

Human resource development strategy model: a case study on small and medium Laweyan Batik industry in Surakarta

Agus Utomo.¹, Yosephine Angelina Yulia²

¹ STIE Adi Unggul Bhirawa, Jl. Mr. Sartono 46 Surakarta, 57135, Central Java, Indonesia

² STIE Adi Unggul Bhirawa, Jl. Mr. Sartono 46 Surakarta, 57135, Central Java, Indonesia

ARTICLE INFO

Article history:

Received 8 October 2018

Revised 11 November 2018

Accepted 11 November 2018

JEL Classification:

Q-15

Key words:

Batik industry, human resource development, soft system methodology

DOI:

10.14414/jebav.v21i2.1436

ABSTRACT

Batik industry in Indonesia, generally small and medium enterprises (SMEs), become some people's livelihood. In the History of Solo Batik, it describes the famous Solo Batik with traditional patterns and they are in the process of printed and in hand-made batik (Batik Tulis). Kampung Batik Laweyan is the center of the township of batik entrepreneurs in Solo, which has tremendous appeal. The lack of regeneration of batik makers makes their numbers decrease and becomes less and less. In order for batik existence to survive in the future, business managers must know how to develop human resources especially for batik crafters. The purpose of this research is to formulate human resource development strategy / method and this is qualitative method using soft system methodology (SSM) developed by Checkland and Poulter (2010), Checkland and Scholes (1990). The findings based on soft system methodology (SSM) shows that developing human resources needs a strategy for medium and small industries in Laweyan, Surakarta.

ABSTRAK

Industri batik di Indonesia pada umumnya adalah usaha kecil dan menengah (UKM) menjadi mata pencaharian sebagian orang. Dalam Sejarah Batik Solo menggambarkan batik solo yang terkenal dengan pola-pola tradisional dan pola-pola batik dalam proses topi dan di batik tulis. Kampung Batik Laweyan adalah pusat perkampungan pengusaha batik di Solo yang memiliki daya tarik yang luar biasa. Kurangnya regenerasi pembuat batik membuat jumlah mereka semakin sedikit. Agar keberadaan batik tetap terjaga di masa depan, para manajer bisnis harus tahu bagaimana mengembangkan sumber daya manusia khususnya bagi perajin batik. Tujuan penelitian ini adalah untuk merumuskan strategi / strategi pengembangan sumber daya manusia yang digunakan dalam penelitian ini adalah metode kualitatif dengan metode soft system methodology (SSM) yang dikembangkan oleh Checkland dan Poulter (2010), Checkland dan Scholes (1990). Temuan yang diperoleh setelah menggunakan metode soft system methodology (SSM) adalah perumusan strategi pengembangan sumber daya manusia untuk industri menengah dan kecil di Laweyan, Surakarta.

1. INTRODUCTION

The national economy development in Indonesia has been the priority of Small and Medium Enterprises (SMEs). These enterprises are the backbone of a people economic system, especially to reduce the poverty. In fact, they are able to develop the economy. In addition, they can contribute significantly to improving both the regional economy and national economic resilience. During the economic crisis, the existence of small industries is vital in

saving the national economy. Small industries tend to be using local raw materials and imported materials of small proportions. Therefore, the production is not easily affected by the depreciation of the rupiah. They are more resistant to the shocks of the global economy, although strongly influenced by changes in people's purchasing power. The empowerment of SMEs in the globalization with high competition can still them able to face turbulences, such as improving product and service innovation,

* Corresponding author, email address: ² joeangel5@gmail.com

resource development human and technological, as well as expansion of marketing area. This should be done to increase the selling value of SMEs, especially in competing with the foreign products that increasingly grow in industrial and manufacturing centers in Indonesia. This is concerned with the fact that SMEs are economic sectors that are able to absorb the largest workforce in Indonesia (Sudaryanto, 2011).

Batik industry in Indonesia is generally small and medium enterprises (SMEs) become the livelihood of some people. Before the monetary crisis in 1997, this small and medium-sized industry had advanced rapidly. Some batik entrepreneurs had experienced the heyday. Especially in the 1980s batik is the official dress should be used at any state event or other official event. Therefore, that can introduce and improve the image of batik in the international world at that time. Batik industry in Indonesia spread in some areas in the island of Java later became the name of the types of batik such as Pekalongan batik, Surakarta batik, Yogya batik, Lasem batik, Cirebon batik, Sragen batik. Each batik from the area has specific motif traits. Type of batik produced there are three namely batik tulis, batik cap and batik printing. The development of batik industry in Indonesia is closely related to the development of batik, which began since hundreds of years ago.

Batik is actually one type of clothing product that has been growing rapidly in Java since several hundred years ago. Most Indonesians have analyzed batik in both traditional and modern styles. Batik history in Indonesia is closely related to the development of the Majapahit kingdom and the spread of Islamic teachings in the land of Java. Development of batik a lot done during the kingdom of Mataram later in the kingdom of Solo and Yogyakarta. The widespread art of batik belongs to the people of Indonesia and the Javanese, especially after the end of the XVIII century or early nineteenth century. At that time, the batik produced was batik. After World War I or Year 1920s then known batik cap. So from its history can be seen the development of batik starting from the Majapahit period. The current batik area as seen from the Majapahit period are such as Kwali, Mojokerto, Betero and Sidomulyo. The batik area that comes from the current spreading of Islam in Ponorogo are the rough batik or batik cap mori blue. Yet, in Solo and Yogyakarta, it perfects batik style in Mojokerto and Tulung Agung, and they also spread their styles to the area of Gresik, Surabaya and Madura (Nuraini, 2008).

Surakarta City or Solo City is a city in central Java that is still very closely related to Javanese culture. With the slogan of SOLO the Spirit of Java. Solo is determined to continue preserving and preserving Javanese culture. Solo city is one famous shopping place batik cloth in Indonesia. There are so many here there is a center of batik cloth, which is famous among other areas of the village of Batik Laweyan and Kampung Wisata Batik Kauman area. Batik is one-city products and has become the solo city icon. Typical of batik solo already known throughout Indonesia and become a leading export product (Prasetyo, 2012)

The History of Solo Batik describes the famous solo batik with traditional patterns and patterns of batik in the process of cap and in batik tulis (hand-made). Materials used for the coloring still are from several materials in the country such as soda Jawa that has been famous from the past. The bands are still among others with "Sidomukti" and "Sidoluhur". Kampung Batik Laweyan is the center of the township of batik entrepreneurs in Solo, which has tremendous appeal. This attractiveness includes the socio-economic conditions, the condition of Cultural Heritage and the condition of batik industry. Formerly, Laweyan batik was dominated by traditional batik design. After the existence of the village Batik Laweyan, design motifs have been much developed. Because of the demands of market demand and the effort to display unique and distinctive works in each outlet (especially to attract tourists), then with the emergence of new motifs are modern and abstract motifs. In everyday modern and abstract motifs are usually the motive favored by teenagers. Most of Laweyan's batik production still uses traditional technology. Traditional technology is still maintained to maintain the uniqueness and uniqueness of Laweyan batik. After the emergence of the village of Batik Laweyan, to anticipate the growing market demand, especially for batik cap and write using dyes that require solar heat, then made an innovation tool that can replace the heat of the sun (lights with running wheels). This tool is used when the weather is cloudy and rainy. However, this condition is counterproductive because it is not balanced with the regeneration of batik makers. Batik makers in Indonesia continue to decrease over time. The lack of regeneration of batik makers makes their numbers more and more decreasing. In order for batik existence to stay awake in the future, business managers must know how to develop human resources especially for batik crafters.

Based on the description above, it needs to

provide a coaching through various ways for developing the human resources' competence skills and quality. They also need knowledge, technology, and education. The competence of batik crafter is related to the skills, knowledge, behavior, personal characteristics and motivation that will correlate with the success in running the business. All of these necessarily require the contribution of the various stakeholders involved in it, including the government itself. Therefore, labor production factors together with other production factors, when utilized optimally will be able to increase production maximally. It is vital to make the labors more productive and skillful to increase the product quality.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Several previous studies have shown that no one has specifically studied the in-depth development of human resources in the batik industry. Previous studies have focused more on aspects of production, history, economics, and finance. (Nurainun, 2008; Setyanto, 2015; Sudantoko, 2006), which is somehow associated with aspects of HR. While this article will contribute more, focus on aspects of human resources with soft system methodology (SSM) approach. SSM is a holistic approach in looking at real and conceptual aspects of society. SSM is seen as one of the strategies in handling various management problems born from the human activity system (Bergvall-Kareborn, 2002). A series of human activities is referred to as a system because each of these activities is interconnected between one another and forms a certain bond.

Approach soft systems is regarded as a very productive methodology for studying every organized human activity in achieving these particular goals (Patel, 1995). Therefore, SSM is best suited to be implemented as a problem-solving framework designed specifically on the circumstances that the problem is essentially difficult to define (Sinn, 1998). SSM is also often used to model concepts, improve pragmatic actions, seek compromise, and learn how to develop organizations and community development, as well as for business development. In order to formulate a development strategy model, we have to deal with a system approach using soft system methodology (SSM). Developing conceptual models of human resource development strategies of stakeholders to develop sustainability of Batik industry.

3. RESEARCH METHOD

To formulate the Batik industrial development

strategy Batik industry is done by using soft method methodology (SSM) developed by Checkland and Poulter (2010), Checkland and Scholes (1990). Like other systems approach, the core of SSM itself is to provide a comparison between the real world with a model that is thought to represent the world itself. The purpose of this will be to provide a better understanding in providing ideas for improvement (Sonatha & Prayama, 2011; Brocklesby 1995; Checkland & Scholes, 1990).

SSM has the capability of providing a framework for understanding the problems faced by even complex problems (Daellenbach & McNickle, 2005). Implementation of SSM in various disciplines has been widely applied by experts, researchers and academics, ranging from structural, policy, military, environmental, teaching, social, energy, industry, innovation and so forth (Triyonggo, Maarif & Sukmawati, 2015; Novani, Putro & Hermawan, 2014, Liu, Meng, Ming ers, Tang & Wang, 2012; Mahregan, Hosseinzadeh & Kazemi, 2012; Cox, 2010; Bjerke, 2008; Staker, 1999; Khisty, 1995; Patel, 1995; Konis, 1994).

SSM method has seven stages namely: (1) Assessing unstructured problem. At this stage, the necessary information was collected in relation to the Batik industrial HR development strategy at Laweyan Surakarta, including the views and assumptions of the parties involved. Primary information is obtained through in-depth discussions with competent experts. The experts selected as many as three people from the Department of Industry and Trade, lecturer STIE AUB Surakarta, batik artisans. For secondary data obtained from public and private institutional library documents including research materials. (2) Express the problem situation. The material obtained in the first stage, then used to build a rich picture. (3) Establish definition of problems related to problem situations. This section is to define root definition (root definition), which is a short sentence that states "a system performs P by means of Q to reach R". Root definition is then poured in the mnemonic CATWOE as Table 1. (4) Building a conceptual model. Based on the above root definition for each defined element, and then constructed the conceptual model needed to achieve the ideal goal. This model identifies the human activity system resulting from the expression of the problem situation in the rich picture and presents the interrelationship between the activities. This conceptual model is an adaptive process, because there is feedback between the processes of modeling with the results of the expression of the problem situation. All elements con-

tained in CATWOE are included in the conceptual model (depiction of the real world map) or also called the representation of the current state. (5) Compare the actual concept model to the problem situation. Conceptual models are compared to the real world to highlight possible changes in the real world. Each party involved provides perceptions and judgments on the activities modeled, for the sake of being maintained, maintained, corrected or reviewed.

The researcher who subsequently requested correction, input, and clarification to each expert as a resource of this research designed the initial draft

of the conceptual model. A comparative model is formulated to include the offered activities, realities or real-world conditions that occur and recommendations for follow-up. This model is refined to be a recommendation for change. (6) Establish appropriate and desirable changes. The purpose of this phase is to identify and seek the desired changes systemically and appropriately. Changes can occur in terms of structure, procedures or attitudes of people. (7) Take corrective action on the problem. At this stage, there will be a recommendation for changing the system. This is intended to make the SME management into the real world of business.

Table 1
Element and Description CATWOE

Element CATWOE	Description
Customer	Who will get benefir from the goal activity?
Actor	Who conducts activities?
Transformation	What should change from input to output?
Works-View	What kind of worldviews that make good system?
Owner	Who can stop the activities?
Environment	What kind of obstacles in the system environment?

Adopten Checkland dan Scholes (1990)

4. DATA ANALYSIS AND DISCUSSION

Based on the steps developed through the SSM approach, the following describes the results and the discussion obtained from each of the stages of the study.

Stage One - Unstructured Problems

One of the problems in batik industry in Laweyan Surakarta is the quality aspect of human resources. Human resources in this context is the potential possessed by individuals as human capital that can develop the production process quality and measurement.

Some of the problems in the human resource aspects of Batik Industry that have been obtained from this research are as follows:

1. Development and improvement of human resources is highly dependent on skilled batik craftsmen.
2. Lack of knowledge development and knowledge management in the batik industry, because it relies more on knowledge from generation to generation from family.
3. Continuity of education and training continuously to batik industry is needed for better quality of batik.

Indriati (2015) believes that HR has an important role in achieving success, because the sophisticated

and complete facilities are not a guarantee of the success of an organization without being balanced by the quality of human resources who will utilize the facility.

Stage two - Express The Problem Situation

Internal factors that occur in the batik industry create barriers in the development of human resources. Therefore, they really need training and education that must be done by entrepreneurs. To illustrate the problems that exist in human resource development, a rich picture is presented with functions that emphasize structure, process, relationships, conflicts and uncertainties, and express issues, expressing values and visualized through symbols

Based on the rich picture that was built, it can be understood map of the issues surrounding the human resource development. Starting from the problem of ability and quality of human resources that exist today, education and skills until the involvement of multi parties who play a role in it. The policy decided by the government to be a challenge and at the same time a threat to the batik industrial human resources.

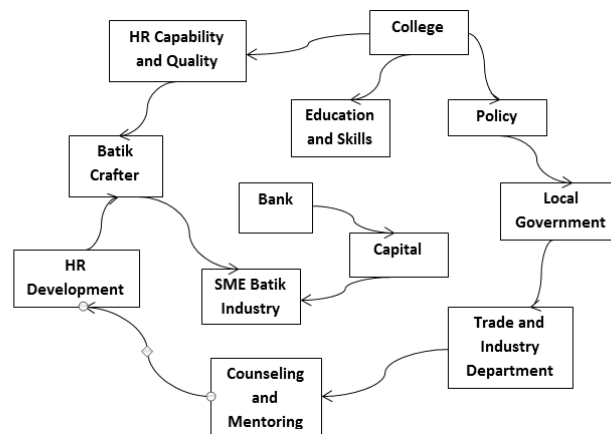


Figure 1
Research Problem

Stage Three – Root Definitions

analysis as follows:

Based on the rich picture we develop CATWOE

Table 2.
Root Definitions

C	Enterprenuer, Batik Crafter
A	Batik Crafter, Enterprenuer, University/College, Conselor and Mentor
T	The development of capacity building strategy of batik industrial human resources through various programs, training, counseling, community empowerment, research and policy formulation
W	The formation of government policy and the establishment of good knowledge together for all elements involved to have a sense of responsibility in planning, controlling and improving the capacity development of batik industry batman in a sustainable
O	Enterprenuer/Company, Local Government, Bank
E	Human resource development program is still very limited and limited its reach Transfer of cultivation knowledge as well as pre and post harvest handling is only based on knowledge from generation to generation

Stage Four – Building Conceptual Mode

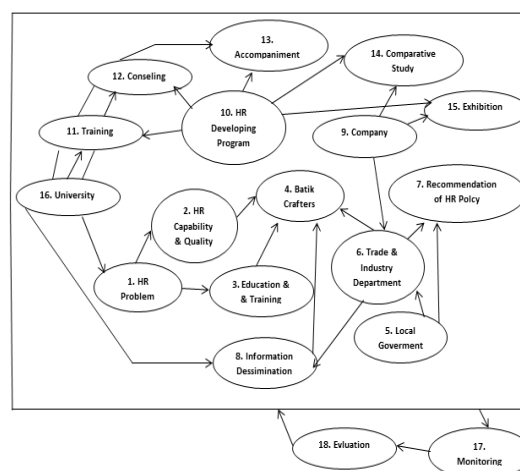


Figure 2
Conceptual Model of HR Development Strategy

Stage five – Planing of Change

The main goal of batik entrepreneurs is to increase production in order to increase income, therefore must understand how to allocate resources or production factors so that the goal can be achieved.

Batik produced must meet certain quality requirements that can be accepted by the market. One effort is to improve the quality of human resources and mastery of batik quality.

Stage Six - Model Comparison with Real World

Table 3
Model Comparison with Real World

Activity	Real World	Recomendation
Personal Development & Skill Training	Facility and skills are still limited	Reproduce facilities and infrastructure of self development and skills, can Establish good cooperation with University, non governmental organization and other communities
Company Development	The company have different Conditions	Sorting the company approach, there is need to be assisted, facilitated, or just promoted
Comparative Study	Some batik industry have conducted Comparative study Outside Solo city	Companies need conduct continues comparative study program to add knowledge
Batik Exhibition	Some batik industry have conducted batik exhibition	Local government need to support in batik exhibition
Counseling and Mentoring	Limited to intern company	Local government need to consider organizing training and mentoring
Continous Research	Lack of HR research	Human resource development studies need continous research

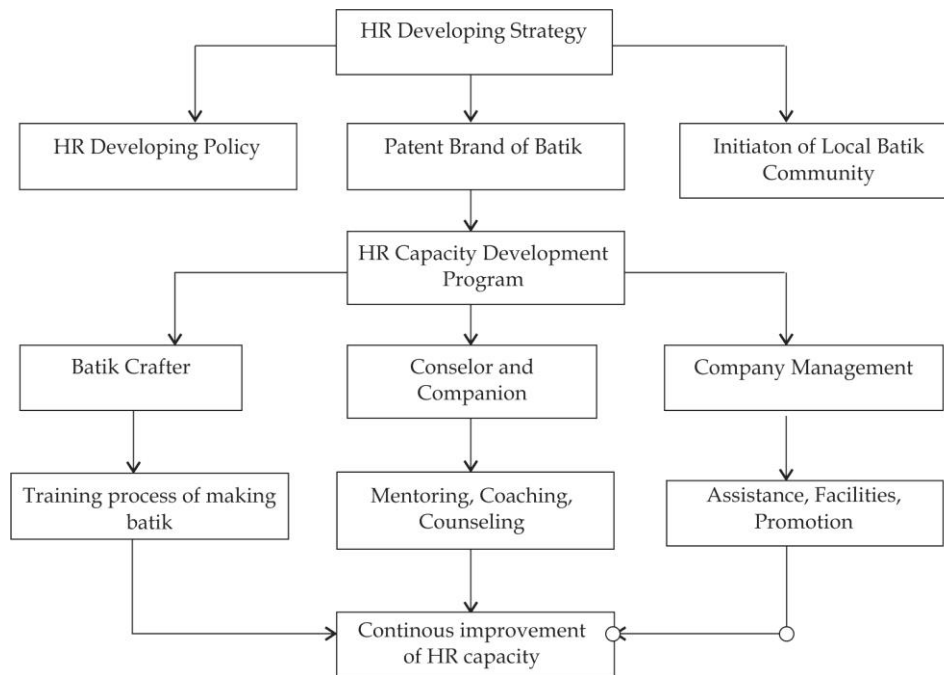


Figure 3
Strategy Formulation

Stage seven – Taking Action

Any change to a system requires that changes be desirable from the systems perspective but also culturally feasible. In this application, local government and other supporting SME batik industry have been required to work closely and cooperate with entrepreneur in the support. On the other hand, entrepreneur and batik crafter have been requires to work closely and cooperate to developing human resources. The figure (picture 3) below shows the strategy of human resource development formula that is ready implementation.

5. CONCLUSION,IMPLICATION,SUGGESTION, AND LIMITATIONS

The strategy of developing human resources for small and medium enterprises (SME) of batik industry in Laweyan Surakarta is strategic to do. They need improving their competence and quality. The soft system methodology approach can describe the problem well and find the conceptual model as a form of HRM industry development strategy of batik industry in SMEs.

It is recommend having various human resource capacity-building programs. This can be done by involving various parties such as government, private, universities, and research institutions. There are three groups of human resource development targets that are directly related to batik industry players, namely batik craftsmen, local government, and universities. Human Resource Investment is actually an intellectual investment that has a sense of regional and important regional command and for improving the welfare of the community in the batik industry of Laweyan Surakarta.

REFERENCES

- Bergvall-Kareborn, B. (2002). Qualifying function in SSM modeling – a case study. *Systemic Practice and Action Research* 15 (4), 309-330.
- Brocklesby, J. (1995). Using soft systems methodology to identify competence requirements in HRM. *International Journal of Manpower* 16 (5/6), 70-84.
- Checkland, P. & Scholes, J. (1990). *Soft system methodology in action*. England: Jhon Wiley& Sons Ltd.
- Daellenbach, H., & McNickle, D. (2005). *Management science: decision making through systems thinking*. Hampshire: Palgrave Macmillan.
- Fadhil, Rahmat., Maarif, M.Samsul. (2017). *Model Strategi Pengembangan Sumber Daya Manusia Agroindustri Kopi Gayo dalam Menghadapi Masyarakat Ekonomi ASEAN*. Jurnal Manajemen Teknologi, 16(2), 2017, 141-156.
- Indriati, A. (2015). *Strategi peningkatan kualitas sumber daya manusia untuk meningkatkan kinerja usaha kecil dan menengah*. [Thesis]. Sekolah Pascasarjana Intitut Pertanian Bogor.
- Liu, W. B., Meng, W., Mingers, J., Tang, N., & Wang, W. (2012). Developing a performance management system using soft systems methodology: a Chinese case study. *European Journal of Operational Research*.
- Novani, S., Putro, U. S., & Hermawan P. (2014). An application of soft system methodology in batik industrial cluster solo by using service system science perspective. *Procedia - Social and Behavioral Sciences*, 115, 324-331. doi: <https://doi.org/10.1016/j.sbspro.2014.02.439>.
- Nurainun, Heriyana, Rasyimah. (2008). *Analisis Industri Batik di Indonesia*. Fokus Ekonomi (FE) Desember 2008 Vol 7, No 3.
- Patel, N. V. (1995). Application of soft systems methodology to the real-world process of teaching and learning. *International Journal of Educational Management*, 9(1), 13-23.
- Prasetyo, A. 2012. *Karya Agung Warisan Budaya Dunia*. Yogyakarta: Pura Pustaka.
- Triyonggo, Y., Maarif, M. S., Sukmawati, A., & Baga, L. B. (2015). Analisis situasional kompetensi praktisi sumber daya manusia indonesia menghadapi MEA 2015. *Jurnal Manajemen Teknologi*, 14(1), 100-112. doi: 10.12695/jmt.2015.14.1.7
- Setyanto, Alief. R., Samodra, Bimo.R., Pratama, Yogi.P. (2015). *Kajian Strategi Pemberdayaan UMKM Dalam Menghadapi Perdagangan Bebas Kawasan ASEAN*. Etikonomi Vol (14)2, Oktober 2015.
- Sinn, J. S. (1998). A comparison of interactive planning and soft systems methodology: enhancing the complementarist position. *Systemic Practice and Action Research*, 11 (4), 435-453.
- Sonatha, Y., & Prayama, D. (2011). Penerapan soft system methodolog y dalam meng atasi permasalahan home monitoring. *Poli Rekayasa*, 6 (2), 154-160.
- Sudantoko, Djoko. (2010). *Pemberdayaan Industri Batik Skala Kecil di Jawa Tengah (Studi Kasus di Kabupaten dan Kota Pekalongan)*. [Disertasi]. Universitas Diponegoro.
- Sudaryanto. 2011. *The Need for ICT-Education for Manager or Agribusinessman to Increasing Farm Income : Study of Factor Influences on Computer*

Adoption in East Java Farm Agribusiness.
International Journal of Education and Develop-

ment, JEDINo 1 halm. 56-67.