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HealthCare Konnect
Scaling accuracy in diagnostics

Context Shapes Value

**Same algorithm, different value: it all depends
on bottlenecks**

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CONTEXT SHAPES VALUE

In a previous paper, we argued that defining a value proposition is never a one-size-fits-all exercise. The meaning of a product shifts dramatically depending on who uses it and in what context. Innovation, likewise, is never absolute: what appears as a breakthrough in one setting may count as only

an incremental improvement in another. Products don't speak for themselves : people and places give them meaning.

True validation, therefore, requires going beyond abstract claims. It means working in the field, understanding what matters, and co-designing

solutions that reflect real, lived realities.

This white paper explores how to contextualize the value proposition of AI in healthcare and move from generic promises to demonstrable gains in workflow optimization and system-wide transformation.

When “Time Saving” Means Different Things

Take pathology. Subjectivity is well known in areas such as biopsy length-to-tumor ratio and grading. Here, AI provides an obvious benefit: automated measurements, color-coded pattern recognition, and ratio calculations. Yet the real impact of these features emerges only when placed in context.

In Morocco, where the shortage of pathologists is severe, these features deliver more than efficiency: they ensure continuity of care. Every minute saved on manual measurements directly increases diagnostic capacity, which is vital when expertise is scarce.

However, when the same solution was introduced in Switzerland, users highlighted a different challenge. Reading slides was not the main drain on time; writing comprehensive reports for multidisciplinary meetings was. More than half of the 44 minutes spent per patient went into drafting reports. The real breakthrough came not from faster grading, but from generating a structured, one-page summary with histograms, ratios, and color coding. This adaptation cut overall case time by 50% and accelerated a hospital-wide digital transformation.



The lesson:

The same algorithm can deliver radically different value depending on local bottlenecks. Contextualization not only uncovers these variations, it amplifies both the perceived relevance of the product and the tangible outcomes for its users.

When Seconds Don't Sell, but Cognitive Relief Does

Radiology offers another telling example. A company developed an algorithm to flag normal chest X-rays. At first glance, this looked like a timesaver. But in practice, reading a chest X-ray usually takes about five minutes—only thirty seconds of which involve looking at the image itself. Cutting that in half saves a mere fifteen seconds, hardly a persuasive value proposition.

The real breakthrough came when the focus shifted from speed to cognitive relief. Instead of chasing marginal time savings, engineers collaborated with clinicians to design a triage mechanism. Cases were color-coded directly in the image viewer: green (certainly negative),

orange (probably negative), and red (positive). What this delivered was more than efficiency : it reduced uncertainty, lowered cognitive load, and streamlined prioritization.

Viewed through this contextual lens, the impact became even clearer. In centers handling large numbers of visa applicants (where the probability of positive cases was higher) triaging produced a 40% reduction in total interpretation and reporting time. What began as a modest technical improvement transformed into a workflow enabler, reshaping how radiologists organized their day and managed patient flow.



Three Takeaways for AI Vendors

These cases highlight three enduring truths about AI in healthcare:

- 1. Value Is Context-Dependent.** Adoption hinges on local bottlenecks and priorities. What is a “must-have” in one country may feel like a “nice-to-have” in another.
- 2. Customization Elevates Impact.** Adjustments—whether in report structure, visual coding or workflow integration—dramatically amplify both perceived and real usefulness.
- 3. Workflows Shape Success.** Clinicians seek more than diagnostic precision; they look for relief from the administrative, cognitive, and coordination burdens that weigh on everyday practice.

That said, these takeaways ultimately call attention to the broader landscape in which integration unfolds. Even the most rigorously designed solution risks forfeiting much of its value when reduced to formats that obscure or diminish its distinctive strengths. Accordingly, a critical principle underpinning sustainable adoption is the imperative to ensure integration without dilution.

Integration Without Dilution

Software vendors too often fall into the trap of simplifying robust solutions into watered-down formats under the pretext of easier integration. A lung nodule detector, for instance, may be reduced to a static PDF report—stripped of the interactivity that constitutes its real value. Such reductions not only compromise clinical adoption but also erode long-term trust

in the technology. By contrast, integration should serve as a means of preserving and extending functionality. A platform’s architecture must safeguard the core capabilities of AI solutions while simultaneously allowing for the addition of new ones and ensuring that innovation remains visible, usable, and valued within daily clinical practice.



Conclusion

AI in healthcare will never prove its value through efficiency claims alone. Its transformative potential emerges when solutions are co-created with practitioners, adapted to local realities, and embedded into the very fabric of clinical workflows. Vendors who embrace this vision transcend the role of tool providers. They become the architects of human-centered innovation by shaping environments

where technology does not merely assist in diagnosis, but reimagines how care is conceived, delivered, and experienced. In this light, AI is not just an instrument of efficiency, but a catalyst for a new era of healthcare—one that advances the well-being of both patients and practitioners, and restores the human dimension at the heart of care.

