and tedious.

Solution: In RailMadad, just by giving the PNR, the complainant system fetches all the details from Indian Railway. This has put an ease to the customer and lowered the threshold to lodge a complaint.

6) Earlier systems not linked with National Train Enquiry System (NTES)

Most complaints pertain to service deficiency on trains. The previous systems were not enabled to exactly locate the position of the train and automatically alert the nearest Divisional Control Centre to attend the complaint.

Solution: RailMadad uses other Indian Railways software to automatically alert the nearest Divisional Control Centre. This greatly enhances the effectiveness of the system. Complaints can now be directly sent to the concerned Control Office under which the train is running.

7) Non-homogenous heads/subheads

Complaints collected from various channels had non-homogenous heads and sub-heads. It was possible to register same complaint twice, each under different head or sub-head. This made any trend analysis very difficult. Collation and analysis of data across channels also required additional manpower dedicated to only compilation of data.

Solution: Heads and sub-heads of the complaints are predefined and made available to the complainant in a drop-down menu. The convergence of the system and defined heads and sub-heads has enabled the compilation and analysis of data which can be used for identifying various trends.

8) Multiple Helplines

The multiplicity of Helpline numbers resulted in many mis-directed calls. This irritated both the complainant and the railway official attending the calls. In other words, this multiplicity compromised the efficacy of the system.

Solution: RailMadad eliminates this multiplicity completely and the caller is assured of a meaningful response to his query or complaint.

9) MIS reports

The biggest challenge was to look at the complaints in a different manner from a fire-fighting exercise. All the efforts were lost in alerting the field unit in time to mitigate the grievance. With multiplicity of channels, porous heads, delayed alerts and not-deterministic approach, it was impossible to provide MIS tools to the Railway PG Managers to take system improvement measures.

Solution: The above-mentioned challenge has been met very adequately in RailMadad. All types of MIS are available at the click of a button which enables IR PG Managers to do root-cause analysis, profiling, identifying bad service providers etc.

10) Average Disposal time and rate

In view of the shortcomings mentioned above, the average disposal time in earlier system was, at best, 7 days (average within that system). Most complaints (recorded on portal) would go unattended.

Solution: In RailMadad, almost 94% complaints get resolved within 2-3 hours. Also, due to its ease of accessibility, the volume handled every day in RailMadad (over 3000 grievances per day) is double of that in earlier systems, over 90% of which get resolved in less than 2 hrs.

4. e-Enablement of RailMadad

For both complaints and suggestions, the RailMadad system has been e-enabled completely as detailed above. The following steps constitute the entire process.

1. **Access to RailMadad:** RailMadad can be accessed through Web, App, SMS, social media, and phone call to 139.

2. **Recording the complaint:** Registering of complaint has been made easy as it is fully supported by drop-down menu with detailed heads/sub-heads and an option of miscellaneous. A text box is also provided to write details of complaint. Documents, image, video content of up to 5 MB can also be uploaded by the complainant. While registering a complaint through phone-call to 139, the complainant can either talk directly to the call-centre executive to get his complaint registered or navigate through the IVRS menu to register complaint himself. After registering a complaint, a unique CRN (Complaint reference number) is automatically and electronically generated and sent to the complainant on his mobile/email.

3. **Auto Alerts to field unit-:** The process of selection of head, sub-head and field unit uniquely identifies the concerned Divisional Control Centre for immediate action.

4. **Auto Escalation:** If a complaint is not redressed by concerned Divisional Control Centre within the pre-defined expected redressal time, it gets automatically escalated to concerned Officer and then to the Divisional head.

5. **Interim communication:** Any additional information or interim communication is made with the complainant in the same mode which he used to lodge the complaint. This is also fully e-enabled.

6. **Closure:** Closure is done through the system and the complainant gets response on the mode/device through which he lodged the complaint.

7. **Feedback:** Fully e-enabled; system-generated SMS/email is sent to the complainant after the closure of complaint to get his feedback on grievance redressal.

8. **MIS generation:** All MIS resides on the system and is accessible to the PG managers.

5. Way Forward – System Improvement

1) Feedback mechanism

Apart from feedback collected after each grievance redressal, RailMadad would also collect general feedback from Railway passengers on their travelling experience. Feedback form would be cloud based. It would be sent to passengers as a unique link. The information collected through feedback form would be collated in RailMadad for meaningful analysis by Railway Managers.

Feedback Mechanism Prototype:
Q. Please rate your overall experience of travelling with Indian Railways?
Q. Please let us know the area of improvement on the train?
Q. Please let us know the area of improvement at the station?
Q. Please share your overall experience?

(3) Please let us know the areas of improvement at the station

☐ Ticket Booking
☐ Station Entry/Exit
☐ Parking Facilities
☐ Cleanliness
☐ Water Availability
☐ Electrical Equipment
☐ Catering
☐ Security
☐ Staff Behaviour
☐ Satisfied with station services

Next

Passenger Feedback Form

Note : Questions marked with * are mandatory.
(4) Please share your overall experience

User answer

Submit

Passenger Feedback Form

THANK YOU

2) Alert to service providers

At present, alerts for grievances go to concerned field units. In the next phase, the complaint would go directly to service providers of all departments. For this, separate login would be created for service providers. Divisional Railway Control Offices would develop profile for their service providers, who would be able to view complaints assigned to them through mobile App. When they resolve the complaint, they would apprise the Divisional Railway Control Offices. This system would be helpful for raising penalties against Contractual Service

Providers. There could also be a system for rewards.

3) ChatBot

Introduction of ChatBot with the help of AI shall greatly mitigate human interface. The manpower shall be used for quality improvement.

4) Integration of Social Media Using AI

At present, the integration has been done manually (with the help on RailMadad Agents). CRIS will develop ways to incorporate Natural Language Processing (NLP) to shift actionable tweets from non-actionable ones and directly route them to RailMadad.

Workflow 1: Existing setup   **Workflow 2: Proposed setup**
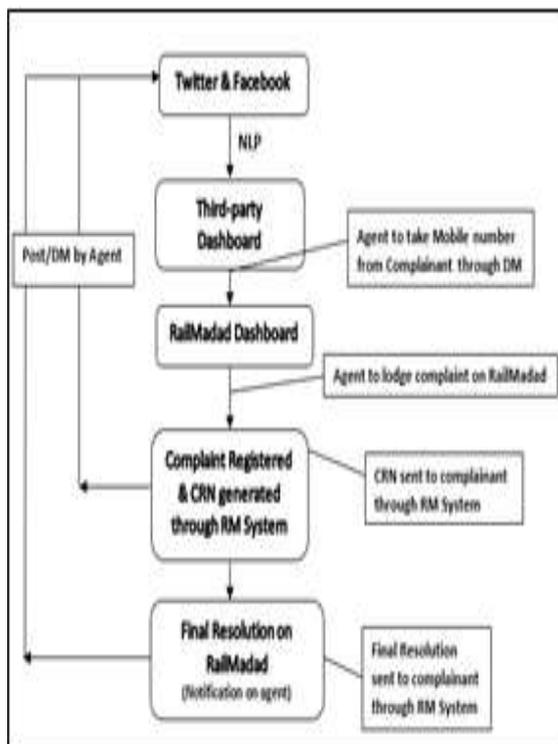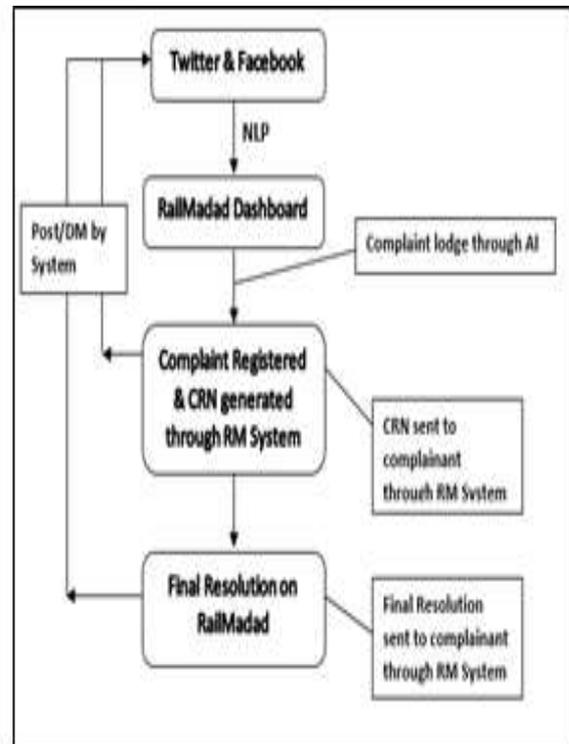
6. Conclusion

The high popularity of RailMadad with citizens can be attributed to the following factors:

(NOTE: These factors are applicable not only to RailMadad, but would also apply to any grievance portal):

a. **Ease of living/travelling**: Single portal for assistance, inquiry and grievance redressal while travelling on Indian Railways.

b. **Ease of accessibility/Convergence**: Accessible through all channels - Web, App, Phone (voice & IVRS), SMS, Social Media, Manual Dak.

c. **Ease of registering complaints**: Minimum inputs required to lodge complaint; modular heads/subheads across channels.

d. **Redressal on fast forward/De-Layering**: Complaint is transferred directly to concerned field unit.

e. **Accountability**: Unique CRN (Complaint Registration Number) generated for every complaint; facility to track complaint and give feedback on redressal.

f. **Citizen-Empowerment**: Citizen charter implemented through RailMadad.

g. **Digital India**: Linked with existing ticketing systems of Indian Railways, like NTES, Passenger Reservation System (PRS),Unreserved Ticketing System (UTS)and Integrated Coaching Management Systems (ICMS).

h. **Proper utilization of Manpower**: Due to direct assignment of complaints to concerned entities and availability of integrated MIS, Railways have been able to save over 27,720 man-hours per month. These man hours were earlier wasted in communicating complaints to the concerned point of contact, and in compiling MIS reports on grievances across channels.

7. Teaching Notes

Learning Objectives

- Importance of innovation and technology to bring transparency and proper accountability in citizen-centric services.
- Technology, services involved for fast response and resolution.

Suggested Questions & Analysis

1) How to lodge a complaint through different channels?
2) Provide rating in given aspects using different channels:
   i. Ease of use
   ii. Time taken
   iii. Resolution impact (Take snapshot before complaint and after resolution)

RailMadad, Indian Railways

Below is a snapshot of the latest status of coverage of channels in RailMadad.

1) Web URL: -www.railmadad.indianrailways.gov.in/
2) App: - RailMadad (Android and iOS)
3) Social Media: - @RailMinIndia (Twitter and Facebook)
4) 139: - Voice, IVRS, SMS
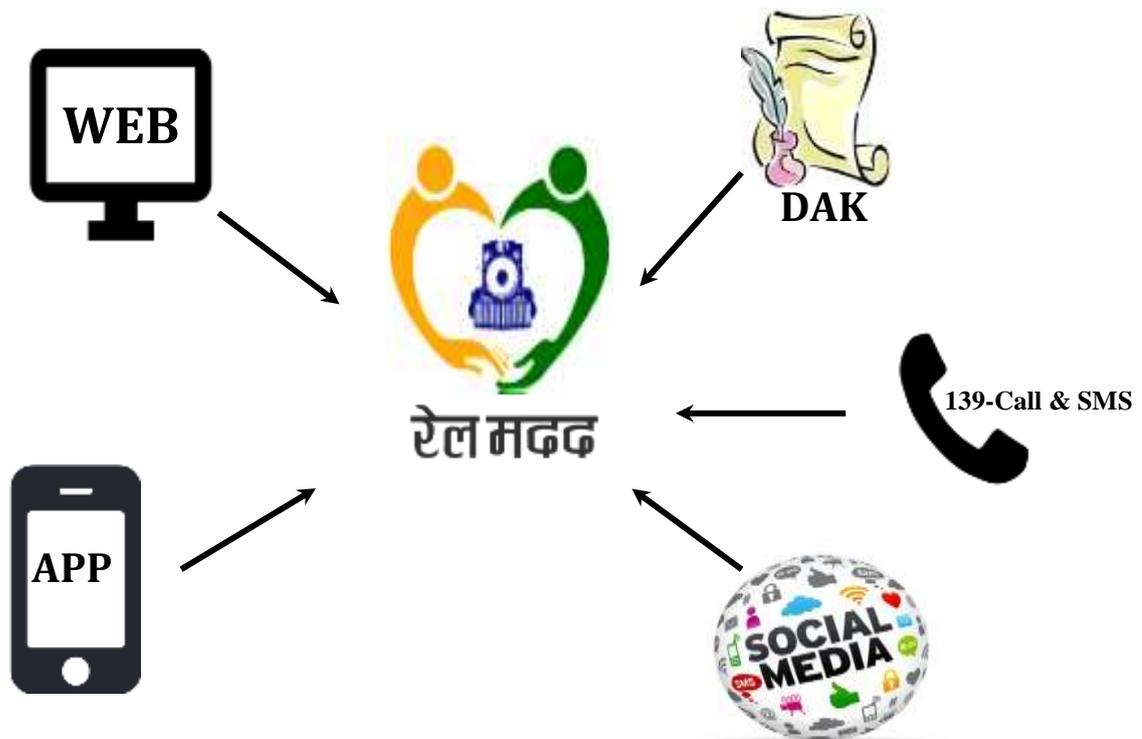
Group Discussion and Role Play Activity

Divide the participants in groups of 4 -5 and discuss the case on following aspects and each group should take one aspect:

1. First group should visit railway stations and ask passengers about RailMadad; their experience about the redressal process; suggestions about areas of improvement in service in the system. They can give live presentations to passengers.

2. Second group should visit railway officials and ask them about RailMadad; their experience about the redressal process; suggestions about areas of improvement in service in the system.

Summary – Key lessons learnt (15 minutes). Each participant shall write down a summary in not more than 500 words highlighting key learnings from the case.

8. Abbreviations

Abbreviations	Full Form
AI	Artificial Intelligence
API	Application Programming Interface
CRIS	Centre for Railway Information Systems
CRN	Complaint Registration Number
DCC	Divisional Control Centres
ICMS	Integrated Coaching Management System
IR	Indian Railways
IVRS	Interactive Voice Response System
MB	Mega Bytes
MIS	Management Information System
NLP	Natural Language Processing
NTES	National Train Enquiry System
PG	Public Grievance
PNR	Passenger Name Record
PRS	Passenger Reservation System
RPF	Railway Protection Force
SEO	Search Engine Optimisation
URL	Uniform Resource Locator
UTS	Unreserved Ticketing System