Human Factors in Design, Engineering, and Computing, Vol. 238, 2026, 507–516
https://doi.org/10.54941/ahfe1008283

What May and May Not Be Digitized: Two Boundaries on Digital Transformation in Traditional Crafts and Their Implications for Service Design—A Case Study of Japanese Kaga Yuzen

Yuka Ishiba and Yasunobu Ito

Japan Advanced Institute of Science and Technology (JAIST), Nomi, Ishikawa 923-1292, Japan

ABSTRACT

Digital technology has advanced remarkably in recent years, and the trend toward digital transformation (DX) in society is expected to accelerate even further in the future. Moves to incorporate various digital technologies can also be seen in Japan's traditional craft industries. However, there is not yet a sufficient body of research documenting the difficulties and internal conflict encountered when incorporating digital technology into the production process of traditional craft products, or addressing the institutional constraints involved. Taking institutional constraints into account, this paper examines what may and may not be digitized in the production process of traditional craft products, where value is placed on handcrafted work. In doing so, we also adopt a service design perspective and use Kaga Yuzen in Japan as a case study. In this study, we conducted research mainly using anthropological ethnography. Our fieldwork revealed two forms of line-drawing, "line-drawing by the institution" and "line-drawing by practitioners," and showed that these two forms of line-drawing lead to questions of service design.

Keywords: Japanese traditional craft products, Kaga Yuzen, Service design, Anthropological ethnography, Digital transformation (DX)

INTRODUCTION

Japan's traditional craft industries are shrinking, and practitioners are exploring various approaches to find a way to recover from this declining trend. The decline in demand for traditional Japanese clothing is also striking. For example, according to the Family Income and Expenditure Survey (Income and Expenditure) conducted by the Statistics Bureau, Ministry of Internal Affairs and Communications (2025), which covers two-or-more-person households, the average annual expenditure on traditional Japanese clothing decreased from 6,251 yen in 2002 to 2,049 yen in 2024 (although there were fluctuations along the way, the overall trend is downward). Kaga Yuzen is regarded as a formal style of kimono; together with factors such as the recent decline in demand for formal wear in Japan, the industry faces an extremely challenging situation in terms of its survival.

Received October 19, 2026; Revised November 16, 2026; Accepted November 26, 2026; Available online December 1, 2026

© 2026 The Authors. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 License.
For more information, see https://creativecommons.org/licenses/by-nc-nd/4.0/

On the other hand, the manufacturing industry is actively adopting digital technologies, including digital transformation (DX). There is also a trend toward incorporating digital technologies in the context of crafts. In prior research, Chittenden, for example, discusses how we should view the incorporation of 3D printing into ceramics. In that work, Chittenden highlights examples where data from human breath or voice is incorporated into the final product, suggesting new forms of human engagement (Chittenden 2018). However, that paper does not examine objects subject to institutional constraints arising from a designation system, such as Japan's traditional craft products.

Furthermore, regarding the use of digital technology in Kaga Yuzen, reports have been published on initiatives such as digitizing design patterns (Torii 2019). However, there is not yet a sufficient body of research describing the difficulties and internal conflict encountered when introducing digital technology, or addressing institutional constraints.

Until now, many companies have devoted their efforts to improving the functions and quality of their products. However, as such products have become widely available in the market and the relationship between companies and customers has changed with the digitalization of society, customers have come to seek "a series of good 'experiences' that also include 'goods'" (Ministry of Economy, Trade and Industry 2020: 2). Accordingly, service design is one methodology for realizing "good 'experiences' for customers" and turning them into a sustainable business (Ministry of Economy, Trade and Industry 2020: 2).

Service design is "a methodology for co-creating desirable and valuable customer experiences with stakeholders and, furthermore, for realizing organizations and mechanisms that continuously create such customer experiences and value" (Ministry of Economy, Trade and Industry 2020: 11). The same document identifies "human-centered," "co-creation," and "holistic" as the characteristics of service design (Ministry of Economy, Trade and Industry 2020: 2).

In our previous study, we suggested that a service-oriented approach could open new business possibilities for traditional craft products (Ishiba and Ito 2025). Digital technology is one means of realizing such an approach, but its adoption in traditional craft products faces specific difficulties.

Taking institutional constraints into account, this paper examines what may and may not be digitized in the production process of traditional craft products, where value is placed on handcrafted work. In doing so, we also adopt a service design perspective and use Kaga Yuzen in Japan as a case study.

What Is Kaga Yuzen?

Traditional craft products are crafts designated by the Minister of Economy, Trade and Industry under the Act on the Promotion of Traditional Craft Industries, and they must meet all of the following five requirements: (1) primarily used in daily life, (2) the main part of the manufacturing process is done by hand, (3) manufactured using traditional techniques or methods,

(4) made from traditionally used raw materials, and (5) produced in a certain region that forms a production area (only the title of each item is excerpted; Traditional Craft Industries Promotion Association 2026a).

Kaga Yuzen is a nationally designated traditional craft product. It received this designation in 1975. The designation specifies the following requirements (excerpted from the "Technology/techniques" and "raw materials" sections only).

- **Technology/techniques**

1 In the case of hand-painted Yuzen dyeing, the following techniques or methods shall be used.

   (1) The colors and designs shall be in a pictorial style based on the "Kaga Five Colors".
   (2) The preliminary sketch should be drawn using "Aihana" (blue flower).
   (3) Use "thread-type glue" for setting the glue.
   (4) When dyeing the base color black, do not use a resist paste.
   (5) If embroidery is to be done, it must be done in the style of "Kaga embroidery".

2 In the case of Itaba Yuzen, the following techniques or methods shall be used.

   (1) The stencil shall be made of paper made by pasting handmade Japanese paper with persimmon tannin, or a similar paper on which a Yuzen pattern has been carved.
   (2) The shaping process involves matching the pattern by hand.

- **Raw materials**

  The fabric must be silk.
  (Material provided by the Kaga Zome Promotion Cooperative Association in October 2026.
  The English translations follow those on the Japan Traditional Crafts Aoyama Square website (Traditional Craft Industries Promotion Association 2026b).)

METHOD

In this study, we conducted research using anthropological ethnography. Participant observation helped us understand the background and context of the interviewees' statements when analyzing the qualitative data obtained from semi-structured interviews. The interviews and participant observation were video- and audio-recorded with the participants' consent and then analyzed. We also drew on online information and literature as appropriate throughout the research and analysis. The interviews were conducted in Japanese, and all quotations from Japanese sources were translated by the authors. The investigation details are listed in Table 1. In addition, Uesaka Co., Ltd. was examined as a point of comparison.

Table 1: List of participant observation and interviews.

Participant Observation List	Date
Okuda Senshoku Co., Ltd.	27 sessions in total, from December 2022 to September 2023
Interview List	**Date**
Ms. Mangyo and Ms. Kazuko from Okuda Senshoku Co., Ltd.'s Sales Department; Ms. Masako, an artist	January 7, 2024

RESULTS

The Case of Okuda Senshoku Co., Ltd.

In addition to producing Kaga Yuzen kimonos, Okuda Senshoku Co., Ltd.—as a "dyeing workshop"—handles dyeing for a wide variety of items, including corporate noren curtains, tenugui towels, and interior decorations. It is one of the larger companies among those carrying on the Kaga Yuzen tradition. Furthermore, Mr. Katsumasa Okuda, an artist at the company, states that "what we craftspeople seek is beauty premised on use, that is, yō no bi (the beauty of use)" (Okuda Senshoku Co., Ltd. 2026: "Sorezore no Kokoro ni Yorisotta Seihin o" section, para. 2).

Okuda Senshoku Co., Ltd. participated in Hokuriku RDX[1] and carried out industry-academia-government collaboration projects. The result of this collaboration was the HANAMON Design Suggestion System. The HANAMON that Okuda Senshoku Co., Ltd. creates are designs unique to each individual, created by combining flowers, plants, and motifs that symbolize particular wishes. The HANAMON Design Suggestion System is a system in which customers choose a word they like and AI automatically proposes multiple designs that match its meaning; it incorporates AI into the creation of designs, which had previously been time-consuming. Based on the designs proposed by the AI, the customer and a Yuzen artist engage in repeated exchanges, through which a more original HANAMON is created (from materials on the implementation progress of Okuda Senshoku Co., Ltd.'s DX initiatives).

Regarding the background to the development of the HANAMON Design Suggestion System, Ms. Mangyo, a sales representative at Okuda Senshoku Co., Ltd., said that obtaining the Kaga Yuzen shōshi (certification label) requires meeting specified requirements, such as those for materials, and that a product that does not meet them cannot be called "traditional-craft Kaga Yuzen." She added that, after considering where DX could be applied while meeting these requirements, the company settled on the designs (from an interview with Ms. Mangyo, a sales representative at Okuda Senshoku Co., Ltd., on January 7, 2024).

[1]Hokuriku RDX is "an 'industry-academia-government-finance collaboration platform' created through the Ministry of Economy, Trade and Industry's Program for Creating Leading Model Hubs for Industry-Academia Fusion (J-NEXUS), involving national universities, public support institutions, business organizations, and others in the Hokuriku region" (RICH Co., Ltd. 2026: What is Hokuriku RDX?, para. 1).

In the creation of HANAMON designs, some of the interactions with customers—which had previously been handled by employees of Okuda Senshoku Co., Ltd.—are carried out by AI. Here, we describe the reaction of Ms. Masako, an artist at Okuda Senshoku Co., Ltd., to the digitization of this portion of the work.

We asked Ms. Masako what she thought about the HANAMON initiative carried out by Okuda Senshoku Co., Ltd. According to her, while she is not well-versed in AI, she believes coexistence will be necessary. Regarding the HANAMON Design Suggestion System, she noted that it is based on hand-drawn designs and involves human input even in the final stages; therefore, she said that utilizing digital technology might be a good way to preserve these designs as "archives" or "reference materials." Next, we asked a related question about the HANAMON initiative. Two aspects of the initiative had come up in the discussion: AI assisting with customer interactions, on the one hand, and selling the designs themselves, on the other. While the former was no different from what Ms. Masako had been doing up to that point, we asked her what she thought about the latter, that is, providing the designs. In response, she said that, although she thought it was fine in itself, what mattered was "how [I] can convey the process" (from an interview with Ms. Masako, an artist at Okuda Senshoku Co., Ltd., on January 7, 2024).

We then asked what Ms. Masako meant by "process." According to her, the production process begins with talking with the customer and involves many stages, with numerous people involved and a significant amount of time required; it is precisely because of this "process" that people want to use things with care. Ms. Masako also noted that with digital technology, the "process" is difficult to convey, and since results are produced "instantly," she is constantly considering where to "draw the line" on the extent to which digital technology should be incorporated into the production process (from an interview with Ms. Masako, an artist at Okuda Senshoku Co., Ltd., on January 7, 2024). Precisely because she saw value in the process, she found it difficult to decide how far it was acceptable to digitize.

The Case of Uesaka Co., Ltd.

Uesaka Co., Ltd. was established in 2016, and Ms. Yukie Uesaka is its representative (Ishikawa Sunrise Industries Creation Organization 2017). The website of the Kaga Zome Promotion Cooperative Association explains that "a Kaga Yuzen artist is a Kaga Yuzen craftsperson who has registered a *rakkan* (artist's seal) with the Kaga Zome Promotion Cooperative Association" (Kaga Zome Promotion Cooperative Association 2026: para. 1). However, it has been pointed out that "there are also a small number of Kaga Yuzen artists today who are not 'registered seal holders'" (Matsuki 2013: para. 9). Ms. Uesaka has not registered a *rakkan*. She states that, "out of a single-minded desire to create works I could be satisfied with and to have no regrets at the end of my life as an artist, I chose not to take the path of the wholesaler-led mass-production system for kimonos (the rakkan 'cooperative member' registration system), but instead chose, alone in the

industry, the path of producing works centered on solo exhibitions" (Uesaka Co., Ltd. 2026a: n.p.).

Uesaka Co., Ltd. uses digital technology to produce kimonos that it has named "Kanazawa Yuzen," and sells them (Uesaka Co., Ltd. 2026b). Kanazawa Yuzen is described as "a kimono for a new era that transcends time, born from the fusion of the traditional techniques of Kaga Yuzen and modern digital methods" (Uesaka Co., Ltd. 2026b: "Kanazawa Yuzen" section). The company also uses vector data in its production process. According to the company, "traditional Japanese painting, which is based on line drawing, has a strong affinity with vector graphics" (Uesaka Co., Ltd. 2026c: n.p.).

The features of Kanazawa Yuzen include "size adjustment and pattern placement tailored to each individual," "delicate and vivid expressiveness that surpasses hand-painting," "an accessible price," and being "machine washable" (Uesaka Co., Ltd. 2026b: "Kanazawa Yuzen" section). Kanazawa Yuzen is not hand-painted but is produced by "printing Kaga Yuzen designs on high-quality synthetic fabric" (Uesaka Co., Ltd. 2025: para. 6). Nevertheless, it "has been highly evaluated as being on a par with hand-painted works, even by those familiar with Kanazawa's traditions, such as skilled kimono tailors, tea ceremony instructors, and kimono dressers" (Uesaka Co., Ltd. 2025: para. 6). Customers who have purchased Kanazawa Yuzen have expressed satisfaction with its high design quality, fast production, the convenience of being washable, and the fact that it is made to order (Uesaka Co., Ltd. 2026d). Customer comments have also been published describing how Kanazawa Yuzen looks the same as hand-painted Kaga Yuzen and how a customer was complimented by people knowledgeable about kimono, who said, "What a lovely hand-painted Yuzen" (Uesaka Co., Ltd. 2026d: n.p.).

In addition, Ms. Uesaka states that "traditional industries have been passed down as 'traditions' precisely because they have continued to find new meaning in people's lives in response to changing times" (Uesaka Co., Ltd. 2025: para. 3).

DISCUSSION

In what follows, we discuss the two cases from three perspectives.

1. Line-Drawing by the Institution: Where Can DX Be Applied?

In the case of Okuda Senshoku Co., Ltd., when the company undertook DX as part of an industry-academia-government collaboration project, it examined which parts of the process DX could be applied to within the institutional constraints to which Kaga Yuzen is subject. As noted earlier, the requirements for traditional craft products are specified. Consequently, DX cannot be applied to every part of the process; it is necessary to consider how digital technology can be introduced while still meeting those requirements. As a result, the designs were identified as the part of the process to which DX could be applied at the company.

On the other hand, Uesaka Co., Ltd. is a case that has stepped outside the line drawn by the institution. The kimonos that the company produces

using digital technology do not meet the designation requirements for Kaga Yuzen as a traditional craft product, and the company sells them under the name Kanazawa Yuzen. Nevertheless, customers commented that Kanazawa Yuzen looks the same as hand-painted Kaga Yuzen, and a customer reported being complimented by people knowledgeable about kimono, who said, "What a lovely hand-painted Yuzen." In addition, the customer comments published by the company indicated satisfaction with the high quality of the designs, the speed of production, the convenience of being washable, and the fact that the kimonos are made to order. In this way, the adoption of digital technology has enabled the company to realize a production approach that responds to customer needs.

2. Line-Drawing by Practitioners: How Far Is DX Acceptable?

Ms. Masako, an artist at Okuda Senshoku Co., Ltd., acknowledged that she is not well-versed in AI but recognized that coexistence with it will become necessary. On the other hand, she wanted to place importance on how she can convey the creative process, believing that it is precisely because of this "process" that users will want to use her work with care. For this reason, she said that it is difficult to "draw the line" on how far digitization is acceptable. Based on this, it appears that while she felt that coexistence with digital technology was being called for as a societal trend, she was conflicted about where to "draw the line" on how far to incorporate digital technology, as she believed that her work held value because it was done by people.

3. The Two Forms of Line-Drawing and Service Design

At Okuda Senshoku Co., Ltd., the creation of HANAMON designs has always been carried out through repeated exchanges between the customer and the artist; that is, it is a site of co-creation. In HANAMON production, AI-generated design proposals (the HANAMON Design Suggestion System) have been partially introduced into this co-creative process. In other words, the line drawn by the institution, which determines where DX can be applied, as indicated by Ms. Mangyo, and the line drawn by practitioners, which concerns how far DX is acceptable, as described by Ms. Masako, overlapped in the same context of design creation. Ms. Masako's conflict raised the question not only of how far production should be digitized but also of which parts of the customer experience should remain in human hands. This suggests that the introduction of digital technology into traditional craft products raised a service design question: how to redesign "a series of good 'experiences' that also include 'goods'" (Ministry of Economy, Trade and Industry 2020: 2).

CONCLUSION

Taking institutional constraints into account, this paper examined what may and may not be digitized in the production process of traditional craft products, where value is placed on handcrafted work. In doing so, we adopted a service design perspective and used Kaga Yuzen in Japan as a case study. We investigated two companies, Okuda Senshoku Co., Ltd. and Uesaka Co.,

Ltd. Our main method was anthropological ethnography, supplemented as appropriate by online materials and literature.

Our findings showed that two forms of line-drawing arise when digital technology is introduced into traditional craft products, namely "line-drawing by the institution" (where DX can be applied) and "line-drawing by practitioners" (how far DX is acceptable), and that these two forms of line-drawing lead to questions of service design. First, regarding line-drawing by the institution, Okuda Senshoku Co., Ltd. examined in its HANAMON initiative where DX could be applied while meeting the institutional requirements, and as a result, the designs were identified as the part to which DX could be applied. Uesaka Co., Ltd., by contrast, is a case that has stepped outside the line drawn by the institution. Although the Kanazawa Yuzen produced by the company does not meet the designation requirements for Kaga Yuzen, the customer comments published by the company showed that it was taken for hand-painted work even by people knowledgeable about kimono, and that the company has realized a production approach that responds to customer needs, as reflected in the high quality of its designs and the speed of production, among other things. Next, regarding line-drawing by practitioners, Ms. Masako, an artist at Okuda Senshoku Co., Ltd., said that because she wanted to place importance on how she could convey the "process" of production, it was difficult to "draw the line" on how far digitization was acceptable. While she felt that coexistence with digital technology was being called for as a societal trend, she appeared to be conflicted about where to "draw the line" on how far to incorporate digital technology, because she believed that her work held value precisely because it was done by people. Finally, regarding the two forms of line-drawing and service design, at Okuda Senshoku Co., Ltd., the institutional line concerning where DX can be applied and the practitioner's line concerning how far DX is acceptable overlapped in design creation, a site of co-creation. Moreover, Ms. Masako's conflict raised the question of which parts of the customer experience should remain in human hands. This suggests that the introduction of digital technology into traditional craft products raised a service design question: how to redesign "a series of good 'experiences' that also include 'goods'" (Ministry of Economy, Trade and Industry 2020: 2).

LIMITATIONS OF THIS STUDY AND IMPLICATIONS FOR FUTURE RESEARCH

This study has several limitations. First, the findings on internal conflict rest mainly on interviews with a small number of practitioners at a single company, in particular one artist; they therefore illustrate, rather than represent, the views of Kaga Yuzen practitioners. Second, the case of Uesaka Co., Ltd. was examined only through publicly available information. This includes customer reviews published on the company's own website, which may be selectively presented and do not necessarily reflect customers' views as a whole. Third, the investigation was limited to Kaga Yuzen, and the interview data date from January 2024. Future research should include interviews with practitioners in different roles and companies, including Uesaka Co., Ltd., as

well as comparisons with other designated traditional craft products, so that the findings can be generalized to the traditional craft industries as a whole.

ACKNOWLEDGMENT

The authors would like to thank the staff of Okuda Senshoku Co., Ltd. and Uesaka Co., Ltd. for their cooperation in this research. This work was supported by JST SPRING, Grant Number JPMJSP2102.

REFERENCES

Chittenden, T. (2018) "Printed Pots and Computerized Coils: The Place of 3D Printing in Ceramic Practice", *Craft Research*, 9(1), pp. 9–40.

Ishiba, Y. and Ito, Y. (2025) "The Potential for Business Development Using a Service-Oriented Approach in Traditional Crafts: A Case Study of Japanese Kaga Yuzen", paper presented at the 16th International Conference on Applied Human Factors and Ergonomics (AHFE 2025) and the Affiliated Conferences, Orlando, FL, July 26–30.

Ishikawa Sunrise Industries Creation Organization. (2017) Kabushiki Gaisha Uesaka [Uesaka Co., Ltd.]. DGnet, ISICO Website: https://www.isico.or.jp/company/dgnet/3432.html (Retrieved October 16, 2026). (In Japanese).

Kaga Zome Promotion Cooperative Association. (2026) Kaga Yuzen Sakka [Kaga Yuzen Artists]. KAGA-YUZEN Website: https://www.kagayuzen.or.jp/artistslist/ (Retrieved October 15, 2026). (In Japanese).

Matsuki, S. (2013) Shodai Yusui Toku Sanbaso Kurotomesode [Yusui Toku I: A Kurotomesode with a Sanbaso Design]. Baiku Gofukuya no Isogashii Hibi Website: https://819529.com/2013/06/%E5%88%9D%E4%BB%A3%E7%94%B1%E6%B0%B4%E5%8D%81%E4%B9%85%E3%80%80%E4%B8%89%E7%95%AA%E5%8F%9F%E9%BB%92%E7%95%99%E8%A2%96/ (Retrieved October 15, 2026). (In Japanese).

Ministry of Economy, Trade and Industry. (2020) Sabisu Dezain o Hajimeru Tame ni [Getting Started with Service Design]. https://www.meti.go.jp/policy/mono_info_service/mono/human-design/20200420002-1.pdf (Retrieved October 17, 2026). (In Japanese).

Okuda Senshoku Co., Ltd. (2026) Konseputo / Sakka Goaisatsu [Concept / Greetings from the Artists]. https://akaneya-web.com/about/concept.html (Retrieved October 19, 2026). (In Japanese).

RICH Co., Ltd. (2026) Hokuriku RDX: Hokuriku no Miryoku to Nihon no Shijo wo Tsunagu, Sangakukankin Renkei Purattofomu [Hokuriku RDX: An Industry–Academia–Government–Finance Collaboration Platform Connecting the Appeal of Hokuriku with the Japanese Market]. Hokuriku RDX Website: https://rdx.rich-hokuriku.co.jp/ (Retrieved October 5, 2026). (In Japanese).

Statistics Bureau, Ministry of Internal Affairs and Communications. (2025) Kakei Chosa / Kakei Shushi-hen: Futari Ijo no Setai Nenpo [Family Income and Expenditure Survey / Income and Expenditure, Two-or-more-person Households, Annual Report]. e-Stat Website: https://www.e-stat.go.jp/stat-search/files?stat_infid=000040297528 (Retrieved September 27, 2026). (In Japanese).

Torii, T. (2019) "Kaga Yuzen Zuan no Dejitaru Akaibu to Sore o Mochiita Gakujutsu Kenkyu [Digital Archiving Hand-Dyed Kaga-Yuzen Designs]", Joho Chishiki Gakkaishi [Journal of Japan Society of Information and Knowledge], 29(4), pp. 323–329. (In Japanese).

Traditional Craft Industries Promotion Association. (2026a) Dentoteki Kogeihin ni Tsuite [About Traditional Craft Products]. https://kyokai.kougeihin.jp/traditional-crafts/ (Retrieved October 18, 2026). (In Japanese).

Traditional Craft Industries Promotion Association. (2026b) KAGA Yuzen (Dyeing). Japan Traditional Crafts Aoyama Square Website: https://kougeihin.jp/en/craft/0203/ (Retrieved October 5, 2026).

Uesaka Co., Ltd. (2025) Kaga Yuzen no Dento: "Dento" no Teigi no Saiko [The Tradition of Kaga Yuzen: Reconsidering the Definition of "Tradition"]. https://www.yukie-uesaka.com/2025/11/04/%E5%8A%A0%E8%B3%80%E5%8F%8B%E7%A6%85%E3%81%AE%E6%9C%AA%E6%9D%A5-%E4%BC%9D%E7%B5%B1-%E3%81%AE%E5%AE%9A%E7%BE%A9/ (Retrieved October 16, 2026). (In Japanese).

Uesaka Co., Ltd. (2026a) Purofiru [Profile]. https://www.yukie-uesaka.com/%E3%83%97%E3%83%AD%E3%83%95%E3%82%A3%E3%83%BC%E3%83%AB/ (Retrieved October 16, 2026). (In Japanese).

Uesaka Co., Ltd. (2026b) Kanazawa Yuzen (Araeru Ittenmono Kimono) [Kanazawa Yuzen (Washable One-of-a-Kind Kimono)]. https://www.yukie-uesaka.com/%E9%87%91%E6%BE%A4%E5%8F%8B%E7%A6%85-%E6%B4%97%E3%81%88%E3%82%8B%E4%B8%80%E7%82%B9%E3%82%82%E3%81%AE%E7%9D%80%E7%89%A9/ (Retrieved October 16, 2026). (In Japanese).

Uesaka Co., Ltd. (2026c) Homu / UESAKA Kukan Ato [Home / UESAKA Spatial Art]. https://www.yukie-uesaka.com/ (Retrieved October 16, 2026). (In Japanese).

Uesaka Co., Ltd. (2026d) Okyakusama Rebyu [Customer Reviews]. https://www.yukie-uesaka.com/%E3%81%8A%E5%AE%A2%E6%A7%98%E3%83%AC%E3%83%93%E3%83%A5%E3%83%BC/ (Retrieved October 16, 2026). (In Japanese).