

Innovation as Strategy

Enabling life sciences of the future



EVERSANA
INTOUCH®

Innovation as Strategy

A mindset and way of working that drives us
in supporting our clients' businesses



Innovation continues to drive the life sciences industry forward, propelled by the accelerating pace and expansive scope of digital transformation with artificial intelligence (AI) emerging as a defining factor. From revolutionizing research and development to streamlining commercialization processes, the integration of AI adds a new layer of complexity and significance. Staying ahead of this evolving landscape is now more challenging yet more critical than ever. Innovation has shifted from being a mere “nice to have” to an indispensable element determining an organization’s success. The ability to harness AI and deliver solutions that effectively address the most intricate challenges has become a pivotal aspect of thriving in this dynamic environment.

We believe that “innovation” is not something that should be relegated to one division or department. Rather, we believe it is a mindset that should be

embraced across the entire organization. When harnessed correctly, innovation can act as a catalyst to drive others forward, do things that have never been done before, take measured risks, and adapt to new realities.

Our exploration of Innovation as Strategy began with the release of our initial whitepaper, unveiling its framework, its key pillars and respective subtopics. From the future of field forces to the evolution of scientific exchange, the framework provides a comprehensive guide for the integration of innovative approaches in life sciences.

Through diverse projects with our clients, leaders at our agency reflected on Innovation as Strategy from their perspective, offering practical advice, best practices, and real-world examples with a series of deep-dive articles. This booklet serves as both a culmination and continuation. It’s a testament to our commitment in not only enabling innovation internally, but also to our clients and the global health ecosystem at large.

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“When harnessed correctly, innovation can act as a catalyst to drive others forward, do things that have never been done before, take measured risks, and adapt to new realities.”

Roberto Ascione
President, Health Innovation,
EVERSANA INTOUCH

Innovation as Strategy

Our Innovation as Strategy framework includes 6 core areas addressing specific needs of the life sciences industry.

DIGITAL TRANSFORMATION OF BRANDS

Future of Field Forces
Omnichannel Maturity
Empowering User Flow
Ideation with AI

CONNECTED EXPERIENCES

Focused Approach to Consumer Centricity
Measurement Evolution:
From KPIs to CPIs

REIMAGINING SCIENTIFIC EXCHANGE

Increasing Importance of Medical Affairs
Peer-to-peer HCP dynamics

INNOVATION

EMERGING BUSINESS MODELS

DTx, Telehealth, and Digital Care Models

DATA DRIVEN ENTERPRISE

Data Science in R&D
Precision Engagement
Building Large Language Models (ChatGPT)

CHANGE MANAGEMENT & SHIFTING CAPABILITIES

Evolving Skills and Processes
Skills and Mindsets for the Future

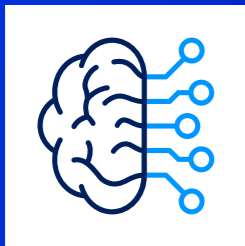
INNOVATION

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1.0

DIGITAL TRANSFORMATION OF BRANDS



- Future of Field Forces
- Omnichannel Maturity
- Empowering User Flow Ideation with AI

Discussions around the digital transformation of how brands go to market often center on the novel technologies supporting this. However, success in this paradigm shift is underpinned by changes in people, systems, and processes.

Starting with ‘people’, we must focus on the future of field forces. A key element required here is training for field teams to enable them to engage virtually with customers, use digital content in physical settings, and coordinate interactions across the customer journey while understanding key customer insights.

Omnichannel maturity speaks to the evolving ‘systems’ that make it all work. Beyond implementation of new enterprise technologies, these new channels need to be integrated to provide a single, real-time view of the customer. At the most mature levels, data from all customer touchpoints combines to allow forward planning and predictive marketing. And finally, the development of such systems can be streamlined through processes such as empowering user flow ideation with AI.



01 | DIGITAL TRANSFORMATION OF BRANDS

THE FUTURE OF FIELD FORCES IN LIFE SCIENCES: TIME TO REPURPOSE THE REP?



Future of Field Forces
Omnichannel Maturity
Empowering User Flow Ideation with AI



Paul Tunnah
SVP, Managing Director,
Global Integration,
EVERSANA INTOUCH
[in](#) [✉](#)

For anyone who has worked in life sciences for more than ten years, you will recognize that the ‘**future of field forces**’ has been a hot topic for some time. We seem to have gone through several phases of prediction, none of which have proven particularly reliable.

In the early 2010s, when hype about digital transformation of life sciences was at its peak, the ‘death’ of the sales rep was loudly proclaimed, with the potential for online channels to deliver an efficiency in engaging HCPs that a fully loaded rep spending time driving around could not match. But even today, it hasn’t come to pass. Then, the narrative moved onto the concept of the ‘**orchestrator rep**’, who would remain as the central controller of dialogue with the HCP, empowered by an array of digital channels and novel content formats, to help them put all the notes together into a beautiful brand symphony, rather like the conductor of an orchestra.

And here we are in 2024, and everyone is now talking about **artificial intelligence and ChatGPT**, in the context of how it could replace reps (and many other roles). Do I think it will? Well, as financial advisors would say, “past performance is not an indicator of future success”, but I think this prediction will also prove to be not entirely correct.

So, what is the future of the field force?

Well, as is often the case, the reality is a little bit more nuanced. I’ve said before that we need to move away from this notion of ‘**digital versus person**’, or ‘**offline versus online**’, because **in reality we need both**.

The last few years of COVID have, to me, clearly demonstrated two things. Firstly, digital has been vastly underutilized and the only barrier to its adoption is changing people’s behavior (which is a pretty big one, to be fair). Secondly, as human beings we crave actual interaction with people and even the best digital engagement cannot replace this (OK introverts, I hear you, but it’s generally true).

The future of the field force is therefore about enabling reps (and MSLs) to smartly use both face-to-face interactions and digital channels to take customers on a journey, knowing which piece of information is relevant to which customer at each specific moment. In effect, I do believe in the ‘orchestrator’ principle, but it’s just taken us a while to get there.

A few pieces are now finally dropping into place to enable this to happen:

- CRM systems that are integrated across central teams (marketing, medical) and field forces, allowing **coordinated data capture and visibility** on activities.
- **Dynamic customer experience architecture**, rather than static personas, which enables building of a more realistic customer journey that can adapt over time, as customers evolve their thinking.
- **Modular content approaches**, which enable field forces with ‘bite size’ chunks of the brand story (and more nimble content approval processes to facilitate this).
- **Better training and incentives** for field forces, aligned to this new paradigm and moving away from archaic measures like ‘call frequency.’

This is all helped by more **digitally native** individuals coming into both the field force and central marketing and medical roles, plus now also emerging into senior decision-making positions. But there is another key aspect to where I see the future of field forces heading, which is better **coordination across silos**, especially marketing and medical.

I know that there are entirely valid reasons why, from a regulatory perspective, life science companies (and I’m focusing here more on the prescription pharmaceutical industry) have firewalls between the medical teams, who focus on ‘above brand’ science, and the commercial brand teams.

However, when you put yourself in the shoes of a customer (the HCP), it doesn’t make a lot of sense to have two disparate groups of people telling you different parts of what should be one big, cohesive story. To adopt a truly customer-centric way of engaging, the industry needs to find a way to tackle these compliance issues and have a single in-field person coordinating their messaging for the customers (ideally across therapeutic areas and products, but in the short-term at least within each brand).

This individual could then truly coordinate the needs of a customer on-demand, delivering to them the right **above brand** and **product information**, when they need it.

As an aside, I reference this more coordinated approach in an article I wrote pre-COVID, called **‘Building a new type of pharmaceutical company – a vision for pharma 2.0’**. It might sound like a challenge to achieve this, given the decades-old internal silos that have been built up around different functions, but some companies are exploring this very route. Initially, these experiments are focused on key accounts, where a central Key Account Manager is coordinating with other functions, but I think this model will expand.

Finally, what about the potential for AI to disrupt the model?

I am a firm believer in the adage of ‘a good [insert role here] who uses AI is better than a good [insert role here] or AI alone’. OK, so my version isn’t the snappiest quote, but it does apply to so many roles inside life sciences and beyond.

The point is that **AI has a very valid place in helping the field force** move customers along a meaningful journey, including factoring into things like ‘next best action’ to suggest what should come next. But you still need, in my view, the **intuition and emotional intelligence of the human being** to interpret this.

To come back to the question in the headline – yes, I do think it’s time to repurpose the rep (or MSL) – and has been for a while, but we’re finally seeing the combination of technology, process adjustment, training and behavior change all come together to deliver this.

Get in touch with **Paul Tunnah**:



01 | DIGITAL TRANSFORMATION OF BRANDS

OMNICHANNEL MATURITY: IT'S NOT ABOUT THE TECHNOLOGY

Omnichannel. It seems to be the word of the moment in life sciences, especially in the pharmaceutical sector. While once just having 'digital' in your title meant you were one of the cool kids, I'm now seeing more roles with 'omnichannel' in the title, especially in commercial functions.

So, to ask the question many people don't like to, what does it actually mean?

A cursory Google search will reveal all kinds of explanations, including how omnichannel is different from multichannel. But, in simple terms, omnichannel is about transforming customer engagement to ensure that a cohesive, and joined up, message is delivered across all personal and digital channels (including the field force) – not just hitting customers with more channels but connecting the dots across them to form a unified and effective story.



Future of Field Forces
Omnichannel Maturity
Empowering User Flow Ideation with AI



Paul Tunnah

SVP, Managing Director,
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EVERSANA INTOUCH



The result: a better customer experience and more impactful message delivery for your brand (which should equal higher sales, if your positioning is solid).

Assuming that sounds good, the next question from senior leaders is: what do we need to deliver this?

Most often, the answer to this question is 'technology' – CRM and all the systems that sit around it, enabling effective customer profiling, content management, next-best action, and so on. For sure, you cannot deliver omnichannel transformation without this technology.

However, given that there are so many good technologies around, why have so few companies achieved omnichannel nirvana?

In my experience, the answer is that, while technology is a key enabler, to view achieving omnichannel maturity (Figure 1) as predominantly a technology project is a path to failure. And I still see too many companies charging down this route.

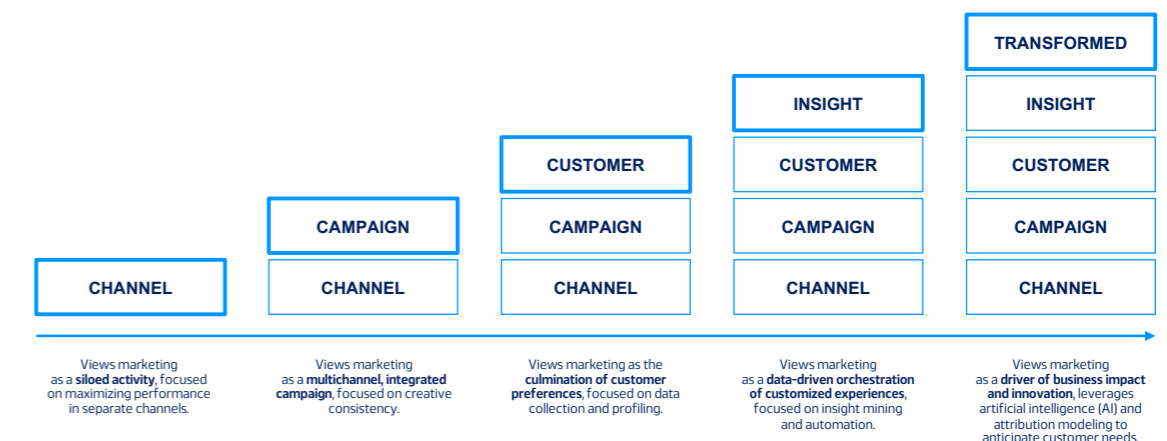


Figure 1: True omnichannel maturity requires both technology and fundamental shifts in the operating model to become more customer- rather than brand-centric.

What else is needed then?

Here are some key areas that deserve at least equal focus as technology, to deliver real success.

Vision and leadership buy-in

As mentioned above, the initial challenge is that there is still a lack of understanding of what omnichannel means. There are multiple interpretations of it, even where it's understood.

Before embarking on any transformation, this needs to be aligned across all levels of leadership, from C-level executives to the leaders who will deliver this change. This vision needs to include not only clarity on the new operating model, but also how this model will be delivered (encompassing all the following points), what success looks like and how it meets the needs of all stakeholders internal and external (including investors / shareholders).

Critically, it also needs buy-in to embrace a mindset that is first and foremost customer-centric, rather than internally brand- or function-centric.

Changes in processes and internal alignment

Changing the customer engagement model also requires changes to the current processes and functional setup, as these are all geared around the 'old' model.

This encompasses numerous areas, for example:

- Brand planning, which needs to be coordinated across all customer-facing functions (commercial, medical, market access, corporate communications) to ensure a cohesive strategy.
- Creative / content production, which must adapt to enable a more modular approach to telling the story piece by piece, allowing dissemination over time and different channels as part of a single, cohesive story.
- Compliance, which will need to operate more nimbly when approving customer-facing materials.
- Field force operations, which must tightly coordinate with central activities, whether within commercial, medical or market access.

With regards to brand planning, to achieve true omnichannel maturity this should actually be 'customer planning', starting with their needs and desires to think about how to best share brand information, rather than vice versa. This is a key component of the industry's long-voiced promise to be more customer-centric.

At its core, true omnichannel transformation also poses questions around the fundamental structure of companies. For example, should there even be separate medical and commercial functions when they are both tasked with providing customers with relevant information, albeit of different types?

That's a much bigger topic for another article...

Comprehensive change management

Change management is one of the most overlooked aspects of any transformation, in my experience. Think about all the effort spent on brand marketing, where we are trying to change the behavior (prescribing) of physicians. It starts with extensive market research, which feeds into testing and retesting the positioning, then building out the experience architecture (what the barriers to change are and how we move customers through them), into the engagement experience (how we get the message across), and extensive measurement to track how we're doing and what needs to change.

Now think about how much of that same effort we typically apply to internal teams when trying to change their behavior to operate in a more 'omnichannel' way. Why is it different?

Change management is another whole topic, but it's so much more than communication. It encompasses every element listed here and, critically, requires securing the right input from internal stakeholders to understand their current beliefs and behaviors, plus securing their input and buy-in to the change being made.

My advice: engage early, understand their situation, and involve them in the solution. Don't suddenly spring a new 'solution' on them that they have heard nothing about and had no input into.

Effective data management

Data, data everywhere, but not a drop of insight!

We live in a world where massive amounts of data are created every day, and data sits at the core of any effective omnichannel system. It enables a deeper understanding of every individual customer, to the level of $n=1$, which allows more personalized, effective approaches.

But only if the data is as complete and accurate as possible.

This requires an understanding of data accuracy at the point of entering the system, identification of gaps, the ability to integrate disparate data sources together (interoperability), and ongoing cleansing / maintenance to ensure it's kept up to date. Without this, even a well-structured data system will quickly become redundant.

Also, make sure the system is set up so that those who know the customer best have the opportunity to challenge the data as part of the maintenance process. This is principally the field forces operating on the front line, because – shock and horror – sometimes they might know something that your data machine doesn't!

Even before you bring in data scientists and smart AI applications, customer profiling needs to embrace both secondary data sources and first-hand human knowledge.

Fresh incentives

Omnichannel transformation can often feel like herding cats to those leading it. And how do you herd cats? Simple, you move their food!

Objectives and incentives are an often overlooked area in customer engagement transformation. At its core, a more customer-centric omnichannel approach seeks to improve the quality of each interaction, not just (or indeed at all), the frequency of interactions.

This needs to be reflected in the personal objectives and incentives for everyone involved in making it happen, from the senior global leaders right through to the local sales reps and MSLs.

For example, trying to get sales reps to invest time in understanding how to deliver more modular content and integrate their activities with central marketing approaches, like email or webinars, is never going to work if they remain incentivized by the number of calls, they make every day.

Instead, it's important to work back from the desired end model (and what success looks like in this) to define overarching KPIs and translate these into specific objectives for all internal stakeholders involved in driving the change, with their incentives linked to these.

In summary, achieving omnichannel maturity is about carefully considering all aspects of the organization that need to change – people, systems and processes. The above factors are key components of this, and I'm sure you can think of more.

Technology is an important part of achieving this maturity, within the 'systems' bucket. However, viewing omnichannel transformation as a predominantly 'technology' problem / opportunity / project won't deliver success.

You could even say that delivering true omnichannel maturity requires 'omnipotency' – the power to influence and lead many others, across every function, on this journey. I look forward to working with more Global Heads of Omnipotency on transforming our industry!

Get in touch with **Paul Tunnah**:



01 | DIGITAL TRANSFORMATION OF BRANDS

EMBRACING THE FUTURE: EMPOWERING USER FLOW IDEATION WITH AI

In the fast-paced world of digital innovation, efficiently ideating and defining user flows is crucial for the success of any application or service. Traditionally, this process involves several rounds of discussion and iteration between the customer and the internal team, leading to a time-consuming and resource-intensive cycle.

However, the advent of modern technology, particularly artificial intelligence (AI), opens up exciting new possibilities for streamlining this creative journey. By involving AI from the very outset of the process, we can transcend the limitations of the traditional model and create user flows that are more intuitive, secure, and error-free. Let us explore how AI can revolutionize the way we shape user flows, using a compelling case-example.



Future of Field Forces
Omnichannel
Maturity
Empowering User
Flow Ideation with AI



Joonas Turunen
UX Director,
EVERSANA INTOUCH



The Case-Example: Crafting a Secure Register and Login Flow

Imagine a customer has provided precise requirements for a register and login flow they want for their upcoming mobile application. Given the need for heightened security and error prevention, the user flow demands meticulous planning and designing. In the conventional approach, the customer's information would be shared with the team, initiating a series of iteration rounds where each member contributes their perspective. However, we propose a more innovative way: incorporating AI, specifically Natural Language Processing (NLP) models like ChatGPT.

Early AI Integration: From Information to Action

Rather than embarking on a lengthy journey of brainstorming and iterating manually, the team can quickly communicate the customer's requirements to the AI model. The NLP machine becomes an active participant by transforming the information into tangible outcomes. For instance, a question or task can be assigned, such as "Write me a user flow with numbered steps based on this information." Alternatively, the AI can be asked to generate a code for a diagramming tool, like Mermaid, to create an illustrative user flow diagram. This proactive involvement of AI ensures a smooth transition from ideation to execution, eliminating unnecessary lag time.

Streamlined Collaboration and Immediate Feedback

With the AI model assisting in creating the user flow, the team can start discussing and refining the design immediately. The traditional siloed approach gives way to collaborative brainstorming sessions with the AI acting as a virtual team member. The dynamic interplay between human creativity and AI's rapid processing capabilities enables the team to explore diverse possibilities without being constrained by time or resources. As the AI-generated diagram serves as a solid foundation, the team can request modifications, additions, or removals with ease, streamlining the entire iteration process.

Efficiency and Resource Optimization

With AI, the need for multiple iteration rounds in this process is drastically reduced or even eliminated. This efficiency allows the team to focus on other critical aspects of the project. Instead of lengthy back-and-forth between the customer and the team, the AI empowers the team to present a refined and comprehensive user flow in a single sit-down. This newfound efficiency not only benefits the team internally but also leaves a positive impression on the customer by showcasing a proactive and agile approach to problem-solving.

Human-AI Symbiosis: Unlocking Creativity

Contrary to popular fears of AI replacing human creativity, this case-example demonstrates the true potential of human-AI symbiosis. AI's ability to swiftly generate comprehensive user flows frees up the team to focus on higher-order creative thinking. Rather than being bogged down by the minutiae of the user flow, team members can channel their creativity into envisioning unique and innovative features for the application. Thus, AI enhances human capacity and enables a harmonious fusion of human ingenuity and AI's analytical prowess.

Incorporating AI into the Creative Process

Incorporating AI from the start of the user flow ideation process opens up a realm of possibilities for efficiency, creativity, and collaboration. By embracing AI, teams can transform the traditionally iterative and time-consuming process into a streamlined and engaging journey of innovation. The case-example of crafting a secure register and login flow exemplifies how AI can swiftly convert information into action, foster collaborative brainstorming, optimize resources, and ultimately unleash the true potential of human creativity. As technology continues to advance, we must embrace these transformative opportunities, redefining the future of user flow ideation and design in a bold and inspiring manner.

Get in touch with **Joonas Turunen**:



2.0

CONNECTED EXPERIENCES



- Focused Approach to Consumer Centricity
- Measurement evolution: From KPIs to CPIs

Conventional Customer Journeys have become idealized, complex pathways that all too often are no longer seen from the customer's "point of view", having instead become a tool to build and track a brand's path to success.

It's time for something new. Something which reflects the reality that the balance of power between brand and consumer is now heavily tipped in favor of the latter.

Connected Experiences involve creating an ecosystem of channels and platforms that adapts to the challenges and objectives of the brand or product. These channels/platforms are connected by 'always on' two-way data flows, and require a focused approach to consumer centricity, one which encompasses personalization, empowerment, acceleration, collaboration, and education. It also means overhauling the Key Performance Indicators and replacing them with Consumer Performance Indicators, outcomes that consumers say are important to them and are measurable in increments consumers actually value.

02 | CONNECTED EXPERIENCES

CONSUMER CENTRICITY - A PEACE OFFERING

For the healthcare industry to truly understand and embrace **consumer centricity**, we must look beyond our category to those who have been doing this successfully for many years.

To this end, we've developed an acronym, **PEACE**, to help focus on what's important and provide examples of organizations who excel at it.

PERSONALIZATION (P)

Healthcare communications tends towards a 'one size fits all' approach. Instead, we must strive to **meet and then exceed** the needs and preferences of all stakeholders in the health space. Sephora, the LVMH-owned beauty retailer, created an approach called "assisted self-service" which bridges an unrivaled in-store experience with digital engagement that consumers actually find useful.

Their three-tier loyalty program includes the expected discounts and free shipping but also a choice of six birthday presents, premium free samples you can choose invitations



Focused Approach to Consumer Centricity
Measurement evolution:
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James May
Global Media Lead,
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to out-of-hours exclusive events and even priority access to product launches. Their app provides VR makeup make-overs, connectivity to online or in-store experts and personalized product recommendations based on your shared beauty preferences. The health sector could learn much from this lack of friction between real life and online.

EMPOWERMENT (E)

Consumers, increasingly in control of their health and wellness experiences, require tools and resources which help inform **better decision making**. Starbucks' ambitions in Asia took empowerment to a new level. China has long been their growth target but sustained success for any foreign brand has always been challenging, especially given significant cultural differences. So, back in 2017, the coffee retailer offered to pay for critical illness health insurance coverage for the parents of its employees. Yes, their parents, not the staff themselves. Eligibility meant they needed to work at the company for more than two years and have parents under the age of 75 but this critical insight - although most of the elderly have very basic private insurance, their children believe it is their responsibility and *duty* to help - was genius. It probably helped that the insurer chosen was state owned, and the country has an aging population. But Starbucks turned the barista into a hero and 2,300 stores then, to more than 6,000 now.

ACCELERATION (A)

The 4th Industrial Revolution of **AI, robotics, and the Internet of Things** has accelerated consumers' expectations, demanding experiences in the channels that are most comfortable and convenient for them, in real time. Amazon realized this but first had to overcome data connectivity across channels and devices. Their 'North Star' was Amazon Prime, a proposition so attractive that a modest annual fee gets you unlimited free deliveries, and generic drug prescriptions for \$5/month, all while watching several billion dollars of exclusive entertainment. Their acquisitions of Pillpack (\$750 million, 2018) and One Medical (\$3.9 billion, 2022) provided even more data alongside household purchases.

Having patented '1-Click' in 1999, it won't be long before Amazon introduces 'Zero-Click' purchasing where each week, a box of specially collated items is delivered based on the machine-learned algorithms of your buying history. With a market capitalization of \$1.1 trillion, Amazon has its sights set on healthcare to deliver the next trillion.

COLLABORATION (C)

Every June, Apple focuses on developer collaboration with a 5-day event in California. Alongside 5,000 in-person attendees and over 20 million views of the event online, Apple employees share improvements to software development platforms, have one-on-one “lab” consultations and give out awards. Aside from developers, Apple also prioritizes **consumer collaboration**. In 2017, “Today at Apple”, a creative in-store initiative, was launched to educate and inspire consumers to “go further with their passions”. To date, over 20,000 free sessions have been attended by millions around the world with Apple experts, alongside hired specialists, sharing how to get the most out of your iPhone, iPad, or Mac in areas including photography, video, music, coding, and design. Furthermore, Apple Watch collaborates with your body, monitoring heart rate, measuring blood oxygen levels, acting as an ECG and helping with **medication adherence**. The future of health just might be on your wrist right now.

EDUCATION (E)

Medical education is a cornerstone of the health industry but has mostly struggled to embrace today’s digital reality. Organizations in the education sphere who were ‘born digital’ such as the Khan Academy, founded in 2006 by its namesake, provide great inspiration. As a non-profit organization, funded across the years by Google, the Gates Foundation and Elon Musk, they create online tools which help educate students. Its free-to-use services combine YouTube videos (2 billion views and counting) with its website and mobile application to deliver **personalized learning** where users can track their progress through practice exercises. Following an instructional strategy called Flipped Classroom, instead of being teacher-led, the Khan Academy is learner-centric allowing users to proceed at their own, individual pace. It includes collaborative discussions and encourages **digital research**.

Focusing on video allows **faster absorption** of information (vs text) and significantly higher long-term recall. When founder Sal Khan was asked recently about the role of Generative AI in education, something troubling many academics because of the opportunity to cheat, he stated that he believes it will offer every student on the planet a personalized tutor.

Those who embrace personalization, empowerment, acceleration, collaboration, and education **will assume leadership in the healthcare space**, with massive returns on investment. What remains to be seen is if these will be legacy health organizations or those outside or on the periphery wanting their share of this gigantic industry.

Get in touch with **James May**:



02 | CONNECTED EXPERIENCES

MEASUREMENT EVOLUTION: FROM KPIs TO CXIs

The rapid advancement of technology and access to vast amounts of data have presented new challenges in measuring and understanding customer experiences.

In this article, we will explore some key themes in this evolving landscape.

The Complexities of the Customer Journey

Traditional customer journeys have become increasingly complex in the digital era.

A study by IQVIA revealed that what used to be a simple four-stage process has now expanded to eighteen stages, accompanied by over twenty digital touchpoints. While this proliferation of touchpoints offers more data to measure, it also poses the risk of overwhelming analysis paralysis.



Focused Approach to
Consumer Centricity
Measurement
evolution:
From KPIs to CXIs



James May

Global Media Lead,
EVERSANA INTOUCH



From Passive to Active to Interactive Engagement

In the realm of global media and customer experience, there is often a tendency to focus on impressive numbers like millions of impressions or website visits. However, such metrics fail to provide insights into whether these interactions are actually influencing customer behavior. Passive engagement, such as views or clicks, offers limited value in achieving desired outcomes. Instead, it may be more fruitful to concentrate on “active engagement,” where customers take deliberate actions such as downloading guides or providing personal details. Interactive engagement takes this a step further, involving real-world commitments like in-person meetings.

Transitioning from KPIs to CXIs

Key Performance Indicators (KPIs) have traditionally been used to measure internal progress, including sales, awareness, and market share. Shifting the focus to Customer Experience Indicators (CXIs) directs attention towards the customer’s perspective. However, it’s important to clarify that CX does not stand for Customer Experience but represents “the customer’s experience or the experience of the customer,” as highlighted by Forbes.

This slight distinction holds significant implications.

Introducing Customer Experience Indicators (CXIs)

It is easy to create CXIs that merely serve as proxies for KPIs - for example, measuring customer satisfaction - without considering their passive nature. However, some companies, like The North Face, take a more comprehensive approach. They offer lifetime product guarantees, providing free repairs, replacements, or refunds. Additionally, they repurpose, recycle, or donate irreparable products. This commitment to sustainability and customer satisfaction enhances loyalty, justifies premium pricing, and stands in contrast to the negative environmental impact of fast fashion.

Understanding What Truly Matters to Customers

In his thought-provoking article by Gene Cornfield, he suggests a shift from KPIs to Customer Performance Indicators to promote customer-centricity. Rather than focusing on revenue, growth, or market share, organizations should measure their performance against indicators that truly matter to customers. Cornfield proposes speed, accuracy, peace of mind, and trust as worthy customer-centric indicators.

Shifting Measurement Focus to CXIs

While KPIs have been an integral part of marketing for decades, it's crucial to adapt to the data-rich environment we now operate in. Conducting a Net Promoter Score (NPS) survey twice a year is no longer sufficient. If you are interested in exploring CXIs further, please feel free to reach out to me on LinkedIn. I am eager to hear your thoughts and experiences.

Get in touch with **James May**:



3.0

REIMAGINING SCIENTIFIC EXCHANGE



- Increasing importance of Medical Affairs
- Peer-to-peer HCP dynamics

As emerging technologies continue to shape the healthcare landscape and the world adapts to a post-pandemic reality, the pharmaceutical industry is faced with the challenge of engaging providers with science-driven digital content.

Medical affairs will play an increasingly strategic role in identifying and addressing the unmet needs of patients, payers, policymakers, and providers, advancing clinical practice and ultimately improving health outcomes.

Today's providers are inundated with an overwhelming amount of scientific data, leading some to describe it as an 'infodemic'. This presents an opportunity for medical affairs to provide a better learning experience – cutting through the noise and helping HCPs focus on what matters most.

By blending science with creativity, through methods such as adult learning principles, storytelling, immersive experiences, or the metaverse, we can reach providers where they are, empowering them to offer more innovative care to their patients.

03 | REIMAGINING SCIENTIFIC EXCHANGE

THE INCREASING IMPORTANCE OF MEDICAL AFFAIRS

As part of our Innovation as Strategy series, we further expand on the topic of Reimagining Scientific Exchange, with a deep dive focused on the Increasing Importance of Medical Affairs, from **Francis Mahmud Namouk**, SVP, Global Strategic Development, MedComms, EVERSANA INTOUCH.

Historically, pharmaceutical, biotech, and MedTech business models could be summed up in two steps: the first was discovering and developing new innovative treatments through the R&D process, and the second was passing the baton to Commercial teams who would knock on the doors of prescribers to generate sales. Then a few decades back, the role of Medical Affairs emerged to solidify the scientific narrative to inform clinicians of the latest unbiased trial data and the unmet needs (gaps) they fill. Fast forward to the millennium, the function of Medical Affairs has grown in importance, with teams **spearheading scientific exchange** (conversations), not only to address gaps but to showcase the efficacy of **post-trial studies** on patients, thus positioning them as a leading strategic player alongside R&D and Commercial activities.



Increasing importance
of Medical Affairs
Peer-to-peer HCP
dynamics



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In fact, Medical Affairs played a key role in providing **evidence based scientific data** during COVID-19 vaccine trials and also accelerating the unprecedented rollout and adoption of the vaccine. The adoption aspect is especially important to note as the decision did not solely lie with clinicians, but very much with patients, payers, and policy makers (stakeholders). Medical Affairs had the responsibility to not only **educate and inform clinicians** but also **influence all stakeholders** to agree, adopt and comply with the vaccination protocols to reach rapid and unprecedented herd immunity on a global scale. This could only be achieved by communicating both the efficacy and value (HEOR) of the data and establishing trust within a global population (excluding the minority of anti-vaxxers).

This feat demonstrates not only where Medical Affairs stands today but where its role and responsibilities lie in the future. There are three main focus areas that Medical Affairs teams should prioritize to not only maintain momentum but drive innovation within the industry

Technology

The first focus area is embracing what **technology** brings to data analytics and insights analysis and finding ways to collaborate with ‘big tech’ who, in many cases, own this data (RWE and Genomic companies for example). **Real-time information** is being increasingly analyzed by artificial intelligence, something Medical Affairs needs to monitor and supplement to ensure **compliance and accuracy**. Patients, or better yet, “all of us” are increasingly empowered to take charge of our health and well-being. We are more informed, and with access to unprecedented information online and technology such as **digital platforms, diagnostic tools, wearables and chatbots**, we are equipped with in-depth information about our health which, in some cases, surpasses what clinicians have time to access. When managed with the right scientific vigor by Medical Affairs teams, technology enables the fast curation of evidence-based information, allowing Stakeholders to make more timely and collaborative decisions.

Adult Learning Principles

The second focus area is to embrace best-in-class **adult learning principles** to not only educate stakeholders but ensure they retain the information and more importantly allow them to apply what they learn. As an example, Oncologists, are flooded with extraneous information, some refer to as an ‘infodemic’, and medical affairs have the responsibility to adopt a stakeholder-centric (some call it omnichannel) approach to ensure the **right information** is delivered to the **right stakeholder**, on the **right channels** (of their choosing), at the **right time** (always on, live or on-demand). This is critical to moving stakeholders along the adoption ladder making sure they all end up in the same place.

Creative Storytelling

The third focus area is **creative storytelling**, meaning how we, as an industry, exchange complex scientific information with stakeholders. Medical Affairs have typically delivered scientific information in conservative lengthy linear formats which are scientifically rigorous but lack compelling narratives. Simply put, they don’t tell a story. Creative storytelling has been used since prehistoric times to communicate with and educate populations. The creative combination of words, sound, and imagery (more recently moving imagery) has moved masses over the centuries to take collective action and influence life-changing moments. The key to engaging stakeholders is to deliver a creative narrative that **triggers an emotional response**, which in turn helps gain their trust and eventually their loyalty.

Medical Affairs stakeholders are **increasingly digitally savvy** and have the opportunity to showcase their leadership within Pharma, biotech and MedTech when it comes to leveraging technology, digital platforms, omni-channel communications, and data analytics. Strategic insights can be derived from these activities, generating qualitative and quantitative metrics, which provide actionable outcomes. Medical Affairs have a key role and responsibility to **engage beyond prescribers** by collaborating with all stakeholders to improve patient outcomes and the overall trust people have in the Pharma industry.

Get in touch with **Francis Namouk**:



03 | REIMAGINING SCIENTIFIC EXCHANGE

FACILITATING PEER-TO-PEER DYNAMICS AMONG HCPs

As the healthcare industry rapidly transforms, collaboration and knowledge sharing among healthcare professionals (HCPs) is vital for delivering optimal care for patients.

The traditional hierarchical model of healthcare has given way to a more dynamic and peer-to-peer approach, where HCPs engage in collaborative decision-making and scientific exchange.

Advances in medical science, evolving treatment modalities, and an explosion of healthcare information have created a dynamic environment enabling healthcare providers to stay updated with the latest medical advancements, and enhance their overall professional development. Digital solutions have emerged as indispensable tools for fostering peer-to-peer dynamics and have become catalysts for revolutionizing how HCPs interact and share knowledge in this dynamic environment.



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The following are examples of digital solutions in which Medical Affairs can play a pivotal role:

Virtual and Hybrid Event Platforms

Medical Affairs teams can leverage hybrid platforms, like **Frontiers Health**, to bring together global experts, thought leaders, and practitioners to discuss the latest research, treatments, and medical advancements. Virtual events (in particular) provide a cost-effective and efficient way for professionals to share their knowledge, ask questions, and engage in meaningful discussions without the constraints of geographical boundaries. Moreover, the availability of on-demand recordings allows HCPs to access valuable content at their convenience, fostering continuous learning and peer-to-peer interactions beyond the live event. These platforms not only provide user-centric benefits to HCPs but help field forces better understand what the next conversation with their customers should be.

Peer-to-Peer Online Communities

The rise of online communities dedicated to various medical specialties has created a digital space for HCPs to connect, collaborate, and seek advice from their peers. Medical Affairs teams can actively participate in these communities by providing accurate and up-to-date information, sharing research findings, and engaging in discussions. By doing so, they not only establish themselves as reliable sources of information, building trust within the industry, but also encourage peer-to-peer interactions among HCPs.

Medical Apps and Mobile Platforms

Medical apps and platforms designed for HCPs are becoming increasingly popular. These offer a wide range of functionalities, from clinical decision support and drug information to medical calculators and educational resources. Medical Affairs can partner with app developers to ensure the inclusion of evidence-based content and facilitate peer-to-peer interactions within these applications. For example, HCPs can use medical apps to share challenging cases, seek second opinions, and discuss treatment options with their peers. Such platforms promote collaboration, enhance clinical decision-making, and strengthen the overall healthcare ecosystem.

Social Media and Professional Networks

Social media platforms like Twitter and LinkedIn have become valuable tools for HCPs to connect with colleagues, stay updated on the latest medical news, and engage in discussions. Medical Affairs teams can establish a strong online presence by sharing scientific content, organising live chats with experts, and participating in relevant healthcare #hashtags. Furthermore, professional networks like *Doximity* and *Sermo*, to name a few, provide specialized spaces for HCPs to connect with peers in their respective fields.

These platforms facilitate knowledge exchange, foster collaboration, and enable Medical Affairs to build relationships with key opinion leaders.

Telemedicine and Virtual Consultations

The adoption of telemedicine has surged in recent years (especially during the COVID-19 pandemic), with the likes of *Teladoc Health*, *Amwell*, and **Paginemediche** leading the way. Medical Affairs can support the integration of telemedicine into healthcare practices by providing guidance on best practices, compliance, and patient engagement strategies. Telemedicine not only improves patient access to care but also offers HCPs the opportunity to consult with specialists and seek expert opinions conveniently and efficiently.

Medical Apps and Mobile Platforms

Medical apps and platforms designed for HCPs are becoming increasingly popular. These offer a wide range of functionalities, from clinical decision support and drug information to medical calculators and educational resources. Medical Affairs can partner with app developers to ensure the inclusion of evidence-based content and facilitate peer-to-peer interactions within these applications. For example, HCPs can use medical apps to share challenging cases, seek second opinions, and discuss treatment options with their peers. Such platforms promote collaboration, enhance clinical decision-making, and strengthen the overall healthcare ecosystem.

Data Analytics and Insights

Digital solutions also offer Medical Affairs teams the ability to gather and analyze data on peer-to-peer interactions. By tracking engagement metrics, identifying popular topics, and understanding the unmet needs of HCPs, Medical Affairs can tailor their content and initiatives to better fill professional educational gaps. Applying adult learning principles helps us assess not only what they retain but what they can practically apply in clinical settings.

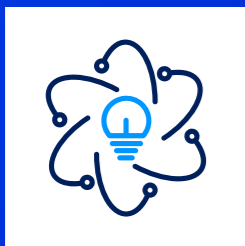
The integration of digital solutions into the realm of Medical Affairs has opened up new avenues for collaboration, scientific exchange, and relationship-building. Virtual and hybrid events, online communities, medical apps, social media, telemedicine, and data analytics all contribute to strengthening peer-to-peer interactions. As technology continues to advance with, for example, the adoption of AI and ChatGPT, the field of Medical Affairs must remain adaptable, innovative and risk-averse and harness the full potential of what digital solutions can deliver in terms of personalized care.

Get in touch with **Francis Namouk:**



4.0

CHANGE MANAGEMENT & SHIFTING CAPABILITIES



- Evolving Skills and Processes
- Skills and Mindsets for the Future

Innovation and change management are proving to be ever more essential for the life sciences industry, where companies must continuously adjust their hiring practices and necessary skills while finding new ways to enable their workforces to evolve with market trends.

Successful employees in this era embody a “digital first” mindset. They are “intrapreneurs”, not afraid of change, comfortable making data-driven decisions, embrace learning new skills, and look forward to adopting new technologies. This is a mindset typically seen at start-ups, but any company would do well to prioritize these skills in hiring.

Change management is critical for adapting to evolving market conditions and remaining relevant. It requires more than having a clear vision: it involves an alignment of skills and capabilities with existing employees. Hiring for the future, leveraging open innovation, and adopting a customer-centric approach, therefore, emerge as the foundation for companies to stay ahead of the competition and achieve long-term success.

04 | CHANGE MANAGEMENT & SHIFTING CAPABILITIES

EVOLVING SKILLS AND PROCESSES IN PHARMA: SALES, MARKETING, AND MEDICAL FUNCTIONS

The pharmaceutical industry is experiencing rapid transformations driven by technological advancements, changing customer expectations, and emerging market dynamics.

In this dynamic landscape, commercial functions are facing new challenges and opportunities. To remain competitive and drive growth, companies' representatives must adapt their skills and processes to effectively engage with customers, navigate regulatory complexities, leverage data-driven insights and start collaborating, taking advantage of AI powered tools.



Evolving Skills and Processes
Skills and Mindsets for the Future



Francesca Filippucci

People Director,
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What we have in front of us is another significant leap: ensuring that our people develop the right skillsets to navigate this demanding new reality.

Embracing Technological Innovations

In this era of digitalization, the pharma industry is starting to embrace technological innovations: digital platforms powered by AI tools provide opportunities for targeted communication, personalized engagement and data-driven decision-making.

Sales representatives need to be equipped with strong digital literacy and social media skills to effectively reach and communicate with healthcare professionals.

Similarly, the marketing function must leverage advanced analytics and artificial intelligence to gain valuable insights into customer behavior, enabling companies to tailor their marketing strategies and optimize resource allocation.

The medical function can benefit from digital tools and platforms to streamline scientific communication, stay updated with medical literature, and collaborate with healthcare professionals in a more efficient manner.

Collaborative Stakeholder Engagement

As the landscape is shifting towards a more patient-driven approach, sales, marketing and medical roles must evolve to effectively engage with new stakeholders such as patients, caregivers, and patient advocacy groups.

Collaborative partnerships with these stakeholders foster trust, improve patient outcomes, and generate valuable feedback for continuous improvement.

The incorporation of the patient's voice and perspective lets pharma companies engage in a more effective way with HCPs and institutions, tailoring strategies and meeting the evolving needs of the healthcare ecosystem.

Navigating Regulatory Challenges

The pharmaceutical industry operates within a highly regulated environment: it is required to comply with evolving guidelines and regulations related to GDPR, evolving media and new product categories, including Digital Therapeutics (DTx), whose specific regulatory framework is not yet clear. This is especially true when we consider the new market of Digital Health and Digital Therapeutics: in such a complex arena where EU markets are evolving in a fragmented way, the only current certainty is that we'll continue to navigate in turbulent waters for some time.

Traditional commercial functions will no longer be successful in such environment and the main skills that are required are related to entrepreneurship and problem solving: representatives from the various functions have to quickly adapt to changes and find creative solutions to complex situations.

Partnership orchestration

Pharma companies are moving towards a new reality where partnerships are becoming the new normal.

Partnerships with startups for innovative services to be provided to patients along with traditional treatments and partnerships with hospitals and institutions to optimize patient's journeys and experiences.

Being able to effectively collaborate across different cultures and being empathetic and accepting of our differences are crucial aspects for being successful in the long run.

While working alongside corporations and startups, we have observed on multiple occasions how difficult it can be to reach an agreement between companies with different cultures, even when they share a common objective. Thus, it's best to avoid additional challenges by coming together under one clear objective.

Adapting to Changing Customer Expectations

Patients are becoming more informed and proactive in their healthcare decisions; HCPs have to cope with new trends and national health systems' profound transformations that are changing their role in the ecosystem. Sales, marketing, and medical representatives must adapt their strategies to meet changing expectations and habits.

This involves fostering patient-centric approaches, providing educational resources to HCPs and patients, and engaging in meaningful conversations that address patients' needs and concerns.

By building trust and delivering value, pharma companies can foster the customer experience, enhancing loyalty and driving brand equity and differentiation among patients and HCPs communities.

So, what does this mean for pharma?

Sales, marketing, and medical functions are expected to evolve in response to the dynamic landscape.

The evolution of the "traditional" roles and the investment in the development of new competencies and processes aligned with these trends is key for every company: evolving employees' skillsets and developing new roles is just an element of the needed change management that pharma companies are facing.

A company's capabilities are just one piece of the equation that pharma companies will continue to face and need to resolve. If you're interested in exploring the right change management plan for your organization, let's start the conversation.

Get in touch with **Francesca Filippucci**:



04 | CHANGE MANAGEMENT & SHIFTING CAPABILITIES

SKILLS AND MINDSETS FOR THE FUTURE

In the dynamic landscape of work, marked by technological advancements and cultural shifts, the conversation around core competencies for today's workforce has expanded beyond traditional concepts, emphasizing the growing importance of new technologies, smart working, emotional intelligence, and adaptability to drive innovation.

We as leaders of life sciences organizations must ensure that our workforce possesses the necessary skills to navigate this evolving space and create working environments that enable our employees to meet the needs of our ever-changing industry. Though not a simple task, by identifying such skills and mindsets, incorporating them into our organizations, and adapting as needed, we can foster innovation internally and allow for it to extend to our clients and the communities we serve.



Evolving Skills and Processes
Skills and Mindsets for the Future



Francesca Filippucci

People Director,
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Digital Literacy, Augmented Working and Capabilities that Go Beyond AI

Mentioned by Forbes as one of **'The Top 10 In-Demand Skills for 2030'**, more than half of jobs will require digital literacy, and professionals who adapt well to advancements in technology and incorporate them into their daily tasks to create value will be in high demand. And as AI and automation continuously develop across the life sciences industry, **"augmented working"**, which involves leveraging AI to eliminate repetitive tasks to enable individuals to concentrate on complex and innovative aspects of their roles, is set to become an indispensable skillset. In fact, as AI systems become more complex and sophisticated, thus will human intelligence. And while AI has an unprecedented range of activities, it can only be maximized with human creativity. Therefore, individuals with the ability to come up with new ideas and solutions and aren't afraid to question the status quo will be instrumental to driving value.

With the increasing amount of information available to us, critical thinking skills, or the ability to identify valuable data and objectively analyze issues and situations, could be one of the most relevant capacities for leaders as they continue to sort through biases and fake news.

Fostering the Right Culture

It's also vital to encourage a culture of lifelong learning, curiosity, and self-improvement. In this context, individuals should proactively seek new skills and stay updated on trends, particularly in the context of digital transformation processes. This approach aligns with the evolving nature of work and ensures that individuals remain adaptable in the face of constant change.

There is an increasing relevance in terms of **sustainable working practices** which brings into focus not only our impact on the environment, but also strategies for prioritizing employee well-being. It's really about creating a healthy working environment to ensure that our people feel good where they are and that they can express their full potential.

Oftentimes, companies are solely focused on the skills that their teams must acquire and look past the key elements of change management and people management that must be assumed at an organizational level. In order to be truly successful in this space, we must bring our people along for the journey, considering how we can empower them to take us where we need to go. Whether through agile working, ongoing personal growth, or fostering an innovative culture, we can enable individuals to reach this potential.

Smart Working and Emotional Intelligence

Smart working extends beyond having the flexibility to work from wherever we find ourselves, representing a transformative **approach that forces us to focus on why and what we need to achieve**. It requires us to be 100% clear about the best way to tackle an objective and allows us the flexibility and responsibility of determining whether it will be maximized as a team in-person at the office or individually somewhere else. In any case, we will have to find a way to stay connected to our teams and colleagues.

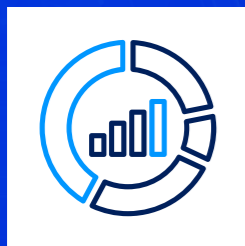
For some years now, our personal and professional lives have steadily become more blended, necessitating a holistic approach to employee well-being. Further accelerated by the pandemic, successful managers require strong emotional intelligence more now than ever. Thus, it is a pivotal competency for leaders to enable workforces from a professional standpoint while also considering their personal challenges and their lives outside of work. A “work-self” and “personal-self” simply do not exist, and we must see individuals as a whole, eliminating this separation and encouraging personal growth that can flow into both spheres. Within our global agency network, we recognize and expect every member of our team to be changemakers, working together to build **future health**. Therefore, we strive to be there with them as they navigate the future of work.

Get in touch with **Francesca Filippucci**:



5.0

DATA DRIVEN ENTERPRISE



- Data Science in R&D
Precision Engagement
- Building Large Language
Models (ChatGPT)

Over the past decade, data management has evolved from a mere technical factor to a strategic business pillar. Pharma and life sciences companies are seeking an approach guided by numbers and making informed decisions based on objective facts; to ultimately become Data-Driven Enterprises.

Thanks to wearable devices and sensors, as well as software architectures, collecting, processing, querying, and analyzing data has become a pervasive process. However, leveraging this data remains a challenge.

Few sectors are as rich in both heterogeneous and unstructured data as the health sector, but there is a significant asymmetry between users' demand for information and its actual availability. Patients want to be as informed as possible about their health status and the state-of-the-art knowledge of their disease, while physicians need quick access to meaningful patient data and industry research and news, and hospital administrations need to efficiently and effectively manage all health data.

05 | DATA DRIVEN ENTERPRISE

DATA SCIENCE IN R&D

The opportunity for Data Science and Big Data in life sciences is particularly compelling within complex corporate environments that face an ever-growing volume and diversity of information.

In the healthcare and pharmaceutical sectors, R&D is the heart of the innovation process. As such, it is one of the main processes that generate high-value data. The use and valorization of this data enable pharmaceutical companies to identify new potential drugs, develop them as effective medications, and get them approved more quickly. The use of Data Science and artificial intelligence allows for the following:

- Improved understanding of diseases and biological processes.
- Predictions of the best molecule to synthesize and how to do it.
- Quicker identification of patients for enrollment in clinical trials, based on multiple sources.
- Reduced risks of adverse events.
- Integrated data backbone instead of rigid silos.



Data Science in R&D
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This last point is crucial and can activate every other data valorization step, where data needs to flow freely throughout the research and development process chain: from research and pre-human stages to clinical development and regulatory stages. It is also necessary to integrate external data sources into the organization to generate high-value analytics for business decisions and research.

Integrating data across all stages of the value chain

In pharmaceutical R&D, one of the most significant challenges lies in accessing big data that contains heterogeneous, consistent, reliable, and easily accessible information. Nevertheless, overcoming this hurdle can lead to the most effective outcomes for addressing new innovation challenges. Managing and integrating data across all stages of the value chain, from discovery to implementation, is a fundamental requirement for companies that want to maximize the benefits of technological trends. Thus, data serves as the foundation for value-added analyses, and effective end-to-end data integration can establish an authoritative source of information for the entire company. By integrating different data, regardless of the source, whether internal or external, proprietary or publicly available, comprehensive cross-sectional research can be conducted.

A more comprehensive and coherent view of information with semantic data integration

In a scenario that typically involves compartmentalized silos, implementing interoperability is more than a technological operation; it requires an effort of semantic data integration. This involves combining and linking information from different sources to provide a deeper and more meaningful understanding of the data itself, allowing seemingly different but conceptually related data to be linked to the same physical data. Approaches, such as the use of ontologies and data description standards, facilitate semantic integration by creating connections and relationships between information.

This approach goes beyond simple data combination, allowing for a comprehensive understanding of the meaning and context of the information, thereby improving the accuracy and reliability of such analyses. Through semantic data integration, a more comprehensive and coherent view of information can be achieved, facilitating the removal of interdepartmental silos.

Building a domain-specific ontology

There are numerous ontologies in the medical field, but when constructing a specific data integration model for a particular business domain, it is necessary to build a domain-specific ontology.

Ensuring a consensus among individuals regarding the specific meanings of concepts that define their activities stands as the most significant challenge in constructing an ontology. Achieving semantic agreement is the process of helping people understand exactly what they mean when expressing themselves. The purpose of an ontology is to model the business, and it is independent of computer systems (e.g., legacy applications and databases). Its purpose is to use formal logic and common terms to describe the business so that both humans and machines can understand it.

Ontologies offer a means to reconcile data present in disparate information silos without necessarily physically integrating them, allowing for a unified and cohesive view.

Semantic technology, in turn, improves collaboration among various departments, helping the organization perform more complex, relevant, and useful searches.

Data Science with our clients

We also apply this approach to our own clients' businesses, where one of them faced challenges in navigating and visualizing thousands of interrelated concepts. How did we think data science could come into play? Our solution involved building a semantic data model for data integration, empowering leaders to make informed decisions and improve business outcomes by accessing the right data, regardless of physical boundaries imposed by data silos. This approach also strives for more flexible updates and management of information.

To assist our client, we initiated a series of workshops aimed at defining and designing an ontology specifically tailored to their research and development business unit. Subsequently, we embarked on the scouting and benchmarking of various ontology management platforms, evaluating each to find the one that best aligned with the company's requirements and constraints. Once the ideal platform was identified, we facilitated another set of workshops to define and validate the use cases, ensuring the practicality of the ontology model.

With the use cases successfully implemented and the selected platform in place, our team is currently collaborating with the platform provider in the second phase of the project to develop and finalize the ontology.

By implementing semantic data integration, advanced solutions for data valorization emerge, unlocking insights across the portfolio. This approach enables us to identify clinical opportunities and conduct research on potential applications for translational or personalized medicine. By combining biomarker research with clinical outcomes, we gain a deeper understanding of the data. These high-value insights, made possible through advanced methodologies of data science, allow companies in life sciences to develop new drugs and solutions that improve the lives of HCPs and patients faster, safer and with better understanding than ever before. If you are interested in learning more about how your business can integrate Data Science into the R&D process, I'm happy to continue this conversation.

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05 | DATA DRIVEN ENTERPRISE

AI-POWERED PRECISION ENGAGEMENT IN COMMERCIAL AND MEDICAL FUNCTIONS

The pharmaceutical industry is no stranger to innovation. It has continually evolved, embracing new technologies and methodologies to improve drug discovery, development, and distribution.

In recent years, the integration of artificial intelligence (AI) into the pharma landscape has been nothing short of transformative, with the industry testing and implementing AI in a few key areas:

Drug Discovery: Improved initial assessment of drug compounds, predicting their success rates based on biological factors and advanced next-generation sequencing.

Pre-Clinical: Deeper comprehension of the impacts and outcomes associated with a particular drug.

Clinical: Optimized efficiency, inventory management, and service quality of clinical trials.



Data Science in R&D
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Language Models
(ChatGPT)



Fulvio Fortini

Managing SVP,
Managing Director,
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Manufacturing: Improved operations, efficiency, and production costs.

Commercial: Improved experience and communication between patients and doctors.

Pharmacovigilance: Early identification of adverse drug reactions, higher data integrity and faster response times.

With today's current possibilities, there is still so much more on the horizon for precision engagement, especially when combining it with generative pre-trained transformers artificial intelligence (GPT AI).

So, what is precision engagement?

Precision engagement is a data-driven approach developed for marketing and sales needs. It uses customer insights to deliver personalized experiences. In the pharma industry, precision engagement can be used to present patients, healthcare professionals (HCPs), and other stakeholders with relevant information and support at the right time.

Is getting the customer's attention the sole purpose of precision engagement?

No, in fact, it can be leveraged to spread the right information through an improved user experience, resulting in a better journey for both patients and caregivers.

- Offering the physician support from a virtual assistant during the differential diagnosis process where they have access to a more extensive knowledge and experience base. This can make a difference in all cases, but particularly with rare diseases.
- Allowing for people with health conditions (and their caregivers) to become more aware of the disorders they face, thus streamlining the patient journey and reducing the risk associated with following incorrect treatments.

What needs to be done before implementing AI in precision engagement?

First, it's worth noting that this will not be a small change. Instead, it will be a transformational process that affects various functions of the organization, triggering considerations related to data privacy and security, regulatory compliance, and change management.

However, in keeping with the nature of this short article, I will highlight a couple of the most relevant activities:

Data Aggregation Strategy and Analysis

AI-powered systems gather data from diverse sources. Some of them could be internal (CRM data and physicians profiling, etc.) but others must be external such as: electronic health records, prescription data, medical literature, social media, and more

Clustering and segmentation

Once the data is aggregated, AI algorithms are employed to cluster physicians or patients into meaningful segments or groups. Multivariate clustering helps in identifying similarities and differences among physicians and patients, simplifying the process of tailoring engagement strategies to specific groups.

Data governance

A commitment to data governance is the foundation for delivering precise, incremental, secure, and compliant engagement experiences.

How is AI being used in precision engagement?

Pharmaceutical companies have a fundamental requirement to establish and cultivate relationships with various external stakeholders, such as:

- Company <> Healthcare Providers (HCPs)
- HCPs <> HCPs
- HCPs <> Patients
- Company <> Institutions

The customer journey, once a linear path from attraction to conversion, has evolved into a dynamic and multifaceted experience. This transformation is driven by the integration of artificial intelligence (AI) at various stages of the customer journey.

HCP Attraction and Engagement

Physicians often find themselves involved in repetitive tasks that may have limited clinical significance. Consequently, they are compelled to reorganize their schedules, reducing the time they have for ongoing education and caring for patients. Therefore, the initial but crucial step in engaging physicians is getting their attention.

This process is relatively straightforward when high-value medical-scientific content is readily available. However, in cases where such content is missing, it becomes necessary to grant access to a wide array of materials. Importantly, these materials do not need to originate solely from pharmaceutical companies but can also come from external sources.

Implementing content factory approaches with AI systems, using Natural Language Processing (NLP) and text mining techniques, allows us to analyze and comprehend the content of third-party sources, perform automatic and incremental tagging, suggest specific content to user clusters, and, finally, employ machine learning algorithms to profile physicians.

This iterative process yields several benefits, including:

1. Creating clusters of customers based on actual physician behavior.
2. Facilitating cost containment and expediting the content approval process in accordance with regulatory compliance.
3. Generating “data-driven” editorial plans.
4. Enhancing effectiveness of engagement, thereby increasing the likelihood of reaching and retaining the target audience.

Medical Information Chatbots:

Since 2020, all market analyses have demonstrated that in the new normal, healthcare professionals require engagement from Pharma Companies not solely through push strategies but also through pull approaches.

Both push and pull marketing have their merits, and companies often use a combination of these strategies in their marketing efforts to reach a diverse audience and cater to different stages of the customer journey.

The Medical Information Chatbot (HCP virtual assistant) is one of the tools that has been most impacted by the advent of GPT AIs. This artificial intelligence-powered conversational agent is designed specifically for the healthcare and medical domain. In the past, multiple virtual assistants were launched by companies but encountered limited success for two primary reasons:

1. The overall experience was good but not as seamless as the HCPs were expecting.

This poor user experience hindered the adoption and employment of the tool, a common frustration experienced by users of voice assistants who repeat information multiple times before giving them up.

2. Regulatory limitations, especially in certain countries.

In this highly regulated Industry, it has become necessary to address and manage issues related to

- Data Quality: quality and integrity are crucial for compliance.
- Interpretability: ensuring transparency in AI decision-making.
- Regulatory Acceptance: pharmaceutical companies need to ensure that AI-driven solutions are accepted and validated by regulatory agencies.

The use of GPT AIs has transformed the user experience, as these new tools have been designed to make human-machine interactions as natural and flexible as possible. In fact, when healthcare professionals interact with the virtual assistants, they can refine initial searches, expand their scope by incorporating new and relevant elements, conduct in-depth investigations into specific domains or explore new areas by comparing them with initial searches.

Compliance concerns have also been addressed, particularly concerning specific project areas. One approach has been restricting GPT AIs' access to data sources from private knowledge bases.

Transforming Commercial and Medical Functions with Precision Engagement

AI is reshaping the pharmaceutical industry, from drug discovery to customer engagement. Precision engagement, powered by AI, drives personalized experiences, improves healthcare, and streamlines processes across the industry. As AI continues to evolve, its impact on pharma is expected to grow, delivering benefits to patients, healthcare professionals, and companies alike.

Get in touch with **Fulvio Fortini**:



05 | DATA DRIVEN ENTERPRISE

LARGE LANGUAGE MODELS: REVOLUTIONIZING UNSTRUCTURED DATA ANALYSIS IN HEALTHCARE

In the big world of health care, the amount of unstructured data: medical records, clinical research papers, scientific publications, clinical trials, etc., can be overwhelming.

Extracting valuable information and knowledge from this unstructured data has long been a challenge, hindering the progress of medical research, diagnosis, and patient care.

However, with the advent of large-scale language models (LLMs), a breakthrough has occurred. These powerful artificial intelligence models have broken barriers, paving the way for unprecedented advances in the analysis of unstructured data in healthcare.

These models have incredible potential and are transforming the data analytics landscape.



Data Science in R&D
Precision Engagement
Building Large Language Models (ChatGPT)



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EVERSANA INTOUCH



What are Large Language Models?

In recent years, large language models have emerged as an innovative development in artificial intelligence (AI) technology and natural language processing (NLP), transforming several fields.

They are designed to process and understand human language by exploiting large amounts of textual data. By learning patterns, relationships, and contextual information from this data, these models gain the ability to generate coherent and contextually appropriate responses and perform various language-related tasks.

LLMs are built with interconnected artificial neurons that imitate the human brain. They undergo extensive training on enormous datasets containing billions of sentences from diverse sources like books, articles, and websites.

Another vital aspect of these models is their immense number of parameters, which can range from millions to billions. These parameters enable the models to grasp the intricacies of language, resulting in the generation of contextually relevant and high-quality text.

Real-world Examples of Large Language Models in Healthcare Analytics

Disease diagnosis and treatment recommendations

In a study, researchers trained a language model using a large amount of medical literature and medical records. The model was then used to analyze complex patient cases, accurately diagnosing rare diseases and recommending tailored treatment strategies based on the latest research findings.

Literature review and evidence synthesis

Researchers have used these models to analyze large volumes of scientific literature, enabling comprehensive reviews and evidence-based assessments. By automating the extraction and synthesis of information, language models accelerate the identification of relevant studies, summarize key findings, and support evidence-based decision making.

Medical image analysis and radiology

In many scenarios, models can interpret radiology reports and extract key findings, aiding radiologists in diagnosis. They can also help with automatic report generation, reducing reporting time and improving workflow efficiency in radiology.

Mental health support and chatbots

These models have been integrated into mental health support systems and chatbots, providing personalized assistance and resources to people. They are also able to initiate natural language conversations, understand emotional nuances, and provide support, information, and referrals for mental health issues.

Integrating Large Language Models in Life Sciences

LLMs are not easily replicable, nor affordable for all organizations. The energy cost of training GPT-4 has been close to \$100 million and rising in proportion to the complexity of the model itself. Thus, large IT companies, including Google, Amazon and OpenAI (sponsored by Microsoft, and others) have been the only players to have entered this space.

Users are therefore forced to work with these pre-trained models, limited to simple “fine tuning” with respect to their needs. However, for very specific domains, it is crucial to recognize that the results and performance may differ substantially from expectations.

Healthcare is a knowledge domain where many of the documents (scientific publications, etc.) are publicly available, and, therefore, large language models are already trained and seem to work well. When, however, we submit private and very specialized documents, performance may change and the LLM may not recognize concepts, such as: active ingredients, or names of molecules, or development processes that are internal knowledge.

Often implemented by universities and research centers, some LLMs, such as Google BERT, have been specialized, with additional training on certain areas, and released to the open-source community: BioBERT, MedBERT, SciBERT; and more recently, BioGPT, a verticalized version on biomedical concepts of the well-known GPT, have been released as well.

Therefore, it is important to have awareness and understanding of the scope of the intended use cases to choose the most suitable model, without getting dragged into the mainstream ChatGPT.

The right process of development can thus be summarized as:

- Identify the right use case: Assess business operations to identify areas where an LLM can add value.
- Select the appropriate model: Choose an LLM that fits your needs, considering the complexity of the task, model capabilities and resource requirements.
- Prepare and fine-tune data: Collect and if necessary, pre-process relevant data to fine-tune the chosen model to ensure that it is aligned with the business context and produces accurate, domain-specific results.
- Plan integration with existing systems: Perform the integration of an LLM into existing business processes and technology infrastructure.
- Monitor and evaluate performance: Continuously monitor the performance of the implemented LLM, using metrics such as accuracy, response time, and user satisfaction to identify areas for improvement.
- Ethical and privacy considerations: Take into account potential ethical and privacy issues related to AI implementation, while ensuring compliance with data protection regulations and responsible use of AI technologies.
- Promote a culture of AI adoption: Encourage understanding and acceptance of AI technologies throughout the company by providing training and resources for employees to embrace and leverage LLMs.

Encouraging further exploration and experimentation

Ongoing research, development and testing of language models are essential to fully unlock their potential in health data analytics, to ensure that data privacy and security standards are met and to promote responsible use of AI technologies. While the seamless integration of language models with existing healthcare systems and workflows is critical for widespread adoption. By developing interoperable platforms and APIs that allow easy access to the models and facilitate integration with electronic health records, clinical decision support systems, and other healthcare applications, the potential impact and usability of large language models can be maximized. It's clear that these technologies have disrupted the landscape of healthcare data analytics, providing healthcare providers with advanced capabilities to extract information, thus improving care, and driving medical research.

The way forward

For years, we have been following the evolution of artificial intelligence and have utilized our machine learning and data science expertise to help our customers. The new LLM-based tools offer us and our customers new ways to accelerate, enhance, and develop processes, products, and projects. They won't make professionals obsolete, instead; they will empower them to work faster and more efficiently.

Our senior developers are already utilizing ChatGPT to speed up development work. Instead of researching documentation, the developer can ask the chatbot to help create a new component, which they can then review and integrate into the codebase. Chatbots are especially useful for more senior developers, who can adequately review the code and ensure it is suitable, working, and secure. This approach allowed our designer to focus entirely on the core design. Looking toward the future, we could ask Chatbots to generate ideas or sketches of these characters. Ultimately, this design approach expedited the discovery process, allowing the designers to find the correct style and refine it. And the number of opportunities just keeps growing. We can generate audio, video, text, images, code,

and more with the current tools. In most cases, these cannot be used as-is at the moment but are great drafts that our experts can finalize. And as the technology evolves, more and more final production content can be generated with these tools. They have already opened up a new skillset of growing importance in the future: prompt hacking. I.e., the ability to ask the right questions with the proper context in the right way from the right chatbot to get the best possible results. We are here to guide you through this evolving world of AI. If you'd like to learn more about how LLMs can transform your business, let's continue the conversation.

Get in touch with **Lino Mari**:



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EMERGING BUSINESS MODELS



■ DTx, Telehealth and Digital Care Models

With pressure on health systems everywhere, health regulators are increasingly adopting outcome-based reimbursement models and risk-sharing mechanisms; as well as addressing the opportunity of systemically integrating digital health services to enhance the standard of care.

The need and demand for more accessible, personalized, and continuous care is only set to rise; and healthcare professionals want instruments that can complement and enhance their role in offering effective clinical and integrated care.

Biopharmaceutical companies can play a key role by adopting innovative strategies, with digital health being a strategic enabler. They can also consider evolving towards a “digital-first biopharma businesses” by exploring disruptive models like SaaS subscriptions for service-oriented platforms paired with “medicines” or stand-alone digital interventions that can further diversify pipelines.

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DTx, TELEHEALTH, AND DIGITAL CARE MODELS



DTx, Telehealth, and
Digital Care Models

The challenges posed by aging populations, the impact of chronic diseases and the shortage of healthcare professionals; together with the pace of ever-evolving technological innovations, serve as the backdrop for a pivotal moment of change in terms of current and future health.

These are noteworthy, with healthcare systems worldwide becoming unsustainable in the face of rising demands and needs. The global population aged over-65 years old is expected to grow by 40% between 2020 and 2030; in Europe, already 37% of people aged 65+ suffer from at least two chronic diseases. Meanwhile, the World Health Organization estimates a 10 million potential shortfall of health workers worldwide by 2030 and chronic conditions already account for approximately 80% of healthcare expenditure.

If we look at the situation in Italy, where the intersection of the lowest birth rate and the highest dependency rate in Europe paints a stark picture of demographic shifts.



Alberta Spreafico

Managing Director, Digital
Health Innovation & Strategy
EVERSANA INTOUCH



The repercussions of this reality are not confined to demographics alone; they reverberate through our GDP and have profound implications for healthcare funding.

In this context, policymakers are called to innovate care models, leveraging **digital health** to cost-effectively enhance **access, quality, equity and sustainability of care**. Regulators are also called to define how to safely leverage the vast amount of health data generated to improve current and future care.

“The challenges we face in healthcare demand innovative solutions that go beyond conventional approaches.”

Reimagining Pharma to Continue Value Generation

Amidst these challenges, the pharmaceutical industry also stands at a crossroads, requiring a reimagining of its role and strategies. The vulnerability posed by the patent cliff and the need to enhance customer experiences demands strategic innovation. It is in this context that digital health emerges as a fundamental strategic enabler. Beyond the conventional realm of medicines, the integration of digital innovations becomes imperative to enhance the value of the drug itself, the experiences of Healthcare Professionals (HCPs), patients and caregivers, and allow all stakeholders to become partners of healthcare systems throughout the ever-evolving digital health transformation.

“Digital health technologies can enhance awareness, access to a timely and accurate diagnosis and referral, as well monitoring, follow-up and continuous care capabilities – shortening, personalizing and improving the care journey”.

The Digital Health & Digital Medicine Opportunity

The broad realm of digital health and digital medicine presents an opportunity for transformative change. Governments, recognizing the need for innovation, are paving the way with enabling platforms. The integration of large telemedicine platforms and technological infrastructure supporting interoperability sets the stage for a new era. The true potential lies in seamlessly integrating this system-level infrastructure with safe and accurate software able to generate a demonstrable positive impact on patient's health.

Indeed, within the broad realm of digital health technologies, software certified as medical devices backed by sound clinical evidence show particular promise.

“Safe and effective Digital Medical Devices, both around the pill and stand-alone, are set to drive new value, positioning, and enable digitally enhanced experiences for both HCPs and patients.”

Challenges in Adoption, Value & Growth

However, the journey is not without its challenges. Adoption of digital interventions, value generation, and sustainable growth present formidable hurdles. Cultural shifts are needed for widespread adoption, and market dynamics require careful navigation. The landscape of medical devices, despite growing evidence, requires strategic and multifaceted approaches for successful systemic integration.

“Success lies not just in digital innovation per se, but in digitally enhancing the standard of care. For all.”

Our Digital Health & Innovation “Gateway”

As we navigate this transformative journey — from building engagement and empowering activation, to optimizing treatment dosage through digital means, to enhancing continuous and personalized care — the role of pharma extends beyond traditional medicine, and we partner to help scale opportunities, impact and value.

Our digital health & innovation strategy supports from co-ideation to commercialization, addressing unmet needs, enabling cultural shifts, driving adoption and creating enduring value.

Get in touch with **Alberta Spreafico**:



Embracing Innovation as Strategy the way forward

As an industry we are always looking to connect the right doctor with the right medicine for the right patient – in short, we are trying to make a difference, providing better health outcomes, and creating a healthier future.

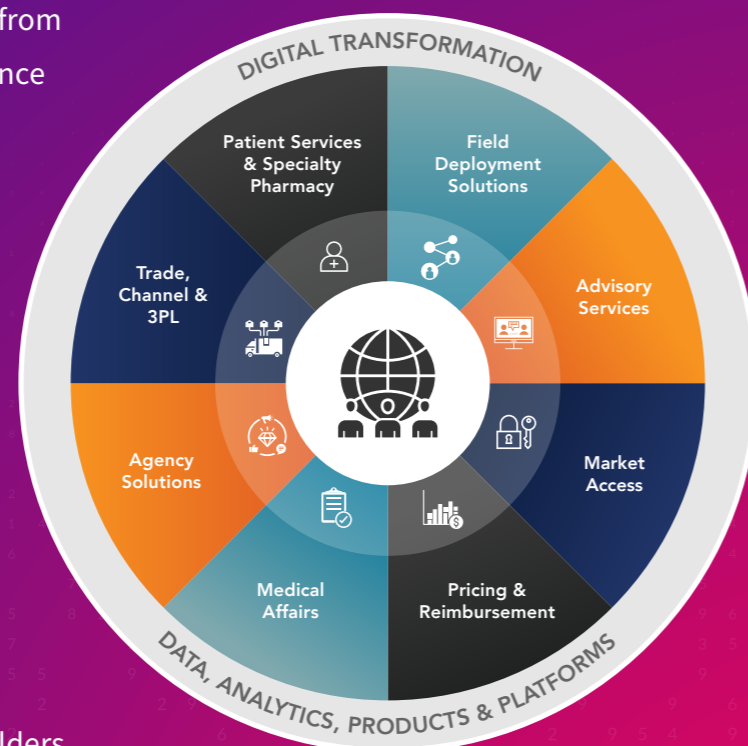
A relentless commitment to innovation, to transforming the way we do business and create impact across both business and systems, payors, prescribers, and patients, internal and external stakeholders alike, **is not an option; it's the only option.**

At EVERSANA INTOUCH, we embrace that commitment. And we make sure we provide the right perspective – weaving innovation into all aspects of commercialization – from marketing to medical affairs, from technology to data, from market access, pricing and evidence to compliance and salesforce.

From delivering scientific information and marketing messages to delivering medicines to patients who need them, we accept and embrace the need for structured change and the fact that the evolving role of biopharma companies will require interaction and dialogue with new audiences and stakeholders.



Ariel Salmang
SVP, Managing Director,
Strategic Global Development,
EVERSANA INTOUCH



It will also demand a shift away from traditional medicine towards digital medicine and ultimately medicine that is digitally enhanced.

We work with our clients and partners to make this change work. We understand what is required and how to get there, with minimal disruption to your daily business, keeping one eye on outcomes and the other on sustainability and ROI.

We take care of the solutions for your evolving business needs, so that you can focus on what matters most: helping patients.

If you would like a free consultation to discuss your specific needs, then please connect with us at

eversanaintouch.com/contact/

ABOUT EVERSANA INTOUCH

EVERSANA INTOUCH is a global, full-service marketing agency network serving the life sciences industry, and is the first – and only – agency network to be part of a fully integrated commercialization platform through EVERSANA®. EVERSANA INTOUCH provides marketing services – connected and powered by data-rich, digitally forward analytics – through its full-service and specialty affiliates: EVERSANA INTOUCH Solutions, EVERSANA INTOUCH Proto, EVERSANA INTOUCH Seven, EVERSANA INTOUCH Oxygen, EVERSANA INTOUCH Engage, EVERSANA INTOUCH Healthware, EVERSANA INTOUCH Tech & Transformation, EVERSANA INTOUCH Media, EVERSANA INTOUCH MedComm and EVERSANA INTOUCH Market Access. To learn more, visit eversanaintouch.com or connect through Facebook, LinkedIn, X, or Instagram.

