

**DATE:**

**Tuesday,  
December 19, 2023**

**This is a webinar. Log-in  
information will be provided  
on the registration  
confirmation email.**

**Time:**

**4:00 pm – 5:30 pm PST**  
(check website to confirm times)

**Cost: Free for ASQ members  
and non-members**

To register for this meeting and  
obtain the webinar link and sign-in  
information, click [here](#).

**Attendance at this meeting earns  
RUs toward ASQ recertification.**

NOTE: Be sure to use the same  
email address to join the virtual  
meeting as you use when  
registering in order to receive the  
RUs. You must register for the  
event and join virtually to receive  
RUs.

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Automotive Division, click [here](#).

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local Columbia Basin ASQ section  
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## Practical Applications of Reliability (Quality over Time)



**Ha Dao, ASQ Fellow**  
**Technical Quality Manager, Emerson (retired)**

Why use reliability?

Reliability techniques help to answer questions such as:

What is the expected life of a product? Does this product meet the reliability requirements? How many more failures are we expecting in the next month? What are the warranty costs? How do the design changes affect product reliability?

This workshop will provide a practical view of Reliability as it relates to Quality and Customer Experience. You will gain an understanding of reliability main concepts and the applications of reliability methods and learn to determine the lifetime characteristics of a product using both graphical and analysis methods. Several hands-on examples of Weibull Analysis and Interpretations will be included.

Other topics to be covered include Bathtub Curve, Weibull Distribution, Analysis and Graphical Interpretations, Failure Forecasting, Censored and Suspended Data, Sample Sizes, Tips and Tricks, Case Studies using SuperSmith, Minitab, and Weibull++ Software.

*About the speaker: Ha Dao, ASQ Fellow, retired from Emerson as Technical Quality Manager, where he was responsible for development and deployment of an enterprise approach to Quality Excellence (Quality, Reliability & Customer Experience). He is an experienced Quality Professional, with the following certifications: Shainin Red X Master, Shainin Red X Reliability Engineer, Six Sigma Master Black Belt, Exemplar Global Certified QMS Lead Auditor, ASQ Certified Six Sigma Black Belt, CQE & CQA. Ha holds a BSME and a Master of Science in Management Science. With over 25 years of diversified experience, he has also worked for General Motors, Delphi Corporation, UTC Aerospace and SSA & Company (formerly Six Sigma Academy).*

*Ha is a member of ASQ Board of Directors and National Director with the Technical Communities Council. Other roles within ASQ have included co-chair of ASQ's Strategic Planning Committee, Strategy Deployment Committee Chair, ITAG Chair, TCC Group Chair, Group Facilitator, Auto Division Chair, Nominating Committee Member and Regional Councilor of the Reliability & Risk Division.*