

# BATIK INDUSTRY IS ONE OF PEKALONGAN INFRASTRUCTURE ASSET TOWARD CREATIVE CITY

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**ABSTRACT:** Batik industry become one of the heart of economic power to several cities in Indonesia, since batik not only the tradition but also its ability to survive since XVIII century, especially in Java. Even though, there are Yogyakarta, Solo, Cirebon, Tuban and Lasem such as primary batik industry in Indonesia, but still Pekalongan is remark as a city of batik, it seems like an anecdote that Batik is Pekalongan, and Pekalongan is Batik. Batik as indigenous cultural heritage has its own potential to generate Pekalongan as the creative city since the most important factor in term of urban creativity is culture, the city's identity, steeped in history yet also extending into the future. The talent of a city, its most distinctive and competitive resource, it is cultural identity, its diversity as a product of its history. Culture, therefore, plays a part in the field of resource, enabling the city to become more creative (Carta, M., Creative City-p.12). However, to incarnate Pekalongan as the creative city, it needs to pay attention the other sectors widely. The multi sector index highlights the importance of a multifaceted, non-homogenous environment, comprising a combination of living accommodation, manufacturing and commercial business.

Here, the batik industry become the tangible asset to manage, in Pekalongan there are 410 textile industries which is recorded in trading department, and a matter of fact it physically found 120 batik industries spread of all around Pekalongan city, the other batik industry found in the district of Pekalongan. Since there are 25 villages from total 46 villages where the inhabitant living by batik industry, this physical asset is the greatest potential to maintain and then developed as tourism creative industry.

This research is using a quantitative approach, with simple random sampling since the population is homogeneous (having the same quality). Product of this research is perhaps to describe a well defined standard of service of batik workshop which is derive from the detail of the operation, maintenance and networking. Yet, this research still in the collecting data phase and try to figure the empowering local system through the creation of clusters and district then strenghtening functional connection and supporting the development of districts not only in terms of primary resources and production supply but also in terms of cultural and environmental heritage. This is the foundation for Pekalongan become a creative city.

**KEYWORDS:** batik Pekalongan, infrastructure asset, creative city

## 1. INTRODUCTION

Batik Industry in Pekalongan was become the biggest industry which is play a part in economic sector and set in motion of regional income. This

industry has its survival value compare to other industry in Pekalongan which is based on home industry. This industry has its unique character, not just work for living, but also social hierarchy between the owner (*juragan*) and the workers which

is spread into different specialization in correlation with the making of batik process, start with drafter (who make a pattern in fabric), hand drawn batik maker (*tukang tulis/babar*), stamp worker (*tukang cap*), fill in motif worker (*tukang isen-isen*), blocking worker (*tukang tembok*), smear worker (*tukang colet*), and ends with acquire color worker (*tukang lorot*). After a material is finished with batik process, then there are several options to finishing the material such as made into sarong, dress, skirt, household-wares, etc. The whole of this sequence is to do with the ability of finance support of each workshop of batik industry, however it is define the class of workshop itself since not every workshop having completely workers to handle their job. In Pekalongan, it is commonly to share or distribute the tasks of making batik according to their specialization, and this distribution even overspread in Pekalongan and its periphery.

The spread of batik workshop in Pekalongan is draw the writer to make a research by classifying workshop then to describe its procedure on making batik for each class. By finding the hierarchy of workshop, it is easier to well-define the standard of service, since each class of workshop has their own characteristic.

The number of workshop in Pekalongan until this paper write down is only found at about 120 batik industry (source : Pekalongan's department of commerce) though actually total population of batik industry is about 410, but since it just found physically 120 objects, so it considered as total population in this research. This research is divided into 4 zones according to the district of Pekalongan city, that are East Pekalongan, West Pekalongan, North Pekalongan and South Pekalongan.

By using a quantitative approach, a simple random sample from the total of population is taken, considering the quality of sample is homogeneous.



## 2. LITERATURE OVERVIEW

The proposed research is located at the intersection of two broad bodies of literature : the creative city and the cultural asset management. Then to compile between them, it is tried to make performance measure of cultural asset by defining standard of service of asset. Standard service here is whole-life cost approach to decisions regarding operation, maintenance, refurbishment and replacement of assets.

### 2.1. Creative City based on Culture

Creative cities are usually thought of in terms that combine the cultural economy and the creative industries even though they usually occupy different 'quarters'.

Why talk about creativity in relation to cities? In part, the reason is obvious. Historically, creativity has always been the lifeblood of the city. Cities have always needed creativity to work as markets, trading and production centre with their critical mass of entrepreneurs, artist, intellectuals, students, administrations and power brokers. They have mostly

been the places where races and cultures mix and where interaction creates new ideas, artefacts and institutions. ( Landry and Bianchini, 1995, p.11)

A further route to the creative city came from an interest in culture. Two significant connection were how culture evolution shapes urban development and the intrinsic link between creativity and the development of culture. Culture is the panoply of resources which show that a place is unique and distinctive. Creativity is not only about a continuous invention of the new, but also how to deal appropriately with the old. It have to analyses how culture is now well established as an instrument for promoting city image, city appeal and the economy of the city

By taking a broad sweep of a city's economy, social potential and political traditions, it assessed how cultural asset could be turned to economic advantages.

## 2.2. Cultural Asset Management

This part is discuss about how tourism asset and cultural heritage management could affecting cultural tourism.

The great challenge for cultural tourism is how to integrate cultural heritage and tourism management needs in a process that will result in a product that is appealing to visitors while at the same time conserving cultural and heritage values. The buzzword is *sustainable cultural tourism*, but this word of sustainable must be used with caution, since it has been used by different groups to promote completely agenda. To some, sustainability means economic sustainability, where heavy use of an asset can be justified as long as wealth is generated. Some adverse impacts are both expected and tolerated as site are managed primarily for their use values.

Management actions are imposed to discourage use,

even if it is to the overall detriment of the viability of the asset.

In reality, sustainability should incorporate both use and conservation values in overall management activities. Such as a statement, however, recognizes the complexity of managing cultural asset, the differing needs of stakeholders, differing level of service of asset and their varied tourism appeal.<sup>1</sup>

The value of cultural industries which as an interconnected sector, are perhaps the fastest growing in modern urban economics. In trying to understand the dynamics of the cultural industries and how the cultural resources of cities could be used to maximize a city's potential. (Landry, 2004, p. 6)

## 2.3. Performance Measure of Cultural Asset by defining Standard of Service

Infrastructure Asset Management is the discipline of managing infrastructure assets that underpin an economy, such as roading, water supply, wastewater, storm water, power supply, flood management, recreational and other assets. Investment in these assets is made with the intention that dividends will accrue through increased productivity, improved living conditions and greater prosperity.

A well-defined Standard of service (SoS) is the foundation of Infrastructure Asset Management. The SoS states, in objective and measurable terms, how an asset will perform, including a suitable minimum condition grade in line with the impact of asset failure.

Without a defined standard of service (SoS) there is no means of knowing what service level customers can expect, and no effective control on the whole-life cost. With a clearly defined SoS, the asset manager

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<sup>1</sup> McKercher and Du Cros., 2002 p.171

is clear about how success or failure will be measured, and the customer understands what to expect in return for the expenditure on the asset system. There are two parts of a well-defined Standard of Service: the minimum condition grade (CG) and a specified performance standard. By managing against a defined SoS, which couples the performance specification with the condition grade as a measure of reliability, Asset Managers avoid the considerable complication of trying to optimize maintenance over short timeframes, or the need to determine the outcome or benefit associated with each individual intervention. Asset Management takes a whole-life cost approach to decisions regarding operation, maintenance, refurbishment and replacement of assets.

The first part of standard of service is an objective, measurable specification of how the asset should perform. This would normally include a specification of the attributes of the asset which are important to its function e.g. location, type, height, capacity. A good performance specification will avoid being prescriptive about the method, but be specific enough to be simply and objectively measured.

The term "Levels of Service" (LoS) is used extensively in asset management planning as it enables a range of performance to be measured and recorded. The basic system uses five grades which are generic and should not be amended : Grade 1 = excellent; Grade 2 = good; Grade 3 = adequate; Grade 4 = poor; Grade 5 = awful.

Grade 1 represents the aspiration that the organization seeks to provide; grade 2 or grade 3 is normally equivalent to the defined standard and grade 5 is formulated to represent the worst performance in the current provision of a service.

Obviously the numbers will differ according to the sophistication of the industry, and this level is refer to the batik making process. Here, the perspective of customers not becoming an urgent point of view. Because, this standard of service is discussing something intangible (skill of batik making) then tried to measure in physical facilities.

There is no industry or organization which cannot be assessed and have its LoS set up in a methodical manner. The key is in being able to use objective criteria to define the standard and then the resulting levels of service which must provide a meaningful measure of the business outputs.

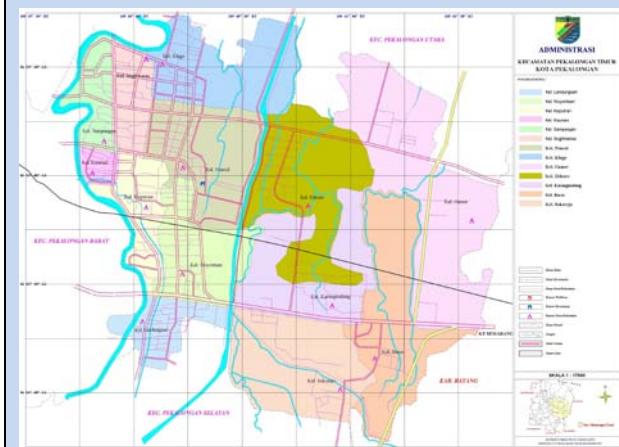
### **3. BATIK INDUSTRY IN PEKALONGAN : a study case**

As part of this research, another previous research has already done, it was about the spread of urban layout of Pekalongan city in correlation with batik industry. This research tells about the development of batik industry which is brought by Diponegoro War at the end of XVIII century and it gave contribution to the spread of urban layout in Pekalongan. Batik is not just the way of living in part of Pekalongan's people, but it plays an important part in daily life, such as in ceremonial party of birth, marriage and even in ceremonial of death, batik is commonly use to show or to express the joyness and sadness. Batik's philosophy is straight off in the Javanese culture.

#### **3.1. Batik Industry as cultural asset**

Based on trading department of Pekalongan (recorded by statistic bureau in 2008), there are 410 batik industries which is spread along Pekalongan and it is location was clustered in each sub-district. But a matter of fact, there are only 120 batik industries detected with fine address. The location of industries will be grouped with 4 different zones according to the district of Pekalongan city. After grouped into 4 zones, it will be divided again with clustering in a

couple of sub-districts. This sub-district is clustered because the similarity of geographic location, physical performance of building and infrastructure. In this table below, will be shown the group of batik industry based on the zone district and village clusters



#### DISTRICT : EAST PEKALONGAN

Village Clusters : Gamer –Baros - Sokorejo Karangmalang – Dekoro = 8 batik industries

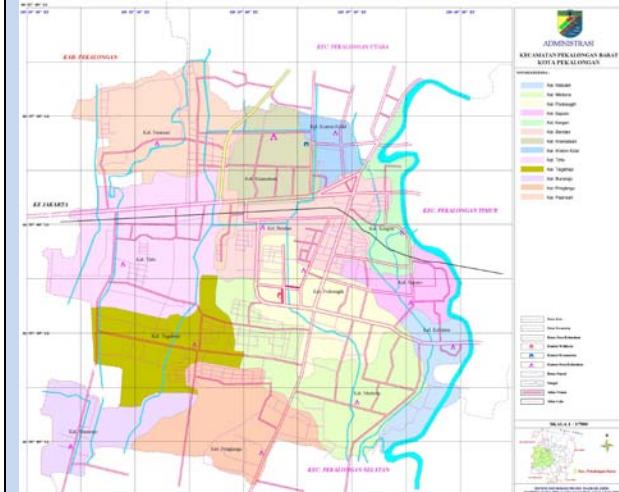
Village Clusters : Klego – Sugihwaras Sampangan = 14 batik industries

Village Clusters : Poncol – Kauman – Keputran = 17 batik industries

Village clusters : Noyontaan – Landungsari = 6 industries

**TOTAL = 45 BATIK INDUSTRIES**  
(37.5 % population)

#### DISTRICT : WEST PEKALONGAN



Village clusters : Kergon – Bendan – Sapuro Podosugih = 13 batik industries

Village Clusters : Kebulen – Medono

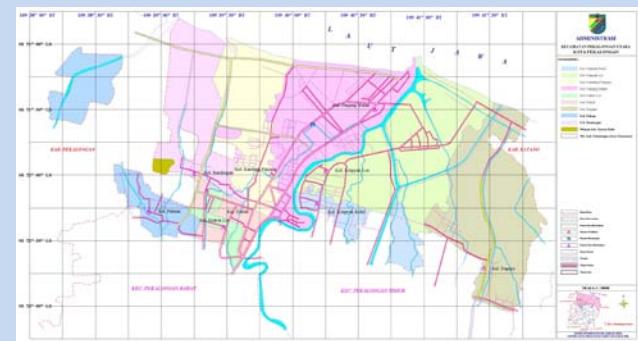
= 5 batik industries

Village Clusters : Pringlangu – Tegalrejo – Bumirejo = 1 batik industries

Village clusters : Tirtosari  
= 7 industries

Village clusters : Keraton Kidul – Kramatsari  
= 2 industries

**TOTAL = 28 BATIK INDUSTRIES**  
( 23.33 % populatin)



#### DISTRICT : NORTH PEKALONGAN

Village clusters : Degayu – Krapyak Lor – Krapyak Kidul – Panjang Wetan – Kadang Panjang - Bandengan = 0 batik industries

Village Clusters : Dukuh – Kraton Lor - Pabean = 7 batik industries

**TOTAL = 7 BATIK INDUSTRIES**  
(5.84 % population)

#### DISTRICT : SOUTH PEKALONGAN



Village clusters : Yosorejo – Kuripan Lor – Soko – Duwet – Kuripan Kidul – Kertoraharjo = 0 batik industries

Village Clusters : Jenggot – Kradenan – Buaran = 29 batik industries

Village Clusters : Banyuurip Alit – Banyuurip

Ageng = 11 batik industries

**TOTAL = 40 BATIK INDUSTRIES**

(33.33 % population)

From the table above can be seen that East Pekalongan and South Pekalongan with little difference in the percentage of the population, are the two districts which have the biggest number of batik industries.

### 3.2. Process of Batik Making

To define the standard of service of batik making, of course it is needed to know the process of batik making. The word batik (pronounced Bateek) means "wax written" and this is basically what batik is. It is a way of decorating cloth by covering part of it with a coat of wax and then dyeing the cloth. The waxed area keeps its original color and when the wax is removed the contrast between the dyed and undyed area makes the pattern.

Because batik wax is applied hot it is necessary to work fairly rapidly and this can produce a freedom (or loss of self-consciousness) that makes many people who think they cannot draw find, to their amazement, that they can. Of course, designs can be worked out beforehand and for many things, such as borders and trimmings, this is necessary; but designs drawn spontaneously in wax, or according to the briefest sketch, can bring surprising rewards.

The process itself divided into three kind of batik, (a) hand drawn batik (b) stamp batik and (c) printing batik.

#### 3.1.1. Hand drawn batik

Hand drawn batik is the most artistic way to produce batik in a high quality. Usually 1 pattern/design only produce for 1 piece fabric.

Step to do hand drawn batik as follow :

a. First, drawing on a motif fabric, and



patterns that have been illustrated overwritten with canting that have been filled with wax. This step is known with *dikandangi/ dicantangi*, and even sometimes the pattern is overwritten back and forth of the fabric, this is called nerusi.

- b. The second step is fill the background with dot pattern or *ngisen-ngiseni*. This step is not only to enrich the motive but also presents three-dimensional impression of the pattern.



- c. After the whole pattern is overwritten, then blocked the motives which is going colored different with its background, this step is called *nemboki*



- d. The fifth step is coloring, began with the soft color then gradually to the strong color.



Remember, this step isn't same with coloring with paintbrush, it is layering color, when we don't want to mix the color, the motive must be blocked by wax to avoid colors that absorb into the fabric

- e. The sixth step is fixing the color by boiling the fabric which is mix with soda in order to dissolve the wax. This step is known as *nglorod*



f. The last step is washing and drying. Washing without detergent only to remove the soda and the colors that are not attached to the fabric. And try to avoid the direct daylight for maintain the soft color and fabric.



### 3.2.2. Stamp Batik and Printing Batik

The Process of stamp batik and printing batik making is similar with the hand drawn batik making, the difference is just on the way of waxing with different *canting*.



Canting for hand drawn



canting for batik stamp



The waxing process in Batik stamp, it's no need to draw the motive on fabric. The process is quicker than

hand drawn batik but the motive stiff and repeatedly.



Printing Batik commonly made because its mass production.

In the contemporary experience society, where the spheres of culture, economy, politics and society merge, neither architecture as pure art or 'public gift' nor fully commercialized architectures seem viable. As mediators between socio cultural and economic values, architects and urban planners cannot elude the forces of the brand-culture. On the contrary, acknowledging their importance would be the first step in changing them to foster viable alternatives, creatively integrating both the interests of the corporation and those of the public to help generate a highly differentiated urban environment.

### 4.1. Detailed Research Concept and Plan

As stated previously, the main goal of this study is to define the standard of service of batik industry. To achieve this central goal, this research proposes a three-phase examination method organized as work packages (WP 1-3) :

**4.1.1. WP 1) Background Research :** The evolution of culture and its effect of urban development

- Provision of a comprehensive understanding of the evolution of Batik Pekalongan and its correlation with the spread of urban layout in Pekalongan city
- Definition of the distinctness of Batik Pekalongan as a unique culture which is potential to generate Pekalongan as a creative city

**4.1.2. WP 2) Case studies of selected Batik Industry in Pekalongan**

- Take a sample by random sample from each group of population which is zoned according to district
- Classified sample to find the hierarchy of batik industry
- Describe the procedure of batik making each class of sample

**4.1.3. WP 3) Describe the Process of Batik Making**

- Mapping every step of batik making and try to find the physical facilities needed for the worker in a batik industry

## 4. Research Intent

The intended contribution of this research to the fields of architecture and urban planning is to provide a body of case studies, which aim to be used as tools for creating responsive strategies within the cultural asset management.

→ Define the standard of service for batik industry based on physical facilities *Java*, Periplus Edition, Singapore.(book)

#### 4.2. Methodology

By using a quantitative approach, a simple random sample from the total of population is taken, considering the quality of sample is homogeneous. My research design includes collection of survey data, in-depth interviews, and analysis of legal archives. Specifically, I intend to test the following hypotheses, data and method such as:

4.2.1 Intangible skill of batik making is one of important aspect to define the standard of service on running or manage the batik industry

*Data* : The process of batik making, detail of equipment to make a batik, supplement facilities to support the making of batik

*Method* : Field collecting data, classified the batik industry to define the procedure of batik making.

Picturing and measuring all batik's equipment and comparing each class of batik industry

4.2.2. There is a strong relationship between the physical standards of batik industry assets with the quality of batik

*Data* : Standard of service for batik making process after answering the first question.

Utilize the statistic bureau data and compile with personal data from batik industry to find constant price value of batik

*Method* : Mapping the Sos to find the best way to make a good batik

In depth interview – The Quality of batik is known by the assessment from the expert.

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