

# **A New Approach to NDT Data Management and Problem Resolution**

**Michael Turnbow<sup>1</sup>, Ajay Pasupuleti<sup>2</sup>**

<sup>1</sup>Technology, Ooga Technologies, USA, <sup>1</sup>Technology , Ooga Technologies , USA

This presentation will introduce a new and innovative approach to facilitate collaboration in the review of NDT data and the resolution of both technical and non-technical issues. Data Management is a growing issue in NDT including the need to readily access experts as needed with the appropriate talent to address specific and /or unexpected challenges. Ooga Technologies has assembled a team and developed a Ooga NDE platform to address these issues and more. For example, applications of NDT such as phased array, digital radiography, and computed tomography creates files upwards to over 50 gigabytes per part. The issue with having large datasets is the ability to find certified technicians readily available for scheduled and emergent work. The certification process in many industries, including oil/gas, aerospace, defense, and nuclear require considerable one-the-job training and experience. For individuals to achieve these requirements is becoming a major challenge for the industry. The demand for Level 2's and 3's to complete regulated tasks are extremely high. Production sites where 1000's of datasets are viewed each day create risk to overall part inspection lead time. NDE 4.0 is changing the way businesses complete tasks automatically with digital systems, digital twins, artificial intelligence, and automated defect recognition, but ultimately leaves the final decision process up to the certified individual. These systems are now exceeding the speed at which an individual reviews and accepts data. Jobs requiring multiple examinations present a particular problem for data management of not only storage but more importantly retrieval and a means to share files with colleagues, customers or researchers for evaluation, opinion, study, education, etc. In addition, the Ooga NDE platform allows a selective group or multiple parties to review singularly or collectively the data. Another provision allows collaboration and discussion concerning challenging technical or non-technical issues. This unique approach also makes it possible for experts to be readily accessible on a global bases to address questions and assist in the effective and efficient resolution of issues. Specifically, the provisions include: 1) data storage, 2) associated software necessary for viewing, 3) a secured platform for private viewing or all the way to an open forum. 4) and a wide range of highly qualified, certified, and experienced experts that can address any NDT issue rapidly.