# MHCO PRINT SHOP ASSESSMENT REPORT

**Prepared June 2026 for MHCO Leadership**

**Prepared by Dan Rice & Thomas Boyd**

## SECTION 1 — EXECUTIVE SUMMARY

**Purpose of Assessment** - MHCO leadership requested an operational, financial, and workflow assessment of the MHCO Print Shop to determine current performance, identify structural issues, and recommend a modernization plan that improves speed, reliability, and financial sustainability.

**Overall Conclusion** - The MHCO Print Shop is **not understaffed** and **operationally constrained**. The shop has the labor capacity to produce **$400,000–$500,000** in revenue but is currently generating far less once pass-through items are removed. ($202,348.09 through April 2026).

**Key Findings**

- Turnaround times are significantly slower than industry standards. Some serious bottlenecks have already been identified and a solution is being considered.
- Printer's Plan Software is not being used as the primary system of record. Since it is an application specific software for the printing industry it has a lot of good features and benefits.
- Redundant QuickBooks invoicing wastes labor and creates potential errors.
- Equipment-up-time has been poor due to third-party leasing and marginal service.
- Financial reporting includes pass-through revenue (postage, outsourced printing, materials), which distorts performance metrics.
- Workflow discipline is inconsistent, and scheduling is not centralized or managed.
- The shop's current labor/salary cost is appropriate for a much higher throughput level.

**Key Improvements Already Underway**

- MHCO is leasing **three new Canon copiers directly from Canon**, eliminating the unreliable third-party service provider.
- Pricing and click rates on the new lease contracts are in line with industry benchmarks.
- This change will materially improve uptime, speed, and reliability.

**Primary Recommendations**

1. Make **Printer's Plan** Software the single source for estimating jobs, scheduling, job tracking, invoicing and managing accounts receivables.
2. Eliminate redundant QuickBooks invoicing and reporting.
3. Implement a weekly and monthly **Financial Dashboard** (included later in this document).
4. Track **Adjusted Revenue** (subtracting postage, outsourced printing, and materials).
5. Establish strict turnaround standards aligned with industry norms. Currently the intake and outgoing invoicing process takes significantly longer than the actual printing does.
6. Increase throughput to match existing labor capacity.
7. Strengthen Thomas Boyd's operational authority as Print Shop Manager.

# SECTION 2 — CURRENT STATE OF OPERATIONS

**Staffing** The shop is staffed with experienced employees who understand production but lack a unified workflow system and consistent scheduling discipline.

**Workflow Observations**

- Jobs enter the shop through multiple channels with inconsistent documentation.
- Estimating is not standardized or even using correct costing of labor or shop overhead.
- Scheduling is informal and not tracked in Printer's Plan.
- Job tickets are incomplete or miss required details that slow things down.
- Communication between departments and customers is inconsistent.
- Turnaround times vary widely and are often slow.
- There is no tracking of reruns.
- There is no follow up on Accounts Receivable Customers and no Credit Controls in place.
- There are a lot of obsolete supplies and paper that are just sitting. An effort needs to be made to use it up even if it is a goodwill job for another non-profit or school.
- There are also a lot of ink and chemicals in the shop that are no longer used. These need to be sold, given away or disposed of by someone like Safety-Kleen. This should be a high priority as some may be toxic.
- There are several pieces of equipment that are no longer functional and are just taking up space in the shop. An effort should be made to sell, donate or dispose of the obsolete equipment as soon as possible. All other equipment should be repaired and all safety mechanisms working.
- Shop appearance makes a difference to the customers and to the Home's donors.

**Impact** - These issues reduce throughput, increase rework, and create bottlenecks that prevent the shop from reaching its true production capacity.

# SECTION 3 — EQUIPMENT ASSESSMENT

**Previous Leasing Structure** The shop previously leased digital presses through a third-party vendor. Service was:

- Slow
- Unreliable
- Frequently delayed
- Responsible for significant downtime

This directly harmed turnaround times and reduced revenue capacity.

**New Canon Direct Leases** - MHCO is now leasing **three new Canon copiers directly from Canon**, which is a major operational improvement.

**Benefits**

- Faster service response
- Higher uptime
- Better parts availability
- Direct manufacturer accountability
- Predictable lease and click costs
- Pricing matches industry benchmarks

**Conclusion** This upgrade will materially improve production speed, reliability, and consistency — all essential for meeting industry turnaround standards. The shop has a lot of equipment that is obsolete or broken and not needed. This should be sold or junked. If it is a piece of equipment that is used but needs a repair – then that repair should be done as soon as possible if it makes financial sense. There is a Saddleback Stitcher that is listed as being in great condition but is a safety concern. Immediate action should be taken to put this machine in a Lock Out – Tag Out situation until all safety issues are resolved.

There is a very minimum amount of maintenance being done on the equipment. The shop is reactive and fixes stuff only after it breaks. Regular scheduled maintenance would have a payback in uptime and shop productivity and in more production output. It would also make it safer for our employees.

# SECTION 4 — SOFTWARE & SYSTEMS

**Printer's Plan (Required System of Record)** - Printer's Plan is designed to be the central operational system for:

- Estimating both labor and material costs for small and large jobs.
- Job entry and customer information tracking

- Scheduling
- Production tracking
- Inventory Level Maintenance
- Invoicing
- Reporting
- History
- Accounts Receivable

**Current Issue** The shop is not using Printer's Plan as intended. Instead, it is:

- Underutilized
- Inconsistently updated with shop costs, labor costs and material costs
- Not used for scheduling
- Not used for job tracking
- Not used for final invoices
- Not used for accounts receivables

**QuickBooks Redundancy** - The shop currently invoices in **both** Printer's Plan and QuickBooks.

This creates:

- Double work
- Potential Errors
- Delays
- Confusion
- Inaccurate reporting

**Recommendation** - Printer's Plan must become the **single source software**. QuickBooks should only receive summarized financial data — not individual job invoices. If possible, QuickBooks should be eliminated completely, and all summarized financial information should be obtained directly from Printer's Plan Software and forwarded to the MHCO CFO. This may require that the Print Shop Manager (or someone else get additional training) so that everything can be updated for full utilization of Printer's Plan Software.

# SECTION 5 — WORKFLOW & TURNAROUND

**Industry Reality** - In small and medium print shops, **speed, quality and customer service are the products**.

Customers choose printers based on:

- Turnaround time
- Reliability/Quality
- Responsiveness

- Communication

Price is rarely the deciding factor. If a print shop is surviving by always being the lowest price – it will only be a matter of time before they are gone.

**MHCO's Current Turnaround** – Shop turnaround times are significantly slower than industry norms due to:

- Poor equipment up time (now being fixed)
- Lack of scheduling discipline
- Inconsistent job documentation
- Underuse of Printer's Plan Software
- Bottlenecks in communication
- Redundant administrative work
- A lack of urgency of some employees

**Impact** - Slow turnaround reduces:

- Revenue
- Customer satisfaction
- Repeat business
- Internal department confidence
- Throughput
- Labor efficiency

## SECTION 6 — FINANCIAL ANALYSIS

**Critical Correction: Adjusted Revenue** - Print shops should remove pass-through items from reported revenue:

- **Postage**
- **Outsourced printing**
- **Materials – Paper, Ink, Supplies, etc.**
- **Shipping Costs**

These do not reflect value created by employees.

**Adjusted Revenue Formula (labor), -** Adjusted Revenue = Total Revenue – Postage – Outsourced Printing – Materials – Shipping Costs

**Through April Labor Cost/**Salaries: **$99,464.29** Benefits: **$33,074** Total Labor: **$132,538**

**Labor Sales/Adjusted Revenue -** Once pass-throughs are removed, MHCO's true internal revenue/labor sales is **$202,000 or $50,000 per month, $2,500 per day and $300 per hour.**

**This equates to $60 per hour for the 5 production employees. This includes the cost of running presses and other equipment. This should be at least $100 per hour per production person or $500 per hour, $$4,000 per day and $80,000 per month or $320,000 through April. This would put an additional $120,000 on the bottom line of the profit and loss statement. If you made the rate $125 per hour it would put an additional $20,000 net profit on the bottom line each month. Making that kind of profit allows the shop to update all the equipment and be even more productive and profitable.**

Labor % of adjusted revenue is therefore **high**, but **not just because of overstaffing** — because throughput is too low.

**Industry Benchmarks**

- Labor and benefits should be **28%–35%** of adjusted revenue. Our Shop's labor and benefits total 65.61% of Adjusted Revenues which is way too high.
- MHCO is above that range because adjusted revenue is way too low.

**Revenue Capacity** With current staffing, MHCO should be producing:

**$1,200,000–$1,500,000** in adjusted revenue annually.

The gap is due to:

- Slow turnaround
- Underutilized equipment
- Poor scheduling
- Workflow inefficiencies
- Redundant administrative work
- Pricing too low

# SECTION 7 — MANAGEMENT & RESPONSIBILITY

**Thomas Boyd** Thomas Boyd is the Print Shop Manager and should have clear operational authority over:

- Pricing
- Scheduling
- Workflow
- Job prioritization
- Equipment usage
- Production standards
- Quality control

- Staff assignments
- Print Shop Employees

The shop needs a single point of accountability — and Thomas is the correct person.

# SECTION 8 — RECOMMENDATIONS

## Operational

- Implement strict turnaround standards. Don't allow equipment or people issues to slow down production. To overcome poor turnaround times and poor service - shops are forced to cut prices to get business. Eventually, you are price competing with companies that are too big to compete against, or you are out of business.
- Use Printer's Plan for all job entry, scheduling, estimating prices, tracking and accounts receivables.
- Eliminate QuickBooks invoicing duplication.
- Standardize estimating using Printer's Plan Software and current labor and material costs.
- Improve job ticket completeness including all contact information.
- Track machine uptime weekly. Productivity is based on the number of hours that the shop is billing out to a customer. Time on the clock that is not charged to a customer is just a burden to shop productivity.
- Hold daily 10-minute production huddles. Make sure that everyone contributes to the success of the shop by keeping productivity high.

## Financial

- Track adjusted revenue.
- Monitor labor % weekly against adjusted revenue.
- Increase throughput to match labor capacity.
- Implement the Financial Dashboard (next section).

## Strategic

- Position the shop as a fast, reliable internal and external service provider.
- Market turnaround improvements to all customers.
- Use Canon Copier improvements to rebuild confidence.

# SECTION 9 — INDUSTRY CONTEXT & WHY SPEED MATTERS

In small and medium print shops:

- **Speed is the competitive advantage.**
- Customers choose printers based on turnaround, not price.
- Slow shops lose business even if they are cheaper.
- Fast shops grow through repeat work and referrals.

MHCO must operate like a modern digital print shop:

- Same-day or next-day for most jobs
- 2–3 days for larger runs
- Immediate communication with customers
- Reliable scheduling
- Consistent quality

Canon's new equipment and a disciplined workflow will allow MHCO to meet these standards. All print shop employees must buy into the plan of improvement.

# FINANCIAL DASHBOARD (WEEKLY & MONTHLY KPIs)

## Weekly Key Performance Indicators

- Adjusted revenue
- Jobs completed vs. jobs scheduled
- On-time delivery rate
- Machine uptime/downtime
- Reprints/reworks
- Backlog size
- Estimated vs. actual production time variance
- Cash collected vs. invoiced

## Monthly Key Performance Indicators

- Labor and Benefits as a % of adjusted revenue
- Materials %
- Gross margin
- Revenue per employee
- Revenue per machine
- Outsourced printing %
- Postage %

- Average job value
- Customer retention
- New customer count
- Accounts receivable management
- Net Profit/Loss

## PRINT SHOP PURPOSE AND MISSION

A key question is the purpose of MHCO's School of Graphic Arts: Is it intended to provide fast, cost-effective printing for the Home, to generate income, or both? Is it intended to really be a vocational training school for the children to better prepare themselves to be able to make a decent living when they leave Oxford? Will studying and working at the print shop offer our children real value over time? A hybrid School of Graphic Arts that consistently made a profit and provided a path for our children to do better when they left the Home seems to be consistent with the Home's larger mission of providing the best care possible for our children.

In the past when printing was dominated by giant very expensive presses and huge start-up costs – many of the Home's graduates, who worked at the print shop, eventually opened their own printing companies and did extremely well. Today, starting up a printing company is not nearly as cash intensive as it was years ago. Our graduates could conceivably do it at a much younger age and enjoy the financial success that comes with owning your own business.

A major hurdle to getting the older children to work at the print shop is that they can get paid working at Hardees or McDonalds. Finding a way to pay the older children to work in our print shop a competitive salary seems to be a possible solution. If the print shop really was a School of Graphic Arts, then I suspect equipment, and software suppliers would do whatever it took to make sure that the MHCO School of Graphic Arts used their equipment and software.

This Assessment Report is just a starting point and turning the MHCO Print Shop will require a lot of work, but it is very doable without having to tie up a huge number of resources. It will require some time commitment from Home's CEO, COO and CFO. Once the shop gets all the changes made, then this time commitment will shrink to a minimum.

The MHCO Print Shop is worth turning around. It has been in business since the 1870s and is one of the oldest print shops in NC, if not in the nation.

Please let Thomas and I know how to proceed.

Respectively Submitted,

Thomas Boyd, Manager SGA

Dan Rice