Report On
The challenges of digitalization and AI training of Medical Documentation Specialists: A qualitative study of experiences in Augmedix Bangladesh

By

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20104130

An internship report submitted to the BRAC Business School in partial fulfillment of the requirements for the degree of Bachelor of Business Administration.

BRAC Business School
BRAC University
May, 2024

Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

_____

Atqiya Maisha Talukder
20104130

Supervisor's Full Name & Signature:

_____

Dr. Nusrat Hafiz
Assistant professor, BRAC Business School

Letter of Transmittal

Dr. Nusrat Hafiz

Assistant Professor,

BRAC Business School

BRAC University

Kha 224 Bir Uttam Rafiqul Islam Avenue, Merul Badda, Dhaka

Subject: Internship report submission

Dear Ma'am,

I am thrilled to present my internship report, "The Challenges of Digitalization and AI Training of Medical Documentation Specialists: A Qualitative Study of Experiences in Augmedix Bangladesh."

This report explores the experiences of the Medical Documentation Specialists from Augmedix Bangladesh, focusing particularly on the training program in aspects of digitalization and AI.

I extend my sincere gratitude to my internship supervisor, for her tireless mentorship and guidance during this initiative.

I hope this report meets the preferences.

Sincerely yours,

_____

Atqiya Maisha Talukder

20104130

BRAC Business School

BRAC University

Date: May 20, 2024

Non-Disclosure Agreement

This agreement is made and entered into by and between Augmedix Bangladesh and Atqiya Maisha Talukder student at BRAC University…….

Acknowledgement

I extend my deepest gratitude to Dr. Nusrat Hafiz, Lecturer at BRAC Business School, BRAC University, for her invaluable support and guidance throughout my internship. Her expert mentorship and specific suggestions were instrumental in ensuring the quality and comprehensiveness of this report.

I am thankful to Ms. Sabrina Ahmed, Talent Acquisition Lead, Augmedix Bangladesh, for excellent supervision. I was placed under the people team where I gained real-life-based HR project knowledge and operation with her. Under her leadership, I could develop, execute employee engagement strategies, manage various projects to get insights into department functioning. This enhanced my sectoral knowledge and will be fruitful for my future career.

I also wish to express my sincere appreciation to Dr. Md. Mizanur Rahman, Associate Professor at BRAC Business School, for his academic support and encouragement throughout my studies.

Besides, I am pleased to thank my peers, Siam, Fatima, Taufiq, Juhayer, Maliha, Sanjana, Tasnuva, and Oritro due to their support and friendly nature. They inspired and gave me constant support to enjoy my internship with responsibility.

Thank you all for your invaluable contributions and support.

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Abstract

The emergence of new opportunities for training MDSs through digitalization and AI results in changes seen within this role. In light of this assumption, a qualitative study was conducted to explore the experience of MDSs in Augmedix Bangladesh and their transition to digitalization and AI training. The qualitative research design was applied to gather data using in-depth interviews. The thematic analysis technique was employed to categorize the collected data into themes. The topic findings assist in addressing a critical gap in literature by exploring the experience and perspective of MDS on training and adjustment to digitalization and AI. The study discovers the complexity and importance of experience in needing digitalization and AI training and the experience of MDS. Ultimately, this thesis is to help healthcare organizations improve their experience of supporting MDS thoroughly and integrating digitalization and AI effectively for their documentation.

As the industry shifts towards more advanced solutions, MDS becomes responsible for becoming acquainted with the newly introduced approaches that reshape their traditional tasks. The qualitative research based on the results of the in-depth interviews and the developed themes have exposed the available difficulties that MDS encounter as they undergo the shift. It becomes clearer that combining digitalization and AI-based training requires a well-structured training initiative and continuous support to master the peculiarities of these transitions.

A consideration of the lived experiences of MDS demonstrates the vital necessity for healthcare organizations to develop comprehensive training and on-going support programs for its workers to integrate digitalization and AI meaningfully into their documentation systems. Health organizations can benefit from the findings of the research to create solutions that will assist them to implement training programs on digitalization and AI that are effective for MDS.

What is already known about the topic?

Although the information related to the field of medical documentation is continually developing, I am aware of the following trends that are to influence MDSs:

The digitalization of tools and workflows is on the rise in the healthcare industry. Although it can increase efficiency and accuracy, it also poses a challenge (Schmitz-Grosz, 2021). MDSs are relieved of time-consuming work, which allows them to focus on higher-level activities (Landi, 2023). However, this requires them to acquire new skills. The traditional training programs applied to MDSs might not be sufficient to enable them to work with the AI tool. At least three areas of knowledge need to be supplemented: grounded understanding of AI capabilities and limits, technical problems preventing normal functioning of AI, and ways of efficient collaboration with AI (Augmedix, n.d.). The adoption of AI might also change how MDSs' workflow looks, which might be confusing, annoying, or lead to resistance. (Meditec, 2023). A high level of trust in AI might result in the depreciation of some skills formerly characteristic to MDSs, such as profound medical knowledge and independent decision-making reference (Offshoring of healthcare services: the case of US-India trade in medical transcription services, 2004).

However, there are limited studies specifically exploring the experiences of MDSs in Bangladesh with digitalization and AI training, particularly within the context of Augmedix, a specific AI solution provider. This research aims to fill this gap in knowledge by providing a qualitative analysis of their experiences.

List of Acronyms

MDS	Medical Documentation Specialist
AI	Artificial Intelligence
EHR	Electronic Health Record Form
AXBD	Augmedix Bangladesh
AST	Augmedix Scribe Training

Chapter 1: Overview Of Internship at AXBD

1.1 Student Information:

Name: Atqiya Maisha Talukder

ID: 20104130

Program: Bachelor of Business Administration

Major/Specialization: Human Resource Management & E – Business

Internship Supervisor: Nusrat Hafiz

This Internship report is submitted as part of fulfillment of BUS 490: Internship Course of the Spring 2024 semester, the Major are Human Resource Management & E-Business under BRAC Business School, BRAC University. While preparing the report I covered the entire institutional work Experience which has been undertaken at Augmedix Bangladesh during January 2, 2024, to April 2, 2024.

1.2 Internship Information:

1.2.1 Internship Tenure Details

Period: 2 January 2024 to 2 April 2024

(First two months I worked with the MDS recruitment team, last month I worked with Employee Branding and Corporate recruitment team; now I am working as an assistant officer, Employer Branding)

Company Name: Augmedix Bangladesh

Department: People Team (HR)

Address: Building: 191/1, Rahman's Regnum Centre, Level 15, Bir Uttam Mir Shawkat Sharak, (Tejgaon-Gulshan Link Road) Dhaka 1208, Bangladesh.

1.2.2 Internship Company Supervisor's Information

Name: Sabrina Ahmed

Position: Talent Acquisition Lead

1.2.3 Job Responsibilities as an Intern

Talent Acquisition & Administrative task

- Run the entire recruitment cycle which includes initial phone screenings, proctoring tests, scheduling interviews, and facilitating shadowing sessions with the interviewers.
- Processing documentation which includes updating applicant's details after cv screening (Update 150 CVS every day for recruitment phase).
- Complete sign-up for new employees, collect all the necessary documents and create personal files for all the new onboarded employees.
- Generate CVs from various sources like Facebook job groups, BDjobs, LinkedIn, and Lever.
- Contributing to achieve the monthly recruitment target.

Employee Branding

- Create liaison with different universities to conduct sessions, create awareness about ongoing job opportunities.
- Attend career fairs to promote and collect CV's for Augmedix Bangladesh.
- Help with ideas about social media posts for the official page.
- Processing documentation and generating reports for campus activities.

Employee Engagement & benefits

- Help the team to organize different cultural events.
- Promote benefits for the new employees to keep them motivated during different sessions.
- Help the team with leave management through a smart sheet.
- Help the team with Insurance claims for employees, if there is any gap in documentation then inform the employees as well.

1.3 Internship Outcomes:

1.3.1 Student's contribution to Augmedix Bangladesh

As an intern at Augmedix Bangladesh, my contributions were multifaceted and integral to the company's operations. I spearheaded the talent acquisition process by managing the entire recruitment cycle, which encompassed conducting initial phone screenings, coordinating proctoring tests, scheduling interviews, and facilitating shadowing sessions with interviewers. This involved not only ensuring the seamless flow of the recruitment process but also maintaining a high level of professionalism and communication with both candidates and internal stakeholders.

Additionally, I played a crucial role in administrative tasks, particularly in processing documentation. I diligently updated applicant details after CV screening, often handling a substantial volume of CVs daily to meet the recruitment phase's demands. Moreover, I took charge of completing sign-ups for new employees, meticulously collecting all necessary documents, and creating personal files for seamless onboarding experiences.

I organized university connections in the employee branding field, offering opportunities to host sessions at different universities to raise awareness of our ongoing job offers. Organizing a booth at job fairs was another way to get potential candidates excited about what our company has to offer trust me. I even pitched in for the social media posts, allowing ideas to be shared in portraying our diverse brand in the most eye-catching way.

When it comes to employee engagement activities and benefits, I contributed to the planning of cultural events that topped up the cultural diversity of the workplace and provided inclusivity and fun to the employees. I also worked closely with the benefits for new hires to introduce them to the company's commitment to their health and professional development. Equally important, I managed the team's leaves including annual and maternity leave using smart sheets for effective leave management. I also guided the team on the insurance claim process for employees and resolved forms discrepancies in a timely manner.

Additionally, five universities fairs and three seminars successfully executed and arranged for the team boosted our collaboration and built a good public image for the company.

1.3.2 Benefits to the Student at Augmedix

I was able to increase my experience and gain many useful skills during the internship at Augmedix Bangladesh. The work on various tasks within the talent acquisition, administration, employee branding and engagement helped me develop a diverse skill set I would need on any feasible career path. For example, managing the whole recruitment process and paperwork helped me improve my organizational abilities, attention to detail and the ability to work effectively under pressure, to meet tight deadlines.

Moreover, communication with university representatives and participation in career fairs, writing engaging posts for our social media refined my networking skills, communication skills and taught me the basics of marketing. Another example is my involvement in cultural events and seminars; in addition to all the skills relevant to any event, it allowed me to improve my leadership qualities in managing smaller teams, and the better understanding of group dynamics. Not only did I gain a lot of experience, but now I feel considerable more confident in my ability to take on a leadership position, manage complex organizational responsibilities.

1.3.3 Difficulties Faced During the Internship Period

However, I also came across various difficulties which I had to exercise my problem-solving skills to address. Indeed, managing the large number of CVs and documentation updates when the company was experiencing a peak in recruitment needed a lot of attention to detail and time management. The same can be said regarding organizing of various events and the processing of doctoral welcoming and retirement documents or those needed for leave and insurance claiming, which was impossible without proactive communication and planning with multiple

stakeholders. Nonetheless, as I managed to stay proactively communicative, work effectively in teams, and solve problems, I managed to address all the challenges.

1.3.4 Recommendations

Reflecting on my internship experience, I would recommend the following strategies to further enhance the effectiveness of future internships at Augmedix Bangladesh:

- Provide interns with structured training sessions and mentorship to familiarize them with company processes and systems.
- Implement automated systems or tools to streamline documentation processing for recruitment, onboarding, leave management, and insurance claims.
- Encourage interns to actively participate in diverse projects and initiatives across departments to gain a comprehensive understanding of the organization's operations.
- Foster a culture of feedback and recognition to acknowledge interns' contributions and provide opportunities for their professional development.
- Continuously evaluate and refine internship programs based on feedback from interns and supervisors to ensure a mutually beneficial experience for both parties.
- Company should offer more opportunities for interns to lead projects or initiatives.

Chapter 2: About Augmedix Bangladesh

2.1 Introduction

The parent company of Augmedix Bangladesh is Augmedix USA. Augmedix is an America-based technology company which headquarter is in San Francisco, California. In Dhaka, Augmedix has an office, which is mainly expertise in medical documentation and virtual medical scribe solution. This expertise at the company level reveals the fact that Augmedix is also a company that has been in existence for quite some years and is in a position of creating more respect in the area. Augmedix offers Excellent expertise in the area. The professionals have mastered the art of Natural Language processing, Artificial Intelligence, and know the medical terms that are used in the marketplace. It also offers high-quality services to medical service providers to help them focus their clients and tiresome outsource ones.

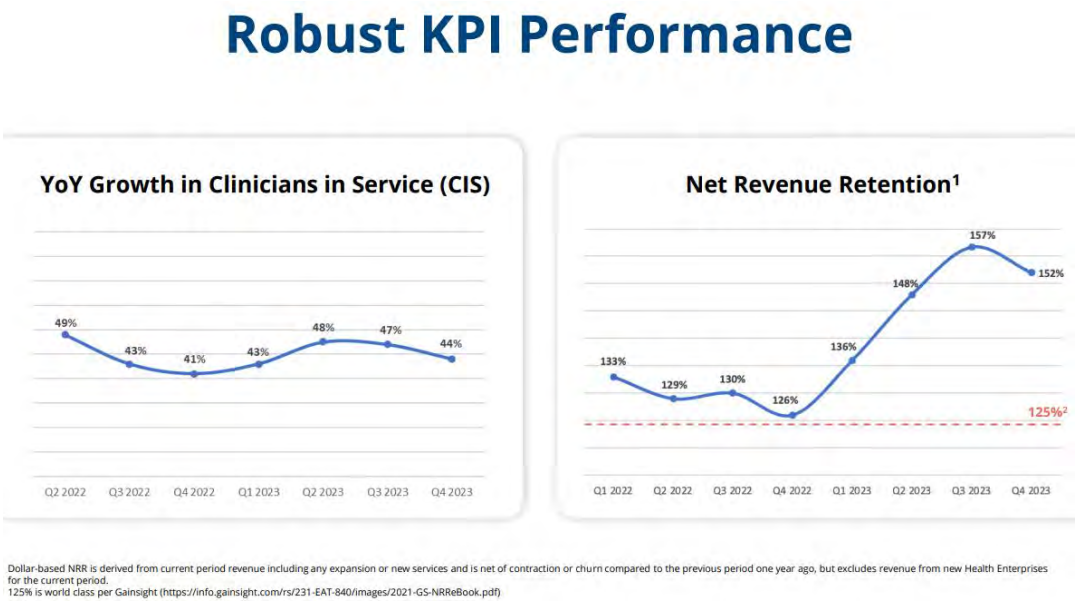
The firm offers Virtual medical scribe product in Bangladesh, in which the technology enables a doctor to record patient encounters in real-time as a remote scribe listens and records the event. This is a revolutionary technology as it has been proven to relieve clinicians of the burden of documentation and hence concentrate on providing excellent service to the patients. The second product offered by Augmedix Bangladesh is medical transcription. Medical transcription helps in converting voice recorded files to Word format. This is very important in the health sector, especially in recording patient information. The other product offered by Augmedix Bangladesh is medical coding. Medical coding is a translation process; it turns the diagnosis, service rendered, and equipment used into some figures and numbers and then into a code. It helps in enabling the hospital to be paid fairly, accurately, and timely. The other product offered by Augmedix Bangladesh is clinical documentation improvement. It further improves documentation making it easier and fast to follow.

2.2 Augmedix Overview

2.2.1 History of Augmedix

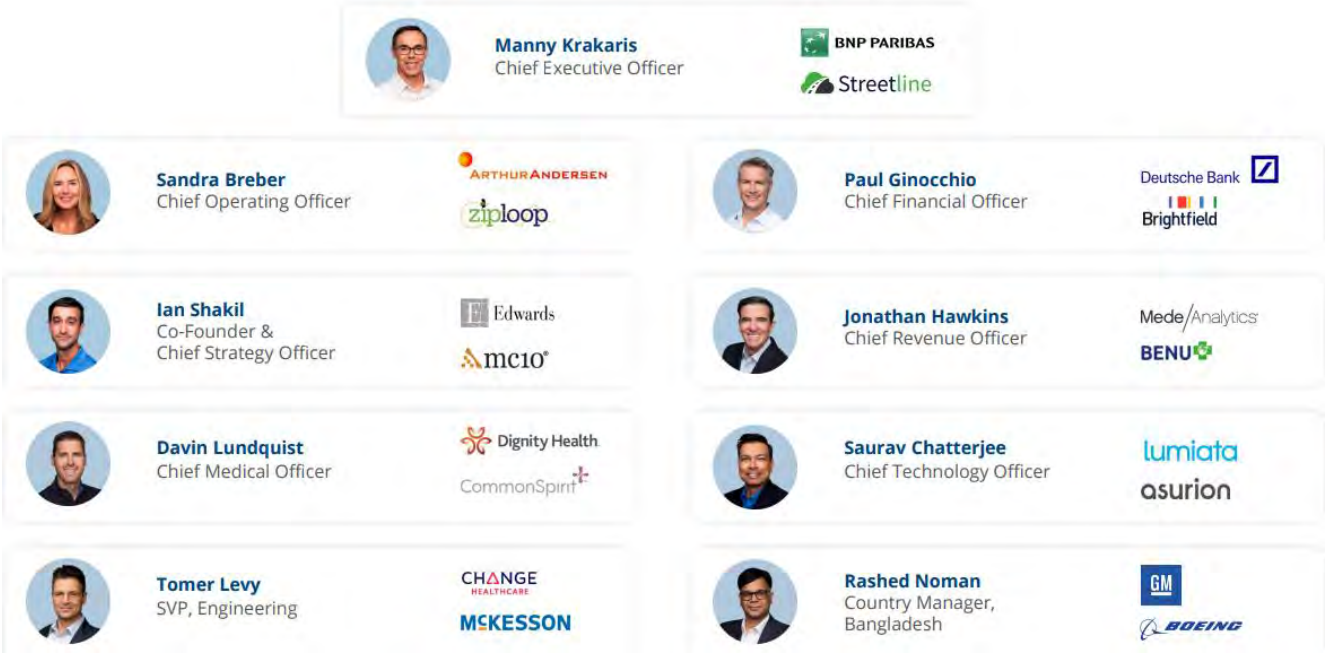
Founded in 2012, Silicon Valley company Augmedix has its beginnings in addressing one of the healthcare industry's great bugbears. As for America, a law called HIPAA came into effect to protect patient information and streamline processes related to medical care. Although it was meant for good, this law inadvertently burdened doctors with even more work--because they had

to fill out an electronic health record (EHR) form every time they came into contact with patients. All that paperwork spelled less time left for the things they truly wanted to do dealing meaningfully with patients.



Seeing this predicament, Ian Shakil in 2012 hit upon a brilliant thought: remote assistants could help doctors with their documentation. So, there were born "scribes". These assistants, located in such places as Bangladesh, monitor conversations between doctor and patient through tools like Google Glass and take care of the paperwork. This provides several benefits. Most obviously, it lightens the burden on doctors. However, no less important is that patients will feel happier if they can focus their attention more completely on meaningful interactions.

2.2.2 Management Team of Augmedix



Below is the Augmedix management team.

Ian Shakil, the creator, director, and chief strategist

Global CEO Manny Krakaris

Bangladesh's Country Director Rashed Noman

Head of People, Lia Horii

Chief Revenue Officer Jonathan Hawkins

Chief Operating Officer Sandra Berber

2.2.3 Mission Statement:

At Augmedix, our aim is to bring back the human touch to the connection between doctors and patients. We're committed to tackling the biggest challenge facing the healthcare system in the USA: the overwhelming burden of documentation.

2.3 Management Practices of Augmedix Bangladesh

2.3.1 leadership style of AXBD

At Augmedix, the leadership style is more on the autocratic side. As a matter of fact, Ian Shakil and the management team make decisions for the whole organization, and they take this responsibility themselves. At the same time, they personally handpick each member to join their team. Although this is a different way of doing things than from what we are used to in Bangladesh, it suits our USA-based company just fine. Here we operate in an open and dynamic atmosphere, unmolested by office politics and with no government interference.

Despite the autocratic style, our very workplace is characterized by a culture of support, in which everyone works together and contributes to projects. It's so laid-back that you can drop by the Country Director's office at any time for a chat or advice. They are always willing to help with any questions or problems that arise. This atmosphere of support and respect for each other's growth potential is what makes us successful.

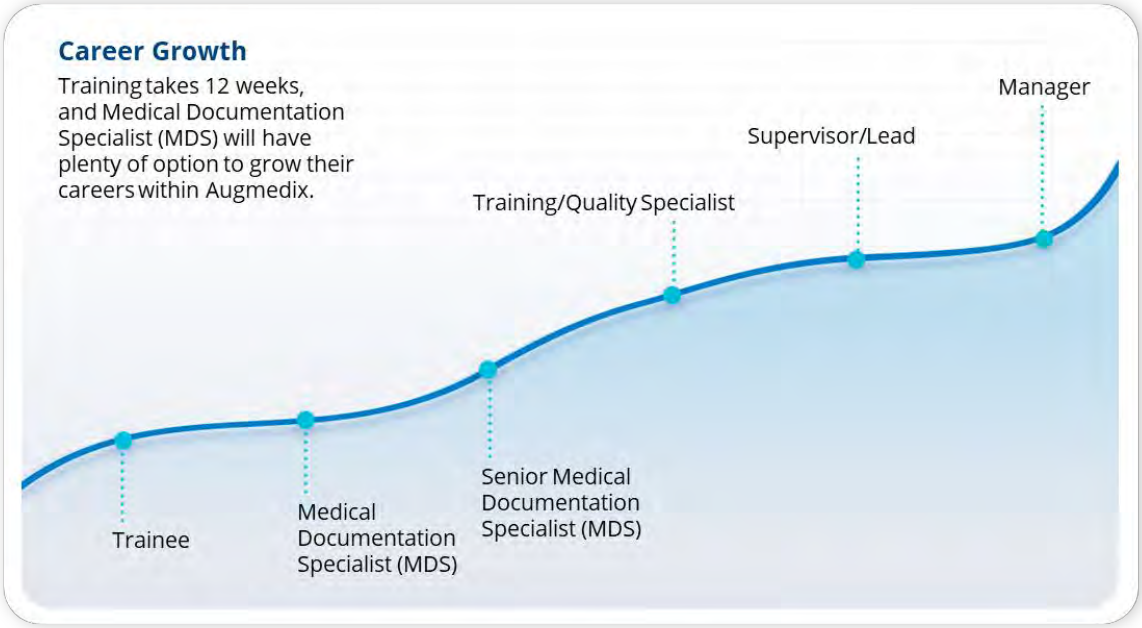
Augmedix's management is committed to the development of its people, hiring thousands of new team members every year. Unlike the toxic workplace of power struggles that can operate in some companies, we focus on teamwork and value each other's contributions more than people's titles. In Augmedix, we believe in cultivating a positive work culture for people.

2.3.2 Recruitment and selection process of AXBD

Augmedix recruits roughly 1000 Scribes annually. Those who work with United States doctors in filling out Electronic Health Record (EHR) forms. This is a crucial function of our operations. Scribing certification involves five simple steps. First, applicants go to an information session where they receive a job description, the requirements for this kind of work, how much they will earn as Scribe and what kind of allowances besides salary there are training program. Then they take a basic pre-screening test that includes logic and simple math problems with grammar correction drills. If the candidates pass this round, they move along to the screening of their skills in English. The English test itself covers grammar, listening comprehension and article use—all tested in an integrated format within the EHR system. There are preposition tests on page ; both main summary 1 and sub summary tests 2 of differing length; an essay question as well some typing practice for those candidates lucky enough to be called back. For those who pass here they go on to the final interview and, if successful, start training as a Scribe.

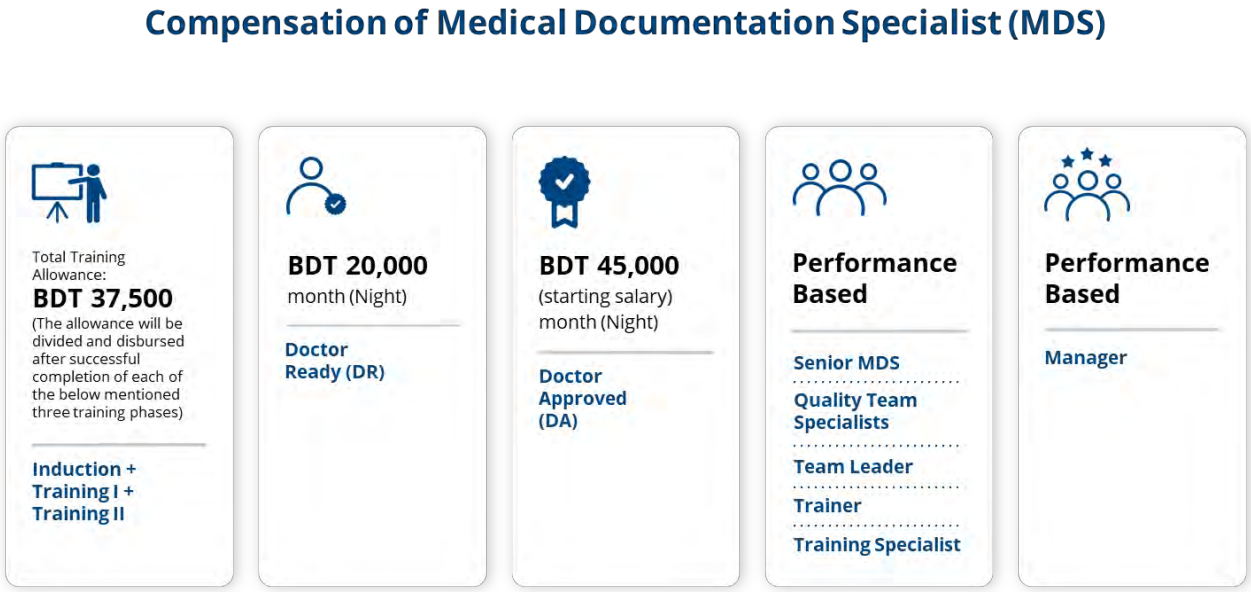
For the other corporate positions, this process might be a little different. It all starts with a phone interview to check if the candidates have the basic requirements necessary. If they do, over to A follow-up meeting with our hiring team will assess the candidate's qualifications and finally whether he is fit for this role that we have open.

2.3.3 Training and Development Program for MDS or Scribe



Before entering the work as a Scribe and working with USA doctors, individuals must attend a three-month training program. As Augmedix hires Scribes from a variety of educational backgrounds, the training is particularly important to train them for the job. The training consists of two phases is AST1 is Augmedix Scribe Training Phase and AST2 is Augmedix Scribe Training Phase 2. After completing AST 1 and 2, a Scribe becomes DR or Doctor-Ready. They will then shadow a doctor to see their flow. If the doctor believes they are ready, the candidate shall be DA or doctor-approved and shall be deployed with USA doctors.

2.3.4 Compensation System of AXBD



The compensation system of Scribes is different. First of all, during training, they receive 37,500 taka for the entire three months. Then, having become Doctor Approved and practiced three days a week, their compensation increases to 45,000 BDT. When Scribe receives a managerial position, they can earn 1 lakh takas or more.

Regarding other corporate positions, the structure is different and depends on the department and the position held.

2.4 Marketing Practices of AXBD

2.4.1 Target Customers and Targeting Strategy

Bangladesh hosts a sizeable Scribe operation for Augmedix, with the company having an annual goal of hiring a minimum of 1000 Scribes. In seeking to achieve this target, Augmedix adopts a mass targeting approach, making the recruitment process open for everyone regardless of their level of education, including students and dropouts. This approach has generated a lot of interest, more so considering that the USA doctors need additional Scribes in the wake of the COVID-19 crisis to help them clear up the increasing load of filling EHRs. Given the high rates of unemployment in Bangladesh and the impacts of the pandemic, Augmedix's decision to adopt a mass recruitment targeting strategy has helped the company meet its demand for Scribes. Unlike other firms in the sector where job experience is a key consideration, Augmedix does not require candidates to have any prior clerical experience. As such, on average, 150 CVs are received in a day for the Scribe position, making it possible for the company to meet its annual hiring need.

2.4.2 Marketing strategy

Augmedix appeals to US-based Doctors by offering its services to Scribe, a private virtual personal assistant, utilizing Google Glass technology. Augmedix accomplishes this through its extensive Scribe operation in Bangladesh and its other Scribe operations and partnerships in India and Sri Lanka. The Scribe, from Bangladesh, observes and records the live interaction between the doctor and the patient and then documents the details in an EHR, assisting the doctor in running a patient's examination efficiently.

While marketing its services, including job opportunities, Augmedix uses social media platforms, such as LinkedIn, to make professional job posts concurrently and easily spread the word about its services to potential candidates.

In terms of pricing, the services Augmedix offer are official and subject to US laws and regulations since their customer is in the US and the law seeks to protect them since they are the end-users. Its services are available in hospitals, diagnostic centers, and insurance, among other health-related facilities in the US.

2.4.3 Advertising and Promotion Strategies

Augmedix uses a variety of advertising and promotion methods to draw in potential Scribe candidates. Job openings are published on platforms such as Facebook and LinkedIn and are sometimes advertised in the newspaper to reach the broadest possible audience. Because today's generation frequently uses social media, Augmedix views this as one of the most efficient methods for a mass message to reach. By joining the millions of job vacancy groups on Facebook, Augmedix is constantly posting job offers to share them, communicate with future employees, and establish job opportunities.

2.4.4 Branding Activities and Marketing Channels

Therefore, Augmedix is a unique company with a unique provision of services to health care professionals in various health facilities in the United States. Since the company was founded with the purpose of remotely assisting doctors to reduce the workload, and very few if any similar enterprises worldwide, then it is important to note that at this early stage, there is a need for wide

advertising and branding. Firstly, since there is inherent demand for Scribes for doctors, especially during a pandemic, the coverage will occur without specialists' long search. Secondly, since the corporation Augmedix is focused on serving doctors who make dreams for people, the slogan that rebrands everyone, the sole slogan Rehumanizing Healthcare distracts from the wide implementation of other multinational companies. Augmedix will provide its services to US doctors through direct sales. The company's distribution will take place through hospitals where Scribes are provided to medical professionals to fill out an Electronic Health Record form.

2.5 AXBD Accounting Practices

Accounting Principles: In the United States of America (USA), the Financial Accounting Standards Board (FASB) sets the Generally Accepted Accounting Principles (GAAP) to provide a uniform basis for reporting of financial information. Accounting principles are essential in ensuring uniformity and uniformity in reporting to uphold transparency in accounting practices.

Conservatism Principle: Five of the key accounting principles upheld by Augmedix include The Conservatism Principle. Augmedix applies the prudence principle in reporting where several options are accessible for a financial statement item. This accounting principle guarantees that Augmedix exercises restraint by alternative reporting options less likely to overstate its financial performance or financial estimates.

The Consistency Principle: The principle of consistency is critical in Augmedix's accounting practice. Once Augmedix chooses an accounting method or principle, the firm remains consistent

with it throughout all periods. Consistency promotes comparability and reliability and makes it easier for stakeholders to understand which fosters better trust and reliability.

The Cost Principle: The cost principle is another accounting principle adhered to ensure financial transparency. Augmedix records its assets, liabilities, and equity as the actual amount paid. The value of assets, for example, cannot be adjusted for inflation or be influenced by the market price upon sale.

The Economic Entity Principle: the economic entity principle dictates that the financial statements of a firm record all transactions with the business entity and not with the owner. Augmedix upholds this accounting principle as all records are separate from the owner's business. For example, the entry of equipment in a balance sheet shows the equipment in terms of cost without considering profit accruing.

The Full Disclosure Principle: Augmedix adheres to the principle of full disclosure that involves divulging all transactional information in financial statements and records. The full disclosure principle ensures that all relevant stakeholders have the information to make decisions about Augmedix's performance.

Going concern principle: In this case, Augmedix discloses uncertainties regarding its future ability to generate positive cash flows thus operating indefinitely in the future. It should be noted that the application of the going concern principle arises from the company's close adherence to

transparency that involves the organization informing the shareholders of any condition that might make it impossible to do business in the future.

Matching principle: This principle assists Augmedix in matching the revenues with the expenditures that are involved in generating them. Matching expenditures with revenues helps in registering and reporting the organization's true performance.

Monetary unit principle: Augmedix records its transactions in terms of a stable currency unit; hence, monetary unit principles are applied. Since the dollar is used as the currency, there is uniformity in applying the principle.

Reliability principle: The principle is also applied at Augmedix, as it requires the organization to report genuine and reliable information. Augmedix has established a good credibility record by following the GAAP guidelines.

Revenue recognition principle: Augmedix follows the revenue recognition principle stipulated at ACC 606, which is based on the five-step model.

Time period principle: Augmedix designs specific time periods for preparing the statements, and that relates to an annual period. This is an important aspect because it helps in the formulation of decisions by the parties concerned.

2.6 Operations Management and Information System Practices in AXBD

2.6.1 Collecting, Storing & Processing Data

Augmedix also uses several Google tools such as Google Sheets, Google Docs, and Google Drive to data collection, storage, and processing where findings can be shared with the stakeholders and clients with little bureaucracy that characterizes complex spreadsheets. Our data is easily managed using Google's platforms, which also support us in handling much information at a time due to their simplicity.

As Augmedix keeps growing and more people join as scribes, we regularly receive an average of 100 CVs every day. It is to keep track of the individuals who have applied for the scribe position. Although one does not need to meet some qualification to become a scribe at Augmedix, we treat all applicants the same way to provide equal chances to all applicants. To help in streamlining this process, we receive CVs submitted through email, LinkedIn, or any other social media, save them in the Google Sheet, where all the CVs submitted throughout the year are recorded. An HR executive then communicates to the 100 applicants every day and invite to the Information Sessions and the Pre-Screening Test. This test and the sessions used to be held in our office but are now done using Google Meet as a digital platform due to the COVID-19 pandemic.

The results are automatically sent to the senior executives through email, which are, then, stored in the Google Sheet to tell the applicants who did the pre-screening test and who didn't. The applicants who passed the event are, then, invited for the Screening Assessment test, then, take the test online, which is stored online on a USA-based online exam center. We receive the results of

the screening test in less than a day, which are then stored on another Google Sheet to say the applicants who qualified for the final interview. If applicants do not qualify, they must wait for one month before making another application. All the interviews are done virtually, only the scribe interview is physically done at our offices, scheduled using the Google Calendar.

The rest of the interviews are scheduled using the Lever Hiring Tool, where CVs from LinkedIn are stored. The final selected applicants for the final interview must fill in the Google Form before filling it. The information provided is then stored in the Google Sheet, where other corporate information is stored in the Google Sheets under different names.

The Lever Hiring Tool is also used in storing CVs, scheduling the interview, and submitting feedback. The tool is then used to make feedback, which is easier to review the CVs. These information systems help in data collection, storage, and processing and ensure quality management.

2.7 Industry and Competitive Analysis of AXBD

2.7.1 Porter's Five Forces Analysis:

1. **Threat of New Entrants (Moderate to High):**
    - **High Entry Barriers:** Augmedix serves the healthcare technology sector which requires high initial investments in technology and research and development.

Moreover, heavy legislative and regulatory burdens and the necessity to comply with healthcare regularities serve as entrance restrictions.

- **Brand Loyalty:** Augmedix created a strong brand reputation over the years. Therefore, it will make it difficult for people to switch to some new companies with no reputation and trust in the market.
- **Economies of Scale:** Augmedix has achieved high levels of production to balance fixed expenses per quantity, making it difficult for new challengers to join at a low cost.

2. **Bargaining Power of Buyers (High):**
    - **Bargaining power:** Buyers in the healthcare industry, which include hospitals and healthcare providers, have significant bargaining power since they have a variety of healthcare technology solutions to choose from. Therefore, their power could be categorized as high since it has a choice.
    - **Low switching costs:** The power of buyers is broadened due to the low costs of switching to other alternatives to healthcare technology.

3. **Bargaining Power of Suppliers (Low to Moderate):**
    - Low: technology and software solutions have a vast number of suppliers.
    - Standardized products: The bargaining power of buyers in the industries forces the suppliers to diminish.

4. **Threat of Substitutes (Low):**
    - **Low:** The products of Augmedix are innovative and cannot be readily substituted.

- **High switching costs:** choosing an alternative apart from Augmedix might be highly costly for the accessors if there is a need for replacement.

5. **Competitive Rivalry (Moderate to High):**
   - **Moderate to High:** Augmedix manages moderate to highly competitive rivalry due to local and international companies operating in the same field.

   - **Product Differentiation:** I believe that the company has high product differentiation since it offers innovative solutions. Healthcare technology is considered to have a low barrier to entry. However, it is essential to mention that advanced technology and a strong brand name allow the company to have high differentiation.

   - **Industry Growth:** The industry in Bangladesh grows rapidly and needs new facilities related to healthcare technology. Hence, many new entrants are likely to enter the market, increasing solid rivalry.

2.7.2 Industry Competitiveness:

Augmedix is a company operating in the healthcare technology sector, which offers remote medical scribing solutions to healthcare providers. This sector is characterized by high competition as the demand for technological solutions that can help facilitate and improve patient care is steeply growing. The leading companies in this sector are established corporations and younger start-ups

that provide many other technology-based solutions in healthcare, such as electronic health record-keeping, telemedicine, among others.

2.7.3 SWOT Analysis for Augmedix Bangladesh:

Strengths:

1. **Innovative Solution:** Augmedix has developed an innovative solution to the healthcare industry. Augmedix's remote medical scribing helps healthcare providers spend less time at the desk charting medical encounters and spend more time at the bedside listening to patients.
2. **Cost-Effective:** Instead of hiring more in-person scribes or wasting valuable staff hours charting medical notes, Augmedix can provide services at a fraction of the cost.
3. **HIPAA Compliance:** Augmedix is not only HIPAA compliant but goes beyond. The Department of Health and Human Services has awarded us the HIPAA Security Compliance Certification, meaning our Use of Information Security Summaries covers the management and reviews of contact records.

Imitable Strengths:

1. **Technology Infrastructure:** Unlike specialized technology and technology assets, technology infrastructure can be quickly and cost-effectively replicated. However, Augmedix has already established a functioning and reliable infrastructure to support remote medical scribing services. For this reason, the infrastructure should be regarded as a competitive strength.

2. **Global Workforce:** Augmedix possesses a global workforce of remote medical scribes operating in nations such as Bangladesh. Such operations are crucial in enabling the company to expand.

Distinctive Strengths:

1. **Specialized Service:** Augmedix's core business is remote medical scribing, which means that it knows how to tailor services to the physician's needs.
2. **Integration with Google Glass:** As a RMT, Augmedix is designed to work with innovative technologies, and that's what Google Glass is exactly, providing the physician with a neat working experience.
3. **Enhanced Patient Care:** with the burden of patient record-keeping lifted off the doctors, clients report that they do not feel like they are getting degraded services.

Weaknesses:

1. **Dependence on Technology:** Augmedix's business is heavily dependent on technology, making it vulnerable to technological failures and cybersecurity threats.
2. **Regulatory Compliance:** Changes in healthcare regulations, including HIPAA, could impact on Augmedix's operations and increase compliance costs.

Opportunities:

1. **Market Expansion:** Augmedix can look into entering new markets outside the US where there is a rising market for various solutions in the healthcare technology sector.

2. **Diversification of Services:** The company can diversify its services to incorporate various other healthcare technologies such as telemedicine, EHR management, among others.

Threats:

1. **Competition:** Augmedix faces competition threats from other established companies and many upcoming startups with similar health technology solutions, including remote medical scribing.
2. **Technological Disruption:** The rapid development of technology in the health industry makes Augmedix's solutions outdated or irrelevant in a few years if the company cannot keep up.

Augmedix can maintain its competitive advantage in the healthcare technology business and capitalize on future growth opportunities by exploiting its particular capabilities, which include specialized services, integration with breakthrough technologies, and a worldwide workforce.

2.8 Summary and Conclusions

Augmedix, founded in 2012 by Ian Shakil – a Bangladeshi American – came out of the need to reduce the pressure on US doctors to fill Electronic Health Record forms or EHR forms. Shakil was aware of the growing burden heaped on US doctors and introduced Augmedix with remote scribes, mainly based in Bangladesh, who would document for doctors in the US. Augmedix also uses modern technology, including Google Glass, to real-time document which makes the process efficient and satisfying to the patients.

It was the commitment to his father's homeland that enabled Ian to formulate ideas to establish his company in Bangladesh. In essence, the establishment of Augmedix in Bangladesh was not only a response to the challenges that the US doctors were facing but also a solution to Bangladesh's employment and economic problems. Even during the ongoing pandemic when people were losing jobs, Augmedix kept hiring Bangladeshis and recording for doctors in the US. Through Augmedix, Shakil has managed to keep close contact with his cultural ties, even with the US.

2.9 Recommendations/Implications

1. **Quality Recruitment Process:** The company has to ensure the stringent recruitment process in order to maintain the standard required to work with US doctors. Given that healthcare documentation is a critical task, the HR department must be staffed adequately enough to reduce work stress and hire suitable candidates.

2. **Targeted Recruitment Strategy:** Augmedix has to design its recruitment strategy to focus on English Medium schools and private universities where students can easily converse in English language. By prioritizing this recruitment, the company can easily streamline its recruitment process by getting enough candidates of a higher quality.

3. **Campus Recruitment Campaigns:** the company could visit campuses to open recruitment where they could target final year students for hire. Most students would want to work with an MNC, and many more would wish to support US based doctors, hence increasing the number of good scribes in their pool.

4. **Continuous Training and Development:** Augmedix should also invest in training and development programs for the scribes to ensure the workers are up-to-date with the health practices and technology. This ensures that the quality of input and output remains desirable; in addition, the job satisfaction and retention of employees would be high.

5. **Diversification of Services:** For further expansion and learning of the market, Augmedix could consider alternative services other than medical scribing; telemedicine or electronic health records management services would be the highest options to consider. Thus, this allows the firm to target comprehensive health service providers.

By embracing these ideas, Augmedix may improve its recruitment process, increase the quality of its staff, and secure its position as a premier provider of healthcare technology solutions, benefiting both US doctors and the Bangladeshi labor.

Chapter 3: Report

The challenges of digitalization and AI training of Medical Documentation Specialists: A qualitative study of experiences in Augmedix Bangladesh

3.1 Introduction

3.1.1 Background

The Role of Medical Documentation Specialists

The digital transformation in healthcare is at the introductory stage in Bangladesh (Alam et al., 2020). Medical Documentation Specialists As previously mentioned, the digitization of the healthcare system has been progressive but transformative. Countries such as Bangladesh have entered this sector during the digital age and aim to lead it into the future. The primary objective of healthcare digitization is to improve patient care, including prescriptive records, use of Electronic Medical Records and AI technology. Medical documentation specialists play a critical role in ensuring patient information is captured, compiled and managed easing clinical decision-making and patient care planning.

The role of medical documentation specialists is to ensure the best preparedness of medical records, the right form of medical records, and their easy availability. The role MDSs perform is an essential resource for healthcare providers of all types. Due to technological advancements, the functions of MDSs have changed from a paper chart to ideally medically connected information to secure digital information in the EMRs. Moreover, the role of MDSs includes special contingency concerning the exponentially fast growing development and use of digital medical records (Ghatnekar et al., 2021).

The transition to digitalization and AI use within the healthcare system implies various problems in Bangladesh, such as the complexity of learning and novelty of the technology, digital readiness and spread, infrastructure capacity, and changes adoption and implementation. In general, these

issues require constant digital competency reinforcement and 24/7 AI use training and support from experienced workers that are absent or incompetent to deal with the specifics of digitalized medical information systems. Furthermore, current advances in the implementation of artificial intelligence might make the problems experienced by Medical Documentation Specialists even worse (Laurenza et al., 2018). Therefore, the present study examines the real issues MDSs meet while going through the training concerning digitalization and AI use.

In addition, given the integration of AI and machine learning technologies into the global healthcare environment, the MDSs require high adaptation education and training (Alam et al., 2020). The health data industry is growing at a rapid pace, and thus, it requires more skilled documentation specialists that can bridge the gap between data collection and understanding. Thus, on the whole, the health sector is increasingly drowning in an information-rich, knowledge-poor paradox (Foadi & Varghese, 2022). There are several problems; one is the wide range of healthcare professionals, including MDSs, lack the basis of digital health knowledge and AI competences acquired. It could also be one of the problems that MDSs faced during the training of digitalization and AI. There are different challenges to consider. Firstly, it is the lack of professional technology exposure. There was not a computer background to cover the digitalization. A comprehensive training intervention should be developed to strengthen necessary tech skills gaps (Alam et al., 2020). In this regard, the proposed qualitative study will seek to explore the difficult situations that were faced by MDSs in Augmedix Bangladesh, one of the country's leading healthcare industries (Nasution et al., 2022). Furthermore, in a larger sense, the study was intended to explore the knowledge and the outcome of the respondents interviewed about the processing of digital literacy knowledge and AI technology that was conducted in Augmedix Bangladesh (Alam et al., 2020).

Policy and Practice on Digitalization and AI Training, Supporting, and Assessing Medical Documentation Specialists

Through the integration of Artificial Intelligence and other innovative technologies, digitalization seeks to promote the process of care, improve health outcomes, and drive the efficiency of care delivery. As a result, national and institutional policies increasingly acknowledge that MDS' professionalism will be determined by their ability to use digital tools in a fast-transforming environment. (Foadi & Varghese, 2022) However, research evidence is lacking to support the successful implementation of new training initiatives for MDSs in digitalization and AI technologies (Paranjape et al., 2019).

The need to ensure that MDS can not only operate digitally but also engage with the AI at a professional level equates to an understanding of digital ethics, new privacy issues, and profound implications for care. The goal of training MDS in digital and AI application is ambitious. It would entail overhauling educational frameworks to align them with the needs of fast-changing health systems. (Sezgın, 2023) This alignment implies that MDSs must be seen as strategic resources in the provision of care, rather than human computers of health records. It would necessitate giving them the ability to use their new capacity to surpass existing occupations and develop a culture of lifelong learning.

However, current and expected policies and programs are still facing persistent challenges when it comes to acquiring effective adoption. A substantial portion of recent research concludes that, specifically, most MDS do not feel properly trained or equipped to properly handle the demands of digital healthcare, and psychiatry settings, especially with enough opportunities to attain

training. More broadly, the extremely rapid pace of technology development makes it almost impossible to create stable training programs and traditional planning approaches that will remain relevant to accommodate new advancements. (Goldsack & Zanetti, 2020) The challenges in training MDS in digitalization and AI technologies are multi-faceted. Firstly, there is a lack of comprehensive training programs or courses that specifically focus on digitalization and AI technologies for Medical Documentation Specialists (Bajwa et al., 2021).

In other words, support for MDS aspiring to master the new possibilities of digitalization is support that shall be more than just signing a document to cover the financial costs of one or another learning session. It will involve mentorship and guidance concerning the usage of new and more electronic or algorithmic tools in the process of daily work. (Healthcare professionals' competence in digitalization: A systematic review., 2018).

There is a need for organizational behavioral support structures that will make MDS feel comfortable using AI and other digitals, and, most specifically, their professionals. To mitigate potential resistance, activity-based concerns, and turnover based on fears of AI replacing their workers, medical documentation’s organizations must implement an activity that will change MDSs’ attitudes. Simultaneously, the ongoing assessment of MDS competencies seems vital. This means that this element requires the establishment of metrics capable of determining the individual level of competencies in dealing with digital tools. (Shiferaw et al., 2020)

In light of these considerations, there is a growing call for the implementation of tailored training programs that are not only technologically up to date, but also take into account the specific needs

and challenges faced by Medical Documentation Specialists in the context of digitalization and AI training (Foadi & Varghese, 2022).

3.1.2 Objectives

Objectives of the Study The main goal of the current research is to study the implementation of digital and AI-based training on MDSs, Augmedix Bangladesh, and its impact and effectiveness. The Specific Objectives of the study include:

1. Experiencing Training Content: Determine and depict in-depth the content of training programs; describe the delivery methods and the degree of adequacy as perceived by MDSs.

2. Investigating Challenging and Barriers: Map and understand the key challenges and barriers that MDSs face regarding the implementation of training and any gaps between training and actuality.

3. Evaluating Training's Effect on Work Condition: Rate the training programs in terms of on-the-job preparation and actual use of the skills and readiness for the new method of working.

4. Querying Managerial Information: Obtain responses from the training MDSs' managers and trainers regarding the adequacy and effectiveness of the training program in terms of preparing MDSs fro the work-related adjustment.

5. Develop Recourse Material: Offer preventative steps lure is for health organizations to support and up the required training process for MDS professionals.

3.1.3 Significance

There are several reasons the study is significant:

Filling the Research Gap: By examining the experience of MDSs at Augmedix Bangladesh, study fills a research gap in understanding how digitalization and AI affect the role of medical document specialists. Their experience is critical in understanding what works and what fails with the current approaches.

Improving training programs: This study can help improve the training programs within healthcare organizations for MDSs. It will recommend the areas in need of attention and what organizational practices may increase readiness and confidence in working with digital and AI solutions.

Improve workplace integration: Experience-based challenges of MDSs associated with the digitalization and AI integration may provide a blueprint to help smooth the further integration of these technologies considerate of MDSs experience. It may lead to better working practice and general happiness of MDSs.

Supporting Organizational change: Given the increased role of technology in healthcare, the organizational change is a natural long-term response. However, providing more evidence-based recommendations for its planning and execution will significantly improve its success probability.

Informing policy and practice: Finally, my study will provide recommendations for evidence-based policy and practice to be applied within healthcare organizations. Those organizations willing to improve their performance will benefit greatly from well-though strategy in supporting MDSs..

In conclusion, my study aims at an academic contribution to the literature on digitalization and AI-wise MDSs trainings and also at practical recommendations for healthcare organizations to improve the training programs and support implementation. Finally, all those combined will ensure better integration of technology in medical documentation and the overall quality of patient care.

3.2 Methods

3.2.1 Sample and Setting

The data for this study was gathered from Augmedix Bangladesh. The target sample size consists of the perspectives from Medical Documentation Specialists on struggles due to digitalization and AI. Augmedix is an excellent platform to collect the data, as one of the leading providers of

scribing services, playing a unique role in digital and AI implementation into medical documentation. Semi-structured interviews were conducted with Medical Documentation Specialists and other staff eligible to participate.

Sites and Interview Sample					
Role/ Gender	**Number**	**Duration of Working**	**Traning Time Period**	**Voluntary**	**Trainig Phases**
MDS					
Male	2	60 Months	3 Months	Yes	Foundation-AST1-AST2
Female	1	24 Months	3 Months	Yes	Foundation-AST1-AST2
Total MDS	**3**	**84 Months**			
Male	1	72 Months	Not applicable	Not applicable	
Female	1	60 Months	Not applicable	Not applicable	
Total Manager	**2**	**132 Months**			
All	5	216 Months			

Table 1

'Other staff' here was defined as anyone managing or working directly with MDSs or responsible for their training at every level of the organization. This category of respondents was selected solely due to their direct impact on the training process and daily experiences of MDSs.

Interviews were conducted with three of the MDS and two other staff, for a total of 5 participants. The sample sizes were determined a priori to be large enough to answer the research question while being feasible considering constraints on the operation of the study setting. Among 'other staff', team leaders, trainers, and managers with duties related to MDS training were interviewed.

3.2.2 Data Collection

The researchers also introduced themselves and the study to the potential participants in both group meetings and direct communication. Researchers also informed the potential interviewees about the purpose of the study, what their participation entails, and tried to ensure the potential respondents that their identity or responses would not be revealed. Potential interviewees were given a participant information sheet that contained the study's information and an expression of interest form to complete if they are interested in participating in the study. Interviews were face to face at the office premises in a confidential room to ensure privacy and no noise. Interviewees who were in-charge of MDS training to the organizational level were contacted through email to plan for an interview, while reminders were sent to them through telephone calls or emails. The interviews were conducted face to face, and written consent was taken prior to the interviews. The interview took an average of 40 minutes. Basic field notes were also taken to record any issues that may help in data interpretation, such identification was later included in the transcripts.

These semi-structured interviews were based on a topic guide that identified the main topics to be covered in the interview, as well as the key questions to ask and a range of suggested prompts and probes. The topic guide varied according to the interviewee and their roles. For example, in the case of Medical Documentation Specialists, training lead and front-line positions, the interview included questions about their training experiences, e.g., "What training have you received? Was it voluntary?"; their perspective on training, e.g., "Can you tell me how that went? Were there any training sessions that really stayed with you? What style of delivery helped you best? "Were there

any difficulties in accessing or completing the training?"; what helps or hinders them in applying training in the workplace; and the most and least easy aspects of their job.

For managers and other professional staff, the interview included questions about their perspective on the training for MDSs given; for example, "I wonder if we can talk about some of the training the Medical Documentation Specialists here have received. I would be interested to hear what your thoughts are on this? Do you think there are any gaps or weaknesses in our training program for the support workforce?", and practical difficulties in following through and doing what they would like to do. For leads, the topic guide focused on the institutional and organizational policies in which MDS were trained, supported and assessed if applicable. For example, "Can you describe to me what training a MDS starting work for you would get?".

3.2.3 Data Analysis

The data analysis for this study was conducted following thematic description, a technique suited for extracting practical insights from qualitative data, particularly relevant for application-focused research. (Thomas & Harden, 2008) I manually coded the transcriptions of interviews with MD Specialists, their managers, and their trainers with the help of Taguette and QualCoder. These open-source software applications made a systematic application of codes to interview material in contrast with a microanalysis of discourse possible and provided a clear and structured path from the transcription of the interview to the identification of themes.

The coding framework was developed in line with the assumptions of qualitative research, allowing for an inductive identification of themes based on the researcher's immersion into the

data rather than the imposition of pre-defined theoretical constructs. Coded themes were identified based on the data directly, and their validation relied on the reliability of the data and the context within which they were gathered. Multiple coding iterations were reviewed to arrive at the framework through cross-analysis of data.

This process included the constant comparison method, which involved comparing data segments with each theme within and between interviews to identify additional coding based on the criterion of specificity. It validates the themes as reflections of the data and ensures that the ultimate identification of themes occurs based on the data itself. The integrity of the data was ensured by the researcher, based on one-on-one interviews conducted with the participants, and the process was documented in an audit trail which included the transcription of the data, the coding process, and the development of themes. It facilitated the development of the iterative coding framework and ultimately led to the full revelation of the thematic framework. The research was also approved by the institutional ethics review board

3.3 Findings:

The study highlights the major themes that concern the training and professional experience of MDSs: the fundamental and superficial nature of the initial training; the delivery mode and availability of the training; the implementation of training practices at the workplace; the opinion of the managers on the effectiveness of the ongoing training; organizational policies that dictate MDS onboarding; whether the onboarding training is required and its length; training content and its customization to MDS; onsite training methodology; the assessment strategies to measure MDS

job documentation skills; the issues faced by training leads in regards to the development of the support workforce's skills. Recognized themes are the result of our qualitative interpretation that encompasses the views and opinions of MDSs new on the job, their managers, and trainers in this specific sector.

3.3.1 Findings Analysis & Discussion

the thorough analysis of the qualitative data collected during the interviews with newly hired Medical Documentation Specialists , their managers and trainers in relation to the intra-organizational and training-related factors and aspects in the context of the digitalization and AI-related change implementation in the medical documentation field in Augmedix, Bangladesh, has been conducted in order to outline the key themes evaluated for their potential influence on the effectiveness of training and further integration of MDS within the workplace.

3.3.2 Training Delivery and Content

Superficial Breadth of Initial Training:

Most of the interviewees noted that while the initial training for the MDSs was wide-ranging, it was inadequate in depth to the detriment of some critical aspects. According to the comments given, the training was general for most informants and was not detailed enough in some areas. As such, it undermined the ability of some of the MDSs to perform their duties without supervision. It is indicative of a well-developed training program that does not, however, devote enough time to some of the key aspects of competence needed by the MDSs in their roles.

"The training was surprisingly extensive by the number of topics covered. Our conversations spanned many areas, from the basics of medical terminology to the specifics of the digital instruments' application. However, I must admit that despite the apparent coverage of goals and objectives, many topics were superficially investigated. For instance, I understood the importance of medical documentation, but when it was required to work with it in the practice scenario, I turned out to be disoriented and unprepared." MDS1

"To be honest, although we discussed a lot of issues, I believe that some of them were relatively shallow, as issues may emerge unexpectedly. Apart from general theoretical material about medical documentation, when I faced real cases, I understood that I am not as confident and ready as if I assume. It was quite difficult for me." MDS2

Tailored and Job-Specific Training:

This issue was mentioned many times as well. MDS and its manager agreed that it was crucial to customize the training content to meet the actual activities and problems that MDS has to address. This may entail adapting practical, situational training that is very similar to real ones, increasing MDS readiness and effectiveness from the start.

"Absolutely. I think that we all agreed that training material should have been align with what we all do daily. In our opinion, the vast majority of the training's content was too generic and was not precise enough to relate to our work." MDS3

“I agree. In my experience, as a manager, I have observed that the new MDSs usually struggle at first not because they lack the skills but mostly because the training they received did not fully prepare them for the challenges they would encounter, especially from a situational perspective. Including more situational and simulation exercises would have made a significant difference in this regard. I personally believe that the documentation procedures and the general use of the AI tools could have been covered more in-depth.” Manager1

3.3.3 Training Mode and Accessibility

Flexibility in Training Approach:

However, responses significantly differed in terms of the most effective style of training delivery. Although some respondents mentioned that classroom-based training was effective, others stated that they achieved better results in training due to practical tasks. These findings can be explained by the necessity for a flexible approach to training. As such, a combination of online modules with the participation of students, workshops, and job assignments that imply that novice MDSs observe experienced specialists in the endeavor can be a useful initiative to improve training.

“Hands-on training is the best for me. When I experience the task and do it following the tasks, my knowledge gets more solidified. So, I think it is a mix of instruction and work”. MDS 3

“I consider that a combination of lecture-style, or seminar-based approaches would be effective. Yet, it is essential to produce it or experience”. Manager 2

Adapting to Various Learning Preferences:

Participants also proposed that training that adapts to learning styles would thus be more effective. Specifically, when a person is a visual learner, they can benefit greatly from videos of what needs to be done, visual aids, video tutorial programs, etc.. In contrast, for those who learn from experience or from imitation, it would be most beneficial to have shadowing or role-playing exercises. Therefore, it is essential to mention the necessity to adapt the training to the learning style of each employee.

"When I first started, I worked under an experienced MDS. I am a visual learner, so, for me, video demonstrations, and step-by-step instructions or tutorials are incredibly helpful – they show me exactly how something should look like, so I know what to aim for" - MDS 2

"I would say that I have experienced a lot on-the-job and with residents, just while engaging in a new role-playing exercise. The more relevant training is, the easier it is to apply." - MDS 3

"Our training is designed for each learning style. Yes, some visual learners benefit from the instructional videos, and some learn by doing – they need shadowing, role-playing sessions, etc." - Manager 2

3.3.4 Workplace Implementation

Discrepancy Between Training and Practical Application:

The second general issue is related to the discrepancy between the current training and practical application. Many MDSs state that they were trained solely in audio transcription, which was often

not even a significant part of their daily routine. This factor indicates that holistic preparedness should become integral, covering such aspects as digital skills, patient interaction, and all documentation facets. As many MDSs are dissatisfied with the insufficient preparedness for their job, diverse training methods should be considered to alleviate the pressure on MDSs. For example, some of the experts proposed using a simulation and even real-time feedback to ensure the diverse metadata usage.

"I feel like we learned one thing at training, and work is another. More focus on applying our skills, especially digital, and using different documentation." - MDS 1

"There is a gap between everything we learned at training and actual work. I think we need to have training that covers all activities and engagements of MDSs. Full, hands-on, practical guidance. Manger 3

"One thing we noted that changes for our employees were training materials for visual and kinesthetic learners. Videos and hands-on shadowing and guidance." - Manager 2

3.3.5 Managerial Perspectives

Lack of Awareness of Training Gaps:

Interviews with managers hinted those managers, in general, were not sufficiently aware of whether or not there were any clear gaps in the training program. Therefore, it is essential to enable a consistent, structured feedback system whereby MDSs can freely express their experiences with the training program as well as their challenges to their supervisor. Managers

will have to be more vigilant in identifying potential training weaknesses, to ensure optimal efficiency at all times.

Proactive Training Self-Assessment:

Since the introductory sessions, there should be constant self-assessment of the training's moderation and necessary modification according to feedback and performance. This endeavor is carried out via a modification of training, session topics and more to ensure no gaps exist and that all parts of moderation are fulfilled.

Need for Systematic Approach:

The concern for most parts of the training to be voluntary has been singled out. Thus, the most efficient strategy would be using uniform approaches for onboarding and follow-up training. For instance, a series of training modules, regular top-up courses and seminars, and on-the-job education and training could be implemented to ensure the uniformity of MDS training. .

Standardized Competency Levels:

Mending standardized training protocols and validation processes with regular assessments can guarantee that all MDSs have the necessary skills and, arguably as importantly, the same level of knowledge.

3.3.6. Assessment Strategies

Challenges with AST 2:

Respondents found the assessment of AST 2 to be particularly stressful and challenging. An examination of the assessment approaches utilized to evaluate MDS competencies is warranted. Methods must be validated, reliable, and do not unnecessarily stress future MDS while preparing them for the job.

3.3.7. Professional Challenges

Monotonous Work and Night Shifts:

Respondents regularly mentioned the monotony of their work and the compensation challenges linked with night shifts. Both of these relate to potential turnovers and stress reduction. Implementing job enrichment approaches, such as job authorizations and titles and career opportunities, can help relieve these stress on the affected areas.

Job Enrichment and Work-Life Balance:

Any measures aimed at developing workplace responses to help these employees better adapt their work with their personal lives can tremendously enhance MDSs' well-being and dream of becoming employed in the medical sector. Variability and autonomy offer possibilities for career advancement in that it keeps the employees motivated and energized.

3.3.8. Skill Development

Transition from Training to Mastery:

The journey of transition from fundamental training to skill mastery that MDSs should take is self-admittedly difficult. Participants stated that they were overwhelmed by the challenge of understanding and notating the language of medicine.

3.4 Conclusion

In conclusion, this qualitative analysis of interviews with MDSs, managers, and trainers at Augmedix, Bangladesh, has identified several central themes related to the training and integration of MDSs in the era of digitalization and AI implementation. The primary finding is the lack of depth in topics crucial for MDSs' performance, despite the broad coverage of the initial training. This indicates the necessity of more specialized training, focusing on the most critical aspects of the role and the most frequent challenges MDSs face.

Another central theme that emerged is the diversity of preferences in the learning approach of the participants. Some MDSs indicated a clear preference of practical, hands-on experience, while others shared their love of a classroom-centered or hybrid learning approach. This suggests that there is no one-size-fits-all training style, and adjusting the training program to meet MDSs' individual style best may yield better outcomes. The same conclusion can be drawn from the third theme – the discrepancy between the training course structure and what MDSs find useful in their work. It indicates that there is a need for more integrated, problem-oriented training types that reflect real-world scenarios.

Managers' perspective also added valuable insights into the strengths and weaknesses of the training program. They indicated the need for a more structured feedback system and the ongoing assessment and revision of the training contents. To conclude, the analysis lends support to the

need to improve the training contents, delivery, and relevance to the job requirements. By focusing on these factors, Augmedix can improve the training experiences, job satisfaction, and overall performance of MDSs in the field of medical documentation.

3.5 The limitations of the study

Although the study findings have serious implications in terms of the benefits of digitalization and post-training AI needs for Medical Documentation Specialists and the official agencies who plan to introduce these facilities in this sector, several limiting factors of the study must also be considered. These include:

1) The focus of the study was on the experiences of Medical Documentation Specialists in Augmedix Bangladesh that the findings of the study may not be always generalizable to countries.

2) The study methodology was qualitative, which can provide many insights and challenges faced by Medical Documentation Specialists but generally lack scientific rigor and strength as they usually can not generate any quantitative data.

3) The focus of the study was only on the experiences of the staff in a particular firm, and many areas such as varying degrees of challenges in other healthcare facilities were not comparatively addressed.

4) The study does not attempt to gather data on the experiences of patients and other healthcare practitioners' experiences about the side of the Medical Documentation Specialists in the situation of digitalization and post-training AI.

3.6 Recommendation

Based on the findings and analysis of the primary training and integration practices of MDSs at Augmedix Bangladesh, the following recommendations emerge in order to improve the relevance and effectiveness of the training program. Firstly, the quality of training should be further elaborated. While the current training plan covers a wide range of aspects pertaining to the role and capabilities of MDSs, it does not provide enough depth necessary for specialists to operate on their own.

The proposed changes enable a more job-oriented and targeted approach to training. This can be accomplished through more practical exercises and simulations which are close to MDSs' experience in the field. Additionally, digital capabilities, job-related customer service skills, and more complicated documentation processes should be studied in greater detail. Secondly, flexibility is essential. The analysis indicated that MDSs have different preferences when it comes to the manner of training delivery. While most can benefit from more traditional classroom-based training, others prefer a more hands-on and practical approach. In order to accommodate multiple learning styles, the concept of blended learning would be the most suitable. Online modules for theoretical learning and live workshops and shadowing following MDSs would help in creating a more comprehensive learning environment. This is particularly crucial since all visual, auditory and kinesthetic learners would be able to benefit maximally. Finally, the bridge should be strengthened. Many MDSs indicated that the training primarily focused on audio transcription, which is not representative of what they have to do daily. Therefore, a closer alignment of training and workplace activity is necessary. This should involve more job-related digital skills, customer service exercises, and different types of documentation. This would also help prepare MDSs for their future job holistically, improve their confidence and reduce the rate of mistakes.

In addition, managerial support and involvement are crucial. An ideal feedback loop in which MDSs can voice their thoughts on the training program's content and realization should be created to pinpoint any shortcomings and areas for improvement. Managers should actively assess MDS readiness and performance gaps and track the progress while actively seeking to improve. Continued improvement and reaction to MDS input should be a priority to enhance the training

program. Furthermore, attending to professional development and health and safety needs is important to the MDSs.

A greater number of chances to advance and ideas to combat wearisome and work-from-night routines should be implemented. Job engagement, on the other hand, should be tailored to ensure that the MDSs are actively involved and motivated while at their positions, fostering retention and overall happiness. Standard isolating training and evaluation processes is also suggested. It is critical to validate the evaluation process in order to stress MDSs while still assessing their competency appropriately. For example, enhancing the AST 2 evaluations to evaluate the demands of the labor market more accurately while also setting out specific advancement needs. Leveraging AI and digital tools within training is crucial in utilizing these areas.

Finally, the importance of leveraging AI and digital systems in training cannot be overstated. Leveraging technology will provide Augmedix with the resources it needs to deliver effective training, increase correctness and effectiveness on documentation. Overall, the change will enable DMSs to have the knowledge and abilities needed to work in the healthcare profession. Through this, Augmedix will be positioned to make substantial strides toward providing the finest documentation services in fully serving the people of America and beyond.

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Appendix

Interview Questions:

Gender

Duration of Employment

Role

For MDS

1. What training have you received? Was it voluntary?
2. Can you tell me how that went? Were there any training sessions that really stayed with you?
3. What style of delivery helped you best? Were there any difficulties in accessing or completing the training?
4. What helps or hinders you in actually apply in the training in the workplace?
5. What aspects of your job do you find most challenging? What aspects do you find easiest?

For Managers and Other Professional Staff

Perspective on MDS Training

1. I wonder if we can talk about some of the training the Medical Documentation Specialists here have received. I would be interested to hear what your thoughts are on this?
2. Do you think there are any gaps or weaknesses in our training program for the support workforce?
3. Are there any practical difficulties in following through and doing what yould like to do in terms of training?
4. Can you describe to me what training a Medical Documentation Specialist starting work for you would get?
5. How long does the initial training period last? Is training mandatory or optional? Is training generic or specific to Medical Documentation Specialists?
6. What form does the training take? Is there any production room-based training? If so, what does that look like?
7. How is the assessment of Medical Documentation Specialists managed?