Step 1: Assess Your Current Communication Costs

Equipment and Infrastructure Costs (Annual)

- Current radio/communication equipment costs: $_____
- Annual maintenance and repair costs: $_____
- Replacement equipment purchases (annual): $_____
- Communication system support/IT costs: $_____

Subtotal - Current Equipment Costs: $_____

Operational Impact Costs (Annual)

Communication-Related Downtime:

- Average unplanned downtime hours per month: _____
- Your cost per hour of production downtime: $_____
- Monthly downtime cost: _____ hours × $_____ = $_____
- **Annual downtime cost: $_____ × 12 = $_____**

Emergency Response Delays:

- Average emergency response time (minutes): _____
- Target emergency response time (minutes): _____
- Response delay cost per incident: $_____
- Number of emergency incidents per year: _____
- **Annual emergency delay cost: $_____ × _____ = $_____**

Miscommunication and Rework:

- Estimated monthly costs from communication errors: $_____
- **Annual miscommunication cost: $_____ × 12 = $_____**

Shift Handover Inefficiencies:

- Time lost per shift handover (minutes): _____
- Number of shift changes per day: _____
- Average hourly labor cost: $_____

- Daily handover cost: (**/60) × _____ × $** = $_____
- **Annual handover inefficiency cost: $_____ × 365 = $_____**

Maintenance Coordination Delays:

- Average maintenance response time (minutes): _____
- Target maintenance response time (minutes): _____
- Cost of delayed maintenance per incident: $_____
- Maintenance incidents per month: _____
- **Annual maintenance delay cost: $_____ × _____ × 12 = $_____**

Total Current Annual Communication Costs

Cost Category	**Annual Amount**
Equipment & Infrastructure	$_____
Downtime	$_____
Emergency Response Delays	$_____
Miscommunication & Rework	$_____
Shift Handover Inefficiencies	$_____
Maintenance Coordination Delays	$_____
TOTAL CURRENT COSTS	**$_____**

Step 2: Calculate Potential Savings with Smart Radio System

Equipment and Infrastructure Savings

Reduced Maintenance Costs:

- Current annual maintenance: $_____
- Expected maintenance reduction (typically 30-50%): _____%

- **Annual maintenance savings: $_____ × (% ÷ 100) = $**

Extended Equipment Lifespan:

- Current equipment replacement cycle (years): _____
- Extended lifespan with smart radios (years): _____
- Annual equipment replacement costs: $_____
- Lifespan extension value: _____%
- **Annual equipment savings: $_____ × (% ÷ 100) = $**

Operational Efficiency Savings

Downtime Reduction:

- Current annual downtime cost: $_____
- Expected downtime reduction (typically 25-40%): _____%
- **Annual downtime savings: $_____ × (% ÷ 100) = $**

Emergency Response Improvement:

- Current annual emergency delay cost: $_____
- Expected response time improvement (typically 40-60%): _____%
- **Annual emergency response savings: $_____ × (% ÷ 100) = $**

Communication Error Reduction:

- Current annual miscommunication cost: $_____
- Expected error reduction (typically 60-80%): _____%
- **Annual communication error savings: $_____ × (% ÷ 100) = $**

Shift Handover Efficiency:

- Current annual handover inefficiency cost: $_____
- Expected efficiency improvement (typically 50-70%): _____%
- **Annual handover savings: $_____ × (% ÷ 100) = $**

Maintenance Coordination Improvement:

- Current annual maintenance delay cost: $_____

- Expected coordination improvement (typically 45-65%): _____%
- **Annual maintenance coordination savings: $_____ × (% ÷ 100) = $**

Additional Productivity Benefits

Worker Productivity Improvement:

- Number of production workers: _____
- Average annual labor cost per worker: $_____
- Expected productivity improvement (typically 5-15%): _____%
- **Annual productivity savings: _____ × $_____ × (% ÷ 100) = $**

Supervisor Efficiency Gains:

- Number of supervisors/managers: _____
- Average annual salary per supervisor: $_____
- Expected efficiency improvement (typically 10-20%): _____%
- **Annual supervisor efficiency savings: _____ × $_____ × (% ÷ 100) = $**

Total Annual Savings Summary

Savings Category	**Annual Amount**
Equipment & Infrastructure	$_____
Downtime Reduction	$_____
Emergency Response	$_____
Communication Error Reduction	$_____
Shift Handover Efficiency	$_____
Maintenance Coordination	$_____
Worker Productivity	$_____

Supervisor Efficiency	$_____
TOTAL ANNUAL SAVINGS	**$_____**

Step 3: Investment Requirements

Smart Radio System Investment

Initial System Costs:

- Smart radio hardware (per unit): $_____
- Number of radio units needed: _____
- Total hardware cost: $_____ × _____ = $_____
- Software licensing (annual): $_____
- Installation and setup: $_____
- **Total initial investment: $_____**

Implementation Costs:

- Training and change management: $_____
- System integration costs: $_____
- Temporary productivity loss during transition: $_____
- **Total implementation costs: $_____**

Ongoing Annual Costs:

- Software licensing/subscription: $_____
- Maintenance and support: $_____
- **Total annual operating costs: $_____**

Total Investment Summary

Investment Category	**Amount**
Initial System Investment	$_____

Implementation Costs	$_____
TOTAL UPFRONT INVESTMENT	**$_____**
Annual Operating Costs	$_____

Step 4: ROI Calculation and Analysis

Return on Investment Calculation

First Year Analysis:

- Total annual savings: $_____
- Annual operating costs: $_____
- **Net annual benefit: $_____ - $_____ = $_____**

Payback Period:

- Total upfront investment: $_____
- Net annual benefit: $_____
- **Payback period: $_____ ÷ $_____ = _____ years**
- **Payback period in months: _____ × 12 = _____ months**

Three-Year ROI:

- Net annual benefit: $_____
- Three-year total benefits: $_____ × 3 = $_____
- Total upfront investment: $_____
- **Three-year net return: $_____ - $_____ = $_____**
- **Three-year ROI percentage: ($_____ ÷ $_____) × 100 = _____%**

Break-Even Analysis

Monthly break-even calculation:

- Total upfront investment: $_____
- Net monthly benefit: $_____ ÷ 12 = $_____

- **Months to break-even: $_____ ÷ $_____ = _____ months**

Step 5: Results Interpretation

ROI Benchmarks for Manufacturing Communication Systems

Excellent ROI (Investment Recommended):

- ✅ Payback period: 12-18 months
- Three-year ROI: 200%+
- Annual savings exceed 25% of investment

Good ROI (Strong Business Case):

- Payback period: 18-30 months
- Three-year ROI: 100-200%
- Annual savings exceed 15% of investment

Moderate ROI (Consider with Strategic Benefits):

- Payback period: 30-48 months
- Three-year ROI: 50-100%
- Annual savings 10-15% of investment

Your Results:

- **Payback period: _____ months**
- **Three-year ROI: _____%**
- **Annual savings as % of investment: _____%**

Additional Benefits to Consider (Not Quantified Above)

Safety and Compliance Benefits:

- Reduced workplace accidents and injuries
- Improved emergency response capabilities
- Enhanced regulatory compliance documentation
- Lower insurance premiums and liability exposure

Strategic and Competitive Benefits:

- Foundation for future digital transformation initiatives
- Improved ability to attract and retain skilled workers
- Enhanced customer confidence and satisfaction
- Competitive advantage in operational efficiency

Risk Mitigation Benefits:

- Reduced dependency on aging communication infrastructure
- ✅ Lower risk of communication-related safety incidents
- Improved business continuity and disaster recovery
- Future-proofing against technology obsolescence

Step 6: Next Steps Based on Your Results

If Your ROI Analysis Shows Excellent Returns:

1. **Present business case to leadership** with completed worksheet
2. **Request budget approval** for smart radio system implementation
3. **Begin vendor evaluation process** starting with Walt Smart Radio System
4. **Plan implementation timeline** targeting quick wins in high-impact areas

If Your ROI Analysis Shows Good Returns:

1. **Identify highest-impact areas** for initial pilot implementation
2. **Consider phased rollout** to spread investment over time
3. **Explore financing options** to improve cash flow impact
4. **Document additional strategic benefits** to strengthen business case

If Your ROI Analysis Shows Moderate Returns:

1. **Review calculation assumptions** - consider if savings estimates are conservative
2. **Focus on safety and compliance benefits** that may justify investment
3. **Consider starting with pilot program** in highest-impact department
4. **Re-evaluate in 6-12 months** as operational conditions change

Action Planning Template

Immediate Actions (Next 30 Days):

- Complete ROI worksheet with accurate facility data
- Present findings to operational leadership
- Identify pilot program opportunities
- Research smart radio system vendors and solutions

Planning Phase (30-90 Days):

- Develop detailed implementation timeline
- Create change management and training plan
- Establish success metrics and tracking methods
- Secure budget approval and implementation resources

Implementation Phase (90+ Days):

- Execute pilot program in selected area
- Measure and document results vs. projections
- Scale successful implementation across facility
- Continuously monitor and optimize system performance

ROI Worksheet Summary

Your Investment Analysis:

- Total Annual Savings: $_____
- Total Upfront Investment: $_____
- Payback Period: _____ months
- Three-Year ROI: _____%