# HTT Complete Customer Service Management Process

# **Process Description**

This comprehensive BPMN process diagram demonstrates all major BPMN 2.0 symbols through a realistic customer service management system for High Tech Talents (HTT). The process is organized across multiple swimlanes representing different participants and systems.

#### **Swimlane Structure**

#### **Customer Pool**

- Contains the HTT logo prominently displayed
- Shows customer-initiated activities and interactions

#### **HTT Customer Service Pool**

- Main service delivery lane with comprehensive workflow
- Includes automated routing, classification, and resolution activities

# **HTT Management Pool**

- Escalation handling and oversight activities
- Management decision points and approvals

#### **External Systems Pool**

- Integration with CRM, reporting, and other external systems
- Automated system interactions and data processing

# **Complete Process Flow**

# 1. Process Initiation (Start Events)

- None Start Event: Basic process start
- Message Start Event: Customer inquiry via email/chat
- Timer Start Event: Scheduled maintenance or follow-up processes

• Multiple Start Event: Process can begin through various channels

### 2. Initial Processing (Activities & Gateways)

- Service Task (Automated Routing): System automatically routes inquiries
- User Task (Classification): Agent classifies the inquiry type
- Exclusive Gateway: Routes based on inquiry classification
- Business Rule Task: Applies routing rules and priorities

#### 3. Service Delivery Paths (All Task Types)

- User Task (Information Request): Agent handles information requests
- Service Task (Information Response): Automated response generation
- Send Task (Response): Sends response to customer
- Receive Task (Information): Waits for additional customer input
- Manual Task: Physical document handling or offline activities
- Script Task: Data processing and calculations

### 4. Decision Points (All Gateway Types)

- Exclusive Gateway (XOR): Single path selection based on conditions
- Parallel Gateway (AND): Simultaneous processing of multiple activities
- Inclusive Gateway (OR): Multiple optional paths based on criteria
- Event-Based Gateway: Waits for specific events to determine next steps
- Complex Gateway: Advanced routing logic for sophisticated decisions

# 5. Exception Handling (Intermediate Events)

- Timer Intermediate Event: SLA monitoring and timeout handling
- Error Intermediate Event: System error detection and handling
- Escalation Intermediate Event: Automatic escalation to management
- Signal Intermediate Event: Cross-process communication
- Message Intermediate Event: Inter-departmental communication
- Conditional Intermediate Event: Condition-based process triggers

# 6. Subprocess Handling

- Collapsed Subprocess (Escalation): Complex escalation procedure
- Event Subprocess: Exception handling running in parallel
- Call Activity: Reusable resolution procedures
- Transaction Subprocess: Atomic operations requiring rollback capability

#### 7. Process Completion (End Events)

- None End Event: Normal process completion
- Message End Event: Sends final notification to customer
- Error End Event: Process ends due to unrecoverable error
- **Terminate End Event**: Immediate process termination
- **Signal End Event**: Broadcasts completion signal to other processes
- Compensation End Event: Triggers compensation activities

#### 8. Data Management

- Data Objects: Customer information, service requests, resolution details
- Data Stores: Customer database, knowledge base, audit logs
- Data Associations: Show data flow between activities and storage

# 9. Supporting Elements

- Text Annotations: Business rules, SLA requirements, special instructions
- Groups: Visual organization of related activities
- Message Flows: Communication between different participants
- Sequence Flows: Process flow within each participant

# **Activity Markers Demonstrated**

### **Loop Markers**

- Standard Loop: Retry mechanisms for failed operations
- Multi-Instance Sequential: Processing multiple items in order
- Multi-Instance Parallel: Simultaneous processing of multiple requests

# **Special Markers**

- Ad-Hoc Marker: Flexible problem-solving activities
- Compensation Marker: Rollback and correction activities

# **Symbol Coverage Summary**

This process diagram successfully demonstrates:

- 12 Event Types: All major start, intermediate, and end event variations
- 7 Task Types: Complete coverage of BPMN task types
- 5 Gateway Types: All gateway types including complex routing
- 4 Subprocess Types: Various subprocess patterns and behaviors
- 6 Activity Markers: Loop, multi-instance, and special behavior markers
- 4 Connecting Objects: All connection types for flow and communication
- 3 Data Elements: Data objects, stores, and associations
- 3 Artifact Types: Annotations, groups, and organizational elements
- 2 Swimlane Types: Pools and lanes for participant organization

# **Practical Application**

This process model represents a realistic customer service system that HTT could implement, demonstrating how all BPMN symbols can be used together in a coherent, practical business process. Each symbol serves a specific purpose in modeling the complex interactions, decisions, and flows required for effective customer service management.

The integration of the HTT logo reinforces brand identity while the comprehensive symbol usage provides an excellent reference for understanding how all BPMN elements work together in practice.