

Peer Review File

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Note to the Reviewer

Thank you for your review and consideration for publication. I'm confident that a large audience of stakeholders (including healthcare researchers, clinicians and allied health practitioners, digital health leaders, technologists, patients, industry and government) will find great interest in the 4 imperatives detailed in this commentary. I have responded to every point made by the reviewer, and have described the new revisions below in the color green. If you have any questions, please do not hesitate to reach out. I appreciate your feedback and the opportunity to share these healthcare insights with your team and the health technology community.

Abstract

Comment 1: While the abstract is evocative and easy to read, I would suggest the authors to add a clearer objective statement that orients the reader to their topic. It seems like Digital Ecosystems is the answer to some of the issues you've mentioned, but what about it and what is digital ecosystems? Abstract should be a robust and standalone component of the paper because many researchers including myself only read the abstract of papers at times.

Reply 1: Based on your helpful suggestion, the abstract now has a clearer objective statement to orient the reader to the topic, provides further background context, and directly lists the purpose and goal of the paper's four imperatives. In the original version of the manuscript, I indicated the solution was "digital ecosystem" – which is true, but agree that was too vague. Therefore, I have focused more on the four imperatives (which are all digital-focused solutions). I have re-stated this in a new way, and highlighted that these imperatives serve as a substantive tool for optimizing future business strategy (Line 16-25).

Comment 2: I also suspect that this is a commentary rather than an empirical investigation. You need to clearly state in the abstract that is a commentary.

Reply 2: I have clearly stated in the abstract this is commentary (Line 19)

Introduction

Comment 3: First paragraph: I would argue that consumer expectations have already shifted considerably. While yes you are right they will likely continue to shift, they have shifted dramatically in the past decade alone.

Reply 3: Adjusted text to address the reviewer's comment about past, current, and future changes in consumer expectations.. I also agree with the comment #6 below suggesting I provide more

“meat” in the introduction. Because of both of these suggestions, I have added more support and background to this section (Lines 32-50)

Comment 4: First paragraph: What is a profit pool?

Reply 4: The business term shifting “Profit Pools” refers to the shifting in total profits earned in an industry along a variety points within a specific industry's value chain. I have deleted this sentence.

Comment 5: Second paragraph: Who are the “non-traditional players” you are referring to?

Reply 5: I have updated the manuscript to provide a description (line 54-58). Non-traditional players are companies that have not historically provided healthcare offerings to the market, but are now providing new products and services that compete with large traditional healthcare organizations. These non-traditional companies are innovators in different industries (such as high-tech, retail, consumer goods, electronics, etc.) (detailed line 54-59)

Comment 6: Overall, I think the introduction needs **a bit more “meat”** in terms of the topic you are looking at, the gaps in the research, all of which lead into the rationale for why you are writing this paper. I see very little description of all three aspects. Though I appreciate the relatively clear objective statement.

Reply 6: I have added more “meat” to the introduction. Namely, focusing on additional description surrounding (1) the central topic (2) current climate and where the market is going and (3) who and why I am writing the paper. (see reply to comment #4 and #5)

Patient-centered care? Think again

Comment 7: You use patient-centered care and patient centric care. I would suggest you use the former term because it is more common for consistency.

Reply 7: I have changed every place that says “patient centric care” to now say “patient-centered care” to ensure consistency across the article (ex: Line 66,86,164)

Comment 8: I think if you are switching your focus to patient-centered care, you should define it briefly in the context of your topic.

Reply 8: I have now defined patient-centered care at the beginning of the paragraph, which includes a source from the Institute of Medicine. (Line 68-70)

Comment 9: You should also include descriptions of explanations of Figure 1 and Table 1. I don't see its fit within the content.

Reply 9: A descriptive explanations of Figure 1 and Table 1 are now included. This additional description ties table/figure back to the idea of patient-centered care. Large healthcare organizations have patient-focused missions, but are laggards in demonstrating lasting patient engagement and consumer loyalty practices relative to other industries. This allows non-traditional players to have an advantage. Seeing that healthcare companies are so behind on patient centered care draws attention to the 4 imperatives as an opportunity for them to improve. This is summarized in Line 82-87.

Comment 10: You mention growth mindset: you need to define this because it may not be as common of a terminology as you think.

Reply 10: Deleted “growth mindset” and made the ending more clear (Line 112-114)

Four Key Imperatives

Comment 11: Good research is transparent on its approach and processes. In this vein, how did you develop these four key imperatives?

Reply 11: I’m passionate about helping improve healthcare through advances in technology. Over the past 3 years I have diligently followed the healthcare market, identified emerging trends across industries, documented them thoroughly in my notepad, and created my unique point of view. From these years of insights, I have analyzed, compiled, and determined that 4 of the imperatives were ground-breaking, provocative, and extremely future-relevant across industries. I’ve summarized these insights into a single article, which is the creation of this commentary review article I am presenting to you.

Comment 12: Furthermore, what is the purpose of these four key imperatives? Are they meant to key decision-makers and managers?

Reply 12: I have added the purpose of the article in the abstract, introduction, and peppered throughout the article to make it clearer to the audience (Line 19-25)

The purpose of these four key imperatives is as follows:

- Decision makers and executives are struggling to identify and build the relevant cross-industry approaches, capabilities, and leadership they need to succeed in our new era of innovation and healthcare convergence. A better understanding of these trends across the healthcare landscape (including innovation by other industries) serves as a substantive tool for optimizing future business strategy, for driving effective strategic planning, and unlocking new possibilities for improved healthcare delivery.
- Each of the four imperatives focuses on the ongoing shifts across the healthcare ecosystem, examines upcoming state-of-the-art technology, invites readers to re-examine the evolving healthcare space with a newer awareness, and recommends strategies for how incumbents and new entrants alike can succeed and overcome industry challenges.

Comment 13: Table 1: Please describe in more detail the contents of the table and how it relates to your topic. What is the NPS score?

Reply 13: I have added further description to the table, and included a clearer definition of NPS (Line 76-81). The Net Promoter Score (NPS), is a business index ranging from -100 to +100, which measures the willingness of customers to recommend a company's products or services to another customer. The NPS is an effective business tool for gauging a customer's overall satisfaction with a company's product or service, which ties to the idea of patient centered care. It also provides insight into a customer's loyalty to a specific brand. Top healthcare companies must increase their NPS score (and other similar patient retention metrics) or risk being cannibalized by other players and risk losing significant growth (line 85-92).

Comment 14: What is a demand aggregation model?

Reply 14: A demand aggregation model is a unique type of business model that is emerging in healthcare, and also growing in other consumer-facing industries outside of healthcare as well. This business model tends to feature multiple companies partnering, combine capabilities or purchases of common goods or services, and in return they often yield economies of scale or increased profit. I've added a few more details to this section! (226-228)

Conclusion

Comment 15: Please re-mention the four key imperatives since they are an essential component of your paper.

Reply 15: Re-mentioned the four imperatives at the end of the paper! (289 – 292)