Amtrak Railway Improvement (Terrorism Prevention)

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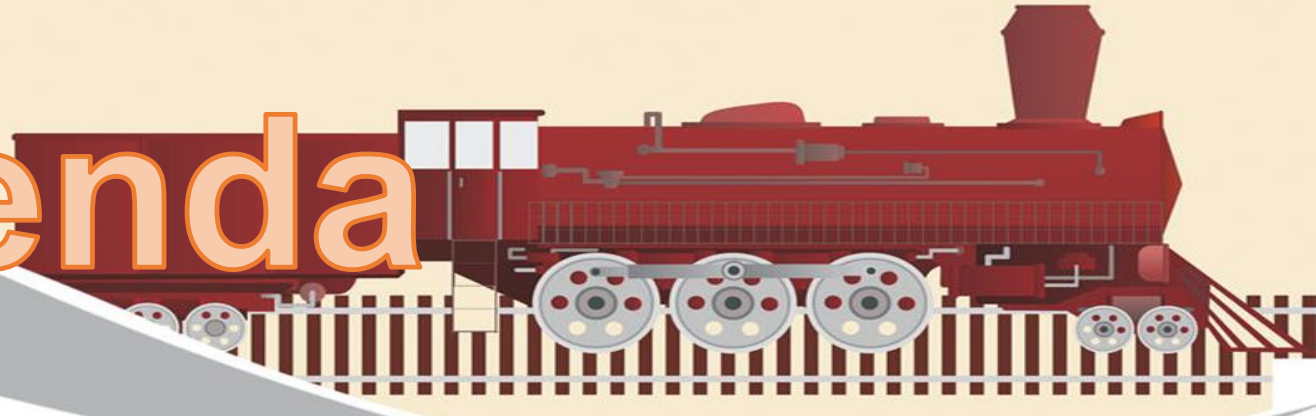
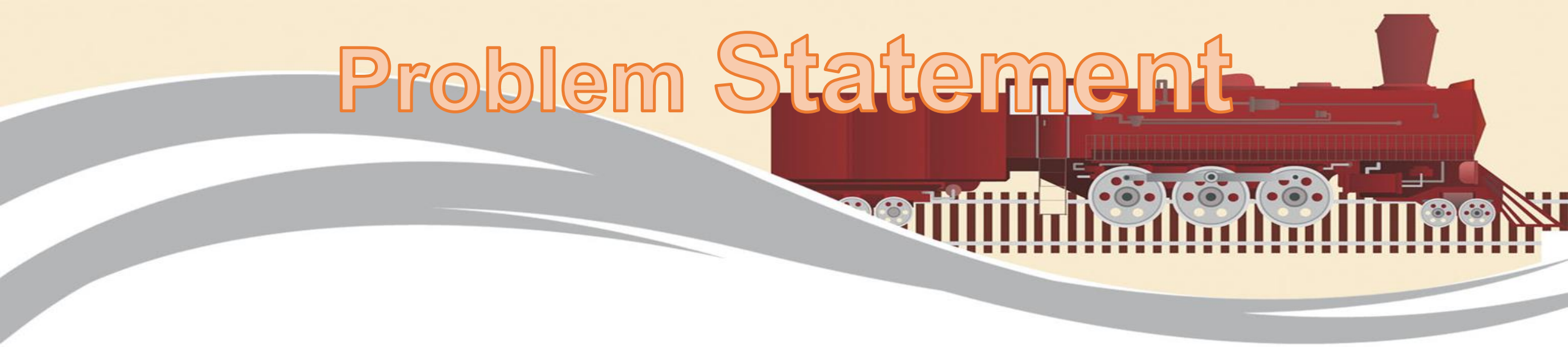
Agenda



Problem Statement
Process Flow Chart
Organization Chart
Cost of Poor Quality(COPQ)
Brainstorming and Affinity Diagram
Fishbone or Ishikawa Chart
Quality Function Deployment(QFD)

Problem Statement

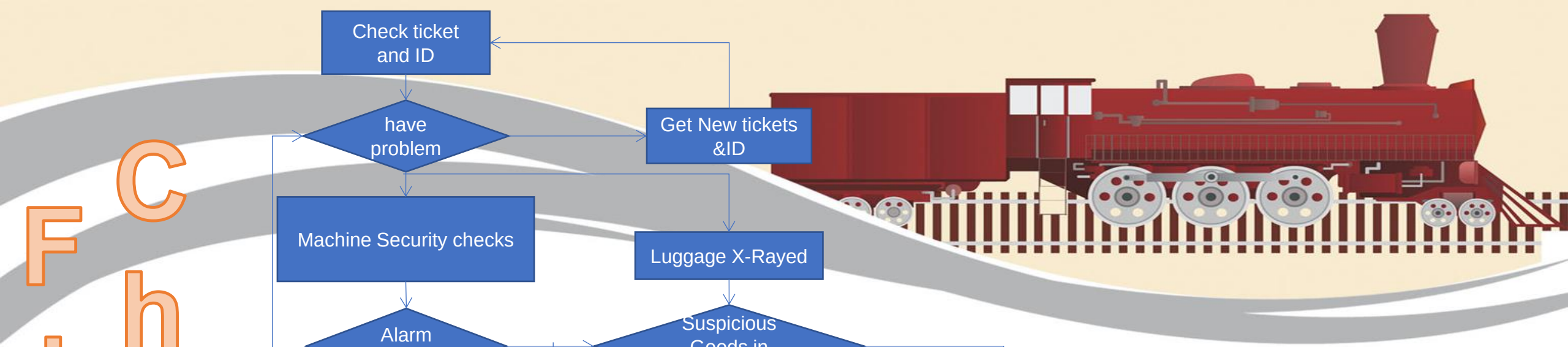


Terrorism is a big threat to the world, inefficiencies in the Amtrak Station security and intelligence can create chaos and our project is to address the dynamic threat keeping abreast with the latest technology and best practices.

AMTRAK

1755
1755
N
C

Flow Chart



Check ticket and ID

have problem

Get New tickets &ID

Machine Security checks

Luggage X-Rayed

Alarm goes off

Suspicious Goods in bag

Person carries out body checks

Open luggage by Security Person

Prohibited goods on person

Prohibite d Goods Found

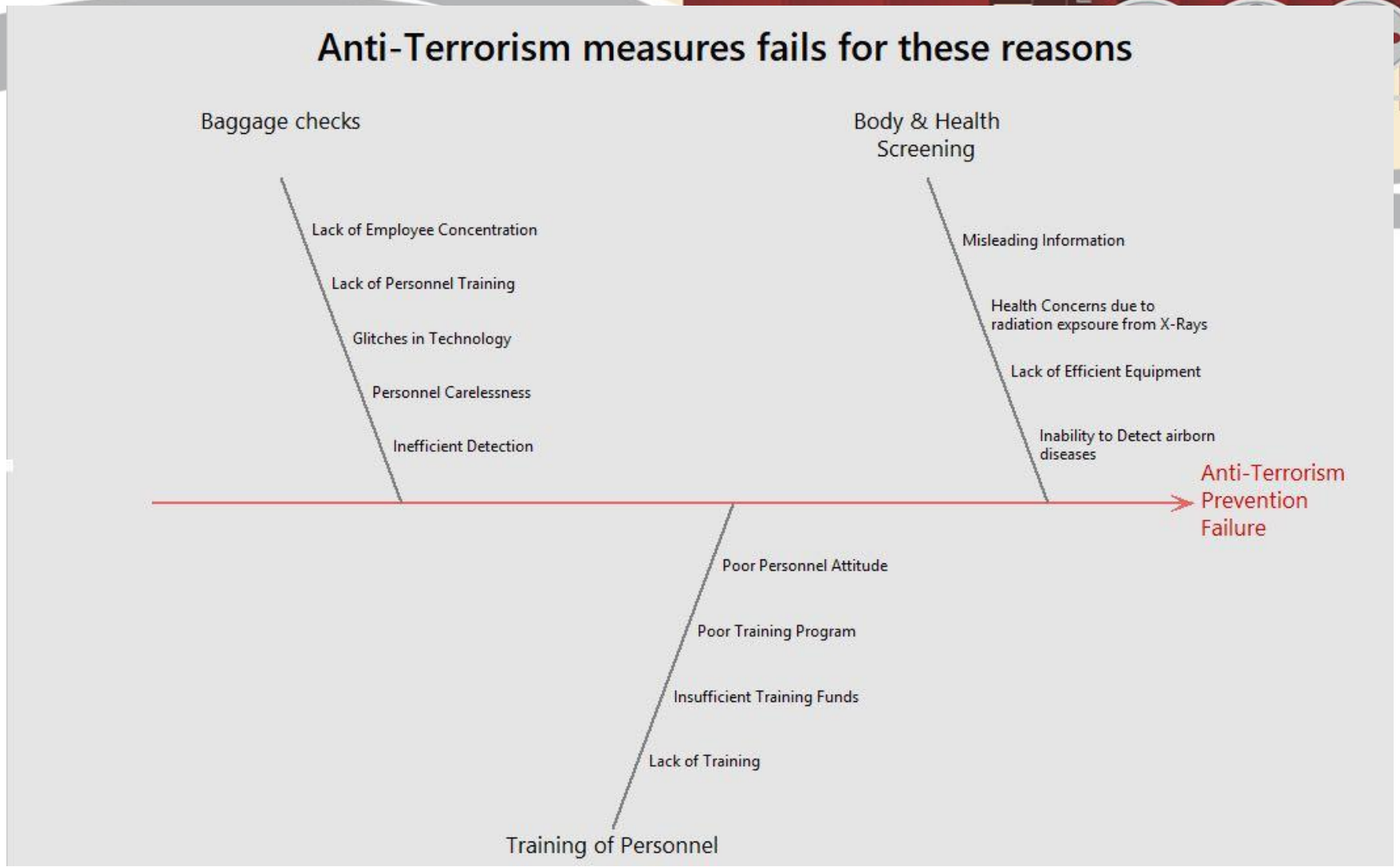
Checking for Explosives

Person Detained and loop closed

Suspicio us goods

Permitted

Fishbone or Ishikawa Chart



COPQ

Process	Internal Failures	External Failures	Appraisal	Prevention
Baggage and carry on checks	Insufficient staff. Arms and weapons. Lack of quality equipment and funding for better machines.	No Prescreening done.	-	Better trained staff and create more funding for larger staff.
Body screening/frisking	Lack of quaity machines for checks and low staff.	No Prescreening done.	Screening.	Investing in good machines and training staff well.
Personnel Training Practices	Lack of funding lack of good training programs.	Lack of recruitment.	Evaluating all employees involved.	Constantly improve the conditions and incentivise working in AMTRAK.

Brainstorming and Affinity

Training of personnel

- Lack of high level training
- Low investment in training
- Poor security development program
- Lack of retaining

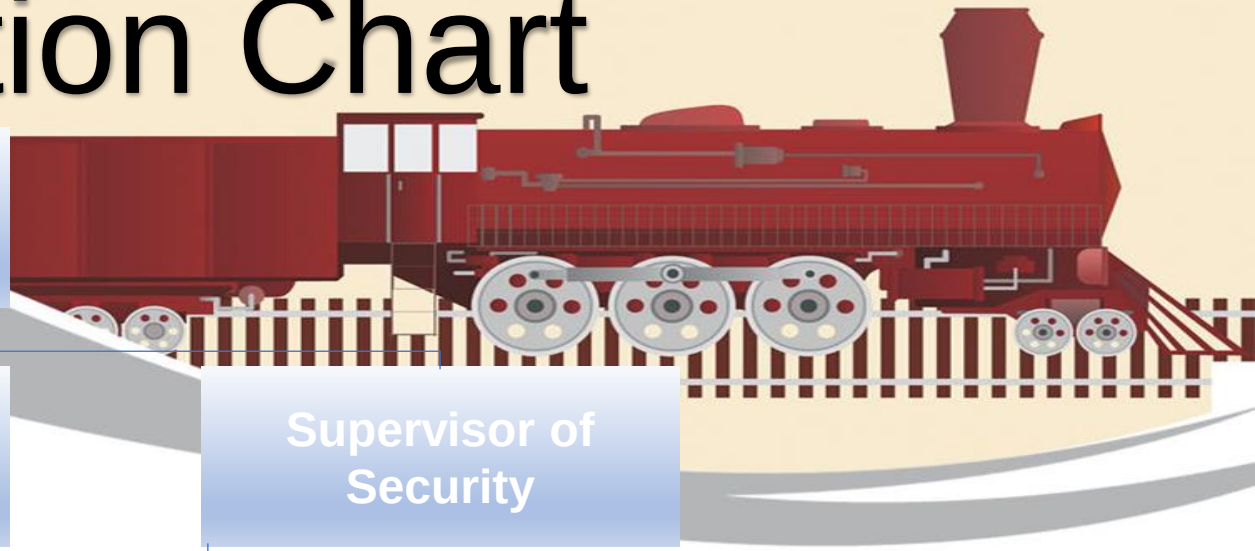
Body & Health Screening

- No efficient equipment
- Poor investment in Health hazard detections
- Health concerns on Radiation
- Need of updated technologies

Customs & Cargo Checks

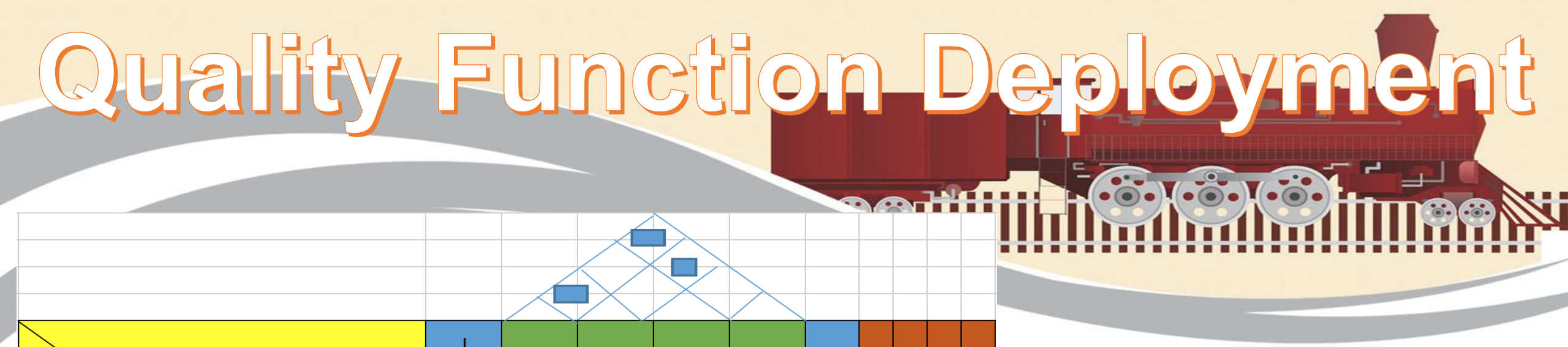
- Licensing and legal documentation
- Poor decurity and surveillance
- Obsolete technologies
- Lawsuits and reports

Organization Chart



- VicePresident of Public Safety
  - Security Engineering
    - IT Program
    - Risk management
    - Familiarity with equipments and softwares
  - Supervisor of operation
    - Security baggage personal
    - Security body screening personal
    - Training Program Processes
  - Supervisor of Security
    - Security guards
    - Training program development
    - Training Program Processes

Quality Function Deployment

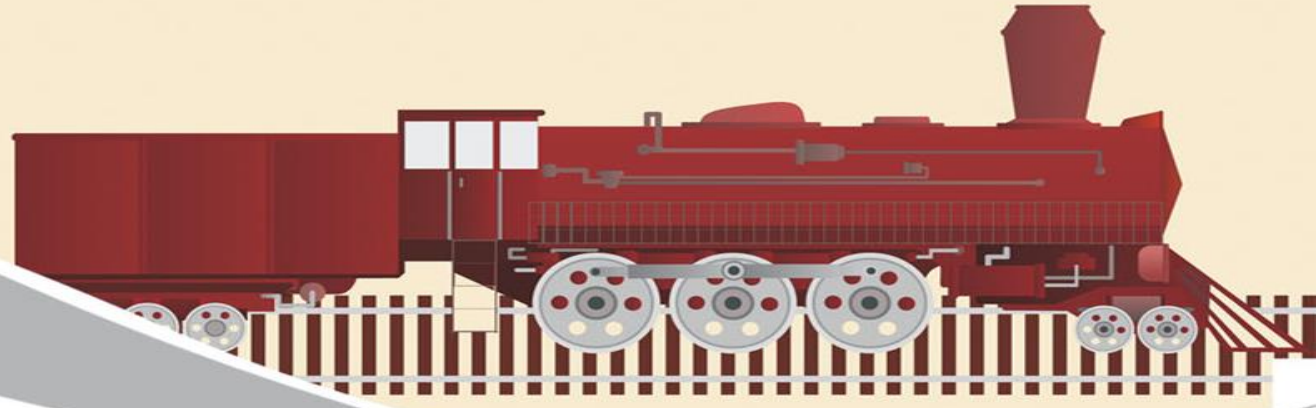


Engineer Recommendations / Voice of Customers	Importance	Security Guard	Checking Staff	Travel Crew	Directors	Relevance	China	France	India	Japan
Process Education Program	3	9	9	6	9		C	B	C	A
Security Check Training	3	9	9	6	9		B	B	B	A
Funding Support	2	6	6	6	3		B	B	B	A
Advanced Equipment & Software	2	6	9	6	3		B	B	B	A
Comfortable Environment	1	3	3	9	3		A	A	B	B
expertise	2	6	6	3	9		B	B	B	A
CTQ Priority Score		39	42	36	36	153				
Percentage		0.255	0.275	0.235	0.235	1				

Importance: 1-Highest
2-Medium
3-Lowest

Relationship: 9-Stronger
6-Medium
3-Small
■ -Positive
● -Negative

Relevance: A-Stronger
B-Medium
C-Lowest



Thanks