

# ICED: Incident Command for Emergency Departments. Results of a Customer Satisfaction Survey for a Novel Command-and-Control Tool

Franc JM†‡, Verde M‡.

†The University of Alberta, Edmonton, Alberta, Canada  
‡L'Universita' degli Studi del Piemonte Orientale, Novara, Italy

## Introduction

Disaster management for emergency departments is often problematic. Although an organized system of command-and-control is often needed, many present systems are extremely comprehensive, and physicians often comment that the systems are too complex. Incident Command for Emergency Departments (ICED) is a simplified tool consisting of an introductory text, an organizational chart with thirteen color coded positions, job actions sheet for each position, and a set of only five forms.

## Methods

Participants were given a short lecture (approximately 30 minutes) about the ICED system and then partook in a group computer simulation (SurgeSim, Edmonton, AB, Canada) lasting approximately one hour. During the simulation, participants had access to the ICED tool. Following the simulation, participants completed a short questionnaire - which consisted of open and closed ended questions - to assess perceived need, satisfaction with the ICED tool, and need for further features.

## Results

103 surveys were collected. Most participants agreed with the statement: "An organized command-and-control structure is needed during a disaster": 88/130 (91%). 91/103 (88%) respondents agreed that ICED had helped the group to manage the simulated disaster. 75/103 (73%) agreed that they would be comfortable using ICED in a true disaster, and 89/103 (86%) participants agreed that they would encourage their department to adopt the ICED system. Overall Satisfaction with the ICED program was high, with 88/103 (85%) of participants scoring 5 or higher on the 7 point scale. (Figure 1) The most frequently requested additional features were an electronic (tablet) based version of ICED program (38/103 participants)(37%), online training in ICED (34/103)(33%), and a longer training session in ICED (34/103)(33%). (Figure 2)

## Conclusions

The ICED system, a simplified version of incident command system, was well received by staff physicians and emergency medicine residents for use during a computerized disaster simulation

Figure 1

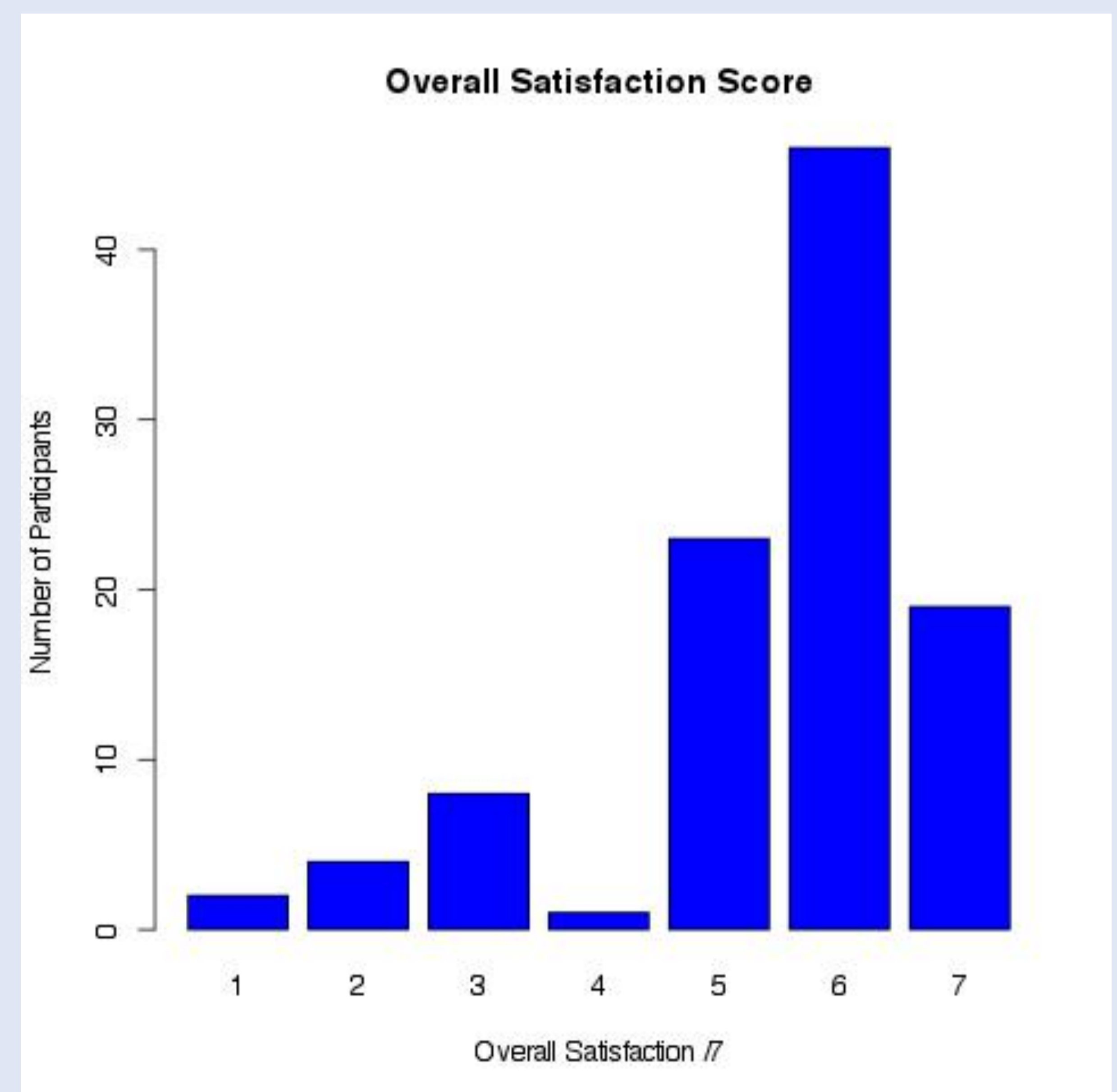
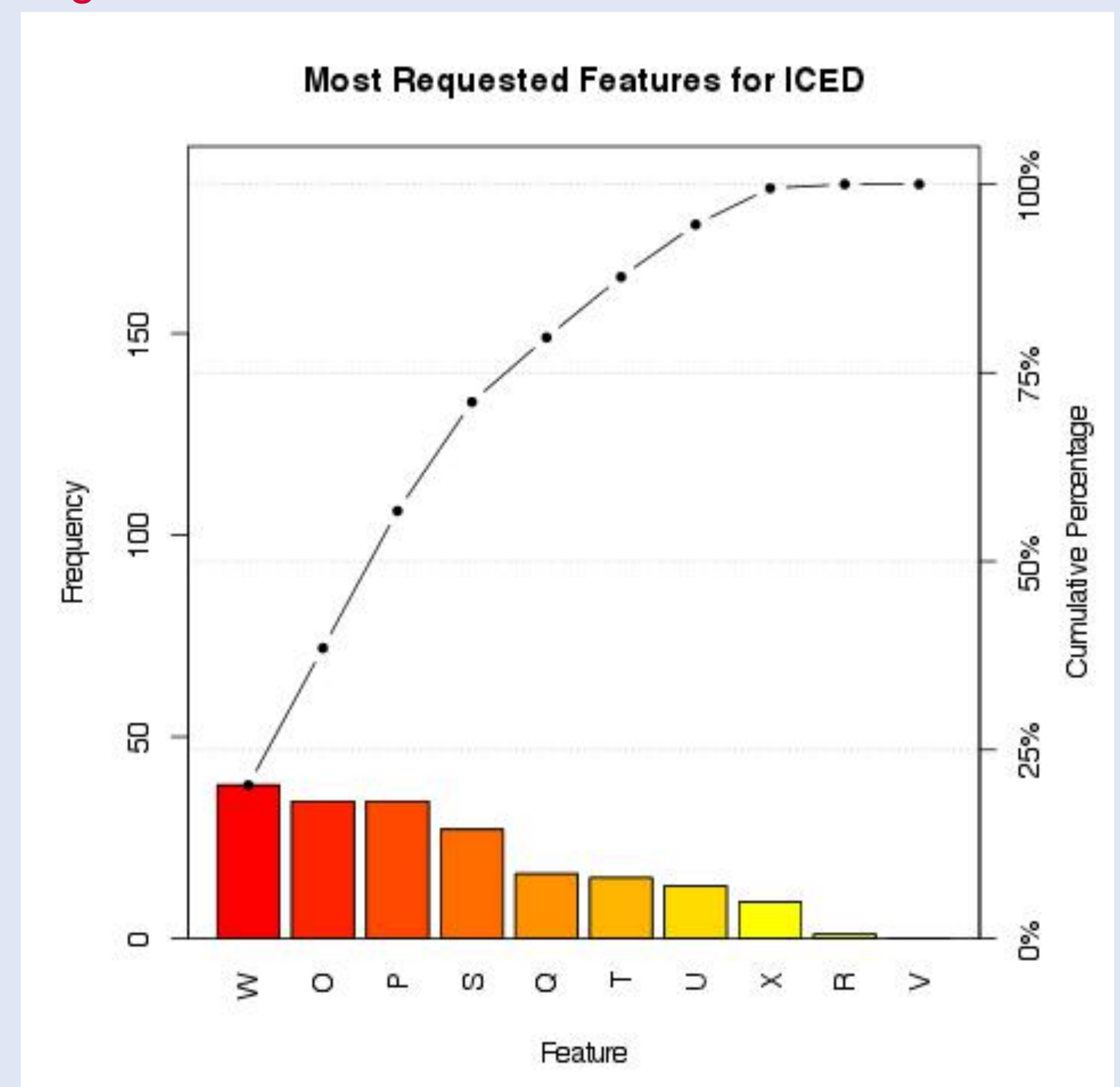


Figure 2



### Legend

W=Tablet Version  
O=Longer Training Session  
P=Online Training  
S=Positions Outside ED  
Q=More Introductory Text  
T=More Job Actions Sheets  
U=Other Job Action Sheets  
X=Other Color Codes  
R=More Org Positions  
V=Additional Forms