

Testing Results

Add Digital Platform

Microsoft Excel Macro-enabled button implemented to add digital platforms.

Missing Criteria Values / Outside Desired Range

System designed with format-protected tables. User cannot manually type in any of the cells, but are prompted to enter values via a dropdown list.

Tie Frequency

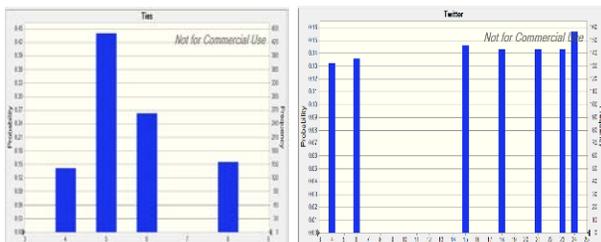
A tie between digital platforms occurred in each simulation. Compared to the number of platforms in the system, these tie occurrences are low. The team concluded that a tie is an allowable outcome.

Ensure Output

Implemented settings on Pivot Table Slicers for Age Range and Gender. If there are no digital platforms for that combination, then those options will become grayscale.

Occurrence of Outcomes

Distributions showed that no platform consistently ranked the best nor was a platform consistently ranked the worst platform in the simulations.



Tie Frequency & Twitter Rank Frequency

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"Locate your next opportunity."

Marketing Decision Support System



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Background

1990s

- Garmin has been a worldwide leader in satellite navigation, setting the bar for personal navigation devices.



2014

- Garmin introduced the Vivo Series to the wearable activity tracking market



2017

- Today, Garmin offers an extensive line of activity trackers for adventurers, professionals and activity “dabblers”.



Project Overview

Problem

There is a need for Garmin to increase the recognition of their Vivo series of activity trackers to become more competitive in the wearable device industry.

Opportunity

Coordinate is taking the opportunity to provide Garmin with a tool to support digital marketing decisions to effectively raise awareness and sales of the Vivo series through exposure to the correct audience.

Mission

Leverage Garmin’s marketing decisions with a solution that identifies digital marketing platforms appropriate for their target demographics.

Design of Marketing Decision Support System

Scope

Design and implement a Marketing Decision Support System (MKDSS) for Garmin.

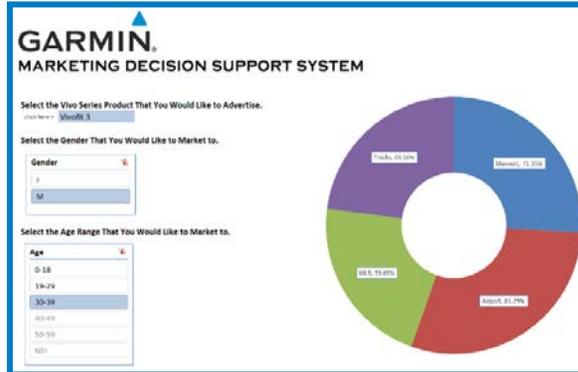


Figure 1: User Interface

On the User Interface of the Marketing Decision Support System (MKDSS) shown in Figure 1, Garmin can select the Vivo Series Product, the gender, and the age range of the target demographic. The results of the ranked digital platforms are displayed in the visualization.

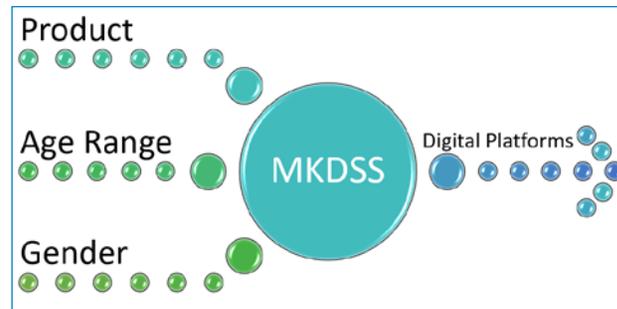


Figure 2: MKDSS Context Diagram

Figure 2 shows the flow of the inputs through the MKDSS which then generates an output of digital platforms. The MKDSS contains predetermined criteria values and a math model which calculate the percent match of the digital platforms from the inputs.

Criteria

Digital Marketing Platforms and Garmin Vivo products were considered on the basis of 9 different criteria defined below and shown in Figure 3.

Figure 3.

Physical Aesthetic - The physical appearance of the technology influences the customer more than the functionality of the technology.

Engagement - The level of proficiency a customer needs to use the technology.

Feedback - The technology has a wide variety of features.

Contemporary - The customer values the newest and most innovative technologies.

Popularity - The technology has a large user base compared to competitors in their respective industries.

Notified - The amount of notification types that a product or service can provide to a customer.

Personalization – The customer's ability to customize the technology.

Images Instead of Text – The customer prefers to view visual information rather than textual information.

Usability - The degree of ease when using the technology.

View Type	Visual	Engagement	Feedback	Contemporary	Popularity	Notified	Personalization	Images/Text	Usability
Vivoactive	0	3	3	2	0	2	3	0	0
Platform	Visual	Engagement	Feedback	Contemporary	Popularity	Notified	Personalization	Images/Text	Usability
Airport	3	2	1	3	4	1	3	3	4

Figure 3: Criteria in Math Model