Internal Rework Requests - Comprehensive Analysis

Executive Summary

This report analyzes internal rework requests data collected between April 2, 2025, and May 20, 2025. During this period, 169 rework requests were logged, resulting in 19,705 units being reworked across various departments. The analysis reveals that "Internal Error/Damage" is the predominant reason for rework (71.6% of all cases), with the Digital department accounting for the highest number of issues (41.4%). The data shows a notable spike in rework requests during the week of May 12, 2025, with 48 issues logged during that week alone.

Overview of Rework Data

Key Metrics

- **Total Rework Requests**: 169
- **Total Units Reworked**: 19,705
- **Average Quantity per Request**: 117 units
- **Maximum Quantity in a Single Request**: 2,000 units

Temporal Distribution

The data shows an increasing trend in rework requests over time, with the highest concentration of issues occurring in May 2025. Notably, May 12, 2025, had 20 rework requests in a single day, suggesting a significant process disruption or quality control issue during this period.

Department Distribution

- **Digital**: 70 issues (41.4%)
- **TBD (To Be Determined)**: 56 issues (33.1%)
- **Bindery**: 29 issues (17.2%)
- **Prepress**: 12 issues (7.1%)
- **Supplier**: 2 issues (1.2%)

The Digital department is responsible for the highest number of rework requests, which suggests that digital printing processes may require closer quality control monitoring.

Rework Reasons

- **Internal Error/Damage**: 121 issues (71.6%)
- **Shortage**: 35 issues (20.7%)
- **Lost Components**: 13 issues (7.7%)

The overwhelming majority of rework is due to internal errors or damage, pointing to potential issues with production processes rather than external factors.

Quantity Reworked by Department

- **Digital**: 7,488 units (38.0%)
- **TBD**: 6,491 units (32.9%)
- **Prepress**: 3,129 units (15.9%)
- **Bindery**: 1,795 units (9.1%)
- **Supplier**: 802 units (4.1%)

While Digital has the highest number of incidents, the volume of units affected is proportional to its incident rate, suggesting consistent impact across issues.

Detailed Analysis

Rework Required Types

- **Text Section(s)**: 44 issues (26.0%)
- **PPC**: 38 issues (22.5%)
- **Complete Book**: 33 issues (19.5%)
- **Limp Cover**: 27 issues (16.0%)
- **Insert(s)**: 16 issues (9.5%)
- **Other**: 11 issues (6.5%)

Text sections are the most commonly reworked components, followed by PPC (Paper, Print, and Color) issues.

CSR Submissions

- **IS**: 94 submissions (55.6%)
- **JB**: 26 submissions (15.4%)
- **RM**: 13 submissions (7.7%)
- **CS**: 11 submissions (6.5%)
- **AJ**: 11 submissions (6.5%)
- **LE**: 8 submissions (4.7%)
- **KD**: 6 submissions (3.6%)

CSR "IS" has submitted the majority of rework requests, which could indicate either a higher workload, greater diligence in reporting issues, or responsibility for problematic product lines.

Weekly Trends

- **Week 1 (Mar 31)**: 10 issues, 2,090 units
- **Week 2 (Apr 7)**: 14 issues, 2,164 units
- **Week 3 (Apr 14)**: 11 issues, 1,138 units
- **Week 4 (Apr 21)**: 25 issues, 3,029 units
- **Week 5 (Apr 28)**: 19 issues, 6,459 units
- **Week 6 (May 5)**: 25 issues, 1,358 units
- **Week 7 (May 12)**: 48 issues, 2,641 units
- **Week 8 (May 19)**: 17 issues, 826 units

The data shows a significant spike in Week 7 (May 12), with 48 rework issues - nearly double the average weekly rate. However, the quantity reworked that week (2,641) was not proportionally high, suggesting that

these were smaller batch issues. The highest quantity reworked occurred in Week 5 (Apr 28) with 6,459 units, indicating fewer but larger volume issues during that period.

Department by Issue Type Matrix

Digital Department

- **Internal Error/Damage**: 56 issues
- **Shortage**: 14 issues

TBD Department

- **Internal Error/Damage**: 24 issues
- **Shortage**: 19 issues
- **Lost Components**: 13 issues

Bindery Department

- **Internal Error/Damage**: 27 issues
- **Shortage**: 2 issues

Prepress Department

- **Internal Error/Damage**: 12 issues

Supplier

- **Internal Error/Damage**: 2 issues

The Digital department has the highest number of Internal Error/Damage issues, while TBD accounts for all Lost Components issues and the majority of Shortage issues.

Notable Patterns

Digital Department Issues

Most digital department issues relate to specific equipment or processes:

- Indigo printer problems (creasing, print quality issues, backing up incorrectly)
- Laminating issues (incorrect lamination type, adhesion problems)
- DBS (Digital Binding System) issues (creased spines, binding problems)
- Inkjet printing problems (wrong reel size, print position errors)

Bindery Department Issues

Bindery issues commonly involve:

- Case-making problems (spine movement, off-center spines)
- Guillotine errors (incorrect cutting)
- KM Binder issues (inconsistent trimming)

- Saddle stitcher problems (missing pages, stitching without covers)

Prepress Department Issues

Prepress issues primarily involve:

- Imposition errors (upside-down printing, incorrect positioning)
- File errors (incorrect spine width, dimensions)

Quantity Patterns

- The average rework quantity is 117 units per request
- Several large-volume reworks (1,000+ units) significantly affect the total
- Most rework requests involve smaller quantities (under 50 units)

Conclusion

The spike in rework requests during the week of May 12 warrants further investigation to determine if there were specific operational challenges, staffing issues, or equipment failures during this period.

The data highlights specific processes and equipment that frequently contribute to rework, including the Indigo printer, lamination processes, and binding systems in the Digital department, as well as case-making and cutting operations in the Bindery department.

Data Visualisation