Empathy Map: Metro Ticket Generating System in ServiceNow

Project Overview

The Metro Ticket Generating System automates the process of generating, managing, and validating metro tickets through ServiceNow's platform, replacing traditional manual ticketing systems with a digital, efficient solution.

Stakeholder 1: Metro Commuters (End Users)

THINK & FEEL

Thoughts:

- "I need to catch my train quickly"
- "I hope the system works fast"
- "Will my payment go through?"
- "I don't want to miss my metro"

Feelings:

- Frustrated with long queues
- Anxious about being late
- Worried about technical failures
- Relieved when booking works smoothly

SEE

- Long queues at ticket counters
- People rushing during peak hours
- Physical tickets getting damaged or lost
- Others using mobile tickets successfully
- Crowded metro stations

HEAR

- Announcements about train arrivals
- Complaints about slow ticketing
- Friends talking about convenience of online booking
- News about digital payment options
- Station staff directing passengers

SAY & DO

Say:

- "The queue is too long!"
- "I lost my physical ticket"
- "Can I book tickets in advance?"
- "Is there a faster way?"

Do:

- Wait in long queues
- Search for quick booking options
- Use mobile apps when available
- Ask station staff for help
- Rush to catch trains

PAIN POINTS

- Long waiting times at ticket counters
- Risk of missing trains due to queues
- Physical tickets getting lost or damaged
- No advance booking options
- Limited payment methods
- Unclear fare information
- Difficulty during peak hours
- No booking history/receipts

GAINS/NEEDS

- Quick ticket generation (under 30 seconds)
- Multiple payment options (card, wallet, UPI)
- Advance booking capability
- Digital ticket storage
- Easy ticket retrieval
- Fare calculator
- Booking history and receipts
- QR code-based validation
- Real-time updates

Stakeholder 2: Metro Station Staff

THINK & FEEL

Thoughts:

- "How do I manage peak hour rush?"
- "Manual ticketing is exhausting"
- "System downtime causes chaos"
- "Need better tools to assist passengers"

Feelings:

- Overwhelmed during rush hours
- Stressed by angry passengers
- Concerned about revenue accuracy
- Satisfied when processes run smoothly

SEE

- Massive queues during peak times

- Confused passengers
- Cash handling issues
- Technical problems at counters
- Revenue collection challenges

HEAR

- Passenger complaints
- Requests for help
- Feedback about system issues
- Management pressure for efficiency
- Discussions about automation

SAY & DO

Say:

- "Please have exact change ready"
- "The system is slow today"
- "Try the mobile app instead"
- "I can't process this right now"

Do:

- Manually issue tickets
- Handle cash transactions
- Assist confused passengers
- Deal with disputes
- Reconcile daily collections
- Report system issues

PAIN POINTS

- Manual ticket generation is time-consuming
- Cash handling and reconciliation errors

- Difficulty managing peak hours
- No automated reporting
- Physical ticket stock management
- Printer maintenance issues
- Lack of real-time visibility
- Revenue leakage risks

GAINS/NEEDS

- Automated ticket generation system
- Digital payment integration
- Real-time dashboard for monitoring
- Automated revenue reconciliation
- Reduced manual workload
- Better passenger flow management
- Quick issue resolution tools
- Performance metrics and reports

Stakeholder 3: Metro Operations Management

THINK & FEEL

Thoughts:

- "How can we improve efficiency?"
- "Revenue accuracy is critical"
- "We need better data insights"
- "Customer satisfaction must improve"

Feelings:

- Pressured to improve operations
- Concerned about revenue leakage
- Excited about digital transformation

- Responsible for service quality

SEE

- Operational inefficiencies
- Customer complaints increasing
- Competitors adopting technology
- Revenue collection gaps
- Data in disconnected systems

HEAR

- Passenger feedback and complaints
- Staff reporting difficulties
- Board demands for modernization
- Success stories from other metros
- Technology vendor proposals

SAY & DO

Say:

- "We need to digitize operations"
- "Customer experience is priority"
- "Show me the metrics"
- "How can we reduce costs?"

Do:

- Review operational reports
- Analyze revenue data
- Plan technology investments
- Set service standards
- Monitor KPIs
- Approve budget allocations

PAIN POINTS

- Limited visibility into operations
- Manual reporting delays
- Revenue reconciliation challenges
- High operational costs
- Inability to track trends
- Poor data for decision-making
- Compliance and audit difficulties
- Scalability issues

GAINS/NEEDS

- Real-time operational dashboards
- Automated revenue tracking
- Comprehensive analytics and reports
- SLA monitoring and compliance
- Reduced operational costs
- Improved customer satisfaction scores
- Data-driven decision making
- Scalable infrastructure
- Audit trail and compliance reports

Stakeholder 4: IT Administrators/ServiceNow Team

THINK & FEEL

Thoughts:

- "System uptime is critical"
- "How do we handle peak loads?"
- "Integration with existing systems?"

- "Need robust error handling"

Feelings:

- Responsible for system reliability
- Challenged by technical complexity
- Motivated by automation opportunities
- Concerned about security

SEE

- System performance metrics
- User adoption rates
- Technical issues and bugs
- Integration challenges
- Security vulnerabilities

HEAR

- User complaints about system issues
- Management expectations
- Vendor support communications
- Team discussions about improvements
- Security audit requirements

SAY & DO

Say:

- "We need to test thoroughly"
- "System must be scalable"
- "Security is non-negotiable"
- "Let's monitor performance closely"

Do:

- Configure ServiceNow modules

- Develop workflows and automations
- Monitor system performance
- Troubleshoot issues
- Manage integrations
- Implement security measures
- Generate technical reports

PAIN POINTS

- Complex integration requirements
- High availability demands (99.9% uptime)
- Peak load management
- Legacy system compatibility
- Data migration challenges
- Security and compliance requirements
- Limited testing time
- Maintenance windows are restricted

GAINS/NEEDS

- Robust and scalable architecture
- Automated monitoring and alerts
- Easy maintenance and updates
- Clear documentation
- Efficient troubleshooting tools
- Strong security framework
- Seamless integration capabilities
- Performance optimization tools

Cross-Stakeholder Pain Points Summary

1. **Time & Efficiency**
    - Long processing times
    - Manual interventions
    - Peak hour bottlenecks
2. **Visibility & Tracking**
    - No real-time status updates
    - Limited reporting capabilities
    - Lack of audit trails
3. **Reliability & Trust**
    - System downtime concerns
    - Payment processing issues
    - Data accuracy problems
4. **Communication**
    - Lack of notifications
    - Poor user guidance
    - Limited support channels

Cross-Stakeholder Gains Summary

1. **Speed & Automation**
    - Instant ticket generation
    - Automated workflows
    - Self-service capabilities
2. **Transparency & Control**
    - Real-time dashboards
    - Complete audit trails
    - Comprehensive reporting
3. **Reliability**

- High system availability
- Secure transactions
- Accurate data processing

4. **Enhanced Experience**
    - User-friendly interface
    - Multiple access channels
    - Proactive notifications

Key Insights for Design

Based on this empathy map, the Metro Ticket Generating System should prioritize:

1. **Speed** - Ticket generation in under 30 seconds
2. **Accessibility** - Multiple channels (web, mobile, kiosk)
3. **Reliability** - 99.9% system uptime
4. **Transparency** - Real-time tracking and notifications
5. **Integration** - Seamless payment gateway integration
6. **Analytics** - Comprehensive dashboards and reports
7. **Security** - PCI-DSS compliant payment processing
8. **Scalability** - Handle peak loads efficiently

This empathy map serves as a foundation for user-centered design and ensures all stakeholder needs are addressed in the Metro Ticket Generating System implementation.