

Module Name:

QRLocker – QR-Mapped Access to Internal Company Documents

Business Use Case Document for Software Team

Module Summary:

QRLocker is a premium feature in **AlVision Exim**, enabling MSMEs to map static documents—such as maintenance schedules, HR policies, SOPs, safety guidelines, etc.—to dynamic QR codes. These QR codes can be printed and placed at physical locations (like machines, notice boards, factory gates), or shared digitally. Scanning the QR shows the latest version of the mapped document via a secure online viewer.

Objectives:

- Centralize document control and visibility
- Enable instant access to SOPs and policies at point-of-use
- Reduce outdated printouts or manual tracking
- Promote compliance with real-time availability

Core Features:

QR Code Generator

- Unique code per document
- Custom label (e.g. “SOP_Lathe_Machine_01”)

Document Mapper

- Upload static document (PDF, DOC, PNG, etc.)
- Attach metadata (title, department, machine, location, revision date)

Version Control

Replace document without changing QR

Retain older versions for audit

Secure Document Viewer

Online preview with watermark (optional)

Role-based access (Employee / Supervisor / Admin)

Access Logs & Reporting

Who scanned, when, how many times

Alerts on document updates

Physical Tagging Interface

Generate printable QR tags with title, icon, and scan instruction

Example Use Cases:

1. Machine Maintenance Schedule

Paste QR code on the machine

Scanning shows weekly/monthly maintenance SOP

Maintenance staff can see checklists and last update

2. HR Policy Document Access

One QR on HR board links to all employee policies

Employees can access updated leave rules, bonus policy

3. Safety SOPs for Equipment

QR tag near fire extinguisher or welding unit

Instantly opens safety instruction PDF and do's/don'ts

4. Training Manual Access

QR in training room or induction area

Shows video or document for new joiners

5. Factory Gate Instructions

QR linked to Visitor Policy or Security Guidelines
Guards or visitors can scan and understand protocol

Reports Required:

a. Scan Analytics Report

Total scans per QR/document
Time-based access trends
Most/least accessed documents

b. Versioning Report

All version history per document
Who uploaded changes, when
Optional comments on each update

c. Department-Wise Access Logs

Which department's documents are most accessed
Team-wise engagement with documents

Security & Governance:

Access based on user role
Optional password for high-sensitivity policies
Time-restricted view links
Audit trail for each document update

Design & Technical Notes:

QR Code: Stored as record in database (QR_ID → document_id)

Backend: API to fetch latest document by QR_ID




Frontend: Web viewer (PDF.js or Google Docs API)

Storage: Cloud (S3/Firebase)

Permissions: Set via user roles and tags (HR, Maintenance, etc.)

Mobile App: Scanning QR via camera opens in in-app viewer

Printable QR Tag Format (Example)

```
-----  
|  Machine SOP - Lathe A2      |  
|                               |  
|  Scan to view maintenance steps |  
|                               |  
|  aivision.in/q/MCH_A2_LATHE  |  
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```

Would you like me to draft a **PDF document** or a **technical PRD** from this, including UI mockups or API structure for implementation?