

Appendices

Questionnaire 1

1) Your age group:

- ☐ 18-29
- ☐ 30-35
- ☐ 36-40
- ☐ 41-50
- ☐ 51-55
- ☐ More than 56

2) Your education status:

- ☐ Did not finish high school
- ☐ High school diploma or GED
- ☐ 2-year college degree (Associate)
- ☐ 4- year college degree (Bachelor)
- ☐ Master's degree
- ☐ Ph.D. or other advanced professional degrees
- ☐ Don't know

3) Your work experience:

- ☐ 0-5
- ☐ 5-10
- ☐ 10-15
- ☐ 20-25
- ☐ 25-30
- ☐ More than 30

4) How do you feel about the tasks assigned to you by the maintenance department?

- ☐ Totally agree
- ☐ Partly agree
- ☐ Totally disagree
- ☐ Partly disagree
- ☐ Disagree but it's better to be done

5) Which of these options is the closest to the current maintenance procedure?

- ☐ The current procedure is fine
- ☐ The current procedure looks complicated and should have been simpler
- ☐ According to the importance of the job and the preferences I recognize, I choose different perspectives
- ☐ The current procedure is fine but because of the high workload and the mutual trust, there is no need to follow the exact procedure
- ☐ I do not have enough information about the procedures and if it is necessary, I will report the failure

6) Have you ever been encouraged to correctly maintain your equipment?

- ☐ Yes, and there is a possibility for financial rewards
- ☐ Yes, orally
- ☐ Yes, by written notice in the personnel profile
- ☐ No, because the procedure is simple and there is no need for encouragement
- ☐ No, because there is not an exact procedure

7) Is there a training program for equipment users to understand how to properly maintain the equipment?

- ☐ Yes, for all the equipment
- ☐ Yes, for most of the equipment
- ☐ Yes, but only for the necessary equipment
- ☐ No there is no coherent program and sometimes they give us oral and scattered descriptions
- ☐ I have no idea and if there was one before, I could not have been there for some reasons

8) Is there a specific procedure for maintenance activities to follow?

- ☐ Yes, and we have been notified about that
- ☐ Yes, but we have not been notified precisely
- ☐ No, I think there is not a specific and fixed procedure
- ☐ I have no idea about a fixed procedure and I have to report orally and pursue it by myself
- ☐ There is one but for routine processes, it is preferred to follow the simpler way

9) How accurately and clearly were you notified about your maintenance tasks?

- ☐ Yes, and I was notified by a document
- ☐ Yes, and I was notified by a document but there are some ambiguities
- ☐ Yes, and I was notified orally
- ☐ Yes, and I was notified orally but there are some ambiguities
- ☐ I do not have clear tasks

10) What is your opinion on calibration timing and the current equipment visits?

- ☐ It is fine
- ☐ It is better to be done more than this
- ☐ It is better to be done on some other hours
- ☐ I do not think that there is a specific timing

☐ I have no idea about that

11) Have you ever noticed that equipment breakdowns are repeated due to improper repair or wrong operating?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

12) Can you identify the possibility of any failure before it occurs?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

13) If a device's failure is minor and can be ignored, is it a waste of time if it is possible to replace this device with a similar existing device?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

14) I am proud to tell others that I work for this organization.

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

15) "Sudden failures" will be always more than "gradual failures with previous signs".

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

16) The repairmen have the needed skills to perform their duties.

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

17) If you detect things like changes in speed, sound, etc., would you stop the equipment immediately?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

18) Is there a rapid reaction to repair a defection in equipment?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

19) Despite its failure in one part, has a machine ever continued to work because of its functionality and the need for the device?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

20) Did you ever postpone the crash report due to your high workload?

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

21) Our suggestions for improvement are encouraged and applied by the management.

- ☐ Almost always
- ☐ Most of the time
- ☐ Sometimes
- ☐ Merely
- ☐ Never

Questionnaire 2

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- ☐ 36-40
- ☐ 41-50
- ☐ 51-55

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3) Your work experience:

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- ☐ 5-10
- ☐ 10-15
- ☐ 20-25
- ☐ 25-30
- ☐ More than 30

4) How do you feel about the tasks assigned to you by the maintenance department?

- ☐ Totally agree
- ☐ Partly agree
- ☐ Totally disagree
- ☐ Partly disagree
- ☐ Disagree but it's better to be done

5) Have you ever consulted a specialist to fix failure by yourself?

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

6) Have you ever been encouraged for maintaining your equipment correctly?

- ☐ Yes, and there is a possibility for financial rewards
- ☐ Yes, orally
- ☐ No, because the procedure is simple and there is no need for encouragement
- ☐ No, because there is not an exact procedure
- ☐ No

7) Is there a training program for equipment operators to understand how to properly maintain the equipment?

- ☐ So far, there was never a chance for these kinds of stuff
- ☐ Yes, for all the equipment
- ☐ Yes, for most of the equipment
- ☐ Yes, but only for the necessary equipment
- ☐ No there is no coherent program and sometimes they give us oral and scattered descriptions.

8) Are there any standards and regulations for maintenance activities?

- ☐ Yes
- ☐ There is almost one standard or regulation
- ☐ Not exactly
- ☐ Not enough
- ☐ No

9) How accurately and clearly were you notified about your tasks?

- ☐ I was notified by a document
- ☐ I was notified by orally
- ☐ My tasks have never been clearly notified to me, by a document or orally

10) Have you ever noticed that equipment breakdowns are repeated due to improper repair or wrong operating?

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

11) I am honored to tell others that I work for this organization.

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

12) There is a clear path in my organization's structure for promotion.

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

13) Emergency works always take more time than scheduled works.

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

14) There is a specific schedule for the maintenance of medical equipment.

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

15) Do you have access to the whole information about the equipment you want to repair?

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

16) Is there a possibility of fast reaction to repair a failure in your organization?

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

17) In the time of emergency, do you have easy access to the maps and catalogs?

- ☐ Almost always
- ☐ Most of the times
- ☐ Sometimes
- ☐ Merely
- ☐ Never

18) What kind of maintenance method is in use in your organization? (Select more than one answer if needed)

- ☐ Corrective maintenance
- ☐ Preventive maintenance
- ☐ Predictive maintenance

19) How is the relationship between equipment operators and the maintenance department?

- ☐ It is always formal
- ☐ It is always oral and informal
- ☐ Both formal and informal
- ☐ There is no continuous relationship

20) Do you have a failure history record for all of the equipment? (Select more than one answer if necessary.)

- ☐ Yes
- ☐ No
- ☐ For crucial devices
- ☐ For expensive devices
- ☐ I have no idea

21) I always try to consult one or more employees to determine what should I do and how to do it. However, I will make the final decision.

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true
- ☐ That is completely true
- ☐ There is no time to do that

22) I will take the employee's votes for important decisions.

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true
- ☐ That is completely true
- ☐ There is no time to do that

23) I do not have enough time to receive suggestions from supervisors and equipment operators (in the form of meetings, conversations, etc.).

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true

24) I want the organization to have a plan for taking the staff's ideas on plans and projects.

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true
- ☐ That is completely true
- ☐ There is no time to do that

25) When someone makes a mistake, I will give them a written notice.

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true
- ☐ That is completely true
- ☐ There is no time to do that

26) My staff knows more about their job than I do, so I let them make their own decisions.

- ☐ That is not true
- ☐ I have rarely done it
- ☐ That is almost true
- ☐ That is completely true

27) How true is this statement? 'If you do not have direct supervision on the process, you will probably have trouble getting the job done.'

- ☐ That is not true
 - ☐ I have rarely done it
 - ☐ That is almost true
 - ☐ That is completely true
 - ☐ I have no idea

28) How true is this statement? 'If you do not have direct supervision on the process, the work efficiency will probably decrease'

- ☐ That is not true
 - ☐ I have rarely done it
 - ☐ That is almost true
 - ☐ That is completely true
 - ☐ I have no idea

29) Delays in the service is a consequence of (Select more than one option if necessary)

- ☐ Lack of staff
- ☐ Lack of reliability because of the uncertainty in the instructions
- ☐ Ambiguity in the policy's instructions
- ☐ Lack of incentives
- ☐ Financial problems

30) Is there a training program for you to become more professional in your career?

- ☐ So far, there was never a chance for these kinds of stuff
- ☐ Yes, but it was not enough
- ☐ No, and there is almost no need for this kind of program
- ☐ Yes, but I could not participate in it for some reasons
- ☐ I have no idea

31) I am aware of my department's policies and standards.

- ☐ Yes
- ☐ No
- ☐ Approximately

32) Are the devices clean and safe enough?

- ☐ Yes
- ☐ No
- ☐ Approximately

33) According to the existing standards, does your office has a good geographical position for having access to related departments?

- ☐ Yes, but it could have been in a better position
- ☐ Yes, it is in a good position
- ☐ No, its current position is not good

34) According to the existing standards, is the office sufficiently independent and big enough?

- ☐ Yes, but it could have been better
- ☐ Yes, it is fine
- ☐ No, it is not fine

35) What do you do to worn out machines? (Rank 1 to 4 based on "1 = most frequent action" to "4 = least frequent action")

- ☐ They are stored in the warehouse and there is no specific plans for them_____
- ☐ We are going to sell them by auctioning or some other way_____
- ☐ We will use them for training the trainees_____
- ☐ Their parts will be used for fixing other devices_____