======================================================================

TASK MANAGEMENT SYSTEM - PROCESS DOCUMENTATION

======================================================================

Database: task\_management

Created: 2025-06-06

Documentation: Complete workflow descriptions for all 8 interaction types

======================================================================

1. PRICE LIST REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction calls asking for a price list for all compaction tools"

PROCESS FLOW:

1. Customer calls hire controller

2. Hire controller captures request details

3. System creates price list interaction

4. System creates user task for hire controller to send price list

INTERACTION TYPE: price\_list

REFERENCE FORMAT: PL250606001 (PL + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, request details

- Layer 2 (Components): Creates equipment list component with requested items

- Layer 3 (Tasks): Creates user task "send\_price\_list" assigned to hire controller

TASK DETAILS:

- Assigned To: Hire controller (same person who took call)

- Priority: Medium

- Due Date: Tomorrow

- Task Type: send\_price\_list

REQUIRED ACTIONS:

- Prepare price list for requested equipment

- Include customer-specific pricing (company vs individual rates)

- Email price list to customer contact

- Include equipment specifications and accessories

- Follow up if no response within reasonable time

OUTCOME: Customer receives professional price list via email

======================================================================

2. QUOTE REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction needs a quote to hire a rammer for 3 days"

PROCESS FLOW:

1. Customer calls requesting formal quote

2. Hire controller captures equipment and duration requirements

3. System calculates pricing based on customer type and duration

4. System creates quote interaction with financial components

5. System creates user task for hire controller to generate and send quote

INTERACTION TYPE: quote

REFERENCE FORMAT: QT250606001 (QT + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, quote request

- Layer 2 (Components):

\* Equipment list with duration and pricing details

\* Quote totals with subtotal, VAT, total, validity period

- Layer 3 (Tasks): Creates user task "send\_quote" assigned to hire controller

PRICING CALCULATION:

- Retrieves customer-specific rates (company vs individual)

- Calculates best rate structure (daily/weekly/monthly) for requested duration

- Applies VAT at 15%

- Includes deposit requirements

- Sets quote validity period (30 days)

TASK DETAILS:

- Assigned To: Hire controller

- Priority: High (for large quotes) or Medium

- Due Date: Tomorrow (quotes are time-sensitive)

- Task Type: send\_quote

REQUIRED ACTIONS:

- Generate formal quote document (PDF)

- Include all equipment specifications and pricing breakdown

- Add standard terms and conditions

- Email quote to customer contact

- Follow up within 3 business days

- Update interaction status when quote sent

OUTCOME: Customer receives professional quote with pricing, terms, and validity period

======================================================================

3. STATEMENT REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction requests an account statement"

PROCESS FLOW:

1. Customer calls requesting account statement

2. Hire controller captures request

3. System creates statement interaction

4. System creates user task for accounts team to generate statement

INTERACTION TYPE: statement

REFERENCE FORMAT: ST250606001 (ST + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, statement request

- Layer 2 (Components): No additional components needed (basic request)

- Layer 3 (Tasks): Creates user task "send\_statement" assigned to accounts team

TASK DETAILS:

- Assigned To: Accounts team member (not hire controller)

- Priority: Medium

- Due Date: Tomorrow

- Task Type: send\_statement

REQUIRED ACTIONS:

- Generate current account statement showing transactions and balance

- Include payment history and outstanding amounts

- Email statement to customer contact (verify billing contact)

- Update interaction status when statement sent

SPECIAL CONSIDERATIONS:

- Verifies if contact is billing contact

- Alerts if statement should go to different contact

- Includes customer credit limit and payment terms information

OUTCOME: Customer receives detailed account statement via email

======================================================================

4. REFUND REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction requests a refund due to overpayment"

PROCESS FLOW:

1. Customer calls requesting refund

2. Hire controller captures refund details and reason

3. System creates refund interaction with financial components

4. System creates user task for accounts team to process refund

INTERACTION TYPE: refund

REFERENCE FORMAT: RF250606001 (RF + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, refund request

- Layer 2 (Components): Creates refund details component with:

\* Refund amount and type (full/partial/deposit\_only)

\* Refund reason and method (EFT/cash/credit\_note)

\* Account balance before/after calculations

\* Banking details requirements

- Layer 3 (Tasks): Creates user task "process\_refund" assigned to accounts team

TASK DETAILS:

- Assigned To: Accounts team member

- Priority: High (large amounts) or Medium

- Due Date: Tomorrow (refunds need prompt attention)

- Task Type: process\_refund

REQUIRED ACTIONS:

- Verify current account balance and eligibility

- Obtain customer banking details for EFT

- Process refund through banking system

- Update customer account records

- Email refund confirmation to customer

- Manager approval required for refunds over R5,000

OUTCOME: Customer receives refund via EFT with confirmation

======================================================================

5. HIRE REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction wants to hire a rammer and plate compactor, delivery to Sandton site tomorrow at 9 AM"

PROCESS FLOW:

1. Customer calls with equipment hire request

2. Hire controller captures equipment, duration, delivery details

3. System creates hire interaction with delivery components

4. System creates driver task for equipment delivery

INTERACTION TYPE: hire

REFERENCE FORMAT: HR250606001 (HR + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, hire request

- Layer 2 (Components):

\* Equipment list with quantities and hire duration

\* Hire details with delivery date, time, site, and instructions

- Layer 3 (Tasks): Creates driver task "delivery" in drivers taskboard

DRIVER TASK DETAILS:

- Task Type: delivery

- Status: Starts in "backlog" (unassigned)

- Priority: Medium (urgent for same-day requests)

- Includes: Customer details, site address, equipment summary, delivery instructions

- Progress Tracking: Booked → Driver Assigned → Quality Control → Customer Notified

REQUIRED ACTIONS:

- Assign driver to task

- Verify all equipment is available and functional

- Load equipment for delivery

- Deliver to specified site at scheduled time

- Notify customer via WhatsApp when en route/delivered

- Update task status through completion

OUTCOME: Customer receives equipment delivered to their site as scheduled

======================================================================

6. OFF-HIRE REQUEST PROCESS

======================================================================

SCENARIO: "John Guy from ABC Construction is finished with the rammer and plate compactor, requests collection from Sandton site on June 10th at 1 PM"

PROCESS FLOW:

1. Customer calls requesting equipment collection

2. Hire controller captures collection details

3. System creates off-hire interaction with collection components

4. System creates driver task for equipment collection

INTERACTION TYPE: off\_hire

REFERENCE FORMAT: OH250606001 (OH + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, off-hire request

- Layer 2 (Components):

\* Equipment list (items to be collected)

\* Off-hire details with collection date, time, site, early return info

- Layer 3 (Tasks): Creates driver task "collection" in drivers taskboard

DRIVER TASK DETAILS:

- Task Type: collection

- Status: Starts in "backlog" (unassigned)

- Priority: Medium

- Duration: Shorter than deliveries (60 minutes vs 90 minutes)

- Progress Tracking: Booked → Driver Assigned → Quality Control → Customer Notified

REQUIRED ACTIONS:

- Assign driver to collection task

- Schedule collection at customer's convenience

- Collect equipment from specified site

- Check equipment condition upon collection

- Transport equipment back to depot

- Update hire records and billing

OUTCOME: Equipment collected from customer site, hire period completed

======================================================================

7. BREAKDOWN REQUEST PROCESS

======================================================================

SCENARIO: "John Guy reports URGENT - TE1000 Breaker stopped working at Sandton site, blocking critical work, needs driver within the hour"

PROCESS FLOW:

1. Customer calls with urgent equipment breakdown

2. Hire controller captures breakdown details and urgency

3. System creates breakdown interaction with emergency components

4. System creates URGENT driver task for immediate response

INTERACTION TYPE: breakdown

REFERENCE FORMAT: BD250606001 (BD + date + sequence)

LAYERS:

- Layer 1 (Interaction): Records customer, contact, employee, breakdown report

- Layer 2 (Components):

\* Equipment list (broken items)

\* Breakdown details with urgency, issue description, resolution type (swap/repair)

- Layer 3 (Tasks): Creates URGENT driver task "repair" in drivers taskboard

DRIVER TASK DETAILS:

- Task Type: repair

- Status: Starts in "backlog" but requires IMMEDIATE assignment

- Priority: URGENT/CRITICAL

- Scheduled Response: Within 30 minutes to 1 hour

- Equipment: Both broken item (swap out) and replacement (swap in)

SPECIAL HANDLING:

- Immediate driver assignment required

- Emergency response timeframes

- Replacement equipment must be prepared

- Customer gets priority notification

- May require overtime/emergency callout

REQUIRED ACTIONS:

- Assign available driver immediately

- Prepare replacement equipment

- Dispatch to site within target timeframe

- Swap broken equipment for working unit

- Collect broken equipment for repair

- Ensure minimal customer downtime

OUTCOME: Customer back operational with minimal downtime, broken equipment collected for repair

======================================================================

8. APPLICATION REQUEST PROCESS

======================================================================

SCENARIO: "Bill Guy calls saying 'I would like to register my company ZXC Works to hire equipment from you'"

PROCESS FLOW:

1. Potential customer calls expressing interest in opening account

2. Hire controller captures applicant details (name, company, email, phone)

3. System creates application interaction using generic customer

4. System creates user task for hire controller to email application form

INTERACTION TYPE: application

REFERENCE FORMAT: AP250606001 (AP + date + sequence)

LAYERS:

- Layer 1 (Interaction): Uses generic customer (ID 999) for referential integrity

- Layer 2 (Components): Application details with:

\* Application type (company/individual)

\* Applicant contact details (first name, last name, email)

\* Required documentation list

\* Verification status (pending)

- Layer 3 (Tasks): Creates user task "process\_application" assigned to hire controller

TASK DETAILS:

- Assigned To: Hire controller (for initial contact and form distribution)

- Priority: Medium

- Due Date: Tomorrow

- Task Type: process\_application

REQUIRED ACTIONS:

- Email application form to applicant's email address

- Include required documentation list:

\* Company registration certificate

\* VAT certificate

\* Director ID copy

\* Proof of business address

- Provide company contact details for queries

- Set follow-up reminders (1 week, 2 weeks)

- Forward completed applications to manager for review

FOLLOW-UP PROCESS:

1. Week 1: Check for completed application

2. Week 2: Send reminder if no response

3. Month 1: Close application if no response

4. When received: Forward to manager for approval and customer setup

OUTCOME: Potential customer receives application form and documentation requirements, begins formal application process

======================================================================

SYSTEM ARCHITECTURE SUMMARY

======================================================================

3-LAYER ARCHITECTURE:

1. Layer 1 (interactions): Universal entry point - captures who, what, when

2. Layer 2 (components): Stores interaction-specific details and requirements

3. Layer 3 (taskboards): Creates actionable work items for employees

TASK ROUTING:

- Price Lists: Hire Controller

- Quotes: Hire Controller

- Statements: Accounts Team

- Refunds: Accounts Team

- Hires: Drivers (delivery tasks)

- Off-hires: Drivers (collection tasks)

- Breakdowns: Drivers (urgent repair tasks)

- Applications: Hire Controller (form distribution)

REFERENCE NUMBERS:

Format: PPYYMMDDNNN (Prefix + Date + Sequence)

- Unique daily sequences

- Traceable across all systems

- Professional appearance for customers

PRIORITY HANDLING:

- Urgent: Breakdowns, large refunds, high-value quotes

- High: Applications, large quotes

- Medium: Standard requests, statements, hires

- Low: General inquiries

CUSTOMER TYPES:

- Real Customers: Full customer/contact records with accounts

- Applications: Generic customer (ID 999) with applicant details in components

- Different pricing: Company vs Individual rates

DATABASE DESIGN:

- Referential integrity maintained

- Audit trails for all changes

- Scalable for future features (contracts, advanced reporting)

- Comprehensive monitoring and analytics capabilities

======================================================================

END OF DOCUMENTATION

======================================================================