

THE EFFECT OF SELF-SERVICE TECHNOLOGY ON RESTAURANT OPERATIONS

A CASE STUDY OF ETAB INTERNATIONAL

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Introduction

- Many challenges facing foodservice operators
 - Minimum wage increases
 - Declining quality of available workers
 - Increasing demands of customers

The Customer as an Employee

- Production
 - Salad bars
 - Self-service beverage stations
- Marketing
 - Sharing stories of experiences
- Supplying information
 - Purchase behavior

Benefits of Customer Participation

- Replacement of labor
- Improve quality of experience
- Increase in loyalty to the organization

Introduction of Technology Into Service Delivery

- Important to blend technology with service delivery (Berry, 1999)
 - Self-service technologies (SST's)
 - ATM's
 - Pay-at-the-pump (gasoline service)
 - Automated hotel check-in/check-out
 - Print your own boarding pass
 - Bank-by-computer
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Proliferation of SST's

- Cost reduction
- Customer demand
- Desire to increase customer satisfaction
(Bitner, Ostrom & Meuter, 2000)

Customer Motivation to Use SST - Retail

Industry

- Speed
- Control
- Reliability
- Ease of use
- Enjoyment
- Avoid interaction with employees

Methodology

- Alpha site, St. Peters, Missouri
- Comedy Club
- 6 tables
- 18 months

Mechanics of SST for Casual Dining

Restaurants

- Touch screen panel at table
 - Display of menu
 - Customers place their own orders
 - Products delivered to table by servers
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Questionnaire

- What did you like most about using etab?
- What would you change about etab?
- What would you most like to see on etab?
- Also asked to rate overall experience using etab
 - 5-point scale (1= poor; 5=excellent)

Methodology (continued)

- Non-parametric statistics & correspondence analysis
 - Examine the variations in responses due to respondents' demographic characteristics
- Data analyses were conducted by using SPSS 11.5

Results

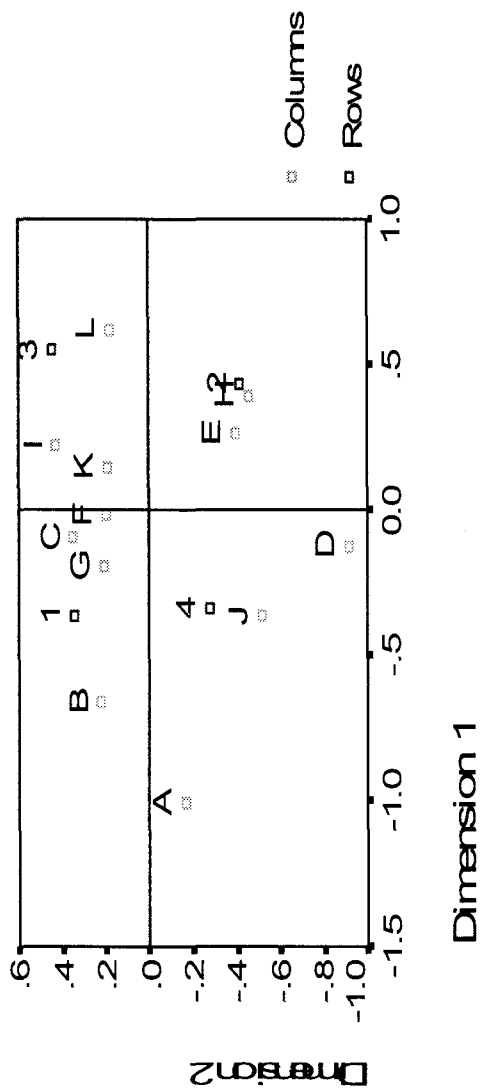
<p>What did you like most about using etab?</p>	<p>Convenience, easy to use, fast service, independence from server, less interruptions, fun</p>
<p>What would you change about your etab experience?</p>	<p>Liquor, bigger buttons, interference from wait staff, better use of descriptions, nothing</p>
<p>What would you most like to see on etab?</p>	<p>National trivia games, contests, discounts, promotions, sports scores</p>
<p>Average overall rating of etab experience: (1 = poor, 5 = excellent)</p>	<p>4.6</p>

Results (continued)

Convenience	49%
Easy to use	43%
Fast service	25%
Independence from server	9%
Fun	9%
Fewer interruptions	7%

Multiple Correspondence Analysis

Row and Column Scores



Symmetrical Normalization

- 1=25 or less
- 2=Over 25
- 3=Male
- 4=Female

- a=fun
- b=easy to use
- c=fast
- d=no server
- e=convenient
- f=contests

- g=promotions
- h=trivia games
- i=videogames
- j=discounts
- k=jukebox
- l=sports scores

Implications

- **New services & revenue streams**
 - **All products offered to every customer
(reduces training time & expense for new employees)**
 - **Customers enabled to “upsell” themselves**
 - **Increase in flow of information to customers**
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Implications (continued)

- Improved menu descriptions with nutritional information
- Streaming video of product preparation
- A virtual server that never leaves the customers table

Opportunities for future research

- Impact upon sales
- Marketing
- Organizational commitment
- Employee & customer satisfaction
- Training

Demonstration