

A New Feature Added to E-grocery Apps to Increase Consumers' Willingness to Buy Vegetables and Fruits

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Abstract

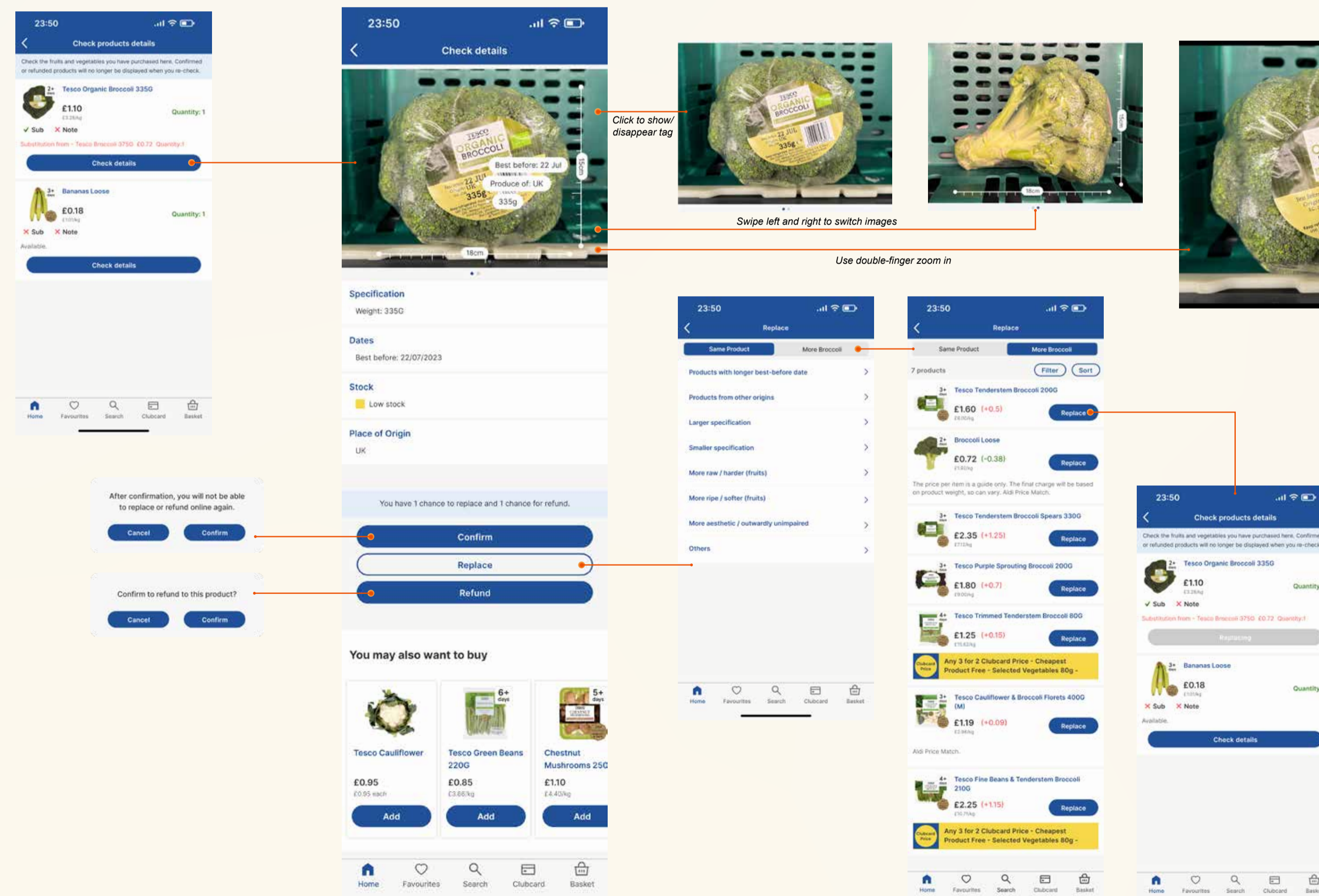
To improve consumers' **shopping experience and willingness** to purchase Vegetables and Fruit (V&F) from e-grocery shops, this study **added a new feature** to an existing e-grocery app. Through this feature, consumers are able to **check details of products**. Low-fidelity and high-fidelity prototypes were sequentially designed. Focus group discussions, interviews, and prototype testing methods were used to evaluate and iterate. The results showed that the added features increased their willingness to purchase V&F from e-grocery stores.

Introduction & Background

Vegetables and fruits (V&F) are the most popular in online food sales. Some consumers, however, remain reluctant to purchase V&F from e-grocery stores. Among the reasons for this is that V&F are highly individualized and consumers need to judge their quality by their appearance, while e-groceries provide **only general information** about them, which does not reflect their true condition. It has been suggested that **digital images** may help consumers gain a more comprehensive understanding of V&F. Nevertheless, relatively little research and design have been conducted in this area.

This project aims to improve consumers' shopping experience and willingness to purchase V&F. The initial inspiration was to add a new feature to e-grocery apps. By using this feature, consumers are able to view **digital images and other textual information** about items to **gain a more accurate assessment** of their purchase.

Design



Study Methodology

Focus Group Discussion

Through this qualitative research approach, it is possible to determine more precisely what information consumers require when checking details.

Usability Evaluation

Once the low-fidelity and high-fidelity prototypes have been developed, participants will be invited to conduct a usability evaluation, which consists of qualitative and quantitative measures of the user experience. One-on-one interviews are used to gain insights into the users' perceptions and make improvements to the design.

Testing & Evaluation

Purpose

To understand the usability and whether the feature would increase consumers' willingness to purchase V&F on the e-grocery app, the high-fidelity prototype was evaluated.

Method

Prototype Test - Participants will be asked to perform a click test on the prototype according to the task and suggest any difficulties or problems encountered during the interaction from their perspective.

One-on-one interview - The interview will be presented and recorded in the form of a questionnaire using a Likert scale to understand how users feel about the new features. The results will be analyzed using a weighted average approach and interpretations will be made based on them.

Research Results

A total of eleven individuals participated in the testing of the high-fidelity prototype. All of them have purchased V&F from an e-grocery shop, and 72.7% have purchased V&F that they were not satisfied with.

Assessment Content	Weighted Average	Description
The new feature is useful.	4.64	Strongly Agree
The new feature is easy to use.	4.64	Strongly Agree
Digital images provide more comprehensive and accurate information.	4.73	Strongly Agree
Text provides more comprehensive and accurate information.	5	Strongly Agree
(Pre-test) Replace the item or get a refund is easy.	1.63	Disagree
(Post-Test) Replace the item or get a refund is easy.	4.82	Strongly Agree
You are willing to pay for this feature.	2.45	Disagree
(Pre-test) You are willing to buy V&F on an e-grocery app.	3	Neither Agree nor Disagree
(Post-test) You are willing to buy V&F on an e-grocery app.	4.27	Agree

Conclusion & Future Work

The results of the evaluation indicate that providing consumers with a way to assess the quality of goods on e-grocery shop apps **does increase their willingness to buy V&F**. A variety of digital images, more detailed information about the item, and the option to replace the item or get a refund are important factors that enhance their online shopping experience.

In the future, more participants and stakeholders could be invited to take part in the evaluation of the high-fidelity prototype, to continually iterate and improve. Additionally, the new feature can be combined with automation technology and freshness detection technology for V&F.