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# Web Design Analysis of Fisheries Startups in Indonesia: A Study of Aruna, Minapoli, and eFishery

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Abstract—The success level of startup companies that have just been started and are digitally based—is significantly influenced by their website design. The website design for fisheries startups in Indonesia should refer to the book 'The Principles of Beautiful Web Design' by Jason Beaird, commonly used by leading companies worldwide. This research aims to analyze the website designs of three leading fisheries startups in Indonesia—Aruna, Minapoli, and eFishery—based on six main design principles from the book: web page anatomy, grid theory, balance, unity, bread and butter layout, and fresh trends. The research employs a qualitative descriptive method to explore the application of these design components on the three websites and present the results descriptively. The research findings indicate that the website designs of the three startups have implemented all principles of web page anatomy, with the exception of the sidebar component. They have also applied the principle of fresh trends by adopting a broad footer navigation pattern. Regarding the principle of balance, the Aruna and Minapoli websites use a symmetrical balance pattern, whereas eFishery employs an asymmetrical balance pattern. In terms of unity, the designs of Aruna and eFishery incorporate a repetition pattern, while Minapoli uses a proximity pattern. However, none of the websites apply the principles of grid theory; instead, they feature free and modern designs. Furthermore, none of them follow the bread-and-butter layout principle; rather, they opt for a more minimalist design.

Keywords—Beautiful design; company website; e-business; fisheries company; web page anatomy.

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## I. INTRODUCTION

Startups are businesses that have recently launched or are in the initial stages of operation. Therefore, they are still in the development phase of various aspects of the business in order to continue finding markets [1]. As a modern business, startup activities utilize an electronic commerce (e-commerce) system, specifically conducting out the buying and selling transaction process online [2], [3], [4]. This enables transactions to occur more quickly and efficiently, as they are supported by the integration of online payment systems offered by various banks, e-money service providers, and other financial institutions. There are two e-commerce models, namely marketplaces (intermediary service companies for sellers and buyers) and online shop applications owned by a brand, company, or home business [5]. These two models, in their operational activities, require website support, namely a collection of site pages contained in a domain or subdomain on the World Wide Web (www) network on the Internet [6]. These pages are components that consist of several elements, namely text, images, audio, video, and animation in various forms, so that they become interesting information media to visit [7]. The function of a website in business is to introduce new brands and products to the public, give the impression of a more professional company, promote and sell products, build relationships with customers, and serve as a means of branding or displaying the achievements of products and companies [8]. Therefore, a business website must be designed well so that it looks beautiful, attractive, and functional. The principles of ideal web design were introduced by [9] in their book 'The Principles of Beautiful Web Design.' This book is not the only reference for homepage design, particularly in the Interface Usability (IU) aspect of business organization websites. Several other experts have made similar contributions. [10], for example, in their book 'Creative Approaches Towards Development of Computing and Multidisciplinary IT Solutions for Society,' emphasize the importance of considering user characteristics, such as abilities, cultural backgrounds, and technological skills, when designing a website's homepage. According to them, what users need most from web design are effectiveness, efficiency, and satisfaction. User IU design is an iterative process that requires continuous improvement. Therefore, designers and developers must remain flexible and responsive to new trends and user feedback as technology advances and user preferences shift. Furthermore, [11] also state that a comprehensive focus on the elements affecting user interface and usability is crucial in e-learning design. His research shows that 79% of Moodle users prefer subtitles that are easily identifiable. Moodle is an open-source software platform that helps teachers create practical online learning courses. In addition, [12] examine the fundamental principles of IU design and the challenges posed by integrating AI into web applications. They found that web users expect designs that meet their expectations, focusing on aesthetics, usability, potential applications, reliability, and consistency. In the future, designers are expected to create web interfaces that leverage AI's capabilities while prioritizing usercenteredness, accessibility, and ethical considerations. However, in this research, we focus more on the design of the interface layout. We believe that Baird's book provides answers to our needs, and thus, we use it as the primary reference for this study.

The book 'The Principles of Beautiful Web Design,' is the main reference for many startup companies in designing their business web. According to this book, there are at least six out of thirteen aspects that must be considered when creating a business web design, namely *Web Page Anatomy*, *Grid Theory*, *Balance*, *Unity*, *Bread and Butter Layout*, and *Fresh Trends*.

1) Web Page Anatomy: it refers to the way components are arranged on a website. A web system consists of many individual components that form a combination. There are seven main components of a website: containing block (container), logo, header, sidebar, content, footer, and whitespace (Fig. 1). Anatomically, a business web page is like a containing block that contains six other main components. Starting with the company logo, which contains information about the company, identity, or site owner; and the header is the top part of the web display, which usually contains key elements such as the introduction, navigation menu, and contact information. The sidebar (navigation) is an important part of the site that makes it easy for visitors to move between pages. It contains additional elements such as navigation menus, lists of links, advertisements, or widgets. The navigation contains menus connected to each other through intermediary links. These links direct users to other pages on the web. The content space is used to place main content about published products or services, in the form of text, images, videos, or a combination of all. The footer is located at the bottom and contains brief information about the site owner (copyright) and several links. Finally, whitespace is empty space on a website design that helps the design look aligned, better, and more organized. The presence of whitespace gives a simple feeling but looks luxurious. Specifically, the use of whitespace makes the text clearer and easier to read, according to user expectations. Whitespace can help a website direct user to find the focal point of the important content they

want to present. A website design without whitespace will make the pages look messy and will force users to close the website page [13].

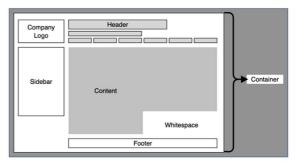


Fig. 1 The anatomy of web page

- 2) Grid Theory: it is a framework that helps graphic designers organize text or image information consistently, meaningfully, and logically on a web page. Using a grid system can help designers manage space to be more structured according to visual hierarchy, so that the information presented can be more communicative. Grid systems are popular because they can be used flexibly, so every designer is still free to express their personal style in designing the web [14].
- 3) Balance: it is a condition or similarity between forces facing each other that creates a visual impression of balance. There are two types of visual balance, namely symmetrical balance and asymmetrical balance. Symmetrical or formal balance occurs when a composition has elements in common with one side of an axis line. Asymmetric (informal) balance is a balance created based on differences in size, shape, color, content, position, texture, and eye direction [15].
- 4) Unity: It can provide design and a sense of harmony, both visually and conceptually. It plays a crucial role in website design by ensuring that users feel comfortable when navigating the interface. A cohesive unity ensures that all elements appear in their rightful place without any jarring contrasts. Unity can be achieved through three primary methods: proximity (where design elements are grouped closely to appear as a unified whole), alignment (where elements are positioned in relation to each other to create a visual connection), and repetition (where elements are repeated in a regular pattern to reinforce coherence and consistency) [16].
- 5) Bread and Butter Layout: In web design, the term "bread and butter layout" refers to a standard, simple, and widely-used layout that is functional, reliable, and effective for many different types of websites. It often includes familiar elements such as a header with navigation, a main content area, and a footer, typically laid out in a clean and structured way. This type of layout is called "bread and butter" because, like the basic food staple, it provides the foundation or essential part of a website. It's not necessarily fancy or innovative, but it works well for typical user needs and expectations. In essence, it's the practical, go-to layout that web designers can rely on for efficiency, usability, and a consistent user experience [9], [14]. In this layout, there are three layout elements that must be configured properly: identity, navigation, and content. In this bread and butter

layout, there are three types of design displays that are often used, namely left column navigation (a design that places the sidebar on the left of the content), right column navigation (places the sidebar on the right of the content), and three column navigation (places the content in the middle with two sidebars on the left and right) as shown in Fig 2. A layout featuring left column navigation is a safe choice for most projects, but the downside is that it looks less creative. On the other hand, if we limit the main content to one page, then the option is to push it to the left side, then place navigation, advertising, and additional content on the right. While a threecolumn navigation layout generally has a wide center column flanked by two small navigation columns. Ultimately, though, the decision whether to place navigation columns on the left or right is a judgment call that really has to do with the amount and type of content to be organized.

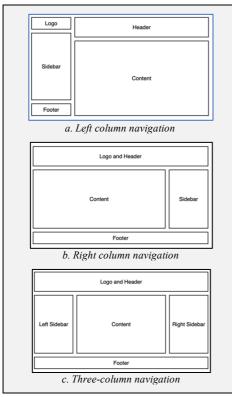


Fig. 2 The website design types are based on the "bread and butter design" principle

6) Fresh *Trends*, namely efforts to create web designs by considering the latest styles. Several trends that are often used on websites include navigationless, magazine style, expansive footers, bare bones, and minimalism [17].

Therefore, the design of websites for startups in Indonesia should refer to the ideal principles of web design, including for fisheries startups. We noticed that the rapidly growing fisheries startups in Indonesia have designed their websites based on their own approaches, which do not always align with ideal website design principles. Therefore, we decided to examine this further. Currently, three fisheries startups are gaining popularity in Indonesia, namely Aruna (https://aruna.id), Minapoli (https://minapoli.com), and eFishery (https://efishery.com). Aruna is a startup that builds a technology-based fisheries ecosystem, from fishermen to customers. Currently, Aruna has various products that are marketed through e-commerce. Minapoli has a core business of a marketplace, an event organizer, and a fisheries' information service. This startup's flagship products are 'Pasarmina', 'Evenmina', and 'Infomina'. Pasarmina markets 36 products and services needed by aquaculture businesses, starting with fish and shrimp seeds, feed, cultivation equipment, and so on. Evenmina offers services for organizing seminars, training, performances, workshops, and talk shows related to the aquaculture business. Meanwhile, Infomina provides various information in the form of practical knowledge articles and digital posters related to the aquaculture business [18]. Lastly, eFishery is the first aquaculture intelligence company in Indonesia, which is known for its innovative product in the form of a smart feeder. The eFishery business focus is to provide fishery products as an animal protein that can be accessed by all groups [19].

Based on these reasons, we aim to examine the extent to which fisheries startups in Indonesia implement their website designs according to the principles outlined in 'The Principles of Beautiful Web Design' by Baird and colleagues. Specifically, this study analyzes the homepage designs of three fisheries startups—Aruna, Minapoli, and eFishery—using the web design principles from the book.

#### II. MATERIALS AND METHOD

This research was conducted in February 2024 using qualitative descriptive methods, namely a method that utilizes qualitative data and is described descriptively. Qualitative research uses non-numerical data, typically involving an analysis of the current condition of a research subject, thus helping researchers identify problems [20], [21]. The data is described descriptively, without the intention of testing a hypothesis, but rather to describe the symptoms, circumstances, or facts found in the subject under study. This involves describing, recording, analyzing, and interpreting the condition of the subject [22].

The research subjects are the homepage designs of three fisheries startup company websites in Indonesia: Aruna, Minapoli, and eFishery, which were deliberately chosen as they are considered to represent most characteristics of fisheries startups [23]. Aruna represents capture fisheries startups, while Minapoli and eFishery represent aquaculture startups. Six main components of website design were studied: web page anatomy, grid theory, balance, unity, breadand-butter layout, and fresh trends, as shown in Table 1.

TABLE I RESEARCH VARIABLES

Variable	Sub variable
Web Page Anatomy	<ul> <li>Container (Containing block)</li> <li>Logo</li> <li>Header</li> <li>Sidebar (Navigation)</li> <li>Content</li> <li>Footer</li> <li>Whitespace</li> </ul>
Grid Theory	- The role of thirds
Balance	<ul><li>Symmetrical balance</li><li>Asymmetrical balance</li></ul>
Unity	<ul><li> Proximity</li><li> Repetition</li></ul>

Variable	Sub variable		
	- Alignment		
Bread and Butter Layout	<ul><li>Left column navigation</li><li>Right column navigation</li><li>Three column navigation</li></ul>		
Fresh Trends	<ul><li>Expansive footer navigation</li><li>Three column with content first</li></ul>		

Data collection was carried out through the following five systematic steps: (1) identifying the homepage and recording the URLs of the three fisheries startup websites being studied; (2) taking full screenshots of the website homepages to visualize the layout, color scheme, typography (font type and size), and page structure; (3) collecting source code (HTML/Hypertext Markup Language, CSS/Cascading Style Sheets, JavaScript) to understand the design's structure and technical implementation, including grids, CSS elements, and layout; (4) conducting direct observation and taking manual notes to capture the color scheme, typography, navigation (menus, links), layout (grids, spacing), and the design's consistency and readability; and (5) documenting, categorizing, and tabulating the data, including images [24], [15].

The data were analyzed using qualitative analysis techniques, which consisted of four stages: data collection, data reduction, data display, and conclusion and verification. Data reduction is the process of simplifying and grouping data in order to produce meaningful information. Meanwhile, data display involves arranging data systematically and easily so that conclusions can be drawn. Information resulting from data analysis is presented in narrative text and a matrix [25].

## III. RESULTS AND DISCUSSION

# A. Result

The results of the analysis of the website designs for the three fisheries startups—Aruna, Minapoli, and eFishery—are as follows:

1) Aruna Startup Website: The website is accessible at https://aruna.id, and the homepage is shown in Figure 3. Figure 3 illustrates that, according to Web Page Anatomy principles, the homepage of the Aruna startup website only includes five out of the six required components: the company logo, header, content, footer, and whitespace. Notably, the sidebar component is absent. The logo, prominently situated on the left side of the header, effectively communicates the company's identity with its simple 'aruna' wordmark design. Within the header, six navigation menus are featured: two directing users to product features (Inquiry Sustainability), two to the latest updates (News and Career), one to the company profile (About Aruna), and another to contact information (Contact Us). The content component, located below, alternates between the Inquiry, Sustainability, and Partnership features, ensuring they are not displayed simultaneously. Unlike typical websites, Aruna's design omits a sidebar, resulting in navigation menus overlaying other components. The footer, positioned at the page's bottom, diverges from convention by offering ample space for multiple menus. It includes sections on company profiles, social media links, and language options (English-The deliberate Indonesian). minimalism of design components on the homepage creates generous whitespace, enhancing the clarity of presented text and images.

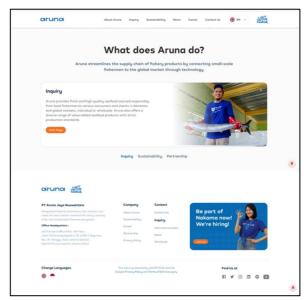


Fig. 3 Homepage of the Aruna fisheries startup website

Regarding the principle of Balance, Aruna's website design particularly through demonstrates implementation, symmetrical balance. Design elements are positioned along the axis of symmetry, ensuring equal shape, size, and composition on both sides of the page. This approach enhances the visual neatness and formal impression of the design. Furthermore, the website adheres to the Unity principle by utilizing repetition, notably in color elements. Blue is consistently used across the company logo, promotional text backgrounds, navigation menu titles, and other features. This repetition reinforces Aruna's branding, associating blue with the sea, which is the startup's signature color. Additionally, the website incorporates principles from Fresh Trends, particularly through an expansive footer navigation layout. It includes comprehensive contact information, expanded site navigation, and integrates various social media platforms such as Twitter, Facebook, Instagram, YouTube, LinkedIn, and Spotify. These features enhance user engagement and accessibility.

However, Aruna's website design does not adhere to *Grid Theory* principles. It does not follow the T-junction law, which typically divides the page into three columns for organizing design components. Instead, the design only utilizes a two-part division approach. Furthermore, it fails to apply the *Bread-and-Butter Layout* principle by not opting for common layout types such as left-column, right-column, or three-column navigation. Content components are placed across the entire homepage without incorporating sidebar elements. As a result, navigation menus are overlaid on the header and footer components.

2) Minapoli Startup Website. The website is accessible at https://minapoli.com, and the homepage is accesible in Figure 4. In Figure 4, according to principles of Web Page Anatomy, the container block on Minapoli startup's homepage only displays five of the required six components: the company logo, header, content, footer, and whitespace. However, the sidebar component is notably absent. The logo, distinct from

the header, is positioned to the left and consists visually of the word 'minapoli' alongside an image featuring four fish arranged to resemble blooming flowers, making it easily recognizable and informative for users. The homepage features two headers positioned consecutively at the top. The first header includes three navigation menus—Pasarmina, Eventmina, and Infomina—which guide users to the startup's product features.

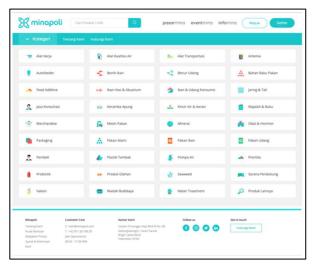


Fig. 4 Homepage of the Minapoli fisheries startup website

Meanwhile, in the subsequent header, three additional navigation menus lead users to product category features (Category), the company profile (About Us), and contact information (Contact Us). The majority of the homepage is occupied by content components, where all product features are showcased. These features provide users with detailed information about the products. The homepage also includes a footer component, typical of most websites, containing company profile details, links to social media accounts, and language options (English and Indonesian). Despite the limited number of design components on the Minapoli website's homepage, the layout does not effectively utilize white space. Each component is densely packed with information, resulting in small font sizes that can be difficult to read. Consequently, the white space appears narrow and cramped.

The analysis results indicate that the Minapoli website design does not adhere to *Grid Theory* principles. Unlike the standard three-column layout that divides the page for placing design components, Minapoli's homepage is structured into four columns. This arrangement creates a balanced and formal appearance but may appear rigid. Additionally, the website does not follow the *Bread and Butter Layout* principle, which typically involves choosing between left column navigation, right column navigation, or triple column navigation layouts. Instead, most of the homepage is occupied by content components without a sidebar for navigation menus. All navigation menus are superimposed on the header and footer components.

However, the Minapoli website design successfully applies the Balance principle, specifically using symmetrical balance. Design elements are symmetrically placed along a central axis, ensuring equal visual 'weight' on both sides of the page. This approach contributes to a tidy and formal appearance. Similarly, the Unity principle is effectively implemented through proximity. By grouping design elements closely together, they appear cohesive and unified. This is evident in the consistent size and color used for the product features. The website prominently features light blue as its distinctive color throughout its design. Furthermore, the Minapoli website adheres to Fresh Trends principles, particularly in its expansive footer navigation layout. The footer includes comprehensive contact information, expanded site navigation, and integrates the company's social media profiles such as Twitter, Facebook, Instagram, and Linkedin.

3) eFishery Startup Website. The website is accessible at https://efishery.com, and the homepage is accessible in Figure 5. Figure 5 illustrates that the container block on the homepage of the eFishery startup website adheres to several Web Page Anatomy principles, showcasing five of the six required components: the company logo, header, content, footer, and whitespace. Notably, the sidebar component is absent. The logo is distinctively designed separate from the header, positioned to the left. Featuring the word 'efishery' with a fish forming the letter 'e', the logo is visually informative, conveying the company's identity effectively.



Fig. 5 Homepage of the eFishery fisheries startup website

The header component includes six navigation menus: Solutions, guiding users to various product features; Career, offering educational opportunities and business collaborations; Company, presenting the company profile; Resources, providing fisheries education and extension materials; and Help Center, offering contact information. Most of the homepage is occupied by content components, displaying four main product features along with brief information for users. On the homepage, there is also no sidebar component which usually contains navigation menus. The rest of the navigation menu is superimposed on the header and footer. The footer contains additional information about the company profile and links to its social media profiles.

Despite the minimal number of design components, the whitespace on the homepage appears spacious, creating a comfortable and informative browsing experience.

The subsequent analysis reveals that the eFishery website design does not adhere to Grid Theory principles, particularly in relation to the law of T-junctions. The homepage is divided into only two columns, which creates a balanced but informal layout. In terms of the *Balance* principle, the website employs an asymmetrical balance pattern. This is evident in the layout where text information is positioned on the left side with supporting photos on the right. The left-aligned text format enhances a more dynamic and less rigid appearance. In addition, the eFishery website design does not adhere to the Bread-and-Butter Layout principle. It does not adopt any of the three typical layout types: left-column navigation, rightcolumn navigation, or three-column navigation. Instead, the homepage is solely occupied by content components without a sidebar. All navigation menus are integrated into the header and footer components.

However, judging from the Unity principle, this website design has implemented it well. The pattern used is repetition. Repetition is carried out in color and photo elements. This is clearly visible in the display of four features containing information about the product in the content component. Each information feature consists of a title and brief description of the product in text format, accompanied by a product photo on the right side. The design pattern for the four features is exactly the same, namely consisting of a green product title, text information, and product photos. This startup uses green as the main distinctive color in its website design. With this color choice, eFishery wants to emphasize to its website users that the company's core business is land-based aquaculture, which is synonymous with the color green. This website has also implemented the Fresh Trends principles, especially the expansive footer navigation layout type. This can be seen from the inclusion of contact information and additional content in the form of the company's social media features: Twitter, Facebook, Instagram, and LinkedIn. A summary of the design analysis results of the three fisheries startup websites is shown in Table 2.

 $\label{thm:table II} \textbf{SUMMARY OF FISHERIES STARTUP WEBSITE DESIGN ANALYSIS RESULTS}$ 

Variable	Sub variable	Fisheries Startup		
		Aruna	Minapoli	eFishery
Web	- Container	$\checkmark$	$\sqrt{}$	$\checkmark$
Page	- Logo	$\checkmark$	$\checkmark$	$\sqrt{}$
Anatomy	- Header	$\checkmark$	$\checkmark$	$\sqrt{}$
	- Sidebar	-	-	-
	- Content	$\checkmark$	$\checkmark$	
	- Footer	$\checkmark$	$\checkmark$	$\sqrt{}$
	- Whitespace	$\checkmark$	$\checkmark$	$\checkmark$
Grid	- The role of	-	-	-
Theory	thirds			
Balance	<ul> <li>Symmetrical</li> </ul>	$\checkmark$	$\checkmark$	
	balance			
	<ul> <li>Asymmetrical</li> </ul>			$\sqrt{}$
	balance			
Unity	- Proximity		$\checkmark$	
	- Repetition	$\checkmark$		$\sqrt{}$
	- Alignment			
Bread	- Left column	-	-	_
and	navigation			
Butter	- Right column	_	_	-
Layout	navigation			

Variable	Sub variable	Fisheries Startup		
		Aruna	Minapoli	eFishery
	- Three column navigation	-	-	-
Fresh Trends	- Expansive footer navigation - Three column with content first	<b>V</b>	<b>V</b>	$\checkmark$

### B. Discussion

Based on the principle of Web Page Anatomy, the website designs of the three fisheries startups-Aruna, Minapoli, and eFishery—include simple brand logos placed within their container components. This indicates that all three startups understand the importance of displaying brand logos to attract user interest. This finding aligns with research by [26], which concluded that simple, flat brand logos are preferred by consumers and can significantly boost sales of food products. All three startups place their logos in the top-left corner of the homepage, parallel to the header component. This placement is effective because, according to [27], user' eyes tend to move from the left to right when navigating media, including social media and websites. In [28]'s research, it was found that products with logos placed on the top-left side of televisions and gadget screens sold better than those with logos on the right side. Apart from the logo, the homepages of the three startups feature complete header components that provide primary navigation menus, directing users to product features.

According to [29], the visual design of websites, including header placement, influences user experience, attitudes, and behavior. Commercial websites with header components at the top of the homepage tend to receive more positive responses from users, as this is the first point users typically view when accessing a web page. However, these three websites lack the sidebar component commonly used to display navigation menus [30]. Instead, the navigation menus are integrated into other components, such as the header or footer, which does not fully align with the design principles proposed by Jason Beaird. Eliminating the sidebar navigation component can make it difficult for them to find the information they need [31]. This supports [32]'s statement that the purpose of a navigation sidebar is to accommodate many links and side content, enabling users to browse vertically with ease. Some important navigation menus on these three websites are placed in the footer at the bottom of the homepage.

Despite being at the bottom, the footers all three websites are relatively large, making the information clear and easy to understand [33]. According to [34], clear and easy-to-understand information is key to the success of business website in achieving optimal performance. The dominant design component on the homepages of all three websites is content, though how the use homepage space varies. On Aruna and eFishery websites, the content space is smaller, resulting in more whitespace, which makes the information clearer and easier to follow. In contrast, Minapoli's homepage is almost entirely filled with content, leaving little whitespace, which makes the page feel cramped and the information harder to comprehend. Research by [35] found that both young (31–45 years) and older (61+ years) users preferred designs with large whitespace (about 55% of the homepage

area) and wider margins, as it enhances usability, aesthetics, and perceived value.

Furthermore, the three websites do not adhere to *Grid Theory* principles. This means that the layout of design components does not follow the T-junction law, as is common on most websites. This can happen for various reasons. On the Minapoli website, it occurs because the large number of product features makes it challenging to follow these design principles. In contrast, Aruna and eFishery aim to differentiate themselves from standard website designs. According to [36] and [37], modern website designs may not always apply *Grid Theory* principles due to other factors, such as the need for practicality in design.

Based on the principle of Balance, the Aruna and Minapoli websites use a symmetrical balance pattern, giving them a more formal appearance. On the other hand, eFishery uses an asymmetrical balance pattern, making its design look more informal. This difference is likely due to the varying target audiences. Asymmetrical balance is typically used to attract younger audiences, such as millennials, while symmetrical balance tends to appeal to older users with established businesses. According to [38], the balance of images or other components on a webpage is crucial to ensuring that users' attention is evenly distributed across all visuals. Unbalanced images often appear unattractive. Symmetrical balance is easier to achieve, as it involves dividing the page vertically in half and placing elements on either side. Although asymmetrical balance is more complex, many designers prefer it because it requires users to spend more time engaging with the image to fully grasp its meaning [39].

Subsequent research shows that the *Unity* principle is applied differently across the three fisheries startup websites. Aruna and eFishery use a repetition pattern, while Minapoli employs a proximity pattern [15]. Repetition involves placing the same element multiple times within a design, creating a sense of unity, consistency, and cohesion. In contrast, proximity uses different but related elements to present them as a cohesive unit [40]. Aruna and eFishery likely chose the repetition pattern because they offer fewer product items, requiring repeated elements to create a unified impression. Meanwhile, Minapoli, with its larger product range, uses the proximity pattern to maintain the principle of unity.

None of these three websites follow the *Bread-and-Butter Layout* principle in their design, setting them apart from more conventional website layouts. This deviation may be attributed to the fact that these startups are relatively young (around five years old) and favor new, simple, and modern design principles. As noted in [41], simple website design doesn't necessarily require adherence to the Bread and Butter Layout principle. Modern website design trends, particularly after 2020, favor minimalism, strong contrast, and usercentered interfaces.

In terms of *Fresh Trends* principles, all three websites use an expansive footer navigation pattern, placing navigation features at the bottom (footer) of the webpage. This navigation includes multiple menu links that direct users to various sections of the website or application. The advantage of this pattern is that it provides quick and easy access to relevant pages, information, or functions without requiring users to scroll back to the top. It allows users to easily locate pages such as privacy policies, contact details, user guides, or

links to less frequently visited sections, such as those beyond the homepage or product pages [42], [43].

#### IV. CONCLUSION

This research concludes that the designs of the three fishery startup company websites in Indonesia—Aruna, Minapoli, and eFishery—implement all the ideal Web Page Anatomy components, except for the Sidebar component. In terms of the principle of balance, the Aruna and Minapoli website designs use a symmetrical balance pattern, while the eFishery website follows an asymmetrical balance pattern. The Unity principle is applied through a repetition pattern on the Aruna and eFishery websites, whereas the Minapoli website uses a proximity pattern. However, the designs of all three websites do not follow Grid Theory principles, which are based on the T-junction law. Instead, they employ modern designs that allow web designers more creative freedom. Additionally, the three websites do not adhere to the Bread-and-Butter Layout principle, opting instead for a more minimalist design.

Although the three websites have implemented the principles of ideal web design as outlined in Jason Beaird's book, differences remain in their selection and implementation of web design components. This presents a challenge for future researchers to explore the reasons behind these variations. For web designers, these findings can serve as a technical guide for developing fishery startup websites in the future.

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