

Studies in Systems, Decision and Control 536

Rim El Khoury *Editor*

# Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations

Volume 2

 Springer

# Studies in Systems, Decision and Control

Volume 536

## Series Editor

Janusz Kacprzyk , Systems Research Institute, Polish Academy of Sciences,  
Warsaw, Poland

## Editorial Board

Dmitry A. Novikov, Institute of Control Sciences (Director), Russian Academy of  
Sciences, Moscow, Russia

Peng Shi, School of Electrical and Mechanical Engineering, University of  
Adelaide, Adelaide, SA, Australia

Jinde Cao, School of Mathematics, Southeast University, Nanjing, China

Marios Polycarpou, KIOS Research Center, University of Cyprus, Nicosia, Cyprus

Witold Pedrycz , Faculty of Engineering, University of Alberta, Alberta, Canada

The series “Studies in Systems, Decision and Control” (SSDC) covers both new developments and advances, as well as the state of the art, in the various areas of broadly perceived systems, decision making and control—quickly, up to date and with a high quality. The intent is to cover the theory, applications, and perspectives on the state of the art and future developments relevant to systems, decision making, control, complex processes and related areas, as embedded in the fields of engineering, computer science, physics, economics, social and life sciences, as well as the paradigms and methodologies behind them. The series contains monographs, textbooks, lecture notes and edited volumes in systems, decision making and control spanning the areas of Cyber-Physical Systems, Autonomous Systems, Sensor Networks, Control Systems, Energy Systems, Automotive Systems, Biological Systems, Vehicular Networking and Connected Vehicles, Aerospace Systems, Automation, Manufacturing, Smart Grids, Nonlinear Systems, Power Systems, Robotics, Social Systems, Economic Systems and other. Of particular value to both the contributors and the readership are the short publication timeframe and the worldwide distribution and exposure which enable both a wide and rapid dissemination of research output.

Indexed by SCOPUS, DBLP, WTI Frankfurt eG, zbMATH, SCImago.

All books published in the series are submitted for consideration in Web of Science.

Rim El Khoury  
Editor

# Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations

Volume 2

 Springer

*Editor*

Rim El Khoury  
Adnan Kassar School of Business  
Lebanese American University  
Jbeil, Lebanon

ISSN 2198-4182                      ISSN 2198-4190 (electronic)  
Studies in Systems, Decision and Control  
ISBN 978-3-031-63401-7              ISBN 978-3-031-63402-4 (eBook)  
<https://doi.org/10.1007/978-3-031-63402-4>

© The Editor(s) (if applicable) and The Author(s), under exclusive license to Springer Nature Switzerland AG 2024

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG  
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

If disposing of this product, please recycle the paper.

# Contents

<b>Study of Policies and Effects of the Government on Food Security</b> .....	1
Pratishtha Pandey, Rani Augustine, and Ishmeet Sodhi	
<b>Developing Sustainability in Business Schools-Best Practices for Implementation of Principles for Responsible Management Education</b> .....	13
Agata Stachowicz-Stanusch, Davide Contu, and Rachid Alami	
<b>The Political Ecology of Risk: Problematising the Risk Distribution of Solid Waste Treatment Plants</b> .....	25
Sameena Moulana Manzil Siddique	
<b>Sustainable Horizons: Navigating Coimbatore’s Economic Landscape Through Green Economics</b> .....	39
S. Ashmath, Balavethashre, and C. V. Suganthamani	
<b>A Proposed Framework for Predicting the Psychological Determinants of Youth Entrepreneurship Success: Gulf Region Perspective</b> .....	51
Raed Awashreh and Abdelsalam Adam Hamid	
<b>Culinary Insights: Unveiling the Tribes’ Cooking Fuel Index Computed from the 2011 Census Data</b> .....	61
Neelu S. Kumar and S. Boopathi	
<b>Risk Analysis at Production Process of Hard Disk Component</b> .....	73
Afif Al Akbar and Tatang Akhmad Taufik	
<b>Perception of Fair Price Shops Owners Towards Public Distribution System: A Factor Analytical Approach</b> .....	85
M. M. Nirmala, Neelu S. Kumar, Mini Thomas, Deepa K. Thomas, and V. S. Soumya	

<b>A Critical Review to Establish an Ontological and Epistemological Framework for Evaluating Variables in the Sustainable Construction of Hyperscale Data Centres</b> .....	107
David King and Nadeeshani Wanigarathna	
<b>Bridging Knowledge Gaps: Theoretical Foundations for Identifying Location Variables Impacting the Sustainable Construction of Hyperscale Data Centres in India</b> .....	119
David King and Nadeeshani Wanigarathna	
<b>Causes of Rural–Urban Migration in India with Special Reference to Metropolitan Cities: Structural Equation Modeling Approach</b> .....	131
S. Amudhan, Padma Nandanam, Sayantani Banerjee, R. Hariharan, and Samuel Mores Geddam	
<b>Impact Analysis of Foreign Direct Investment Inflow on Gross Domestic Product Growth in India</b> .....	145
Roopa Adarsh, K. Sivasubramanian, P. Kumarasamy, and K. Ramesh	
<b>Technology Growth-Based Transformation in Education: Understanding the Role of Technology and Teachers</b> .....	155
Sree Lakshmi Ammanamanchi and Annie Bangtegan Domede	
<b>Empowering Women in Entrepreneurship: Unraveling the Nexus of Technological Capital, Self-efficacy, and the Role of Perception</b> .....	167
Inneke Qamariah, Fadli, Windi Astuti, and Muhammad Dharma Tuah Putra Nasution	
<b>Determinants of Impact on Global Food Security</b> .....	181
Svitlana Tkalenko, Liudmyla Kudyko, and Andrii Kazanishen	
<b>Empowering Change—The Catalyst of Women Entrepreneurs in Green Entrepreneurship for Sustainable Development in the Sultanate of Oman</b> .....	197
Alamelu Mangai Raman, S. Porkodi, R. Sasikala, and T. K. Murugesan	
<b>Influence of Human Resource Management Practices on Job Satisfaction Among Chosen Private Sector Banks in Coimbatore District</b> .....	213
Maksud A. Madraswale, Velmurugan Ramasamy, and K. P. Jaheer Mukthar	
<b>Aggrandize Sustainable Development Through Decent Work: Literature Review</b> .....	225
P. Remmiya Rajan, Amitabh Patnaik, and Sanathanan Velluva	
<b>Unveiling the Agricultural Growth Catalyst: A Review on the Importance of Public Expenditure in the Agriculture Sector</b> .....	243
Tinto Tom, M. M. Nirmala, Neelu S. Kumar, and U. P. Reshmi	

**An Empirical Study on Association Between Demographic Factors and Level of Life-Work Blend** ..... 257  
 M. Sugin Raj, M. Subala, and Vismaya Vince

**Unveiling the Digital Echo: How Online Reviews Shape Consumer Purchase Decisions** ..... 269  
 Devarajanayaka Kalenahalli Muniyanayaka, Komal A. Dave, Syed Kazim, Kotigari Reddi Swaroop, Naveen Pol, and Ajai Abraham Thomas

**AI-Driven Customer Relationship Management (CRM): A Review of Implementation Strategies** ..... 283  
 R. Leelavathi, Bijin Philip, R. Madhusudhanan, N. Sony, and K. P. Jaheer Mukthar

**Navigating Challenges and Strengthening Resilience: A Study of Supply Chain Measures in the Tirupur Garment Industry Amid the Pandemic** ..... 297  
 S. Gokilavani, Yashwanth L. Reddy, S. Deepa, N. Vadivu, and T. Unnamalai

**Unpredictable Stock Market: An Insightful Psychological Examination of Investor Behavior** ..... 311  
 M. Chandrakala, Ande Hari Hara Nath Reddy, R. Prathima, and Ch. Raja Kamal

**An Examination of the Effects of Sifting HR Data Analytics on the IT Sector’s Training and Development Strategy: A Case Study in Bangalore** ..... 319  
 M. Chandrakala, J. Easubatham Armstrong Anand, P. Y. Naveen, and Ch. Raja Kamal

**Leveraging Digital Platforms for Optimal Productivity and Returns in Horticulture—A Study in Coorg** ..... 327  
 Lokanandha Reddy, K. M. Shobha, R. Vijayakumar, and M. Mathiyarasan

**Green Finance and Sustainable Development in India** ..... 335  
 M. Biju, J. Raghavendra Babu, Shanmugha Priya Pon, K. Mahesha, and C. Dhanapal

**A Study on Bill of Lading Operations in CMA CGM GBSI (Global Business Services India), Chennai** ..... 343  
 R. Karthika, J. Chandrakhanthan, Anjali Bajaj, S. J. Michael, R. Haribaskar, and M. Shashi Kumar

**Assessing Machine Learning Algorithms Performance in Predicting Stock Market Trends Using Varied Input Combinations** ..... 353  
 M. Jahnavi, Purushottam Bung, N. Nagasubba Reddy, and Arti Singh

<b>Harnessing Technology for a Sustainable Future in Finance: The Role of Artificial Intelligence in Promoting Environmental Responsibility</b> .....	367
Shalini Singh, Shubhanker Yadav, Arti Singh, Y. Jaya Krishna, and Anjana Singh	
<b>Social Media Marketing and Its Impact on Consumer Buying Behaviour with Special Reference to Coimbatore City</b> .....	379
Shanmugha Priya Pon, M. Biju, N. Vijaiatha Christy, S. Smilee Bose, and S. Soniya	
<b>The Economics of Sustainability: Green Initiatives and Their Financial Outcomes</b> .....	387
Jenifer Lawrence, D. Anitha Kumari, Manoj Govindaraj, and D. Ravindran	
<b>Unveiling the Emotions: A Sentiment Analysis of Amazon Customer Feedback</b> .....	403
V. Muthu Ruben, R. VijayaKumar, and T. K. Sateesh Kumar	
<b>Exploring Temporal Dynamics of Customer Sentiments: A Comprehensive Analysis of Maybelline Kajal Product Reviews</b> .....	411
R. VijayaKumar and T. K. Sateesh Kumar	
<b>Predictive Analytics in Retail: Revealing the Strategic Impact of Advertising Channels on Sales Performance Through Python and Linear Regression Model</b> .....	421
R. V. Dhanalakshmi, B. R. Venkatesh Prasanna, Richa Tiwari, Reeja Jose Pavanathil, K. S. Ashok Kumar, and M. Mathiyarasan	
<b>Candidate Performance Prediction—A Detailed Analysis Using Predictive Analytics Workbench</b> .....	431
B. R. Venkatesh Prasanna, R. V. Dhanalakshmi, Sreoshi Dasgupta, S. Sivagnana Bharathi, J. Chandrakhanthan, and M. Mathiyarasan	
<b>The Employees' Demographic Profile of Startups in India with Special Reference to Bangalore City: A Case Study</b> .....	439
Y. Jaya Krishna, K. Raghu Ram, T. Sivagami, Arti Singh, Robin Shaji, Amulya Kurian, Hima Devadas, and Ankitha Theres	
<b>Navigating Industry 4.0: Skill Development Strategies for Empowering MSMEs in the Digital Age</b> .....	453
T. Mohammed Shebeen, R. Shanthi, and M. Mathiyarasan	
<b>The Crucial Role of ESG in Sustainable Reporting: A Determining Factor for the Performance of Indian Co</b> .....	463
Bharti Deshpande, S. Ranjith Kumar, Ibha Rani, and M. Mathiyarasan	

**A Study on Socio-demographic Factors Influencing Customers’ Attitude in Purchasing FMCG Branded Products with Special Reference to Chennai, Tamil Nadu** ..... 475  
 P. Kumarasamy, Ajith P. Mathews, N. M. Vipulkumar, and A. P. K. Abdul Rasheed

**Unveiling the Dynamics of Initial Public Offerings: A Comprehensive Review of IPO Pricing, Performance, and Market Trends** ..... 487  
 Kenneth Wilson Bavachan and M. Muthu Gopala Krishnan

**The Future of Artificial Intelligence and Its Impact on the Marketing Industry** ..... 499  
 Arti Singh, Raja Kamal Ch, and Geetanjali Diwani

**Farm to Fork: Pioneering a Sustainable Supply Chain Revolution** ..... 507  
 R. Sangeetha, E. Dhanasekar, P. Annamuthu, G. Dinesh Kumar, and Raja Krishnan Manivel

**Refining Talent Management: Navigating Employee Performance Through Organizational Commitment** ..... 515  
 D. Mythili, V. Saranya, V. Akalya, C. Ranganayaki, and M. Mathiyarasan

**COVID-19 Pandemic and Disruptions—Lessons Learned and Resilience Building Through Robust Business Sustainability Model** ..... 523  
 Hesham Magd and Ravi Thirumalaisamy

**Resilience and Recovery: A Strategic Blueprint for Financial Sustainability in Oman Amidst COVID-19 Disruptions** ..... 539  
 Ravi Thirumalaisamy and Hesham Magd

**Determining the Composition of the Working-Age Population in the Low-Mobility Group in Ukraine** ..... 553  
 Oksana Sydorenko, Aušra Liučvaitienė, Oleksandr Khadartsev, Dinara Jakupova, Anna Slobodanyk, George Abuselidze, and Oleksandr Sanchenko

**Motivation of Women Towards Sustainable Entrepreneurship and Financial Empowerment** ..... 565  
 Velmurugan Ramasamy, Ravi Thirumalaisamy, Rene Paquibut, Mahmoud Abouraia, and M. Mathiyarasan

**Short-Term Stock Market Price Trend Prediction Using Genetic Algorithm-Enhanced Back Propagation Neural Networks for Traders’ Sustainable and Inclusive Future** ..... 581  
 Ravi Thirumalaisamy, Velmurugan Ramasamy, Sudarvel Jayaraj, Mahmoud Abouraia, and M. Mathiyarasan

# Farm to Fork: Pioneering a Sustainable Supply Chain Revolution



R. Sangeetha , E. Dhanasekar, P. Annamuthu, G. Dinesh Kumar, and Raja Krishnan Manivel 

**Abstract** This research article focuses on the transformative effect of the supply chain revolution prevailing in the food industry, with explicit attention to the consumption of the short food supply chain in the city of Coimbatore. Recognizing Coimbatore as a significant revenue-generating city, the study utilizes a structured survey instrument distributed randomly among 150 consumers. The research employs Structured Equation Modeling to quantitatively assess the relationships between various factors. Coimbatore, chosen for its economic importance, serves as the primary location for this study. A structured survey is administered to 150 consumers chosen randomly. The research employs Structured Equation Modeling to analyze the quantitative relationships between key factors influencing the supply chain in the food industry. The current research paper reveals a robust model fit between consumer intention, attitude, and satisfaction. Notably, consumers with high intentions demonstrate a higher level of satisfaction in their purchase experiences within the short food supply chain in Coimbatore. These findings suggest that the consumer's intention plays a more significant role in shaping their attitudes and overall satisfaction towards the supply chain in the food industry. This research contributes valuable insights into the dynamics of the evolving supply chain in the food sector, specifically in the context of a city with economic significance like Coimbatore.

**Keywords** Short food supply Chain · Consumer · Sustainable development

---

R. Sangeetha (✉) · P. Annamuthu  
Sri Krishna Arts and Science College, Coimbatore 641008, India  
e-mail: [Fsangeethar31@gmail.com](mailto:Fangeethar31@gmail.com)

E. Dhanasekar  
Dr.N.G.P. College of Arts and Science, Coimbatore 641048, India

G. Dinesh Kumar · R. K. Manivel  
PSG College of Arts & Science, Coimbatore 641014, India

# 1 Introduction

## 1.1 Short Food Supply Chain

Short food supply chains are vital in the edifice of strong relationships between regional producers and customers, endorsing sustainability, backing up local economies, and guaranteeing calm access to premium, fresh goods. However, the mismatch between producer supply and consumer demand presents difficulties for this vital industry, preventing it from reaching its full potential for development [3]. Increased focus on sustainability in food chains has come from a wide range of stakeholders, including suppliers, policy officials, researchers, consumers, and food producers. The fact that short food supply chain (SFSC) efforts have grown significantly and provide an alternative to the globalized food chains that are now common in the food business is further proof of this growing interest [8].

In the midst of the EU's economic crisis, member states are stressing their own national identities more and more. Interestingly, in order to strengthen their national economy, a number of EU members, like France, Germany, Italy, Spain, and Poland, are aggressively encouraging the consumption of goods made in their own countries (Tanasa, n.d.). Short food supply chains have a long history in India, an agricultural country with a rich legacy of traditional food processing methods (SFSC) [13]. The advent of globalization has made a wide range of food products available everywhere. The food industry, food producers, and consumers have all seen significant increases in their financial returns as a result of this opportunity [2]. It is indisputable that this shift has affected consumers' dietary and shopping choices, often prompting them to substitute supermarkets and discount stores for local and retail markets, where they can easily obtain a variety of food products [9].

The recent COVID-19 outbreak has highlighted many problems and exposed the need for a more balanced approach by exposing flaws in the current production and supply chain systems [13]. Several critical factors have contributed to the growth and success of these shorter supply chains. Today, the world faces an abundance of challenges related to food, including the loss of biodiversity, wasteful consumption, health issues resulting from overconsumption, and widespread food insecurity [1]. Organic farmers face difficulties in finding appropriate purchasers, which increases the cost of transactions [7].

Slack resources, anticipation of occupational and process health and safety hazards, natural resource management, information exchange, clean technologies, inner variability, food price, external variability, diversity of consumer profiles, uncertainty in judgment due to the assortment of criteria for waste and pollution assessment, and climate change are the factors that managers should develop in order to reduce system complexity, said [11]. The systems for food quality that are currently in place, the added value found throughout the food supply chains, the demands and characteristics of consumer choices, the difficulties involved in implementing the impression of sustainable development, and the degree of cooperation and teamwork among supply chain participants are the other factors concentrated by [17].

Farmers believe that the product itself—its quality, freshness, and location—as well as client referrals and loyalty, are the most crucial factors in selling their products locally [5]. In real terms, it became evident that producers needed to put in every effort to develop their marketing and communication plans. From a political perspective, it was acknowledged that local governments should offer the support required to put training programs into place and create marketing and communication strategies that work [10].

The growth and development of cross-border agronomic product supply chains via broadcast in e-commerce is facilitated by digital platforms, which also contribute to the increasing organization and coordination of cross-border e-commerce platforms in agricultural product transactions [16]. This has led to a greater degree of ecosystem integration [12] for producers, sellers, and professional service providers.

## ***1.2 Strategies for Improving Customer Engagement and Fulfilment***

The COVID-19 pandemic had no appreciable impact on consumer spending or the frequency of shopping at SFSCs. This lack of change could hinder SFSCs' capacity to grow beyond their current capacities and suggests that SFSCs and LFSCs work well together to promote more environmentally friendly consumption habits [6]. Short food supply chains benefit from a competitive advantage provided by sales and producers, who are recognized as essential components of the marketing mix and exhibit definite indications of customer satisfaction [14]. From the point of view of producers as well as consumers, the direct purchasing network demonstrated its adaptability as a short, flexible food chain in times of crisis [15].

Short food chain producers can take advantage of specific market niches and provide consumers with useful information about food, including its health benefits. The primary obstacles that have been identified should be addressed by policies to support SFSCs, as should the development of stronger ties between the person who produces and the person who consumes [4]. Short food supply chains, or SFSCs, present a viable way for producers to reach specific market segments, give consumers useful food information, and respond quickly to emergencies. Encouraging policies, the elimination of obstacles, and improved producer–consumer relationships are critical for the prosperous expansion of SFSCs.

In today's ever-changing food environment, the sustained success of SFSCs depends on an open approach to creative distribution systems, cooperation, and collaboration with researchers.

## **2 Objectives, Data, and Methodology**

### ***2.1 Statement of the Problem***

A short food supply chain denotes the system in which construction, dispensation, distribution, and consumption of food involve fewer intermediaries and are more localized. This approach aims to minimize the distance between the person who produces and the person who consumes, nurturing direct relationships and promoting sustainability. This article focuses more towards analyzing the satisfaction of consumers in the purchase of short foods and their perception in the short food supply chain.

### ***2.2 Objective of the Study***

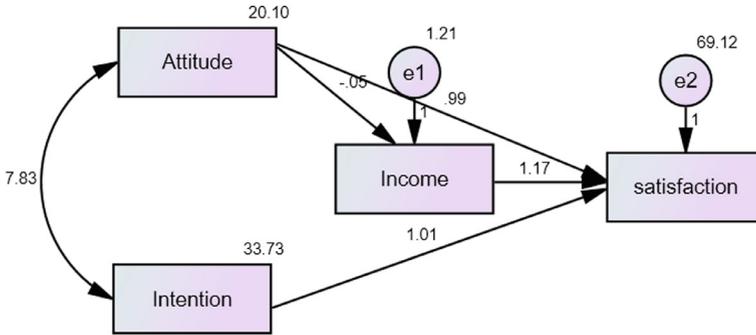
The objective of this study is to analyze the satisfaction of consumers in connection with the short food supply chain.

### ***2.3 Research Design***

This research paper employs a Simple Random Sampling (SRS) method to analyze consumer satisfaction inside the framework of the short food supply chain. This approach involves randomly selecting a sample of consumers from the population of interest in Coimbatore. By utilizing SRS, every consumer in the study has an equal chance of being encompassed in the study, ensuring a representative and unbiased sample. The structured survey instrument is distributed among 150 randomly chosen consumers, allowing for a comprehensive understanding of their satisfaction levels with the short food supply chain in Coimbatore.

### ***2.4 Data Collection***

The data were poised from 150 respondents of Coimbatore city through a structured questionnaire. The collected data from the consumers were analyzed through Structured Equation Modeling (SEM) through AMOS.



**Fig. 1** Structural Equation Model (SEM) grounded on standardized co-efficient on consumer satisfaction

### 2.5 Structural Equation Model Analysis

SEM includes the subsequent variables:

1. The Observed/endogenous variables: Income and Satisfaction
2. The Observed/exogenous variables: Attitude and Intention
3. The Unobserved/exogenous variables: e1—Error term for Income and e2—Error term for Satisfaction

Hence the number of variables used in Structural Equation Modeling is, as shown in Fig. 1:

- No. of variables in the model: 6
- No. of observed variables used: 4
- No. of unobserved variables used: 2
- No. of exogenous variables used: 4
- No. of endogenous variables used: 2

## 3 Findings

Using the other path variables held constant, Table 1’s unstandardized coefficient of attitude on income (-0.048) can be used to estimate the partial influence of attitude on income. The coefficient value is significant at the 1% level, and the estimated negative sign suggests that the effect is negative, with Expectation decreasing by -0.048 for each unit fall in Attitude. The partial impact of intention on satisfaction, while all other path variables are held constant, is represented by the unstandardized coefficient of intention on satisfaction, which is 1.007. According to the anticipated positive sign, there would be a positive effect and a 1.007 rise in satisfaction for every unit increase in intention. This coefficient value is significant at the 1% level.

**Table 1** Standardised and unstandardised Co-efficient values

Variables			Unstandardised Coefficient (B)	S.E	Standardised Co-efficient (Beta)	t value	P Value
Income	<--	Attitude	-0.048	0.020	-0.190	-2.362	< 0.001**
Satisfaction	<--	Intention	1.007	0.123	0.499	8.185	< 0.001**
Satisfaction	<--	Attitude	0.987	0.162	0.378	6.095	< 0.001**
Satisfaction	<--	Income	1.174	0.619	0.112	1.898	< 0.001**

Note: \*\* represents significance at 1% level

Keeping the other path factors constant, the unstandardized coefficient of attitude on satisfaction, which stands at 0.987, indicates the partial impact of attitude on satisfaction. With every unit rise in attitude, satisfaction is predicted to improve by 0.987, according to the anticipated positive sign. This coefficient value is significant at the 1% level.

The partial impact of income on satisfaction, when all other path variables are held constant, is represented by the unstandardized coefficient of income on satisfaction, which is 1.174. With every unit increase in income, satisfaction is expected to improve by 1.174, according to the expected positive sign. This coefficient value is significant at the 1% level.

The most influential path in this SEM model is intention on satisfaction (0.499), which is followed by attitude on satisfaction (0.378), income on satisfaction (0.112), and so forth, according to the Standardized Coefficient.

The null hypothesis and alternative hypothesis are formulated with the intention of testing the model fit (Table 2).

- Null hypothesis: There is a good fit with the proposed model.
- Alternate Hypothesis: There is inadequate fit to the proposed model.

**Table 2** Model fit summary

Model fit summary of structural equation model indices	Value
Chi-square value	2.228
DF	1
P value	0.136
Chi-square value/DF	2.228
GFI	0.993
AGFI	0.926
NFI	0.982
CFI	0.989
RMR	0.070
RMSEA	0.079

A calculated P value of 0.136, which is greater than 0.05, suggests a good fit with the proposed model. Currently, both the Adjusted Goodness of Fit Index (AGFI) score (0.926) and the Goodness of Fit Index (GFI) value (0.993) are greater than 0.9, indicating an excellent fit. The Root Mean Square Residuals (RMR) and Root Mean Square Error of Approximation (RMSEA) value is 0.079, which is less than 0.08, indicating a perfect fit. The computed Normed Fit Index (NFI) value (0.982) and Comparative Fit Index (CFI) value (0.989) also demonstrate that it is a perfect fit.

## 4 Conclusion

The analysis shows that there is a strong model fit between customer satisfaction, attitude, and intention. Interestingly, buyers with good intents express greater happiness with their purchases made in Coimbatore's short food supply chain. These results imply that customer intentions are a major determinant of how consumers feel about the food industry's supply chain generally and in terms of their sentiments. In the setting of a major metropolis like Coimbatore, this study offers insightful information about the dynamics of the changing food industry supply chain.

## References

1. Abideen, A.Z., Sundram, V.P.K., Pyeman, J., Othman, A.K., Sorooshian, S.: Food supply Chain transformation through technology and future research Directions—A systematic review. *Logistics*. **5**(4), 83 (2021)
2. Cappelli, A., Cini, E.: Will the COVID-19 pandemic make us reconsider the relevance of short food supply Chains and local productions? *Trends Food Sci. Technol.* **99**, 566–567 (2020)
3. Cirone, F., Masotti, M., Proserpi, P., Bosi, S., Dinelli, G., Vittuari, M.: Business strategy pathways for short food supply Chains: sharing value between consumers and producers. *Sustain. Prod. Consum.* **40**, 458–470 (2023)
4. González-Azcárate, M., Cruz Maceñ, J.L., Bardají, I.: Why buying directly from producers is a valuable choice? expanding the scope of short food supply Chains In Spain. *Sustain. Prod. Consum.* **26**, 911–920 (2021)
5. Horská, E., Petrilák, M., Šedík, P., Nagyová, E.: Factors influencing the sale of local products through short supply Chains: a case of family dairy farms In Slovakia. *Sustain. (Switz.)* **12**(20), 1–17 (2020)
6. Mass, M., Abebe, G.K., Hartt, C.M., Yiridoe, E.K.: Consumer perceptions about the value of short food supply chains during COVID-19: Atlantic Canada Perspective. *Sustain. (Switz.)*, **14**(13) (2022)
7. Nandi, R., Gowdru, N.V., Bokelmann, W.: Factors influencing smallholder farmers in supplying organic fruits and vegetables to supermarket supply Chains In Karnataka, India: a transaction cost approach. *Int. J. Rural. Manag.* **13**(1), 85–107 (2017)
8. Paciarotti, C., Torregiani, F.: The logistics of the short food supply Chain: a literature review. In *Sustain. Prod. Consum.* **26**, pp. 428–442 (2021)
9. Pato, M.L.: Short food supply Chains-A growing movement. The case study of the viseu ão lafões region. *Open Agric.* **5**(1), 806–816. (2020a)

10. Pato, M.L.: Short food supply Chains-A growing movement. The case study of the viseu dão lafões region. *Open Agric.* **5**(1), 806–816. (2020b)
11. Silva, B.P. Da, Cassel, R.A., Wachs, P., Saurin, T.A.: The influence of sustainability on the complexity of food supply Chains. *Prod. Manuf. Res.* **11**(1) (2023)
12. Sujatha, S.: An empirical study on competencies required for a sustainable educational research. *ECS Trans.* **107**(1), 14807 (2022)
13. Thulasiraman, V., Nandagopal, M. S. G., & Kothakota, A.: Need for a balance between short food supply Chains and integrated food processing sectors: COVID-19 takeaways from India. In *J. Food Sci. Technol.* **58**:10, pp. 3667–3675 (2021). Springer. <https://doi.org/10.1007/S13197-020-04942-0>
14. Tiganis, A., Grigoroudis, E., Chrysochou, P.: Customer satisfaction in short food supply chains: a multiple criteria decision analysis approach. *Food Qual. Prefer.* **104** (2023)
15. Ušča, M., & Tisenkopfs, T.: The resilience of short food supply Chains during the COVID-19 pandemic: a case study of a direct purchasing network. *Front. Sustain. Food Syst.* (2023)
16. Wang, G., Zhang, Z., Li, S., Shin, C.: Research on the influencing factors of sustainable supply chain development of Agri-Food products based on Cross-Border Live-streaming E-Commerce in China. *Foods*, **12**(17) (2023)
17. Ziemiańczyk, U., Krakowiak-Bal, A.: Infrastruktura I Ekologia Terenów Wiejskich infrastructure and ecology of rural areas factors influencing food supply Chains in the context of existing food quality schemes. (2018)