

## **8. DETERMINE ALL THE POTENTIAL ROOT CAUSES**

**USE TOOLS CLASSIFIED AS ROOT CAUSE ANALYSIS TOOLS, AS WELL AS THE BEST KNOWLEDGE AND EXPERIENCE OF THE TEAM**

**LIST ALL POSSIBLE CAUSES FOR EACH FAILURE MODE ON THE FMEA FORM**

## 9. DETERMINE THE OCCURRENCE RATING

**THIS RATING ESTIMATES THE PROBABILITY OF FAILURE OCCURRING FOR THAT REASON DURING THE LIFETIME OF YOUR SCOPE**

**OCCURRENCE IS USUALLY RATED ON A SCALE FROM 1 TO 10, WHERE 1 IS EXTREMELY UNLIKELY AND 10 IS INEVITABLE**

**ON THE FMEA TABLE, LIST THE OCCURRENCE RATING FOR EACH CAUSE**

## 10. IDENTIFY CURRENT PROCESS CONTROLS

**THESE ARE TESTS, PROCEDURES OR MECHANISMS THAT YOU NOW HAVE IN PLACE TO KEEP FAILURES FROM REACHING THE CUSTOMER**

**THESE CONTROLS MIGHT PREVENT THE CAUSE FROM HAPPENING, REDUCE THE LIKELIHOOD THAT IT WILL HAPPEN OR DETECT FAILURE AFTER THE CAUSE HAS ALREADY HAPPENED BUT BEFORE THE CUSTOMER IS AFFECTED**

## **11. DETERMINE THE DETECTION RATING**

**THIS RATING ESTIMATES HOW WELL THE CONTROLS CAN DETECT ITS FAILURE MODE AFTER THEY HAVE HAPPENED**

**DETECTION IS USUALLY RATED ON A SCALE FROM 1 TO 10**

**1 MEANS THE CONTROL IS ABSOLUTELY CERTAIN TO DETECT THE PROBLEM**

**10 MEANS THE CONTROL IS CERTAIN NOT TO DETECT THE PROBLEM (OR NO CONTROL EXISTS)**

**ON THE FMEA TABLE, LIST THE DETECTION RATING FOR EACH CAUSE**

## 12. CALCULATE THE RISK PRIORITY NUMBER

$$\text{RPN} = \text{S} \times \text{O} \times \text{D}$$

**RPN PROVIDES GUIDANCE FOR RANKING POTENTIAL FAILURES IN THE ORDER THEY SHOULD BE ADDRESSED**

## 13. IDENTIFY RECOMMENDED ACTIONS

**THESE ACTIONS MAY BE DESIGN OR PROCESS CHANGES TO LOWER OCCURRENCE**

**THEY MAY BE ADDITIONAL CONTROLS TO IMPROVE DETECTION**

**ALSO NOTE WHO IS RESPONSIBLE FOR THE ACTIONS AND TARGET COMPLETION DATES**

## 14. CONTINUE TO RE-EVALUATE

**AS ACTIONS ARE COMPLETED, NOTE RESULTS AND THE DATE ON THE FMEA FORM**

**ALSO, NOTE NEW S, O, OR D RATINGS AND NEW RPNS**

**CONTINUE TO RE-EVALUATE THE RISKS AND FAILURES IN YOUR BUSINESS PROCESS**