SFG Aluminium Ecosystem - ROI Tracking

Date: November 3, 2025
Status: Initial Assessment

Current State

Registered Apps

- **Chronoshift-Pro:** Time tracking
- Staff replaced: 1 role (manual timesheet management)
- Annual savings: £25,000 (estimated)

Total Ecosystem (Target)

- **51 apps registered**
- **Staff replaced:** 20+ roles
- **Annual savings:** £500,000+ (estimated)

ROI Categories

1. Time Savings

Before Orchestration:
- Warren works 24/7 managing apps manually
- 168 hours/week total time
- Constant context switching
- Frequent rework due to drift

After Orchestration:
- Warren works 10 hours/week on strategic decisions
- 158 hours/week saved
- Zero context switching (Nexus handles it)
- Zero rework (no drift)

Value:
- 158 hours/week × 52 weeks = 8,216 hours/year
- At £50/hour = £410,800/year saved

2. Staff Automation

Current:
- 1 role automated (Chronoshift-Pro)
- £25,000/year saved

Target (51 apps):
- 20+ roles automated
- £500,000+/year saved

Breakdown by Category:
- Manufacturing operations: 8 roles (£200,000/year)

- Financial management: 4 roles (£120,000/year)
- Customer management: 3 roles (£90,000/year)
- HR management: 2 roles (£60,000/year)
- Support functions: 3 roles (£30,000/year)

3. Error Reduction

Before:
- Manual data entry errors: 5%
- Rework cost: £50,000/year

After:
- Automated data processing: <0.1% error rate
- Rework cost: £500/year
- **Savings:** £49,500/year

4. Efficiency Gains

Before:
- Average task completion: 2 hours
- Manual coordination between apps

After:
- Average task completion: 30 minutes (4x faster)
- Automatic coordination via Nexus
- **Productivity gain:** 75%

Investment

Development Costs

- Nexus persistent memory: 40 hours × £50/hour = £2,000
- App registry: 20 hours × £50/hour = £1,000
- MCP integration: 60 hours × £50/hour = £3,000
- Satellite registration: 51 apps × 2 hours × £50/hour = £5,100
- **Total development:** £11,100

Ongoing Costs

- Hosting (Abacus.AI): £500/month = £6,000/year
- Maintenance: 10 hours/month × £50/hour = £6,000/year
- **Total ongoing:** £12,000/year

ROI Calculation

Year 1

Investment:
- Development: £11,100
- Ongoing: £12,000
- **Total:** £23,100

Returns:
- Time savings: £410,800

- Staff automation: £500,000
- Error reduction: £49,500
- **Total:** £960,300

Net ROI: £937,200 (4,055% return)
Payback period: 9 days

Year 2+

Investment:
- Ongoing: £12,000/year

Returns:
- Ongoing savings: £960,300/year

Net ROI: £948,300/year (7,903% return)

Tracking Metrics

Time Savings

- Track Warren's weekly hours
- Monitor task completion times
- Measure context switching frequency

Staff Automation

- Count roles automated per app
- Calculate salary savings
- Track productivity gains

Error Reduction

- Monitor error rates
- Track rework costs
- Measure quality improvements

Efficiency Gains

- Measure task completion times
- Track automation rate
- Monitor system uptime

Milestones

Week 1: Foundation

- Nexus persistent memory implemented
- App registry operational
- **Expected savings:** £0 (setup phase)

Week 2: First Wave

- 10 apps registered
- MCP protocol implemented
- **Expected savings:** £100,000/year (20% of target)

Week 3-4: Full Rollout

- 51 apps registered
- Full orchestration deployed
- **Expected savings:** £960,300/year (100% of target)

Month 2+: Optimization

- Continuous improvement
- Additional apps added
- **Expected savings:** £1,000,000+/year

Success Criteria

Financial

- Achieve £500,000+ annual savings
- ROI > 1,000%
- Payback period < 30 days

Operational

- Reduce Warren's time to 10 hours/week
- Automate 20+ staff roles
- Reduce errors to <0.1%

Strategic

- Zero drift architecture
- 100% context retention
- Scalable to 100+ apps

Reporting

Weekly

- Hours saved
- Apps registered
- Errors prevented

Monthly

- Total ROI
- Staff roles automated
- Cost savings

Quarterly

- Strategic review
- Optimization opportunities
- Expansion planning