DIGITALIZATION OF LEGENDARY FOODS TO SUPPORT CULINARY TOURISM IN YOGYAKARTA CITY REGION

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KEYWORDS
Digitalization, Legendary Culinary

ABSTRACT
This research aims to 1) generate data mapping legendary culinary foods in the city of Yogyakarta, and 2) create a media that serves as a reference for tourists in the city of Yogyakarta. The research uses a descriptive research method to understand the mapping of legendary culinary items and create a digital map application for legendary culinary items. The data analysis employed the test case analysis (Guttman scale) to assess the success of application access and the USE Questionnaire for users. The research was conducted in the Yogyakarta City area through interviews, observations, and documentation. The findings of this research are as follows: 1) The mapping of legendary culinary items in the city of Yogyakarta is differentiated based on the age of the businesses and the types of food sold. The mapping by business age reveals 60 businesses, with those under 25 years accounting for 10% (6 businesses), those between 25-50 years accounting for 30% (18 businesses), and those over 50 years accounting for 60% (36 businesses) of the total. The categorization based on types includes souvenirs, traditional snacks, meatball soup, soto (traditional soup), noodles, gudeg (traditional Javanese jackfruit dish), beverages (traditional and fresh), restaurants, and eateries. 2) The mapping results have led to the creation of a digital mapping application for legendary culinary items. The application, validated by media experts, was found to be easily and smoothly accessible. In user testing, the application received a high level of approval, with 85.8% of respondents strongly agreeing, 13.9% agreeing, and only 0.3% stating that the application was not acceptable. Therefore, it can be concluded that the digital mapping application for legendary culinary items is well-received by users.

INTRODUCTION
This research is motivated by concerns about legendary culinary heritage that is gradually eroded by time, either disappearing with the passage of time or persisting but in unfamiliar conditions. Although it is acknowledged that many legendary cuisines manage to endure and exist until today, indications of legendary culinary tourism consist of three aspects: being a food passed down through generations, having an unchanged recipe, and maintaining an unchanged location since its establishment.

Factors contributing to the disappearance of legendary cuisines include the absence of successors inheriting the skills and knowledge of making these legendary foods. Food is closely associated with recipes, and individuals from the past who created legendary foods rarely documented their recipes specifically. Some entrepreneurs fear increased competition if their recipes become widely known. Furthermore, the ability to document recipes was hindered by the high rate of illiteracy in the past. The measurements in historical recipes were not determined with measuring tools but rather with everyday items like a cup or bowl, leading to inaccuracies in taste, texture, and aroma (Suryana, 2012).
The location of legendary foods is sometimes not permanent, making them susceptible to displacement or discontinuation of the legacy by the original creators' passing. Legendary food recipes can change in taste, aroma, texture, and quality due to various reasons such as unclear measurements in the main recipe, the use of different ingredients compared to the past, and differences in taste preferences between generations leading to various recipe developments that result in foods considered legendary in the current generation.

The loss of these legendary food recipes is also attributed to the lack of successors. Various reasons, such as lack of interest and parents' expectations for their children to have better prospects, contribute to this. Children are often encouraged to pursue higher education and attain jobs with better salaries and positions, leading to pride for their parents. However, on the flip side, there is usually no one to continue the culinary legacy pursued by their parents as these legendary cuisines are typically crafted individually (Taufik et al., 2022).

Apart from internal factors, the loss of legendary cuisines can also be due to external factors such as infrastructure development, which may force the relocation of places where legendary foods are made (Junaidi, 2015). As a result, individuals returning to Yogyakarta may struggle to find these culinary gems as they have lost their original locations.

The advancement of technology in contemporary times does not always bring negatives but also offers potential benefits (Simarmata et al., 2021). One advantage of technological development is the facilitation of tasks or jobs. Technology can aid travelers seeking to enjoy legendary cuisines through the creation of online systems, helping them track down legendary foods in Yogyakarta (Junaidi, 2015; Taufik et al., 2022).

The objectives of this research are 1) to generate data mapping legendary culinary foods in the city of Yogyakarta and 2) to create a media platform that serves as a reference for tourists in the city of Yogyakarta.

**RESEARCH METHOD**

This study uses survey methods to collect data and determine the categorization of legendary culinary in Yogyakarta City. This method is carried out to find out the culinary that is included in the legendary category and detailed information about legendary culinary in the city of Yogyakarta. In addition to using survey methods, this study also photographed culinary products to get visual results that suit your needs (Sugiyono, 2013).

The time of this study was from February to August 2022. While the research location is in the location where legendary food is located. For the FGD location, it will be carried out via zoom because it is still in the pandemic period. Broadly speaking, the approach to implementing digitalization of the legendary culinary of Yogyakarta City is divided into several stages of activities (Ramdani, 2019).
The stages or procedures of survey research to be carried out begin with the first activity, namely:

1. **Planning / Preparation Stage (Preparation)**
   Preparation This legendary culinary digitization requires preparation materials, namely through literature review and survey activities. The results of this activity are expected to inventory about: 1) the theoretical basis that will underlie the survey results, and 2) the final condition of the legendary culinary profile. Armed with the results of the literature review activities and the results of this survey, a survey design can then be prepared that can include all expected outputs from the activity.

2. **Data Collection Stage (Data Collective)**
   In the preparation of digitizing this legendary culinary using primary data and secondary data. Primary data is obtained from surveys, while secondary data on tourism statistics and tourism industry data obtained from the Yogyakarta City Tourism Office.

3. **Data Validation Phase**
   The data that has been obtained from the survey results in the culinary sector in the city of Yogyakarta is then validated by comparing with secondary data on data in tourism and data adjusted to theoretical studies, so that culinary will be determined to be included in the legendary category. At this stage, a focus group discution (FGD) will be carried out which presents 25 experts in culinary and culinary culture (Guritno & Rahardja, 2011).

4. **Legendary culinary digitization design**
   The design stage of preparing the legendary culinary digitization concept was carried out after the survey data on the culinary sector in the city of Yogyakarta was valid, then determined the layout design in the application. At this stage involves 1 programmer who is competent in the field of making applications. The programmer makes an application with the available layout and inputs data in the application and does editing until this application is finished and can be used.
   
   At this stage, validation of the application produced by 3 experts in the field of information technology and application users was also carried out to find out the extent to which this application can be used by tourists, and to gather criticism by users (Lund, 2001).
Population and sample
The population in this study will be carried out in Yogyakarta City, so that the population is a legendary detected culinary business in the Yogyakarta City Area. While the sample in this study is a culinary business that has been declared legendary based on data in the Yogyakarta city tourism office. The type of culinary business will not be limited to only be categorized according to its classification, for example restaurants, food stalls, tent stalls, souvenir products, bakery and street food.

Data collection techniques
Data collection techniques using primary data and secondary data. Primary data is obtained from surveys, while secondary data on tourism industry data is obtained from the Yogyakarta City Tourism Office. The techniques used in data collection are: data analysis, interviews, observation, and documentation.

Data Analysis
The data analysis technique used in this study is using descriptive analysis. This technique is carried out using descriptive statistics, which serves to provide an overview of the object being studied without conducting analysis and making conclusions (Sugiyono, 2019).

RESULTS AND DISCUSSION
Research Results
This research focuses on tracking legendary foods in the city of Yogyakarta. In its implementation, this research is of a survey nature, involving activities such as data collection, mapping, and categorization. The stages carried out in this research include:

1. Preparation
In this stage, planning or preparation is carried out by conducting various activities, such as literary studies to find valid data related to legendary culinary offerings in the city of Yogyakarta. Literary data can be obtained through the Tourism Office of Yogyakarta and the designation of legendary culinary items that have been in existence for a minimum of 50 years since the establishment of the business. This has been determined by the cultural department related to Intangible Cultural Heritage (ICH).

The next step in gathering data is through discussions with culinary experts to determine or validate the remaining but undetected culinary items. The experts involved are 25 competent individuals in the field of culinary, especially in legendary culinary items.

2. Data Collective
The culinary data collected in the previous stage is further processed through a Focus Group Discussion (FGD) held on July 6, 2022, resulting in 60 legendary culinary items from 72 legendary culinary points in the city of Yogyakarta.

<table>
<thead>
<tr>
<th>Kategori kuliner</th>
<th>jml</th>
<th>ada</th>
<th>Tidak ada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oleh-oleh</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Jajan pasar</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Sepinggan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Soto</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>b Bakmi</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>c Mie ayam &amp; Bakso</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>d Sayuran</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>e Gudeg</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Minuman
This category is based on the mapping of data collected so that 6 categories are found, namely: souvenirs, market snacks, sepinggan (soto, noodles, chicken noodles and meatballs, vegetables, and gudeg), drinks (refreshing drinks and traditional drinks), food stalls and restaurants. Food stalls and restaurants at first glance seem the same but they are different. In accordance with the regulation of the Minister of Tourism Number 12 OF 2014 states: Restaurant Business is a business providing food and beverages equipped with equipment and equipment for, storage and serving in a fixed place that does not move with the aim of obtaining profits and / or profits (Permenparekraf, 2014)

Number 11 of 2014 states that Restaurant Business is a business providing food and beverage services equipped with equipment and equipment for the process of making, storing and serving in a fixed place that does not move with the aim of obtaining profits and / or profits (Peraturan Menteri Pariwisata Dan Ekonomi Kreatif Republik Indonesia Nomor 11 Tahun 2014 Tentang Standar Usaha Restoran, 2014).

3. Data Validation Phase

The data that has been obtained from the survey results in the culinary sector in the city of Yogyakarta is then validated with secondary data on data in tourism and data adjusted to theoretical studies, so that culinary will be determined to be included in the legendary category. Legendary culinary that is still valid for its existence amounts to 60 businesses. The 11 businesses listed are not included in the legendary culinary category in Yogyakarta City because 6 businesses have been declared no longer operating, 4 businesses are in Sleman regency, and 1 business has only been operating for 7 years. This data is more valid because observations have been made to the business location listed according to the address. Observation is carried out door to door, namely visiting one business by one and conducting interviews related to the content to be inputted, in addition to taking photos in the business area which will be included as documentation that can be used as a reminder.

4. Legendary culinary digitization design

The design stage of preparing the legendary culinary digitization concept was carried out after the survey data on the culinary sector in the city of Yogyakarta was valid, then determined the layout design which was then made visual design and digitization of legendary culinary. At this design stage, several stages are carried out, namely:

a. Discussion stage with programmers

This stage is the stage where the team has discussions with the designated programmer. This discussion was carried out using zoom 3 times, with the evaluation results as follows:
1. Not all images have been inputted, because not all photos have been input in the drive
2. Grab, Gofood and Shopeefood application links still have many errors
3. Filter not added yet
4. The incoming data is not yet valid, related to the link on the online application
5. Related to access links that can be accessed constrained during search
6. The photo size settings that have been input are considered less large so they are not too detailed
7. The colors in the application are replaced with green, yellow and red as classic color symbols
8. Displays a caption on the button when touched by the cursor for easy detection

The results of making the legendary culinary digitization map application can be accessed through https://food-map.unydevelopernetwork.com. This application contains the following information:

1) Home screen view

![Figure 2 Main screen view](image)

On this main screen shows a map equipped with symbols of the existence of culinary businesses. Equipped with a button to search for the type of food or business to be searched for in the buttons that have been provided. In addition, symbols on the map can be directly accessed by pressing the symbol.

2) Screen view of each category

![Figure 3 Legendary culinary categorization screen view](image)

This categorization is divided into 5, namely food stalls, street food, restaurants, souvenir places, and production sites. Equipped with a map reset button to reset maps that may have errors.

3) More info screen shots

![Figure 4 More info screen view](image)
This screen includes some information related to culinary businesses, namely business opening time, owner, year of business operation, culinary type, generation, signature menu, brief history of the business, address, and online services.

4) Screen view of connected addresses on a folder

![Figure 5 Application linked folder view](image)

This application is facilitated by searching for businesses, namely connecting with the map, so tourists can easily search for the business in question by following the map.

5) Screen shots for online services

![Gambar 6 Tampilan layanan online](image)

Online service is also an advantage of this application, where this application can be connected to purchasing service providers that are delivered directly to consumers who order it. This phenomenon has become a culture for some people. For people who are lazy to come to this business just by pressing the button provided will be directly connected to the selected online service.

b. Mapping creation stage

This mapping stage is carried out to create a menu of culinary categories that will be used in the application. This mapping is done in the form of a spread sheet with a link https://docs.google.com/spreadsheets/d/13NpgLzej3E5d3k_5AocAQ9EyyK_Ahmq11Jyy1lWmBi0/edit?usp=sharing it is hoped that this spread sheet will facilitate communication with programmers and data takers. Mapping is categorized into 2, namely based on business age, type of food and type of business.

Based on the year of establishment or age of legendary culinary businesses in Yogyakarta City, from 60 businesses.
Table 1: Legendary Culinary Business Data Table Based on Length of Establishment

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Quantity</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dibawah 25 tahun</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Antara 25-50 tahun</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Diatas 50 tahun</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

From the table shows that legendary culinary has a business age above 50 years. But there are other aspects that can be used as guidelines for the business to be declared as legendary culinary. Culinary businesses that have operated over 50 years old a total of 60 businesses, over 25 years but under 50 years old there are 18 businesses and under 25 years there are 6 businesses.

The legendary culinary category is distinguished by business groups and groups of food types sold. The souvenir category is only 4 businesses, market snacks and soto sellers are 7 businesses each, noodle sellers have 8 businesses, meatball and gudeg sellers have 6 businesses, Javanese salad sellers have 2 businesses, drink sellers have 6 businesses, restaurants have 10 businesses and restaurants 4 businesses.

c. The stage of creating a layout or design
   The layout creation stage is adjusted to the available application templates. For design using familiar symbols.
   The layout is made simple to make it easier to search with a white background color, which is dominated by green, yellow and red. This color symbolizes the classic color that is widely used in colors related to the Yogyakarta palace.

d. Development stages
   This validation stage is carried out after all content in the application has been tried by programmers and research teams. So that the validation results can be measured with data, validation is carried out by media experts (content) and users. This instrument is created in google form and validators can access it directly on the following legendary culinary digital application link: https://food-map.unydevelopernetwork.com (figure 8).

Filling out this questionnaire will appear when the application is opened, a request for formulir filling will appear. The legendary culinary digitization map application can be directly accessed into the google form to fill out the following questionnaire https://bit.ly/Angket_pengguna_web.
1) Validation by media experts (content)

Media expert validation is carried out by people who have the ability or competence to assess applications in cyberspace. This application was validated by 3 media experts who are competent in their fields, namely as teaching staff in the field of IT programmers. The results of data processing from this media expert validator can be seen in the following table:

Table 11 Results of validation by media experts against legendary culinary digital map applications

<table>
<thead>
<tr>
<th>No</th>
<th>Function</th>
<th>Output Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Accessible</td>
</tr>
<tr>
<td>1.</td>
<td>Home Page</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Map page</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Menu button</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Map of each culinary category</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Culinary photo</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>Culinary name</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Operating hours</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>Name of entrepreneur</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>Business category</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>Year established</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>Generational offspring</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Menu options</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>Menu offered</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>Culinary address</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>Culinary location</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>Historical facts</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>Online services</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>

From the table that all experts state that all buttons in the webapl are declared to function properly according to the results of their assessment at a score of 1 which means they can be accessed.

2) Validation by users

User validation is taken from respondents who fill out the google form. The profile of the audience who was willing to fill out the questionnaire amounted to 33 people with a total of 12 male audiences and 21 female audiences. The following are the results of the recapitulation of filling made by application users.

Table Recapitulation of user validation results of legendary culinary applications

<table>
<thead>
<tr>
<th>Valuation</th>
<th>Qty score</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>538</td>
</tr>
<tr>
<td>3</td>
<td>87</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
The calculation of data from respondents shows that users strongly agree with this application with a percentage of 85.8%, respondents who say they agree with 13.9%, while respondents who say they are not worthy are 0.3% so it can be concluded that the legendary culinary digitization map application can be accepted by respondents.

The suggestions given by respondents for the perfection of the web application made are:

- Further expanded to kab. Gunungkidul and other districts
- Good app, helps make it easier to find legendary places to eat
- This application is very membranate, especially for tourists who want to enjoy various culinary in Yogyakarta
- It's been very kind and helpful
- For this application, it is more coupled with new innovative features that can make it even easier for its users
- Can be added photos of the product / culinary
- Maybe plus i photo” to make it more interesting
- Hope it’s better
- Good
- Good, very helpful... Tomorrow it can be developed outside Jogja.
- Hopefully the digital map can be improved again, and can be useful for its users
- Hopefully the existence of the Legendary Culinary Digital Map can help the community, especially ordinary people about the culinary in Yogyakarta in particular
- Maybe it can be advertised so that everyone knows
- Plus detailed information such as photos of the place and products

Discussion

1. Legendary culinary businesses by business age
   a. Under 25 years old
      The legendary culinary mapping in Yogyakarta City has obtained 60 businesses that are still operating with business ages ranging from under 25 years to 50 years and above. When viewed in the image diagram... It shows that there are businesses that are opened under 25 years, but this business is still included in the legendary category, this is because the business has characteristics and can survive during the pandemic until now.
      Culinary businesses that are still under 25 years old are only 10% of the total 60 businesses in the city of Yogyakarta that are pioneering to become businesses that will later be included in the legendary category in the future if they continue to maintain the quality and quality of their products. Businesses under the age of 25 are: chocolate monggo kotagede, Gatot tiwul lopis kranggan, Legomoro kotagede, Soto kenikir (waroeng Yu Par), Bakmi Jiono, mutihan, and Bale raos.
      Monggo chocolate, although it is said to be new and 17 years old, but its products are able to raise culinary souvenirs in the eyes of tourists. Legomoro kotagedhe is a typical market snack from the city of gedhe. Its existence is still felt in the community as a symbol in weddings. Soto kenikir, Jiono noodles are foods served in the morning and evening which are the most popular foods by the community to prop up the stomach before eating the main meal. Bale raos is a restaurant established in the palace to maintain the legendary culinary that became the favorite dish of kings.

   b. Business age between 25-50 years
Business age that can last up to over 25 years and is able to continue and pass on to the next generation such as: Lumpia samijaya, Jadah manten Mbak Ayu kotagede, Roti Kembang Waru Pak Bas Kota gede, Soto pak Dalbe, Soto Pithes Mbah Galak, Soto Sumuk pak Wongso, Bakmi pele alun alun, Mie ayam Tumini, Bakso Bethesda 74, Lotek and gado-gado Teteg, Gudeg bu tekluk (bromo, Es Moerni 78 tukangan, Rujak ice cream pak nardi, Es buah PK Pakuningratan, Jamu Jawa Selirang Kota gede, Satay kere bu suwarni beringharjo, Sambel Baku Bu Filter

The number of businesses that are over 25 years old is 30% of the total 60 legendaris culinary businesses in the Yogyakarta City area. From the list of businesses included in this category are businesses that sell legendary foods such as soto, gudeg, market snacks, noodles, herbs, brongkos, and restaurants. A new business in the past which was a development such as the sale of concocted drinks such as pure ice, PK meatballs with mixed ice, rojak added with ice cream, satay kere which uses very small meat. In his era, these foods were very popular until now they still survive even though they are hit by economic crises or pandemics.

c. Business age over 50 years

The age of the legendary business that is already known and always missed by tourists is culinary that is more than 50 years old, until there are businesses that are over 100 years old, namely gudeg mbok Lindu and jamu Kerekop. Gudeg is a typical food of Yogyakarta, it should be if gudeg becomes the longest selling business. While jamu Kerekop is a traditional drink that has a bitter spice taste. Jamu Kerekop is very famous for giving medicine to toddlers who have problems with appetite. Children who are given herbal medicine by way of cekok (Javanese: forced to drink) will make children have an appetite again. The list of businesses that are over 50 years old are businesses that have become many icons of Yogyakarta koya, namely bakpia, Yangko, market snacks (lopis, kipo), sepinggan (soto, satay, bakmi) Jogja salad dishes (strong tofu, gado-gado), gudeg, traditional drinks (jamu), and refreshing drinks (es teler, syrop TBH, wedang ronde), restaurants and restaurants.

The number of businesses that are 50 years old is 36 businesses or about 60% of the total legendary culinary businesses in Yogyakarta City

CONCLUSION

The conclusions of the study entitled Digitalization of Legendary Food as a Supporter of Culinary Tourism in the Yogyakarta City Area are as follows: 1. Legendary culinary mapping in the city of Yogyakarta is distinguished based on the age of the business and the type of food sold. From the mapping of business age amounting to 60 businesses with the number of business ages under 25 years as many as 6 businesses or 10%, business age between 25-50 years as much as 18 or 30% and business age over 50 years as many as 36 businesses or 60% of the total business. While the categories based on the type are souvenirs, market snacks, meatballs, soup, noodles, gudeg, drinks (traditional and fresh drinks), restaurants and restaurants. 2. From the mapping results, a legendary culinary digitization map application has been made with validation results by media experts stated to be accessible easily and smoothly, while the results of trials by application users with the results of this application users strongly agree with this application with a percentage of 85.8%, respondents who expressed 13.9% agree, while respondents who stated that it is not feasible amounted to 0.3% so that it can be concluded that the culinary digitization map application legendary acceptable to respondents.
REFERENCES

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Wika Rinawati, Minta Harsana, Afia Fauziah (2023)

First publication right:
Devotion - Journal of Research and Community Service

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