

# An Analysis of Intermodal Information Technology Usage by Intermodal Ports and Terminals in the Agricultural and Food-Product Market

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Information that is accurate, comprehensive, timely, trustworthy, and relevant to the task at hand has become a major factor in the growth of intermodal transportation. Intermodal ports and terminal operators who have the computer equipment, personnel, and background to use this technology can provide information across different business activities that affect internal as well as external needs. This ability allows intermodal ports and terminals to deal with tactical and strategic planning and opportunities for themselves as well as for their customers. This in turn should lead to more competitive intermodal ports and terminals and better service for the agribusiness sector.

Information technology is seen as one of the ways firms may make more efficient and effective decisions. Through advanced information technologies, intermodal ports and terminal operators can be better informed about operational costs, new and emerging markets and their customers. Electronic information can be used to monitor the status of shipments and to track and locate mobile assets (Muller, 1999). However, to the authors' knowledge there has been very little if any published information analyzing the use of intermodal information technologies by ports and terminals serving agribusiness firms in Mississippi.

Intermodal information technologies are technologies involved in acquiring, storing, processing, and distributing data and information by electronic means (radio, television, telephone, and computers) between two or more different modes of transportation in such a way that all parts of the freight transportation process are efficiently connected,

seamless, coordinated, and continuous (Collin 1997; Muller 1999). Results from this study should help firms and ports improve operational efficiencies, reduce information delays and errors, speed up cargo transfers, and improve customer service and overall productivity for the firm and port. Intermodal information technologies should also enable intermodal ports and terminals to maintain or attract additional traffic, since the competition for business is as fierce among ports and terminals as it is among carriers and agribusiness enterprises.

## Objectives

This study's general objective is to assess the use, adoption, benefits, and impacts of intermodal information technologies on intermodal ports and terminals serving agribusiness firms in Mississippi. The specific objectives are to determine the reasons intermodal ports and terminals implement or do not implement information technologies at their facilities, and to examine intermodal port and terminal operators' perceptions of how information technologies are affecting the management of their facilities.

## Procedures, Data, and Methods

This research concentrates on intermodal ports and terminals that serve primarily agricultural and food-product firms. To determine which intermodal ports and terminals implement advanced information technologies at their facilities and the operators' perception of how these technologies have affected their delivery of services and customers, we conducted surveys of Mississippi port and terminal officials whose firms serve the state's agriculture. The questionnaire was developed following a comprehensive review of information technology literature including Berry et al. (1998) and Bigras and Roy (2000). The target population for this study

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was limited to firms that had physical facilities at port sites in Mississippi. A list of 84 such firms was obtained from the port respondents, twenty-one of which were firms identified as agribusiness firms. Questionnaires were sent to the 84 firms and eleven port respondents that had physical facilities of firms located at their sites.

Eight ports (73 percent of those who had responded earlier to the request for firms physically located at port sites) filled out the questionnaire. Seven agribusiness firms (33 percent) and eight non-agribusiness firms responded to the questionnaire. The overall response rate to the questionnaire was 27 percent. In addition, there were 10 non-deliverables, which were included in the non-agribusiness sector.

The survey consisted of eight sections. The first section sought general information about the profile of the port or firm. The second section determined which types of intermodal information technologies respondents were familiar with. The third section verified the sources which respondents heard about current or new intermodal information technologies. The fourth section of the survey dealt with respondents' opinions of the importance of 16 selected reasons for implementing or continued use of intermodal information technologies. The fifth section asked respondents to indicate activities most affected by the use of intermodal information technologies. The sixth section sought to gauge the level of respondent satisfaction with the use of intermodal information technologies. The seventh section of the survey verified the obstacles or factors preventing or retarding the implementation of intermodal information technologies. The eighth section of the survey was designed to determine the level of familiarity of the respondents with the seven selected categories of intermodal information technologies systems.

## Results

### *Familiarity Level of Intermodal Information Technologies*

A 9-point scale similar to the one used by Berry et al (1998) was used to collect data with which to assess management perceptions of information technology. The results revealed that agribusiness, non-agribusiness, and ports used several types of

information technologies on a daily basis (indicated by an average response of 9). Respondents were most familiar with personal computers, Windows, and fax machines; very familiar with electronic mail, Internet, and cellular phones; and least familiar with satellite positioning, personal communication systems, and automatic equipment identification tags (Table 1).

Agribusiness firms were most familiar with personal computers, Windows, fax machines, electronic mail, cellular telephones, and the Internet; these firms were least familiar with satellite positioning, automatic equipment identification tags, personal communication systems, and onboard computers. Non-agribusiness firms were most familiar with personal computers, Windows, fax machines, the Internet, and local area networks. These firms were least familiar with satellite positioning, bar coding, and electronic imaging. Ports were most familiar with personal computers, Windows, fax machines, and electronic mail; ports were least familiar with satellite positioning, electronic imaging, automatic equipment identification tags, personal communication systems, and onboard computers.

### *Sources of Intermodal Information Technologies Knowledge*

A 5-point Likert scale was used to verify where respondents learned about new intermodal information technologies. Respondents received their information about new intermodal information technologies most often from work, magazines, colleagues, and the Internet (Table 2). These results should not be that surprising, considering the large number of people at work that are familiar with computers, telephones, Internet, and magazines. The two items reported as sources of knowledge with the highest grand mean scores were classes and television shows/movies.

### *Reasons for Implementing or Continuing to Use Intermodal Information Technologies*

The most common reason given by respondents for implementing or continuing to use intermodal information technologies was to reduce paperwork (Table 3). This allowed the respondents to reduce the space required for storage and to reduce errors,

**Table 1. Familiarity with Intermodal Information Technologies (IIT)**

|     | Types of IIT                            | Type of Respondents         |                                 |                | Grand Means |
|-----|---|-----------------------------|---------------------------------|----------------|-------------|
|     |   | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Ports |             |
| 1.  | Personal Computers                      | 9.00                        | 9.00                            | 9.00           | 9.00        |
| 2.  | Windows                                 | 9.00                        | 9.00                            | 9.00           | 9.00        |
| 3.  | Fax Machines                            | 9.00                        | 9.00                            | 9.00           | 9.00        |
| 4.  | Electronic Mail                         | 9.00                        | 8.50                            | 9.00           | 8.83        |
| 5.  | Internet                                | 9.00                        | 9.00                            | 8.67           | 8.92        |
| 6.  | Electronic Data Interchange             | 6.00                        | 7.75                            | 6.00           | 6.58        |
| 7.  | Satellite Positioning                   | 4.33                        | 4.30                            | 2.00           | 3.56        |
| 8.  | Bar Coding                              | 5.75                        | 4.30                            | 4.00           | 4.80        |
| 9.  | Electronic Imaging                      | 5.00                        | 4.30                            | 2.67           | 4.10        |
| 10. | Pagers                                  | 6.60                        | 5.75                            | 7.00           | 6.42        |
| 11. | Voice Mail                              | 7.80                        | 7.25                            | 6.00           | 7.17        |
| 12. | Cellular Telephones                     | 9.00                        | 8.50                            | 6.67           | 8.25        |
| 13. | Spreadsheets                            | 8.20                        | 7.75                            | 6.67           | 7.67        |
| 14. | Search Engines                          | 7.80                        | 8.00                            | 7.33           | 7.75        |
| 15. | Databases                               | 8.60                        | 7.75                            | 6.33           | 7.75        |
| 16. | Word Processors                         | 7.50                        | 8.50                            | 6.67           | 7.64        |
| 17. | Local Area Networks                     | 7.80                        | 9.00                            | 5.33           | 7.45        |
| 18. | Electronic Funds Transfer               | 7.00                        | 6.50                            | 6.00           | 6.58        |
| 19. | Automatic Equipment Identification Tags | 1.67                        | 4.30                            | 2.00           | 2.67        |
| 20. | Personal Communication Systems          | 4.00                        | 4.30                            | 2.00           | 3.44        |
| 21. | Onboard Computers                       | 3.75                        | 6.67                            | 2.00           | 4.10        |

Choice Types

1= I have never heard of

2= I have heard of, but have not used

3= I have used a little

4= I use a few times a year

5= I use about 2 or 3 times a month

6= I use about once a month

7= I use about 2 or 3 times a week

8= I use once a week

9= I use daily

**Table 2. Sources of Intermodal Information Technologies (IIT) Knowledge**

| Sources            | Type of Respondents         |                                 |                | Grand Means |
|--------------------|-----------------------------|---------------------------------|----------------|-------------|
|                    | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Ports |             |
| 1. Newspapers      | 3.00                        | 3.00                            | 2.33           | 2.77        |
| 2. Magazines       | 2.50                        | 1.30                            | 2.00           | 2.00        |
| 3. Work            | 2.00                        | 1.67                            | 1.67           | 1.80        |
| 4. News on T.V.    | 3.00                        | 2.33                            | 1.33           | 2.30        |
| 5. Friends         | 2.50                        | 3.00                            | 2.00           | 2.50        |
| 6. Colleagues      | 1.25                        | 2.00                            | 3.00           | 2.00        |
| 7. Textbooks       | 2.75                        | 3.50                            | 2.33           | 2.78        |
| 8. Classes         | 2.75                        | 3.00                            | 3.67           | 3.11        |
| 9. TV shows/movies | 3.75                        | 3.00                            | 3.37           | 3.50        |
| 10. Internet       | 2.00                        | 1.30                            | 2.67           | 2.00        |

Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4= Disagree; 5= Strongly Disagree

**Table 4. Company/Port Activities Affected by Intermodal Information Technologies.**

| Types of Activities          | Type of Respondents         |                                 |                | Grand Means |
|------------------------------|-----------------------------|---------------------------------|----------------|-------------|
|                              | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Ports |             |
| 1. Billing                   | 1.80                        | 1.50                            | 1.33           | 1.58        |
| 2. Costing                   | 2.00                        | 1.75                            | 2.00           | 1.42        |
| 3. Dispatching               | 2.60                        | 2.00                            | —              | 2.33        |
| 4. Gate Activity             | —                           | —                               | 1.33           | 1.33        |
| 5. Shipment Tracing          | 2.40                        | 1.75                            | —              | 2.11        |
| 6. Cargo Delivery            | —                           | —                               | 2.67           | 2.67        |
| 7. Vehicle Tracing           | 3.00                        | 1.75                            | —              | 2.44        |
| 8. Freight Manifest          | —                           | —                               | 2.67           | 2.67        |
| 9. Loading/Unloading         | 2.20                        | 2.00                            | 2.33           | 2.17        |
| 10. Vehicle Routing          | 2.60                        | 2.00                            | —              | 2.33        |
| 11. Demurrage Notification   | —                           | —                               | 2.00           | 2.00        |
| 12. Load Preparation         | 2.40                        | 1.75                            | 2.67           | 2.25        |
| 13. Answering Customer Calls | 2.20                        | 1.75                            | 2.00           | 2.00        |

Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4= Disagree; 5= Strongly Disagree

Table 3. Reasons for Implementing or Continuing to Use Intermodal Information Technologies (IIT)

| Reasons  | Type of Respondents         |                                 |                |             | Grand Means |
|--|-----------------------------|---------------------------------|----------------|-------------|-------------|
|  | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Ports | Grand Means |             |
| 1. Customer service enhancement  | 1.40                        | 1.50                            | 1.67           | 1.50        |             |
| 2. Improve operations planning   | 1.20                        | 1.25                            | 1.33           | 1.25        |             |
| 3. Improve communications with customers   | 1.60                        | 1.50                            | 1.67           | 1.58        |             |
| 4. Maintain a competitive advantage  | 1.40                        | 1.25                            | 1.67           | 1.42        |             |
| 5. Meet customer requirements  | 1.60                        | 1.50                            | 1.67           | 1.58        |             |
| 6. Reduce costs  | 1.60                        | 1.00                            | 2.33           | 1.58        |             |
| 7. Improve profits   | 2.00                        | 1.00                            | 3.00           | 1.92        |             |
| 8. Reduce paperwork  | 1.40                        | 1.00                            | 1.00           | 1.17        |             |
| 9. Increase office/clerical efficiency   | 1.60                        | 1.00                            | 1.67           | 1.42        |             |
| 10. Improve security   | 2.80                        | 1.50                            | 3.33           | 2.50        |             |
| 11. Improve monitoring of company equipment and drivers                                    | 2.20                        | 1.50                            | —              | 1.88        |             |
| 12. Manage documentation better  | 1.80                        | 1.00                            | 2.33           | 1.67        |             |
| 13. Improve integration of information   | 1.80                        | 1.00                            | 2.67           | 1.75        |             |
| 14. Measure the performance of carriers and facilitators                                   | 2.40                        | 1.75                            | 2.67           | 2.25        |             |
| 15. Improve communication with company drivers   | 2.80                        | 1.50                            | —              | 2.22        |             |
| 16. Identify the best rates and levels of service available from carriers and facilitators | 2.60                        | 1.25                            | 3.00           | 2.25        |             |
| 17. Book, issue, account for, and generate reports of freight shipments                    | 1.80                        | 1.25                            | 1.67           | 1.58        |             |
| 18. Plan the routing of intermodal equipment and cargoes                                   | 2.80                        | 2.00                            | —              | 2.44        |             |
| 19. Examine the sequence of intermodal operations at my company                            | 3.00                        | 2.00                            | —              | 2.55        |             |
| 20. Respond quickly to emergencies or change of operational orders                         | 1.60                        | 1.75                            | 2.00           | 1.75        |             |

Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4= Disagree; 5= Strongly Disagree

Table 5. Satisfaction With Intermodal Information Technologies.

| Statements  | Types of Respondents              |   |                      |                             |                             |
|---|-----------------------------------|---|----------------------|-----------------------------|-----------------------------|
|   | Means of<br>Agribusiness<br>Firms | Means of<br>Non-<br>Agribusiness<br>Firms | Means<br>of<br>Ports | Grand<br>Means <sup>1</sup> | Grand<br>Means <sup>2</sup> |
| 1. Top management at my firm is satisfied with our use of intermodal information technologies                                 | 2.60                              | 1.75                                      | —                    | 2.22                        | —                           |
| 2. Top management at my port is satisfied with our use of intermodal information technologies                                 | —                                 | —   | 1.67                 | —                           | 1.67                        |
| 3. Our employees are satisfied with our use of intermodal information technologies  | 2.60                              | 1.75                                      | 1.67                 | 2.22                        | 1.67                        |
| 4. Our customers are satisfied with our use of intermodal information technologies  | 2.40                              | 1.75                                      | 2.00                 | 2.11                        | 2.00                        |
| 5. My firm has benefitted greatly from the use of intermodal information technologies   | 2.40                              | 1.50                                      | —                    | 2.00                        | —                           |
| 6. My port has benefitted greatly from the use of intermodal information technologies   | —                                 | —   | 1.67                 | —                           | 1.67                        |
| 7. My firm sales volume increased after the implementation of intermodal information technologies                             | 3.40                              | 2.50                                      | —                    | 3.00                        | —                           |
| 8. My port sales volume increased after the implementation of intermodal information technologies                             | —                                 | —   | 3.33                 | —                           | 3.33                        |
| 9. Implementation of intermodal information technologies has allowed my company to handle increased business more efficiently | 2.66                              | 1.50                                      | —                    | 2.11                        | —                           |
| 10. Implementation of intermodal information technologies has allowed my port to handle increased business more efficiently   | —                                 | —   | 2.00                 | —                           | 2.00                        |

<sup>1</sup>Includes agribusiness and non-agribusiness means

<sup>2</sup>Includes means of ports only

#### Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4=Disagree; 5=Strongly Disagree

Table 6. Users: Obstacles Preventing or Retarding the Implementation of Intermodal Information Technologies at Firm/Port

|   | Type of Respondents         |                                 |                |      | Grand Means |
|---|-----------------------------|---------------------------------|----------------|------|-------------|
|   | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Ports |      |             |
| Obstacles   |                             |                                 |                |      |             |
| 1. High investment cost   | 2.50                        | 3.67                            | 2.00           | 2.77 |             |
| 2. Lack of financial resources  | 2.50                        | 3.67                            | 4.50           | 3.33 |             |
| 3. Rapid evolution of technology  | 2.75                        | 2.33                            | 1.50           | 2.33 |             |
| 4. Lack of awareness of the benefits of intermodal information technologies | 3.00                        | 2.67                            | 1.50           | 2.56 |             |
| 5. Difficulty in obtaining technical assistance                             | 2.33                        | 2.33                            | 2.00           | 2.25 |             |
| 6. Lack of compatibility with technology in use                             | 2.67                        | 2.67                            | 3.50           | 2.88 |             |
| 7. Lack of firm personnel training/education                                | 3.33                        | 2.67                            | —              | 3.00 |             |
| 8. Lack of port personnel training/education                                | —                           | —                               | 3.50           | 3.50 |             |
| 9. Lack of information on intermodal information technologies               | 2.67                        | 3.67                            | 2.00           | 2.88 |             |
| 10. High operating cost   | 2.33                        | 3.33                            | 3.50           | 3.00 |             |
| 11. Users' resistance   | 2.00                        | 3.33                            | 3.00           | 2.75 |             |
| 12. Lack of product features offered by single manufacturer/vendor          | 3.00                        | 2.67                            | 3.50           | 3.00 |             |
| 13. Lack of cooperation on the part of customers or partners                | 2.67                        | 3.33                            | 3.50           | 3.13 |             |
| 14. High installation cost  | 2.67                        | 3.67                            | 3.50           | 3.25 |             |

Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4=Disagree; 5=Strongly Disagree

**Table 7. Non-Users: Obstacles Preventing or Retarding the Implementation of Intermodal Information Technologies at Firm/Port**

|   | Type of Respondents         |                                 |                                 |                                 | Grand Means |
|---|-----------------------------|---------------------------------|---------------------------------|---------------------------------|-------------|
|   | Means of Agribusiness Firms |                                 | Means of Non-Agribusiness Firms |                                 |             |
|   | Means of Agribusiness Firms | Means of Non-Agribusiness Firms | Means of Agribusiness Firms     | Means of Non-Agribusiness Firms |             |
| 1. High investment cost   | 3.50                        | 3.33                            | 1.75                            | 2.67                            | 2.67        |
| 2. Lack of financial resources  | 2.50                        | 3.33                            | 1.75                            | 2.44                            | 2.44        |
| 3. Rapid evolution of technology  | 3.50                        | 2.67                            | 2.50                            | 2.77                            | 2.77        |
| 4. Lack of awareness of the benefits of intermodal information technologies | 2.50                        | 2.33                            | 3.00                            | 2.67                            | 2.67        |
| 5. Difficulty in obtaining technical assistance                             | 4.50                        | 3.00                            | 3.25                            | 3.44                            | 3.44        |
| 6. Lack of compatibility with technology in use                             | 3.50                        | 3.67                            | 2.67                            | 3.22                            | 3.22        |
| 7. Lack of firm personnel training/education                                | 3.00                        | 2.33                            | —                               | 2.60                            | 2.60        |
| 8. Lack of port personnel training/education                                | —                           | —                               | 3.00                            | 3.00                            | 3.00        |
| 9. Lack of information on intermodal information technologies               | 2.50                        | 2.00                            | 2.00                            | 2.11                            | 2.11        |
| 10. High operating cost   | 3.50                        | 3.33                            | 2.50                            | 3.00                            | 3.00        |
| 11. Users' resistance   | 3.50                        | 3.00                            | 2.75                            | 3.00                            | 3.00        |
| 12. Lack of product features offered by single manufacturer/vendor          | 3.50                        | 3.33                            | 2.50                            | 3.00                            | 3.00        |
| 13. Lack of cooperation on the part of customers or partners                | 3.50                        | 3.33                            | 2.50                            | 3.00                            | 3.00        |
| 14. High installation cost  | 3.50                        | 2.67                            | 2.50                            | 2.77                            | 2.77        |

Choice Types

1= Strongly Agree; 2= Agree; 3= Undecided; 4=Disagree; 5=Strongly Disagree



since they are using fewer personnel to manage their facilities. The second most common reason for implementing intermodal information technologies was to improve operations planning. Respondents were equally concerned with maintaining competitive advantages and increasing office/clerical efficiency.

The least common reasons for implementing or continuing to use intermodal information technologies were examining the sequence of intermodal operations at companies, improving security, and planning the routing of intermodal equipment and cargoes.

#### *Types of Company/Port Activities Affected by Intermodal Information Technologies*

The respondents were asked to reveal the types of activities that were affected by intermodal information activities at their facilities. Results reveal that the most common activities affected were gate activity (port only), costing, and billing (Table 4). The activities that were least affected by intermodal information activities were dispatching, cargo delivery, freight manifest, vehicle routing, vehicle tracing, and load preparation.

#### *Satisfaction with Intermodal Information Technologies*

Ports were most satisfied with the use of intermodal information technologies because of top management, employees, and benefits in general (Table 5). Results reveal that agribusiness firms were satisfied because customers were being satisfied with their use of intermodal information technologies. Agribusiness and non-agribusiness firms feel they have benefitted from the use of intermodal information technologies.

#### *Obstacles Preventing or Retarding the Implementation of Intermodal Information Technologies*

The greatest concerns of users of intermodal information technologies were difficulty in obtaining technical assistance, rapid evolution of technology, and the lack of awareness of the benefits of intermodal information technologies (Table 6). These results suggest that manufacturers and dis-

tributors need to provide the technical assistance necessary for firms using intermodal information technologies. Also, the manufacturers and distributors need to continue to educate their clients about the benefits of intermodal information technologies relative to the cost of implementing intermodal information technologies at firms.

Firms that do not use intermodal information technologies reveal that lack of information on intermodal information technologies, lack of financial resources, and lack of personnel training and education were the most common obstacles preventing them from using intermodal information technologies (Table 7). These results suggest that marketers need trained and educated management and employees so that they can become familiar with the operations of intermodal information technologies. Also, the sellers will be able to provide potential users with information on the different funding sources available for those who want to implement intermodal information technologies.

### **Summary and Conclusions**

The general purpose of this study was to assess the use, adoption, and benefits of intermodal information technologies on intermodal ports and terminals serving agribusiness firms physically located at port sites in Mississippi. Secondary and primary data and information were used to accomplish this. The results provide insight into the use of, satisfaction with, and obstacles preventing the increased use of intermodal information technologies, and can prove useful in continued analysis of this data and development of future research projects. Results from this study reveal that agribusiness firms and ports are most familiar with personal computers, Windows, and fax machines. Information on new information technologies was obtained from work, colleagues, and magazines. The most common activities affected by ports and firms responding to the survey are gate activity (port only) and costing and billing.

### **References**

- Allen, Albert J. and Warren C. Couvillion. 2001. *The Use of Intermodal Information Technologies by Intermodal Ports and Terminals Serving Agriculture in Mississippi*, Department of

- Agricultural Economics, MAFES, Mississippi State University, March. Final Report submitted to National Center for Intermodal Transportation (NCIT), Department of Transportation (DOT), Grant Number DTRS 98-G-0017.
- Berry, Ronald L., Marianne D'Onofrio, Patricia Hall, and Mary C. Jones. 1998. "Information Technology: An Assessment of Multinational Management Perceptions." *Journals on Information Technology*. <http://cott.bus.okstate.edu/isworld/journal2.htm>.
- Bigras, Yvon and Jacques Roy. 2000. "The Use of New Information Technologies: The Case of the Quebec Trucking Industry," *Transportation Quarterly/Journal of the Transportation Research Forum* 54:3 (Summer).
- Collin, S. M. H. 1997. *Dictionary of Information Technology*. Second Edition. Peter Collin Publishing, Ltd., 1 Cambridge Road, Teddington, Middlesex, TW118DT, Great Britain.
- Muller, Gerbardt. 1999. *Intermodal Freight Transportation*. Fourth Edition. Econ Transportation Foundation, Inc., and Intermodal Association of North America, Washington, D.C.