

MAKING AN IMPACT ON U.S. MANUFACTURING





Examining the Quality, Market Value, and Effectiveness of Manufacturing Credentials



an affiliate of ANSI

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- MEP Overview
- Background
 - Manufacturing workforce issues
 - Why we are doing this
- Project Actions
 - Survey
 - Highlights
 - Focus groups





What is the Manufacturing Extension Partnership (MEP)?

MEP is a public-private partnership that provides small and medium-sized manufacturers (SMMs) technology-based services needed to thrive in today's economy and create well-paying manufacturing jobs. MEP is managed by the National Institute of Standards and Technology (NIST), a U.S. Department of Commerce agency, and implemented through a network of industry-led Centers located in all 50 states and Puerto Rico. MEP Centers are not-for-profit corporations or state/university-based organizations that employ or partner with industry experts who work with manufacturers.

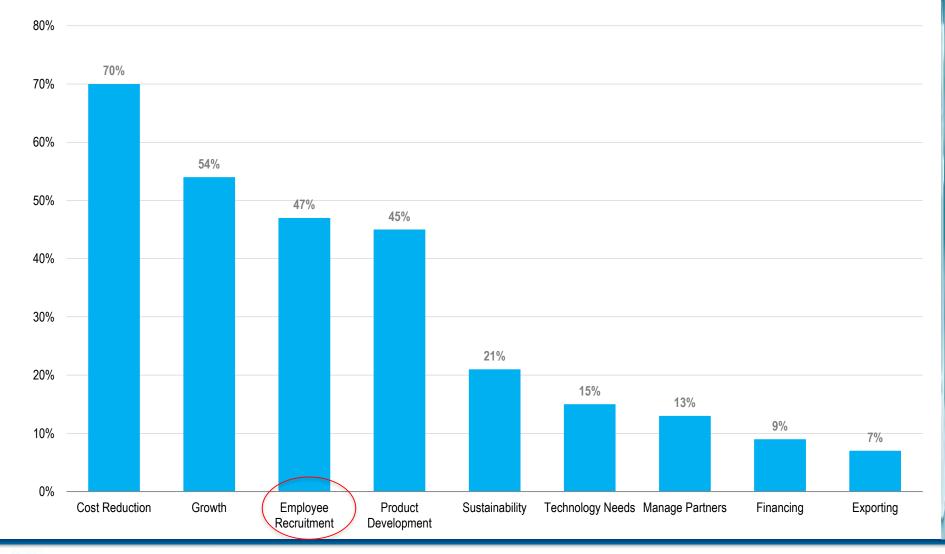


What MEP Centers Do

- Work with small and medium size manufacturers to help them create and retain jobs and sales, increase profits, and save time and money.
- Focus on meeting manufacturer's short term needs, but in context of overall company strategy.
- Reach over **25,000 manufacturers** and complete over **8,000 projects** per year.
- Provide companies with tailored services including:



Client Challenges



Manufacturing Workforce

- MEP Centers are engaged in a wide variety of activities to help build the workforce development eco-system for manufacturing. Essential components of these efforts include:
 - Ensuring access to career ladders
 - Reviewing competitive wages and benefits
 - Identifying training opportunities and Skill Certifications
 - Assisting companies with work-based learning, mentorships, internships, and apprenticeships
 - Talent planning
 - Customized training opportunities







Manufacturing Credentials Survey Project -- Why

- The United States faces a skills gap, and particularly so in the manufacturing section.
- This skills deficit stems from a mismatch:
 - Many of today's job seekers don't have the competencies needed for today's high-skill manufacturing jobs.
- Often, much of the decision-making when selecting a credential is based on the "popularity" of the credential. It is often mistakenly assumed that if a credential is recognized by a third party, used by manufacturers, and sought by many individuals looking to obtain a credential, then it must be effective in the workplace.

Our Premise:

For U.S. manufacturing to close the skills gap and maintain its competitiveness, the quality, market value, and effectiveness of manufacturing credentials must be carefully examined, and an understanding of what new credentials may be needed to fill the current and future needs of manufacturing must be established.

Why we are doing this:

- There are many choices of credentials but a significant lack of independent research regarding the quality, market value, and effectiveness of manufacturing specific credentials.
- This project will provide NIST MEP and the manufacturing community quality information to identify and develop new credentials needed by the manufacturing market.
- This research will help identify skill gaps that could be filled by creating new credentials and replacing existing ones that are ineffective.

The Goals of the research project

- (1) Identify credentials being used by manufacturers that are representative of the industry;
- (2) Evaluate the quality of the credentials against national and/or international standards;
- (3) Determine the market value of credentials based on data from the credential issuer;
- (4) Determine how the credential is being used and how the effectiveness of the credential is being determined in work settings through interviews with HR department officials, work supervisors, and individuals who hold the credentials; and
- (5) Identify the need for new credentials, the scope and outcomes needed of the credentials, and what organizations might be willing and capable of creating the credential.

Key questions the project seeks to answer:

- 1. In general, are credentials used and valued by manufacturers?
- 2. Do they make a difference?
- 3. In general, how are credentials used by the manufacturer?
- 4. What specific credentials are required by most manufacturers and why do they require them?
- 5. What specific credentials are generally preferred by most manufacturers and why do they prefer them?

Survey Process

- MEP contracted with Workcred to design a survey and process specific to manufacturers and their use (or non-use) of credentials in the workplace.
- The project team defined a process to:
 - Collect data using an online survey instrument
 - Conduct follow-up interviews or focus groups
 - Analyze the information to determine the needs of manufacturers for credentials and inform the community

Phase I: Developing Survey and Gathering Data from Manufacturing Employees

- 1. Create the overall research questions that we want answered by the survey
- 2. Confirm the questionnaire with a group of MEP Workforce consultants
- 3. Questionnaire was made available in an online survey program
- 4. Survey was made available to manufacturers by the 51 MEP Centers

Research questions to be answered:

- What is the broad spectrum of credentials used in manufacturing?
- Which are the most prevalent?
- What manufacturing areas are they used in?
- What position titles are associated with what credentials?
- Which credentials are required?
- Were credentials acquired before or during employment?
- In general, are credentials valued?
 - Do they make a difference?
- What are your reasons credentials are not used and valued?
- What specific credentials are generally preferred by most manufacturers and why do they prefer them?
- What positions are not filled/hardest to fill due to lack of qualified candidates?



Phase II: Follow-up discussions to gain more indepth information from manufacturers

- To determine effectiveness, the project team will conduct interviews with manufacturing representatives to determine how the credential is being used and how the effectiveness of the credential is being determined in their particular work setting.
- Questioning will also seek to determine market value, identify how many manufacturing employers are requiring the credential or using it in some manner to hire.

Phase III: Determining Quality, Market Value, and Effectiveness of Manufacturing Credentials

- 1. To determine quality, for each identified credential in the Phase I survey research, determine:
 - (1) if the credential is related to a national, regional, or local standard; and
 - (2) if the credential is recognized by anyone.
- 2. To determine market value, collect information from each credential issuer about the profile of the individuals who are acquiring the credential
 - Identify the total number of certified individuals for each credential and how many have been certified over the past five years.
- 3. Variables such as quality, market value, and effectiveness will be analyzed to determine if there is a relationship between the three variables

Final Report: Determining the Need for New Manufacturing Credentials

- 1. Based on the Phase I and II data, identify the need for new credentials.
- 2. Determine the scope and outcomes needed for the credential.
- 3. Identify what organizations might be willing and capable of creating the credential.

For more information:

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