National Quality Standard Approach for Business Competitiveness and Sustainability: A Study of Indonesian Public Market

Budi Sumantri[1], Siswoyo Haryono[2*], Irman Firmansyah[3] and Casnan[4]

[1, 2]*Universitas Muhammadiyah Yogyakarta, Indonesia*
[2]*System Dynamics Center, Indonesia*
[3]*STKIP Muhammadiyah Kuningan, Indonesia*
[1]*bsdpukabmagelang@yahoo.co.id,* [2*]*profsiswoyo@umy.ac.id,* [3]*irmanf@gmail.com,*
[4]*casnan.ipb@gmail.com*

Abstract

This study aimed to provide instruction on market management policy strategies in order to improve the status of market performance according to national standards. The research method used was the analysis of Interpretative Structural Modeling (ISM) to map and structure constraints in the management of the Tempuran market in the Magelang Regency, which complies with the Indonesian National Standard (SNI). Based on the result of the study, in short of time, the management can solve two main priority obstacles. The first one was the issue of business competition (mini markets) close to traditional markets. The second one was security (installation of CCTV), creating a group of market traders/ Market Association, providing parking space, and fulfilling the cleaning staff. The strategy to overcome the Tempuran market management problem in Magelang Regency focuses on the constraints faced by traders, market managers, and local governments in Magelang Regency.

Keywords: public market, Indonesia national standard, interpretative structural modeling

1. Introduction

After Law No. 7 of 2014 concerning Trade has been legalized, the term Traditional Market changes its name to the Public Market. Public Market is an economic institution that has strategic functions, including (1) becoming the knot of local economic strength. (2) contributing to the regional economy. (3) increasing employment opportunities. (4) providing sales facilities, especially for micro, small and medium-sized businesses. (5) becoming a reference for the price of staple goods that underlies the calculation of the inflation rate and an indicator of price stability. (6) increasing Regional Original Revenue (PAD). (7) becoming a means of local cultural sustainability. (8) becoming both an upstream and estuary of the informal economy, which is the backbone of the Indonesian economy. According to [1]-[3], the function of the public market is to become a commercial house and a house of Indonesian culture that has competitiveness while maintaining local wisdom.

The existing public market in Magelang Regency will compete with the mini-market. Therefore, the public market must be able to adjust proper management in order to compete with the mini-market. Sustainable market management contains three main pillars, including economic, environmental, and social dimensions [4]-[5].

The process of increasing market competitiveness in the Magelang Regency can be by overcoming market constraints to develop with better management [6]-[7]. Market constraints faced are then prioritized using Interpretative Structural Modeling (ISM) so that constraints are structured based on priorities [8]-[9] for the development of public markets with professional management. This study was to make a structured strategy

based on stakeholder problems [10]. This study was to analyze the priority strategy of the Tempuran Public Market, Magelang Regency.

2. Methodology
2.1. Research Location

This research was conducted at the Tempuran Market in Magelang Regency by conducting field visits, direct interviews, and Focus Group Discussion (FGD). The design of this research is the qualitative approach [11].

2.2. Research Design

According to [12], the research design was associated with the achievement of research objectives based on the variables, methods, and outputs produced, as presented in Table 1.

Table 1. Research Design Matrix

Research Objectives	Analysis Method	Variable	Output
The direction of market management policy strategies is to improve the status of market performance.	Interpretative Structural Modelling (ISM)	Constraints faced by the management of the Tempuran market in Magelang Regency	Priority for sustainable market management strategies and program direction

Data collection was from FGD carried out with the World Cafe Method (WCM) to analyze market management constraints, problem mapping, and strategy design developed from expert opinions in FGD. The results of the FGD were then processed using Exsimpro Software called Interpretative Structural Modeling (ISM) for mapping and structuring constraints [13]-[14] in market management.

Performance measurement is a tool or method to access personal/ company/ organizational progress compared to the established goals and objectives. Performance measurement is a basis for assessing the success and failure of the implementation of activities following the goals and objectives set in order to realize the vision and mission [15]. Performance measurement is one of the main pillars of the performance management system. Figure 1 shows the performance management diagram.
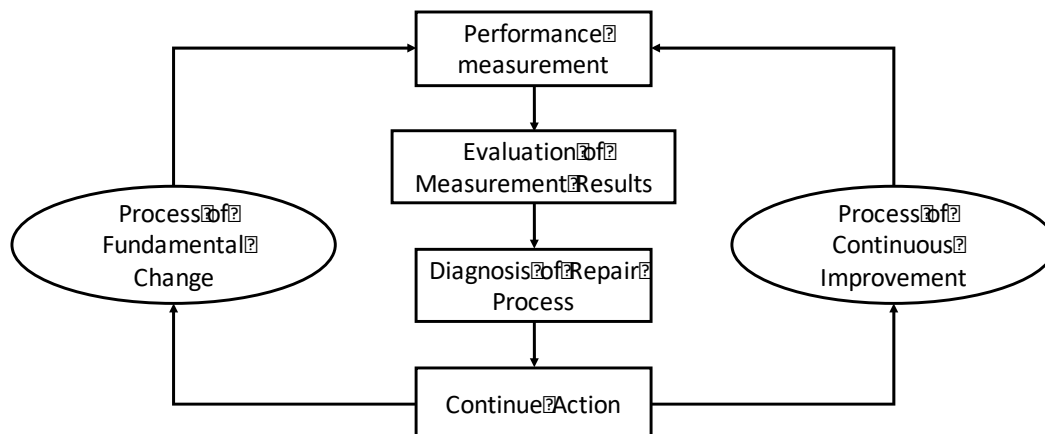

Figure 1. Performance Management Diagram [16]

Market performance optimization aims to improve competitiveness and sustainable development. According to the Indonesian dictionary, competitiveness is the ability to produce products and services that meet international testing while at the same time maintaining high and sustainable income levels or the ability of regions to generate high levels of income and employment opportunities that keep maintaining external competition.

Increased competitiveness must still be examined in detail and continuously in order to create a solution in winning the competition of the public market with the existing mini market. Therefore, several steps for the public market to maintain and win the competition, namely: (1) Consistently maintaining product quality. (2) Adding competitiveness of the public market through attractive product packaging. (3) Daring to compete in terms of price. (4) Maintaining consumer loyalty, [8], [17], [14], [9], [18].

Increasing the competitiveness of sustainable market management in Magelang Regency needs to be supported by Human Resources (HR). Human resources (HR) in a company organization is the key to the success of the company because of human resources that design, install, operate and maintain an integrated system of the organization or company [17], [19]. The process of increasing the competitiveness of sustainable market management in the Magelang Regency was by overcoming the constraints of market management to develop with better management [20].

Market constraints faced were then prioritized using ISM so that constraints were obtained based on priorities. Constraint graph of Tempuran market management was into three quadrants/ groups, that is, quadrant II with the characteristics of a low power driver and high dependency, quadrant III with the characteristics of high power drivers and high dependency, quadrant IV with the characteristics of high power drivers and low dependence [8]-[9]. Figure 2 shows the graph of Tempuran market management mapping.
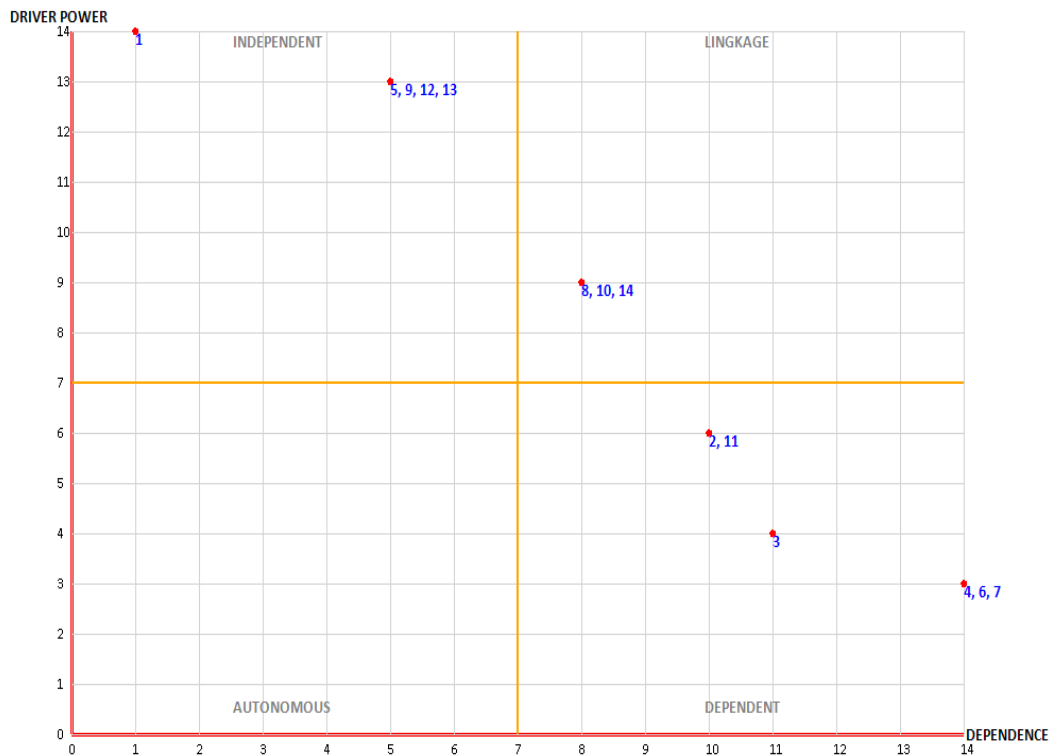
Figure 2. Mapping of Tempuran Public Market Management Constraints in Magelang Regency

Structuring the constraints of Tempuran market in Magelang Regency was divided into three levels according to the color of the market management constraint structure, as shown in Figure 3. The red color is a short-term constraint to resolve immediately. Blue is a medium-term constraint, and green is a long-term obstacle. The main priority obstacle to be resolved in the short term is the problem of competition with the mini-market. The second priority is the installation of CCTV, a group of market traders/market association, parking lot provision, and the cleaning staff fulfillment.

To be able to compete with the mini market, the management of Tempuran market needs to apply the concept of national standard service and apply the quality management system standard. Some studies conclude that the application of quality management system standard has a significant correlation with the support and commitment of market managers/ top management in the aspect of a real increase in sales and profits and an improvement of the existing quality management system [21], [9].

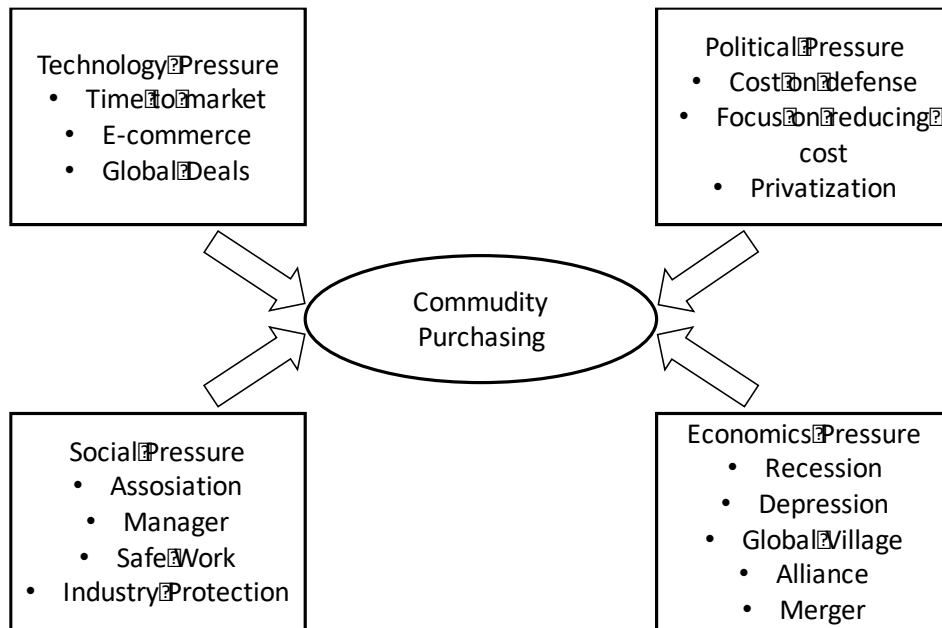| No	Element Description
1	Mini Market
2	Fan
3	Meat Storage
4	ATM
5	CCTV
6	Clinic
7	Nursing Room
8	Electricity Facilities
9	Community of Market Stakeholder
10	Drainage Mangement
11	Ventilation Building
12	Parking Space
13	Janitor
14	Cleaning Facility
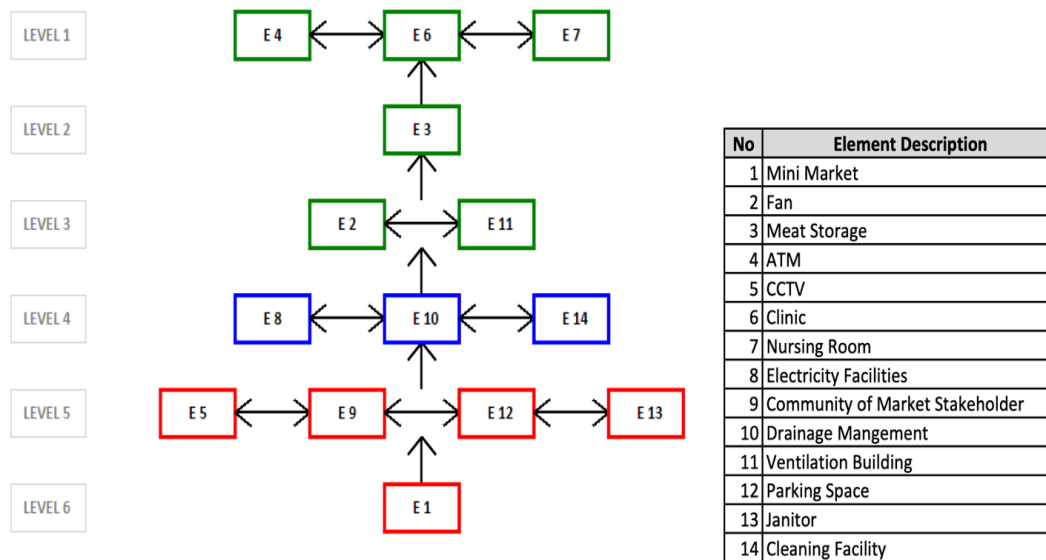
Figure 3. Structure of Market Management Constraints in Magelang Regency

The Strategic Plan to Handle Constraints in Tempuran Public Market Management in Magelang Regency in order to increase market competitiveness must be examined in detail and continuously in order to create a solution in winning the market competition with mini markets in Magelang Regency. The strategy to overcome market problems in Magelang Regency was carried out based on the constraints faced by traders, market managers, and the local government of Magelang Regency [22]-[24].

There must be the continuous enhancement of public market competitiveness in Magelang Regency in order to create a solution in winning the market competition with supermarkets or mini markets in Magelang Regency through open market innovation by prioritizing consumers to buy products in the market. According to [23], the process of product purchase is cumulative of several factors, namely technological pressure, political pressure, social pressure, and economic pressure, as shown in Figure 4.

Optimization of market management institutional development consists of three optimization patterns, namely traders, market managers, and local governments. Grouping institutions in market management can improve the performance and competitiveness of public markets [25]-[26], [14].

```
┌─────────────────────────┐        ┌─────────────────────────┐
│   Technology Pressure   │        │   Political Pressure    │
│   •  Time to market     │        │   •  Cost on defense    │
│     •  E-commerce       │        │   •  Focus on reducing  │
│     •  Global Deals     │        │          cost           │
│                         │        │     •  Privatization    │
└─────────────────────────┘        └─────────────────────────┘

              ⇘    ⌢⌢⌢⌢⌢⌢⌢⌢⌢    ⇙
                 (  Commudity  )
                 (  Purchasing )
              ⇗    ⌣⌣⌣⌣⌣⌣⌣⌣⌣    ⇖

┌─────────────────────────┐        ┌─────────────────────────┐
│    Social Pressure      │        │   Economics Pressure    │
│   •  Assosiation        │        │     •  Recession        │
│     •  Manager          │        │     •  Depression       │
│     •  Safe Work        │        │   •  Global Village     │
│ •  Industry Protection  │        │       •  Alliance       │
│                         │        │       •  Merger         │
└─────────────────────────┘        └─────────────────────────┘
```

Figure 4. The product purchasing process [16]

Countermeasures Program of market management constraint in Magelang Regency is sorted based on the priority from the short term to long term main constraints. The policy strategy on the ISM structure, including
Main Strategies in Temmpuran Market Management

Priority I
1. Aligning and synchronizing operating hours of the mini-market on Tempuran market
- Socialization of operating hour arrangements to the market and minimarket
- Minimarket opening hour agreement (10 am)
- Market management collaboration with e-commerce
2. Improving meat storage facilities
- Procurement of meat storage facilities (refrigerators) of at least two cabinets

Priority II
1. Carrying out digital security facilities (CCTV)
- Provision of CCTV facilities as many as 8 points (5 units inside and three units outside)
- Provision of CCTV support facilities
- Maintenance training and backup of CCTV record results for operators
2. Activating the role of the community as a place of togetherness for market traders
- Socializing and inviting traders to initiate formation/ activation
- Forming market management associations
- Arranging the program plan of the community as an effort to improve the welfare

Priority III
1. Realizing the arrangement of motorized parking lots
- Arranging parking permit construction
- Structuring parking lot according to the planner
2. Parking management operations

- Conceptualizing parking management that can accommodate traders and motorcycle taxis
- Determining parking rates based on stakeholder needs
- Special cards/ stickers for managers, market traders, and motorcycle taxis
3. Increasing the number of cleaning staff based on market needs
- Adding two market cleaning personnel

Priority IV

1. Improving management and control of the drainage system
- Improving closed drainage in drainage to the main channel
- Placing traps in the upstream and downstream limits of the channel going through the market
- Managing rubbish that is in the drainage channel
- Controlling drainages around the market

3. Conclusion

Based on the research results, the constraints in the Tempuran market management following the Indonesian National Standard (SNI) have two main priority constraints to be resolved in the short term. The priority is the issue of business competition (Mini Market). The second priority is the installation of CCTV, a formation of market trader group/ Market Association group, a provision of the parking lot, and cleaning staff fulfillment. The strategy used to overcome market management problems in Magelang Regency is on the constraints faced by traders, market managers, and the local government of Magelang Regency.

References

[1]. Staal, S. The role and future of informal and traditional dairy markets in developing countries. Invited Plenary Presentation, Dairy Symposium, Intergovernmental Group on Milk and Milk, 2006, p. 1-15.

[2]. Kirzner, I.M., Competition and entrepreneurship. 2015: University of Chicago Press.

[3]. Kickul, J. and T.S. Lyons, Understanding social entrepreneurship: The relentless pursuit of mission in an ever changing world. 2020, England: Routledge.

[4]. Odinokova, T., M. Bozhinova, and M. Petrova. Promotion of Innovative Entrepreneurship Under Sustainable Development. E3S Web of Conferences. 2018, 41: p. 1-6.

[5]. Suryadarma, D., Poesoro, A., Budiyati, S., Rosfadhila, M., & Suryahadi, A., Traditional food traders in developing countries and competition from supermarkets: Evidence from Indonesia. Food Policy, 2010. 35(11): p. 79-86.

[6]. Hawkins, D.I. and D.L. Mothersbaugh, Consumer behavior: Building marketing strategy. 2010, Boston: McGraw-Hill Irwin.

[7]. Coca-Stefaniak, J.A., C. Parker, and P. Rees, Localisation as a marketing strategy for small retailers. International Journal of Retail & Distribution Management, 2010, 38(9), 677-697.

[8]. Mahajan, V.B., Jadhav, J. R., Kalamkar, V. R., & Narkhede, B. E., Interpretive structural modelling for challenging issues in JIT supply chain: Product variety perspective. International Journal of Supply Chain Management, 2013. 2(4): p. 50-63.

[9]. Talib, F., Z. Rahman, and M. Qureshi, An Interpretive Structural Modelling (ISM) Approach for Modelling the Practices of Total Quality Management in Service Sector. Talib, F., Rahman, Z. and Qureshi, MN (2011)'An interpretive structural modelling approach for modelling the practices of total quality management in service sector', Int. J. Modelling in Operations Management, 2011. 1(3): p. 223-250.

[10]. Hisrich, R.D., T. Stanco, and H.S. Wisniewski, Identifying Markets and Opportunities for the Ideas and Technology. World Scientific Book Chapters, 2020: p. 93-117.

[11]. Saldana, J., Fundamentals of qualitative research. 2011, England: Oxford University Press.

[12]. Zikmund, W.G., J.C. Carr, and M. Griffin, Business Research Methods. 2013, Massachusetts: Cengage Learning.

[13]. Fahrizal, M., Yani, M., Purwanto, M. Y. J., & Sumaryanto, T. I. P., Model penunjang keputusan pengembangan agroindustri gula tebu (studi kasus di Provinsi Nusa Tenggara Timur). Journal of Agroindustrial Technology, 2014. 24(3), 189-200.

[14]. Permana, A.I.S., Model Konseptual Strategi Pengembangan Industri Kecil Menengah Berbasis Sumber Daya (Studi Kasus Pengembangan IKM di Pangalengan). Journal of Agroindustrial Technology, 2016. 26(1), 14-20.

[15]. Rangkuti, F., SWOT–Balanced Scorecard. 2013, Jakarta: Gramedia Pustaka Utama.

[16]. Chowdhury, S.K., A. Gulati, and E. Gumbira-Sa'id, The rise of supermarkets and vertical relationships in the Indonesian food value chain: Causes and consequences. Asian Journal of Agriculture and Development, 2005. 2(1&2): p. 39-48.

[17]. Meliala, A.S., N. Matondang, and R.M. Sari, Strategi peningkatan daya saing usaha kecil dan menengah (UKM) berbasis Kaizen. Jurnal Optimasi Sistem Industri, 2016. 13(2): p. 641-664.

[18]. Wibowo, Y., Ma'arif, M. S., Fauzi, M. A., & Adrianto, L., Strategi pengembangan klaster industri rumput laut yang berkelanjutan. Jurnal Agritek, 2011. 12(1): p. 85-89.

[19]. Baron, D.P., Integrated strategy: Market and nonmarket components. California Management Review, 1995. 37(2): p. 47-65.

[20]. Huggins, R. and H. Izushi, Competition, competitive advantage, and clusters: The ideas of Michael Porter. 2011, England: Oxford University Press.

[21]. Asa, M.F., I.S. Abidin, and Y. Latief, Faktor-Faktor Kritis dalam Sistem Manajemen Mutu (SMM) untuk Optimasi Profitabilitas dan Daya Saing Perusahaan Jasa Konstruksi di Indonesia. Journal of Civil Engineering, 2008. 15(3): p. 99-106.

[22]. Kraus, S., M. Breier, and S. Dasí-Rodríguez, The art of crafting a systematic literature review in entrepreneurship research. International Entrepreneurship and Management Journal, 2020: p. 1-20.

[23]. Sa'id, E.G., Manajemen Rantai Pasok Global dan Antisipasi Peningkatan Kinerja Manajemen Rantai Pasok Pangan di Perusahaan Umum BULOG. Jurnal Pangan, 2016. 19(1): p. 51-58.

[24]. Menon, A. and A. Menon, Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. Journal of Marketing, 1997. 61(1): p. 51-67.

[25]. Kolb, B., Entrepreneurship for the creative and cultural industries. 2020, England: Routledge.

[26]. Budiyanto, M.A.K., Optimasi pengembangan kelembagaan industri pangan organik di Jawa Timur. Jurnal teknik industri, 2012. 12(2): p. 169-176.