

Digital Transformation: Accelerating Organizational Intelligence

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According to a report released by Veritis in 2021 “the global digital transformation market size is anticipated to reach USD 1009.8 billion by 2025 from USD 469.8 billion in 2020. The demand for digital transformation services is expected to rise at a Compound Annual Growth Rate (CAGR) of around 16.5% over the forecast period from 2021 to 2025. The growing adoption of digital technologies, including Artificial Intelligence (AI), cloud computing, big data, the Internet of Things (IoT), and Machine Learning (ML), is driving the growth of the digital transformation market.” To be competitive in today’s fast-changing marketplace, organizations need to apply the “alphabet” of digital transformation.

The focus of the book series is unique and will cover the various perspectives on organizational digital transformation, namely business & management, technology, legal and ethics, and social aspects.

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Digital Transformation Accelerating Organizational Intelligence – Volume 4

DIGITAL STRATEGIES AND ORGANIZATIONAL TRANSFORMATION

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Chapter 15

Digital Transformation and Organizational Change: An Experiential Case

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When it comes to digital transformation, the healthcare industry remains a laggard. The lack of adoption of digital products, services, and business models highlights the case. Despite the evidence that the rate of change is accelerating, such as in the hospital sector, true transformation will happen once digital skill sets are fully incorporated in the training and development of the healthcare workforce and its leadership. In the meantime, healthcare leaders should take pragmatic steps to enable the digital transformation of their respective organizations.

1. Introduction

It is 2022. How many times have you opened an app to order something? Food, clothes, groceries? And how many times have you picked up your phone and used an app to attend to your health?

Digital transformation is everywhere. We are now exploring new frontiers of digital life. Amidst this evolution, why is the healthcare industry still a laggard when it comes to adopting technology that seems so prevalent all around us?

2. Digital Transformation: A Fait Accompli?

Digital transformation entered the broad vernacular sometime in the late 1990s, before the dot-com boom. While e-commerce was in its early days, traditional businesses looked at digital models with curiosity. Some disdainfully regarded them as futureless. It was not “human” to transact digitally. For the early adopters, the business case was about cost savings primarily: contact centers, business process outsourcing, knowledge process outsourcing, data analytics, and process optimization. Digital business models were a far cry and left best to the non-threatening digital start-ups. Nowadays, digital presence and online business models have become a professional necessity: if you don’t offer consumers the choice to interact with you digitally, you may as well close the shop. Even my barber allows me to make appointments online, pay, shop, and leave reviews — all through a fun-to-navigate app. And we have all seen the revenue-generating capabilities of digital business models — look at Google and Facebook.

It is 2022. So why are we still talking about the digital transformation of healthcare? Shouldn’t we all be well on our way to being digital already and thinking about what is next? The Metaverse? Life and health in space?

Before we get into the reasons, let us deconstruct the word “transformation.” According to the Merriam-Webster dictionary, the term means “a complete or major change in someone’s or something’s appearance, form, etc.” It is, in fact, a popular word — one of the top 1% of the words by look-up popularity as reported by Merriam-Webster (n.d.). The data suggest that transformation may well be the need of the day.

We have read about examples of transformation in school — how a caterpillar becomes a butterfly, how plants capture solar energy and convert them into glucose through photosynthesis, and how water becomes vapor. In math, we studied about four types of transformations: translation, reflection, rotation, and dilation.

Transformation is all around us. A blender transforms electrical power into mechanical power. An internal combustion engine in cars transforms fuel into heat energy into mechanical energy that propels the car forward. COVID-19 has transformed itself from alpha to beta to delta to omicron, where each variant challenges the efficacy of vaccines.

The one fact that remains consistent across all these transformations is that the end takes a remarkably different shape from the beginning. It is not a tweak, it is not an adjustment, and it is not a change. It is a “transformation.”

By that logic, what should a digital transformation of a business lead to? A new business? New processes? New products? New business models? New customer service models? New supply chains? New payment models? One could argue that all of these are the right answers.

Or are they?

In other words, is digital transformation necessary? If your business has been running successfully for 100 years? If your business model makes you money, and barriers to entry into your business are high? If your product is not for digital consumption?

Even though it is 2022, digital transformation remains a relevant concept. If technology helped businesses do better in the early days, now it has become the driver of business in most industries. The COVID-19 pandemic has only accelerated the change, with healthcare and education being the exceptions.

Healthcare has been one of the slowest entities to embrace digital transformation. The reasons have been discussed *ad nauseam*, so I will not belabor that. The pace of transformation has varied based on the sector within healthcare: hospitals, which are the frontline portal to patients, have embraced digital solutions faster than the sectors that are one step removed from the patients: insurers and manufacturers. This fact supports the hypothesis that customer expectations, rather than revenue or cost, drive the business case for digital transformation in healthcare.

Looking deeper into healthcare occupations reveals a particular trend. Take, for instance, the 2021 compensation data for healthcare occupations as identified by the Bureau of Labor Statistics and the 2020 median base salary of the jobs in healthcare as reported by the US Willis Towers Watson Health Care Compensation Survey. Together, the data show a greater-than-average increase in market demand for radiology, IT

development, strategic planning, corporate development, IT administration, data science, and business intelligence. A combination of the two sources as seen in Figure 1 reveals that IT occupations rank in the top 20% of all healthcare jobs from a median salary perspective and, as reported by Willis Tower Watson, are growing at a rate higher than average. A safe

Occupation	Median Salary (\$)
Physicians and Surgeons	2,08,000
Dentists	1,64,000
Podiatrists	1,34,300
Pharmacists	1,28,710
Optometrists	1,18,050
Nurse Anesthetists, Nurse Midwives, and Nurse Practitioners	1,17,670
Physician Assistants	1,15,390
IT Architecture (Systems Design)	114,800
Network Architecture Design	102,400
IS and Cybersecurity Development	1,08,700
Data Engineering	1,07,300
Database Administration	1,06,700
Clinical Business Informatics and Project Management	1,02,200
Predictive Analytics/Business Intelligence	1,00,600
Veterinarians	99,250
IS and Cybersecurity	98,700
Network Control/Administration	98,600
Physical Therapists	91,010
Radiation Therapists	86,850
Occupational Therapists	86,280
Genetic Counselors	85,700
Audiologists	81,030
Speech Language Pathologists	80,480
Nuclear Medicine Technologists	79,590
Dental Hygienists	77,090
Registered Nurses	75,330
Occupational Health and Safety Specialists and Technicians	72,530

Fig. 1. Median salary, healthcare professions, 2020.

Source: 2020 US Willis Towers Watson Health Care Compensation Survey and Bureau of Labor Statistics: *Occupational Outlook Handbook: Healthcare Occupations*.

Occupation	Median Salary (\$)
Chiropractors	70,720
Medical Sonographers and Cardiovascular Technologists and Technicians	70,380
Orthotists and Prosthetists	70,190
Radiologic and MRI Technologists	63,710
Dieticians and Nutritionists	63,090
Respiratory Therapists	62,810
Occupational Therapy Assistants and Aides	60,950
Clinical Laboratory Technologists and Technicians	54,180
Exercise Physiologists	50,280
Physical Therapist Assistants and Aides	49,970
Athletic Trainers	49,860
Surgical Technologists	49,710
Licensed Practical and Licensed Vocational Nurses	48,820
Recreational Therapists	47,710
Medical Records and Health Information Specialists	45,240
Massage Therapists	43,620
Dental Assistants	41,180
Opticians	38,530
EMTs and Paramedics	36,650
Phlebotomists	36,320
Veterinary Technologists and Technicians	36,260
Medical Assistants	35,850
Medical Transcriptionists	35,270
Pharmacy Technicians	35,100
Psychiatric: Technicians and Aides	33,140
Nursing Assistants and Orderlies	30,830
Veterinary Assistants and Laboratory Animal Caretakers	29,930
Home Health and Personal Care Aides	27,080

Fig. 1. (Continued)

conclusion that can be drawn from these data is that the engines of digital change in healthcare, especially in hospitals, are accelerating. Whether it is in the form of enabling virtual visits, remote monitoring, or remote work, the wheels are churning. *Fait accompli? Feels like it. Is it enough? Maybe not yet!*

3. A Recent Healthcare Experience

Day 1: My 75-year-old uncle recently slipped on ice and fell. His home was three hours away from where he slipped, ultimately hurting his arm. Blessed with relatively good health and a strong will, he didn't think much of it and decided to finish the task he was there for. Despite the pain in his arm, he drove three hours and got back home in the evening. His arm was swollen, so his wife called my wife, who is a physician, to get an opinion. My wife suspected a fracture, but given the current COVID-19 load in emergency rooms, suggested a consult at an orthopedic Urgent Care.

A Google Maps search showed only one Urgent Care nearby that could do an X-ray, but it was closed for the day. The next best option was more than 20 miles away. Given the situation, my wife recommended waiting overnight based on her preliminary assessment. There wasn't a way to make an online appointment, so the only option was to wait until the next morning to give the Urgent Care Center a call.

Day 2: The next morning, my uncle was given an appointment for later that afternoon. In the meantime, we called an orthopedist and made the earliest available appointment for the day after. Again, no online scheduling was available.

Lo and behold, the X-ray showed a double fracture below the elbow — both the radius and the ulna were broken. Urgent Care suggested an orthopedic consult. Thankfully, we had an appointment for the next day.

Day 3: The consult with the orthopedic doctor brought troubling news. He recommended surgery and referred the case to a specialized orthopedic group. My cousin got on the phone with the set of doctors to arrange an appointment, but they had none available for the next four weeks. So, it was time to call other orthopedic surgeons to try to get an appointment for the next day. Ultimately, my wife had to play the physician card to get my uncle the care he needed.

Day 4: The orthopedic surgeon evaluated the fracture and scheduled a surgery for the Friday of the following week, eight days away. In the meantime, my uncle needed to get his cardiac clearance and take care of other pre-surgery formalities.

Days 5 to 11: After a few unsuccessful attempts, the family network strikes again and gets involved to find this time a cardiologist to get a stress test done in time for cardiac clearance. A feat accomplished: The stress test is scheduled for the day before the surgery!

In the meantime, my uncle, who is hurting, watches us navigate the complex healthcare system to get him to surgery, almost as a bystander in the situation.

Day 12: The surgery takes place and the healing process begins. Was this situation exacerbated by COVID-19's load on emergency rooms? Certainly. Did it expose how difficult it is to navigate a healthcare system with no other single point of entry other than the ER? Absolutely. Did trying to navigate the system leave a bad taste in everyone's mouth? You bet. Did the healthcare system earn anybody's trust? No. Did this episode highlight the difference in the digital maturity of healthcare versus other businesses from a customer experience perspective? An understatement!

4. The Typical Hospital Board Room

Chief Executive Officer: My biggest concerns are overcoming COVID-19-induced financial challenges, managing workforce shortages, earning the public's trust, and ensuring diversity and inclusion.

Chief Medical Officer: My biggest concerns are managing the caseload and avoiding physician burnout.

Chief Nursing Officer: Same. My nurses are falling like broken trees.

Chief Digital Officer: The world is going digital. We need to move fast. (Sigh.) No one listens to me.

And so the conversation goes.

The voice of the customer demanding digital engagement has still not made it to hospital board rooms, at least not at a disruptive level. The incumbent system works, the near-term challenges overshadow the long-term investments, and so goes life.

Which brings us back to the following original question: Is the digital transformation of healthcare necessary? In that case, what would enable

such a transformation other than innovation and advances in healthcare technology?

Having spent more than 20 years as a consultant and an executive in the industry and now as the director of the Business Leadership Center at the Stillman School of Business, I am firmer in my belief that it comes down to people: both the workforce and the leaders.

5. The Workforce

Physicians and nurses form the core of the healthcare workforce. Becoming a physician or a nurse is one of the most challenging and expensive journeys in the US. It typically requires four years of pre-medical education, four years of medical school, three to five years of residency, and two to three years of fellowship. According to Melanie Hanson (2021) at Education Data Initiative, medical school graduates owe a median average of \$200,000 to \$250,000 in total educational debt, pre-medical debt included (EducationData.org, n.d.). Becoming a nurse is relatively easier; it typically requires a four-year Bachelor of Science in Nursing (BSN) degree. However, the student debt level still gives us pause: "Graduate nursing students expect to finish school with a median debt between \$40,000 and \$54,999, according to a 2017 report by the American Association of Colleges of Nursing" (Lane, 2021). Once they graduate and enter the workforce, they set the diagnostic and treatment protocols, make all clinical decisions, and provide and oversee care.

However, if we look at the training curriculum for MD or BSN programs, seldom will we find a mention of or emphasis on the development of a digital skill set. Figures 2-4 are snapshots of the curriculum for three of the top medical schools: Johns Hopkins University, Harvard Medical School, and the University of Pittsburgh Medical Center.

In a similar fashion, Figures 5-7, representing the BSN curricula at three of the top nursing schools, University of Pennsylvania, New York University, and Case Western Reserve University, demonstrate little to no engagement with the digitalized world.

While robust in medical science, none of the curricula include more than a cursory mention of anything related to training in digital skill sets fundamental to running a digital healthcare business, such as telemedicine, clinical information systems, data analytics, digital communications, or change management — skills essential for digitizing the business of

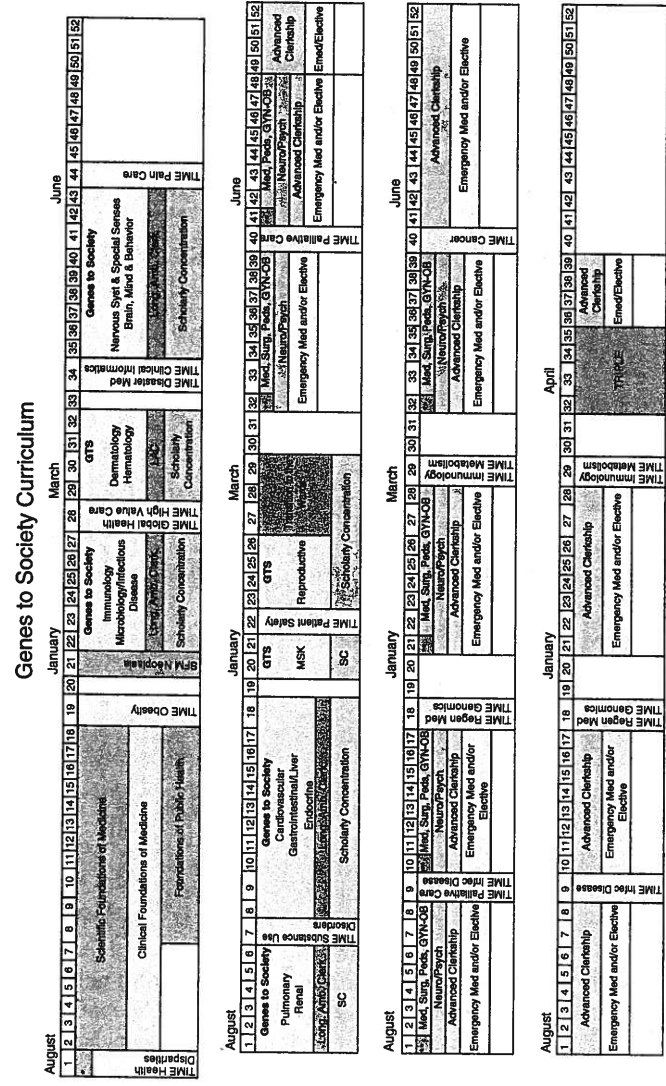


Fig. 2. Medical school curriculum, Johns Hopkins School of Medicine (n.d.).

* - Transition to Medical School
 ** - Preclinical Education Exercises
 TIME - Topics in Interdisciplinary Medicine
 TRIPLE - Transition to Residency and Internship and Preparation for Life

Pathways Curriculum Map
HARVARD MEDICAL SCHOOL

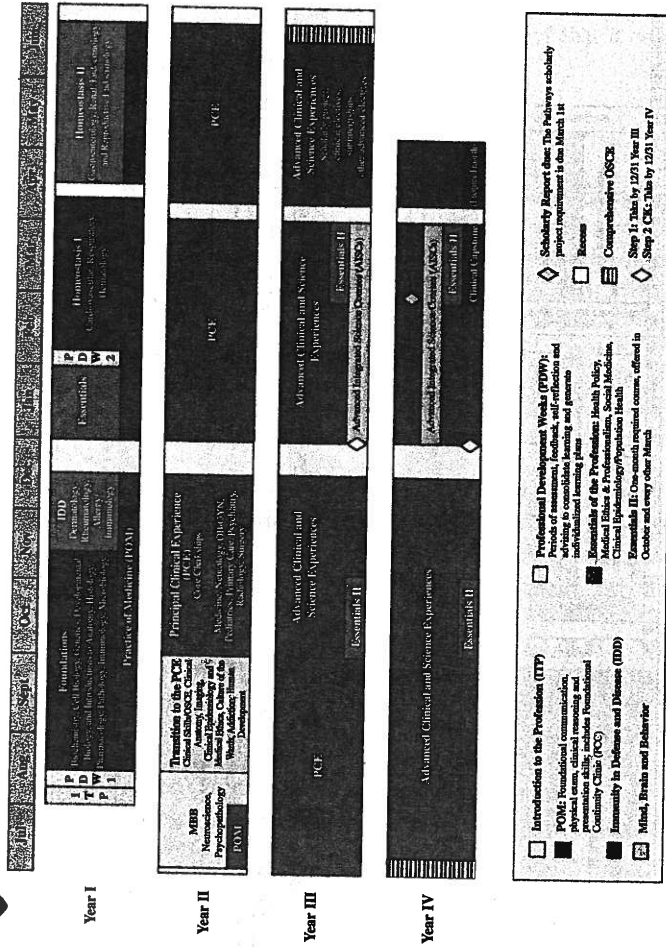


Fig. 3. 2021 Medical school curriculum, Harvard Medical School (2021).

UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE
CURRICULUM OVERVIEW

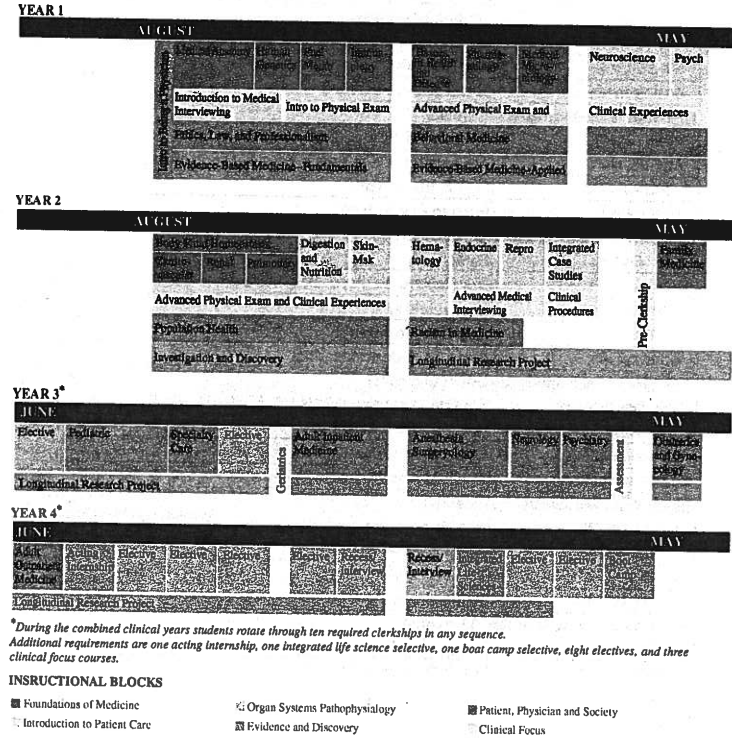


Fig. 4. Medical school curriculum, University of Pittsburgh Medical Center (n.d.).

healthcare. In fact, none of them presents even basic business skills, such as the economics of and money flow in healthcare. Case Western Reserve University's BSN program stands out as an outlier with two courses: Nursing Informatics and Information Technologies in Health.

Once physicians and nurses enter the workforce after years of intensive education, is it fair for us to expect them to be digitally savvy and engage in digital healthcare? In their 30s or later, burdened by debt and a

First-Year: Fall Semester (17 credits)	
Course ID	Course Name
CHEM-UA 120	Introduction to Modern Chemistry
EXPOS-UA 1	Writing The Essay:
SOC-UA 1	Intro to Sociology
NURSE-UN 4	Nursing Cohort Seminar
CAS-Search by Sub.	Social Science Elective
First-Year: Spring Semester (15 credits)	
NURSE-UN 70	Anatomy & Physiology
ACE-UE 110	Advanced College Essay: Educ & The Professions
CORE-UA 4XX	Text & Ideas: Tpcs
PSYCH-UA 1	Intro to Psychology
Sophomore Year: Fall Semester (16 credits)	
NURSE-UN 80	Statistics I
APSY-UE 1271	Developmental Psychology Across the Lifespan
NURSE-UN 75	Microbiology
NUTR-UE 119	Nutrition and Health
CORE-UA 5XX	Cultures & Contexts: Tpcs
Sophomore Year: Spring Semester (16 credits)	
CAS-Search by Lang.	Foreign Language (SPAN-UA, FREN-UA, etc.)*
CAS-Search by Sub.	*Liberal Arts Electives
CAS-Search by Sub.	*Liberal Arts Electives
CAS-Search by Sub.	*Liberal Arts Electives
Junior Year: Fall Semester (16 credits)	
NURSE-UN 239	Health Assessment & Promotion
NURSE-UN 240	Adult & Elder Nursing I
NURSE-UN 1261	Professional Nursing
NURSE-UN 1435	Pathophysiology
Junior Year: Spring Semester (15 credits)	
NURSE-UN 120	Integrating Evidence into Clinical Practice
NURSE-UN 1241	Adult & Elder Nursing II
NURSE-UN 241	Psychiatric Mental Health Nursing
NURSE-UN 1436	Nrsg Pharmacotherapeutic
Senior Year: Fall Semester (15 credits)	
NURSE-UN 1242	Maternity Nursing
NURSE-UN 1243	Adult & Elder Nursing III
NURSE-UN 1255	Pediatric Nursing
NURSE-UN 1248	Contemporary Issues in Health Care
Senior Year: Spring Semester (18 credits)	
NURSE-UN 1244	Community Health Nursing
NURSE-UN 1245	Leadership & Management in Nursing
	UG Nursing Electives
	UG Nursing Electives

Fig. 5. BSN curriculum, NYU Rory Meyers College of Nursing (n.d.).

Year 1:	
NURS061	BIOLOGICALLY-BASED CHEMISTRY
NURS068	INTEGRATED CELL BIOLOGY & MICROBIOLOGY
NURS101	THE NATURE OF NURSING PRACTICE
NURS065	FUNDAMENTALS OF NUTRITION
NURS102	SITUATING THE PRACTICE OF NURSING
NURS163	INTEGRATED ANATOMY, PHYSIOLOGY, AND PHYSICAL ASSESSMENT I
Year 2:	
NURS103	PSYCHOLOGICAL AND SOCIAL DIVERSITY IN HEALTH AND WELLNESS
NURS164	INTEGRATED HUMAN ANATOMY, PHYSIOLOGY & PHYSICAL ASSESSMENT II
NURS165	INTEGRATED PATHOPHYSIOLOGY, PHARMACOLOGY, AND THERAPEUTICS
NURS215	NURSING OF WOMEN AND INFANTS
Year 3:	
NURS230	STATISTICS FOR RESEARCH AND MEASUREMENT
NURS245	NURSING OF YOUNG AND MIDDLE AGED ADULTS
NURS255	NURSING OF OLDER ADULTS
NURS330	THEORETICAL FOUNDATIONS OF HEALTH CARE ETHICS
NURS334	PUBLIC POLICY AND THE NATION'S HEALTH
NURS225	PEDIATRIC NURSING
NURS235	PSYCHIATRIC NURSING
NURS547	SCIENTIFIC INQUIRY FOR EVIDENCE-BASED PRACTICE
NURS330	THEORETICAL FOUNDATIONS OF HEALTH CARE ETHICS
NURS334	PUBLIC POLICY AND THE NATION'S HEALTH
Year 4:	
NURS380	NURSING IN THE COMMUNITY
NURS389	RESEARCH/INQUIRY-BASED SERVICE RESIDENCY
NURS390	LEADERSHIP IN THE COMPLEX HEALTHCARE SYSTEM
Case Study: One of the Following	
NURS354	CASE STUDY: ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH: COMMUNITY ENGAGEMENT IMMERSION
NURS355	CASE STUDY: SELF-CARE OF CHRONIC ILLNESS
NURS356	CASE STUDY: CULTURE OF BIRTH
NURS357	CASE STUDY: INNOVATION IN HEALTH: FOUNDATIONS OF DESIGN THINKING
NURS358	CASE STUDY: NURSES AND THE CHILD WELFARE SYSTEM
NURS359	CASE STUDY: QUALITY CARE CHALLENGES IN AN EVOLVING HEALTH CARE MARKET
NURS360	CASE STUDY: NURSING PRACTICE WITH HIV+ PATIENTS
NURS361	CASE STUDY: BREAST FEEDING & HUMAN LACTATION
NURS364	CASE STUDY: CANCER
NURS365	CASE STUDY: CASE ANALYSIS IN CLINICAL NUTRITION
NURS367	CASE STUDY: PRINCIPLES OF PALLIATIVE CARE
NURS368	CASE STUDY: HOME HEALTH CARE

Fig. 6. BSN curriculum, University of Pennsylvania (University of Pennsylvania, n.d.).

highly demanding, zero-error tolerance profession, how realistic is it for us to expect them to be the innovators, leaders, or enablers of digital practices? Is it fair for us to expect of them what they have not been trained for?

The first change we must make is to introduce digital skill sets in the training curricula for our physicians and nurses. While I understand the complexities involved in updating the curricula, especially when the

Course ID	Course Title	Credits
First Year, 1st Semester		
NURS 115	Fundamentals of Nursing	4
BIOL 114	Principles of Biology	3
BIOL 116	Anatomy and Physiology	3
SAGES	University First Seminar	4
GER	General Education Requirement	3
First Year, 2nd Semester		
NURS 122	Foundations of Practice	3
NURS 201	Nutrition	2
NURS 160	Health Care in the Community	1
BIOL 117	Anatomy and Physiology II	3
CHEM 119	Molecular View of Biology	3
SAGES	University Seminar	3
Second Year, 1st Semester		
NURS 230	Nursing Care of the Adult	5
NURS 211	Introduction to Pharmacology I	1.5
NURS 250	Aging in Health and Illness	2
NURS 210 or NURS 260	Teaching Learning in the Community OR Evidenced Based Policy in the Community	1
CHEM 121	Chemical Biology	3
SAGES	University Seminar	3
Second Year, 2nd Semester		
NURS 212	Introduction to Pharmacology II	1.5
NURS 342	Medical Microbiology	4
NURS 317	Psychiatric/Mental Health	3.75
NURS 240	Nursing Care of the Adult II	4.75
NURS 210 or NURS 260	Teaching Learning in the Community OR Evidenced Based Policy in the Community	1
SOC 203	Human Dev: Med & Social	3
Third Year, 1st Semester		
NURS 315	Parents & Neonates in Health and Illness AND	4.5
NURS 316	Children & Adolescents in Health and Illness OR	4.5
NURS 338	Care of Complex, Acutely Ill Adult and Older Adult AND	4.5
NURS 339	Care of the Perioperative Patient	3.5
STAT 201	Basic Statistics	3
NURS 310 or NURS 360	Leadership in the Community OR Process Change in the Community	1
GER	General Education Requirement	3
Third Year, 2nd Semester		
NURS 315	Parents & Neonates in Health and Illness AND	4.5
NURS 316	Children & Adolescents in Health and Illness OR	4.5
NURS 338	Care of Complex, Acutely Ill Adult and Older Adult AND	4.5
NURS 339	Care of the Perioperative Patient	3.5
NURS 320	Departmental Seminar	3
NURS 310 or NURS 360	Leadership in the Community OR Process Change in the Community	1
NURS 345	Nursing Informatics II	2
GER	General Education Requirement	3
Fourth Year, 1st Semester		
NURS 370	Information Technologies in Health	1
NURS 371	Public Health Nursing	3
NURS 372	Health in the Global Community	3
NURS 373	Global Health Practicum (Capstone)	5
Fourth Year, 2nd Semester		
NURS 343	Issues and Ethics	2
NURS 341	Nursing Management	3
NURS 380	Senior Preceptorship	8

Fig. 7. BSN curriculum, Frances Payne Bolton School of Nursing, Case Western Reserve University (n.d.).

digital world continues to evolve so rapidly, the mere inclusion of health-care IT professionals is not enough to enable the transformation of the field. However valuable, they are not trained in the intricacies of health-care. Digital transformation requires us to train our core healthcare workforce — the physicians and the nurses — so that they become the true enablers of such a transformation. Otherwise, we are asking deep-sea divers to fly an airplane, and then scratching our heads as to why the plane keeps crashing.

We can't, however, wait for the right workforce to be in place for digital transformation of healthcare to happen. While such a transformation is inevitable given the forceful push of our society toward digitalization, its entrance doesn't need to be abrupt. That is where leadership comes into play.

6. The Leadership

Twenty years ago, as a newly minted MBA from NYU Stern School of Business, nothing felt impossible. The world was for us to take, and we were going to change it for the better! We were smart, we had the skills, and the MBA had opened a new set of opportunities.

For the first 10 years, I was a management consultant working on complex consulting projects focused on strategy and transformation in the healthcare industry. The analysis was always rational, the recommendations always clear, and the final client presentations almost always hit the mark. We were so proud. We were providing the right answers that made sense for the organization. But, when we were going back to the same organizations one, two, or even five years later, it was more of the same.

Then, I got a chance to go in-house. As Head of Innovation and then Global Head of Strategy for Digital Services, it was now my chance to implement what I knew was needed. If I could see it, I was sure everyone else did too. Now, it was my turn to hire consultants. Their recommendations were again highly rational, rooted in analysis, supported by facts and investment analysis that made dollar investments a no-brainer. But the money to invest in digital transformation, as I learned, even in some of the highest positions of authority, was not that easy to come by.

Any transformation requires a purse. The purse strings loosen when its holders believe that the investment is necessary. And it is not one person who holds the purse strings and makes investment decisions in an organization — it is a team effort. Rather, it is a match where short-term

revenue wins over the long-term possibility. And in healthcare, digital transformation still gets trumped by other, more urgent needs, as we saw with the board room conversation.

However, I have also learned a few key lessons on what could enable leaders' work in driving digital transformation forward:

- (1) Start with clarity of the organizational purpose: Irrespective of the level of the organization, clarity of and alignment to the organization's purpose are critical. The absence of alignment leads to individual agendas, politics, and conflict.
- (2) If an organization's purpose is to be the best digital health provider, it may be easier to adapt its goals to a digital future than if it is "Exceptional Care, Close to You."
- (3) Have a pragmatic vision and measurable milestones: The less pragmatic the vision, the more difficult it will be to gain organizational momentum. Measurable, declared milestones are important because humans are innately trained to go after targets, and nothing succeeds like success.
- (4) Stay innovative: Most mature organizations stay focused on driving their core business, leveraging the process machinery they have perfected over time. In the long run, that becomes the reason for obsolescence. As is posited in innovation literature and discussed in our book, *Redefining Innovation: Embracing the 80–80 Rule to Ignite Growth in the Biopharmaceutical Industry*, organizations should methodically allocate to drive their core business (85–90%), build adjacent businesses (7–10%), and innovate for the future (3–5%) (Nagji and Tuff, 2012). Yes, Wall Street and investor expectations will get in the way, but large organizations have the highest ability to operationalize such an investment philosophy.
- (5) Be agile, but not rushed: Leading transformation requires agility, but don't confuse that with rushing to adopt every best new idea since sliced bread. That creates confusion, panic, and mistrust.
- (6) Be a leader-coach: People will find it difficult to embrace change. You need to operate as a leader-coach to empower people and enable change. Leading with a coaching mindset, a leader-coach operates and enables organizations to operate from the position of creativity, not reaction. A leader-coach frames and reframes perspectives but remains true to the organizational purpose. And a leader-coach can operate from any level in the organization, coaching up and down.

- (7) Lead with courage: Change is difficult, and uncertainty will be high. Resistance will come from multiple directions. A lot of times, there will be no playbook to refer to; you will have to create the playbook. This is where the 80–80 rule comes in: "Being 80% confident that you will only be 80% right the first time should feel normal."
- (8) Don't miss the forest for the trees: While it is extremely important to execute different initiatives that are part of the transformation program, it is equally important not to lose sight of the big picture. Another way to say it: Don't forget the organizational purpose as you get deep into divisions, functions, and the rest of the organizational labyrinth.

7. Conclusion

Is healthcare a complex system comparable to a food delivery app in terms of user experience and ease of use? Maybe not. Is there an expectation in the market that the healthcare user experience should be simple and easily accessible at the touch of an app? Absolutely. Can we get there? I am an optimist and think so, but a digital transformation will require a multi-pronged approach. The most important area to focus on is developing the people who can lead this transformation.

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