

“SMLS-SFMS” : Developing an Automated Skills and Faculty Management System



Project Proposal

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CHAPTER 1

The Problem

A. Introduction

Documents are fundamental to every company as they serve as official records of information that promote responsibility, accountability, and organization. They play a crucial role in maintaining records, keeping track of operations, and managing their employees, projects, and many more. These documents help ensure that every company can run and function smoothly. Important documents such as employment contracts and Curriculum Vitae (CV) are common documents every human resource department in a company manages every single day [1]. A Curriculum Vitae (CV) is an important document which gives an outline of a professional or an individual's unique skills, achievements, experiences in the field, and his academic background [2]. Despite the significance of these documents, many companies still do manual processes in doing them. Traditional filing systems which are done mostly in papers consume more time as everything is handled physically, just like finding certain documents, submitting documents back and forth, and cases where companies may lose important documents [3]. Manual processing of CV may take some time as every personnel needed to sign and validate the documents are needed for their approval, which is very time consuming. To address these problems, Having an automated system dedicated for processing these documents will not only improve the documentation process but will also significantly improve the efficiency of the company to handle various processes.

Globally, The inefficiencies of doing manual processes have led to business or company losses and financial costs. According to a research conducted by Adobe/Forrester [4], a significant 97% of all organizations in the world revealed to have minimal or even no digital processes in their companies. This shows that even in today's generation where digital processes are

introduced and commonly utilized, they are still companies who still opt to the traditional ways of handling documents which may later on lead to risk in overall performance of the company and loss of accessibility to certain documents if mismanaged. A study conducted by Malak [5] further proves this in which he emphasized that inefficiency in document management leads to 21.3% loss in productivity in companies. Additionally, the average office worker uses 10,000 sheets of paper annually, contributing to unnecessary costs, and environmental concerns. These statistics prove the hassle time it takes to do manually processing using papers and since companies are printing, and managing papers it also consumes space and shows the risks it could deal to the environment. Given these challenges, Companies must learn the advantages of leaning towards digital or automated processes. More than 90% of employees surveyed by Harvard Business Review [6] revealed that automating processes and documents within companies enhanced their productivity, and 85% commented that these automated tools boosted their collaboration within their teams. By shifting into so, companies can save up unnecessary costs, minimize environmental concerns, and even improve the companies efficiency in handling important documents.

Nationally, 99.58% of businesses in the Philippines are composed of mostly small and medium-sized enterprises (SMEs) which is the foundation of the Philippine Economy [7]. These companies are significant in shaping the Philippine economy, however, many of these small and medium companies are relying on doing tasks manually and commonly doing their tasks in papers [8]. This may sound ordinary but these processes of doing and making tasks manually consumes a lot of time, may be vulnerable to human error, and also eats up unnecessary costs that affect the revenue of companies. According to Sprout Solutions [9] which is a company based in the Philippines, There is a significant difference between the costs of doing tasks manually and in automatedly with a value as high as ₱1.68 million pesos. With these statistics, The companies within the country must consider opting for business tasks and documentations in an automated process. A study conducted by Manlutac [10]

suggests that companies can benefit from automated processing; It can lower the cost of business operations, it can boost productivity, and makes the processes much more efficient. As technology advances, The need for automation of companies in the Philippines has become more crucial and important for the companies to thrive, reduce costs, improve efficiency of processes, and magnify the economic status of the country.

Specifically, San Pedro College's School of Medical Laboratory Science Faculty does not have a dedicated system for information yet. In the faculty, it was revealed that when updating and requesting information, all the processes were done manually. Utilizing paper-based forms that are filled out. To address these inefficiencies, the researchers propose developing a Digital automated management system dedicated to the faculty's skills and specialization. This system will organize and manage administrative processes, eliminate the dependence on paper-based forms, and provide a centralized platform for the faculty.

B. Statement of the Problem

The process of collecting and processing a faculty member's data in traditional paper-based forms poses several challenges, particularly:

1. Cumbersome Skills & Curriculum Vitae Management

As of the moment, the School of Medical Laboratory Science utilizes a Google Drive-Based System to keep track of each of the faculty's profiles and supporting documents. This system, although easy to set up, presents issues. Upon initial checking, The faculty of SMLS needed to purchase an additional 1TB of storage space. This is where their faculty update their credentials in their respective folders and upload certificates, and proofs of their expertise. The folder was structured in a way where each faculty profile was represented by a folder—inside each of the folders were 6 subfolders which are aptly named: Academic Qualifications, Awards and Recognitions, Community Involvement, Continuing Professional Development, Professional Affiliation, and Research

Engagements and Publications. These are folders in which faculty upload their supporting documents. The process in which the faculty do this is in every seminar, or event the faculty attends, they need to upload it in the Google Drive folder and email the administrators for reminders and approval of the supporting documents. Based on the team's interview with them, The team found out that while it might be digitized, the process is not centralized and that the administrators are having a hard time shifting from emails to Google Drive, then attaching the signatures, and approving the documents.

Name	Owner	Last modified	File size
Academic Qualifications	[Redacted]	[Redacted]	—
Awards and Recognition	[Redacted]	[Redacted]	—
Community Involvement	[Redacted]	[Redacted]	—
Continuing Professional Development	[Redacted]	[Redacted]	—
Professional Affiliation	[Redacted]	[Redacted]	—
Research Engagements and Publications	[Redacted]	[Redacted]	—

Figure 1. *San Pedro College - School of Medical Laboratory Science - Folders for Updating Faculty Credentials in Seminars and Events.*

1.a. Limited Storage

Google Drive which is cloud-based provides free storage, but it has a limit for free trials. This is utilized by the faculty, and as more documents are uploaded the space also decreases.




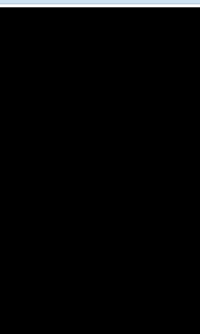
A	B	C	D	E	F	G	H	I	J	K	L
		SCHOOL OF MEDICAL LABORATORY SCIENCE SAN PEDRO COLLEGE, INC									
					ROSTER OF FACULTY AY 2024-2025						
					SMLS OFFICERS						
					NAME OF FACULTY	DESIGNATION	HIGHEST EDUCATIONAL ATTAINMENT	CURRICULUM VITAE	SUPPORTING DOCUMENTS		
							Doctor of Philosophy	Click	Click		
							Doctor of Philosophy	Click	Click		
							Doctor of Philosophy	Click	Click		
							CAR, Master in Public Health	Click	Click		
							CAR, Master in Public Health	Click	Click		
							Master of Science in Medical Technology	Click	Click		
					FULL-TIME CLASSROOM INSTRUCTORS						
					NAME OF FACULTY	DESIGNATION	HIGHEST EDUCATIONAL ATTAINMENT	CURRICULUM VITAE	SUPPORTING DOCUMENTS		
							Master of Science in Medical Technology	Click	Click		
							Master of Science in Medical Technology	Click	Click		
							CAR, Master in Public Health	Click	Click		
							CAR, Master in Public Health	Click	Click		
							Doctor of Medicine	Click	Click		
							Master of Science in Medical Technology	Click	Click		
							Doctor of Philosophy	Click	Click		
							CAR, MS in Medical Technology	Click	Click		
							Master of Science in Medical Technology	Click	Click		
							CAR, Master in Public Health	Click	Click		
							CAR, Master in Public Health	Click	Click		
							Master of Science in Medical Technology	Click	Click		
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							CAR, MS in Medical Technology	Click	Click		
							Master of Science in Medical Technology	Click	Click		
							CAR, MS in Medical Technology	Click	Click		
							Master of Science in Medical Technology	Click	Click		

Figure 2. *San Pedro College - School of Medical Laboratory Science - Current Google Sheets for the Faculty Skills Management System.*

2. Delays in Processing Document Requests and Approvals

Due to the manual processes, document requests such as updating the Curriculum Vitae of each faculty member lead to significant delays. Causing some problems and inefficiencies. Since forms must be manually filled out, submitted, and approved, the process becomes slow, especially when approvals are required. The faculty also revealed that they have experienced delays in weeks due to approval requests. There were instances when the team requested documents from the administrator, they simply told the team that the documents were not found yet or they still needed to look for them. These inefficiencies not only affect the schedules of the faculty but also add to the administrative workload, making it difficult to organize and manage requests efficiently.

3. Storage and Space Limitations for Paper Documents

Almost all processes done by the faculty are done manually - paper and documents are continuously accumulating taking up space in the faculty office.

Over time, unwatched documents grow in volume. This makes the organization and retrieval of documents difficult and time-consuming. Based on the team's inspection of their faculty office, the team found many bound documents stacked in certain areas of the faculty, these are all documents of their previous transactions and processes. This not only decreases the space in the faculty but also increases the probability of losing documents that are of significance. As time passes, some papers might get lost, damaged, and mixed up with other files, which can cause further delays and problems within the department.

4. Misplacement and Loss of Important Documents

According to the Dean and Associate Dean of the School of Medical Laboratory Science, they have experienced misplacement and loss of documents in their faculty. Since everything is done manually, there is no quick way to track and find a document, its location, and the last one who handled it. When documents get lost or misplaced, faculty and their staff have to redo the paperwork, which takes extra time and extra effort. This not only slows down the process but also wastes valuable resources such as ink, paper, staples which could have been used for other documents.

C. Statement of Goals and Objectives

The primary objective of this study is to develop an Automated Skills and Faculty Management System that would assist the faculty manage their records and concerns in the School of Medical Laboratory Science department at the San Pedro College.

The study aims to:

1. Streamline the process of updating and retrieving information from each of the faculty's CV. Currently, the School of Medical Laboratory Science faculty members must still manually upload their credentials in a Google

Drive link. This includes the Academic Qualifications, Awards and Recognition, Community Involvement, Continuing Professional Development, Professional Affiliation, and Research Engagements and Publications which according to their office faces challenges in the retrieval and organization process. The proposed system will centralize faculty information into a structured digital platform where members can easily update their credentials. The system will provide easy document upload and retrieval, will also allow faculty members to manage and track their professional profile through a dashboard, and will be accurate by preventing duplicate or outdated records.

2. Automate Document Approval Workflows. The current approval process of the SMLS for faculty documents such as the curriculum vitae updates, and seminar/event participation certificates is through email and uploading in their respective Google Drive folders which according to them leads to delays and difficulty in tracking documents. The proposed system will automate these approval workflows where faculty members can simply submit requests, and administrators will be notified every time a faculty member submits or uploads a document for approval. Also, Administrators can review, approve, and reject these documents within a centralized digital platform. The system will also include a real-time tracking process, where faculty members can easily check the status of their requests without having to approach the administrators for follow-ups. Lastly, the proposed system will also provide a summary dashboard for administrators to manage and view certain applications of documents from the faculty members.

D. Scope and Limitations

The study will focus on the streamlining of the skills management system for the School of Medical Laboratory Science at San Pedro College. This study revolves around Updating and Retrieval of information from faculty CVs.

In the digitalized CV, the system will be focused on creating a centralized platform where faculty can easily update their information and upload supporting documents. The administrators will receive suggestions on what teaching load or work is most appropriate for each specific faculty. The system is only limited to suggestions as the faculty of SPC-SMLS is free to choose the subjects they choose to teach. The suggestions however help in pinpointing which among the faculty can be approached initially based on their experience and expertise. The system will not suggest which among the faculty must be sent to trainings or seminars, but will just give suggestions on the most suitable work based on the skills/specializations they have.

E. Definition of Terms

SMLS (School of Medical Laboratory Science) → A department or college within San Pedro College that manages and teaches future medical laboratory professionals.

Faculty Members → The educators and professors responsible for teaching and nurturing students in the SMLS department.

Administrators → The personnel who oversee and manage academic and operational affairs within the department, ensuring that the department functions in compliance with the SPC policies and educational standards.

Curriculum Vitae → A document that presents a faculty member's academic background, professional experience, research, and achievements, which is used for evaluation and assignments.

Google-Based System → A digital platform in which the SLMS integrates such as Google Drive and Google Sheets to manage faculty information and documents.

Digitalization → The process of converting manual or paper-based processes into digital formats and documents for efficient and accessible processes.

F. User Requirements

During the researcher's formal interview with the San Pedro College School of Medical Laboratory, they would like to implement to the Automated Skills and Faculty Management System these features

- A way of easily managing the skills of their faculty—for members of the faculty, a centralized system where they can easily update and retrieve information, and a digitalized CV.
- They need a way of uploading files of different formats for the supporting documents e.g. .png, .pdf as file formats will vary. After uploading said supporting documents, they will identify which discipline or field their training/seminar/research was for, for easier classification in the next system. To ensure the validity of the documents, the administrator must first verify the document before it gets reflected in the CV.
- For the administrator, being able to visualize which fields and specializations each member excels in. Just like the faculty, the admin also has access to a digitalized CV. The admin also has a “Matrix of Specializations”. This is a matrix that will visualize the skills each faculty member has. Each member of the faculty is represented by a row, and the fields/disciplines are represented by columns. Once a cell is filled or has a check mark, it would indicate that the faculty has skills or knowledge in that specific field/specialization. The administrators will receive suggestions on what teaching load or work is most appropriate for each specific faculty. When the name of the faculty is pressed in the matrix, a window will pop up showing the details and the information of the faculty member. Inside the window, it will show suggestions on the possible teaching load or work for the faculty based on their skills and expertise.

G. Company Profile

a. About San Pedro College

San Pedro College was founded in 1956 by the Dominican Sisters of the Trinity from Quebec, Canada. It began as a school of nursing of the San Pedro Hospital, the first Catholic hospital in

Mindanao, which the religious sisters have been operating since their arrival in 1948.

b. About the School of Medical Laboratory Science

The School of Medical Laboratory Science (SMLS) is one of the academic clusters of San Pedro College that offers both undergraduate and graduate programs – Bachelor of Science in Medical Laboratory Science (BSMLS) and Master of Science in Medical Technology (MSMT). Since its humble beginnings in 1982, SPC has developed an MT/MLS curriculum to address emerging needs in MT/MLS education and health care. It has produced thousands of compassionate caregivers and leaders shaping science and healthcare fields locally, nationally, and globally with their expertise and dedication.

The Bachelor of Science in Medical Technology/Bachelor of Science in Medical Laboratory Science (BSMT/BSMLS) is a four-year program consisting of general education and professional courses. The program aims to provide the country and the world with Medical Technologists imbued with the knowledge, competence, and values to deliver the full spectrum of medical laboratory science services necessary in modern health care to determine the presence, extent, or absence of disease, provide data needed to evaluate the effectiveness of treatment, and hone future leaders in the healthcare industry.

The Master of Science in Medical Technology program is designed to equip Medical Technologists/Laboratory Scientists and MLS educators with advanced knowledge and skills, research competencies, and leadership qualities in response to the spectacular advances in laboratory medicine, changes in Medical Laboratory Science education, and modern health care.

The SPC School of Medical Laboratory Science takes great pride in being consistently cited by the Professional Regulations Commission as one of the top-performing schools in Medical Technology due to the exemplary performance of its graduates on the Medical Technologists Licensure Examination (MTLE).

c. Mission

Provide a nurturing environment beneficial in the total formation of persons

d. Vision

In ten years, the San Pedro College envisions to be a leading autonomous Dominican learning community, living and spreading the love of compassionate Jesus, the Healer and Teacher, offering internationally recognized programs that produce holistically developed graduates serving the Filipinos and the world.

e. Goals

1. Strengthen spirituality and values formation.
2. Aim for excellence in instruction, research, and community engagement.
3. Upgrade student support services programs.
4. Cultivate faculty and workforce development.
5. Pursue sustainable local and international partnerships and linkages.
6. Put in place a vibrant and comprehensive quality assurance mechanism.
7. Sustain infrastructure development.
8. Advance technological and digital infrastructure.
9. Ensure operational excellence.

f. Core Values

- Truth and Wisdom

- Excellence with Quality
- Social Responsibility
- Respect for the Uniqueness of Persons
- Family Spirit and Sense of Caring

CHAPTER 2

Data Collection and Analysis

A. Description of the Existing System

The School of Medical Laboratory Science (SMLS) faculty is located on the 8th Floor of Trinity Building at San Pedro College. The faculty varies in operation based on roles and responsibilities. The minimum working hours of the faculty are 21 hours per week—whilst the maximum is 33 and 40 hours for faculty and administrators respectively. The faculty works from Monday to Saturday. Currently, SMLS does their operations mostly relying on paper-based forms and Google Drive-based process of updating various information for their credentials and curriculum vitae. The current process for updating their credentials and curriculum vitae is that after the event, competition, or any accomplishments by any faculty members, they need to make an accomplishment report first, upload any supporting documents on the event or seminar in their respective faculty google drive folders, and lastly, email the dean's office or the administrators for their signature and final approval. Once approved, the updated credentials or curriculum vitae will be recorded in the faculty's official records. This process often leads to delays in updating faculty records as it takes multiple steps before a faculty member can complete updating his credentials and curriculum vitae. They have been using the Google Drive-based system for 5 years and the Curriculum Vitae form for approximately 15 years and more.

B. Results of the Interview

Characters:

Interviewee:

Dean: Jasmen S. Pasia, Ph.D.

Associate Dean: Chalee S. Reyes, Ph.D.

Interviewer:

Student 1: Kent Paulo R. Delgado

Student 2: Theo Benedict S. Pasia

Student 3: Ken Erik Y. Justiniani

Student 4: Marc Alvienth T. Hernandez

Student 5: Earl Josh B. Delgado

Setting: TEMP-o conducted the 1st formal interview with the SPC - Dean of Medical Laboratory Sciences on the 1st of March 2025. During the day of the planned interview date (February 28, 2025), the employer suddenly informed our team that SPC-SMLS will have a meeting in our planned time which she might not be able to accommodate the team. So the team, Tempo decided to opt and conduct the formal interview online. Due to the tight schedule and time constraints by the employer, the team conducted the formal interview online the following day March 1, 2025 in order also to not disrupt the employer's time.

The team conducted the 2nd formal interview in-person on March 11, 2025 at the San Pedro Hospital - School of Medical Laboratory Science, located on the 8th Floor of the Trinity Building. This was to confirm additional information and clarifications about the processes in SMLS.

First Interview:

Interview conducted on 1:45pm

Student 1: uhh, so good afternoon po ma'am, we are TEMPo, so tempo po is derived from the initials of our names, which is namely: Theo, Erik, Earl, Marc, and Paulo, but along the way po ma'am, we thought that temp, which was the initials only po is very simple and kinda weird so as a group we thought of a much more meaningful name and there we thought of tempo. So tempo also represents tempo in music, which signifies rhythm and synchronization, so as a team, we aim to work in harmony in everything we do, and we also have this principle that in every project that we undertake, tempo reminds us of the excellence that comes from working perfectly together. So I think Theo will be the one to question first ma'am.

Dean: Okay.

Student 2: What do you need to be addressed sa inyong current system? Ang aming napili na problem ma'am is the Human Resource Management so what is the current process pala? What is the current process of tracking the human records?

Dean: Well actually at the moment uhm, while the school is still in the process of preparing the information management system for human resource, so we really don't have a system for human resource management, so all the requests, all the information pertaining to the faculty, and the requests of the faculty is done manually. So we submit our leave forms, we submit our requests pertinent to work and personal concerns manually to the office of the human resource and management. So in our benchmarking with other institutions, we have learned that they have a comprehensive portal for human resource management, so for example if I am the dean, when the faculty would submit their examination, and because we check examinations along with the TOS of the faculty, they do that in the email noh, so sa email lang, while in other institutions, they already have a portal for the faculty and the faculty can just submit through the portal, so at the same time, the portal will serve as a tracker as to the date of submission of the faculty, of their ease and any comment coming from the dean or from the program coordinator, on the items that have to be revised noh, so in other words, its very comprehensive, there would be easy access on the part of the faculty that all the processes within the organization is properly monitored. So for example, if the faculty will also submit a leave form, the portal also carries that information where the faculty can just submit the form and the tracker perhaps will tell the person in charge of the need that is requested by the faculty. This is separate from the human resource management system, kasi sa HR, ang buong employees ang kanyang gina cater noh, the dean also has a human resource function and that is basically on the monitoring, hiring of the faculty. For example, may mag a-apply, mag a-apply sa HR but it is the dean who will recommend to the HR for the hiring of the applicant, so kung merong comprehensive portal ang isang department because the program that I am carrying is just one of the many programs that is offered by San Pedro College, so it would be easier for us to

track all that activity, so kahit na siguro hindi lang sa faculty, even the students' request kung may mga problema din ang mga faculty, kunyari, common kasi ito sa San Pedro na hindi pa na on ang aircon, instead of dun sa GC, mas maganda yung merong portal so natatrack kung resolved na ba or hindi pa resolved ang mga request ng faculty. If there is a system such as that, that would be fine, may tiningnan nga ako online, yung mga human resource management na portal, the faculty can just update their file 201, and information nila kung may mga bago silang degree, kuyari even the licenses, because every year, we are asked to submit a copy of our license, kung meron bang updating, even the seminars that we have attended, andun na nilagay lahat, so that would keep track the information about the employee, so kung merong ganun, that would be very nice.

Student 2: Uh so, follow up question is, given na merong information, so how frequently does the office need to update and access this information?

Dean: Well we do it everyday, because if you monitor what's going on in the organization, it has to be done everyday, so for example, kung ako yung dean, the moment that the first day of the first class schedule will begin, kung merong mga concerns and buong faculty, then they could just go the portal and inform whatever is their need, gaya ng sinabi ko, most of the time, they would complain for, hindi pa bukas ang classroom, hindi pa bukas ang aircon, or may problema sa television, or the LED tv inside the classroom, or there is a problem on let's say, sa LCD, so dun sa portal parang may tracker na dun nila gina lodge ang kanilang problem, so whether it's me or the secretary or the program coordinator, pag nakikita nila ang problem, they would immediately call the office incharge to address that problem. So, makikita doon kung resolved na ba or hindi, because, currently, our practice is through the GC, so the faculty will raise the concern sa gc, the dean addresses the concern, ginaforward lang nako siya sa facilities management office, and then FM office would say "sige ma'am, magpadala kami nang tao". So sometimes, I will have to ask pa the faculty kung okay na ang kanilang concern, but when there is a tracker, siguro kung unsa ilang request, then it is properly addressed and monitored in real time, so this can also be a platform for the evaluation of how fast an office would respond to the concern of

a specific faculty, so it's like really a system that manages the daily operations of the organization noh, of the school, in my case, of the school of Medical Laboratory Science. If you try to look at, I try to browse sa mga available online platforms and it is available noh, "Monday anong nangyayari, Tuesday", so that's on top of the data about the faculty, if they would like to upload, para ang bawat faculty ba doon mismo sa system, sa kanya lang talaga yun, the data is protected, their information is protected, their request is protected, examination is protected, so everything is there in the portal. So this is again, managing the daily activities that is happening in the organization, and many of organizations are into it right now. Kaya lang wala pa kaming ganun, because, admittedly, our IT infrastructure is still umm... perhaps they are still looking for avenues to improve their capacity to make systems such as that, kase ginagawa nila ngayon ay ang aming records pa ng students noh, the SRMS student record management information system, the system which I allowed you to see, the last time that you came to my office, here muna ang inaaskaso nila. So yun.

Student 2: uh, next question is... will the faculty level users be able to edit their records freely, or only under the approval of an admin? Or ang admin lang ba ang only person that will be able to edit records?

Dean: Well, if it is a personal information, that has to be uhh... the faculty should have the authority to address that particular concern, sa kanila yun eh, so I would love that if there is a portal, anything that is about their personal information, sila lang ang pwedeng maka edit nun, I also don't want to do anything on their personal records, because that would show that everything that is posted, let's say about the updates about their trainings, that is actually under their jurisdiction. Walang nakaka erase nun, walang nakaka dagdag nun, sila lang.

Student 2: Thank you.

Dean: But the data owner is the faculty, but as to the system, noh, the access of the system, I think it has to be the dean or the person designated by the dean.

Student 2: Okay, thank you ma'am.

Dean: Yeah, kasi kunga ko, kung ako tatanungin nyo, if you have a better idea of managing academic processes, I am open to listening to your ideas, kay nakita

ko na paminsan, sa office of student affairs, I went to the office of the student affairs, the other week to follow up the budget of the students who will be joining the Mindanao Medtech Congress. So when I went to the office of the OSA director, I told them, "What seems to be the problem?" because our students were telling us that the letter was submitted here for more than a week and yet there's no response coming from the office, and the office of student affairs, directed me to their tracker, sabi niya "Ma'am Jas, we received the letter ganitong oras, ganitong araw, we responded to them but they need to submit an itinerary before we will approve the requested budget, but until this point of time, wala pa rin." So I was so shocked that in real time, namomonitor nila yung mga responses nila dun sa requests sa students, sabi ko, "That's a very nice platform, because the students can never deny" noh, kasi minsan, students can be very.. What do you call this one.. outrageous din. Parang, ibiniblame sa system na ikaw ang matagal, yun pala, kung titingnan mo ang tracker ng OSA, It was them who failed to submit the document that they needed so that their request for budget will be released, noh so yun, so walang nagawa, I had to call the president and tell them na it's not the OSA that is the problem but it's you. You failed to submit the documents that they needed... so natrack nila. Maganda siya especially sa, like sa OSA na, because there's so many requests coming from the students, there are so many letters, so everytime pala they receive the letter, they put it in their portal and then, they would put also in the portal what is the response, what is the content of the response.. So na tatrack nila, and I think that's improving, that's also tracking the efficiency of the office. Kung ako, if you have better ideas, because you are into IT, maybe you are exposed to operations and systems, if you think that there is a better way of managing daily activities in an organization through.. What do you call this one, an online infrastructure, noh because putting up a system is also an infrastructure, that would be better. I think if you tried to look at monday.com they're doing that noh, they tried to manage the processes in an organization so everything is tracked properly, and monitored properly.

Student 3: Uhh, good afternoon Ma'am.

Dean: Good afternoon Ken.

Student 3: So for the design of the UI system, is there a need to align with the design of the other computerized systems in the organization? Like, are there specific icons, logos, that must be present?

Dean: Yeah, well, in our case, we have the logo for San Pedro College and our school, because I carry one school, the School of Medical Laboratory Science, so we have the school logo, San Pedro College and we have the logo for the School of Medical Laboratory Science. Correct me if I am wrong hah, because in our case man gud, if there would be a system that you will be proposing, it will just be for the school of MedLab Science. It will not be used by the whole San Pedro College. Other schools also are putting up their own portal, pero ang ginagawa nila, they would subscribe, so for example, the school of Allied Health Sciences, they already have established portal that they subscribed to a known system, I forgot the name, but yung problem lang nila, because they have to pay that noh, and I think there is a limitation on the file capacity, so if there are more and more files are submitted by the faculty, I think yun yung na rinig ko na problem dun sa pinagawa nila na system for their school only. Kay sabi ko nga there still no existing system for the whole school, the different programs of San Pedro College.

Student 3: Uhh, thank you ma'am, so for the designs ma'am, what designs must be avoided to ensure that the system's design is aligned with the other systems of the school?

Dean: Well, we are not really very proscriptive noh, meaning, we're so flexible when it comes to the design, for as long as it will not go against with the values that SPC upholds, so, no designs that would portray that the school is anti-christ noh, or what do you call this one... nudity, noh. So it has to be something that is very professional and very academic. So, in most of our systems, it is only the school logo of San Pedro college, I think I've shown you already the portal of the school, yun yung ginagawa ng mga IT namin, who are actually, majority of them, are from USEP noh, so most of them all our software, uuh, what do you call this one... yung gumagawa ng software, are all graduates or majority are graduates

of USEP, so they are the ones that are currently making...(Mic gets cut off)
College.

Student 3: Thank you ma'am.

Student 1: Uhhh, once again ma'am, good afternoon ma'am, ang question ko po ma'am is more on the field of analytics. So you mentioned po earlier na gagawa po kami ng human resource management system, and then, and processing po niya is it would record or it would generate report daily, so my question po is, how do you want the data to be visualized po in the system?

Dean: You mean the kind of format?

Student 1: Uhh, yes po, yes po.

Dean: Uhh, whether, it's in google, things like that? Google docs, google sheets, is that what you meant?

Student 1: Uhh, what I meant po is like a data, like graphs po and like, visualizations.

Dean: Uhh, okay, graphs, we will do. Noh, because it's easy to see what is happening if it's in graphs. Siguro rather than calling it a human resource management system, it's more of a program management information system, because it would just cater the School Medical Laboratory Science, SMLS. So siguro ako nalang is SMLS management information system, rather than calling it human resource, because I think it's more than human resource noh, I mentioned about tracking the activities of the program, tracking the daily management and operations, so I think it's better to call it the school of Med Lab Sci Management Information System. So it may have a lot of dimensions, one of that would be human resource, one would be the student requests, for example, allow me to show you, okay lang?

Student 1: Ay, okay lang po.

Dean: O sige, I'll show something lang. Okay, I'm using Ipad kasi so... Ipakakakita ko. So eto yung, gingawa ng SPC ngayon, this is our.. Nakikita nyo ba?

Student 1: Yes po, yes po.

Dean: Eto yung, management information system, so for example if ako yung dean, makikita ko dito kung, for example, if I am going to use the coordinator view, makikita ko dito ang grades ng students, so kunwari, may parent na magpunta, regarding the status ng kanilang anak, if they would like to know if their son or their daughter is going to school, dito ako pupunta. So dito sa coordinator view, tapos medyo dito grade view, para makikita ko, kung sino yung studyante, so nandito lahat. So this is the portal that can only be seen... na ang merong access is only the dean, so teachers, they also have their own portal pero iba din ang laman ng kanilang portal, ang laman ng kanilang portal is only their load noh, the teacher load and the grading sheet of the students, because didto sila nag e-encode ng grades. So in my end, ako naman meron rin akong ganyan, so kunyari teacher's load ko for the 2nd semester, kunwari katatapos ng simple lang ang system ng SPC, but this is not really perfected noh compared to the system of USEP, because the system of USEP is really very advanced already, palagi ko ngang gina share sa management dito na... because I was once a student of the graduate school of USEP, at nakita ko kung gaano kaganda ang kanilang system, when it comes to student management, and everything is actually very good, from teachers evaluation, dun na sa system. Sa amin kasi ng prelim namin, so kung encode ako ng grade, for example prelim, so eto yung mga students ko. So dito lang ako mag e-encode ng grade. So ganyan lang. So manual parin noh, the HR will go to the different classes and hand in a paper for us to be evaluated, for the teachers to be evaluated noh, but yours in USEP, online na, so kung kayo, if there's anything that you could suggest noh. Ang problema ko lang naman talaga is how do I manage the daily operations of my school, and most of the time, kasi eto yung problema namin, palagi nalang araw-araw noh, complain. Yung mga complaints noh, kung merong system na ganun, which I saw sa monday.com ba yun na lahat ng mga problema, dun na nila nilalagay. Then somebody monitors, like the secretary monitors, "ma'am may ganito", then they will resolve that, if the complaint is resolved, maglalagay sila ng "R", naresolve na siya. So kung magsusubmit... kunyari, may tatlong grading periods kami: prelim, midterms, finals, ang mga faculty nagsusubmit through

email. So if there is a portal, if each within the portal, the teacher can submit their exams na sila lang din ang nakakaikita at ang dean because it is to be submitted to the dean, it would be better. But which do you think is easier on your part as students? I think any online tool to manage the processes of our school is most welcome. Wag lang masyadong pahirapan ang sarili ninyo noh, what you think is more essential at this point, based on the things that you have learned is really most welcomed.

You know what sellers do? Kunwari ako, maraming nag o-offer sa akin, I don't usually express the need, they tell me their product and what their product can do, so kung baliktarin natin, if you try to come up with a platform, and now you know what is my problem, maybe you could come up with a counter proposal. That would help manage the people and the processes of the daily operations in our school, that is really highly appreciated.

Student 2: So, we would be able to offer multiple process management system, merong separate na tabs for each process such as: merong different na tab for student requests firstly, diyan na mahulog ang mga request forms and complaints; next is another tab for human resource management, so ma track na ang faculty, ang kanilang current achievements so far and then; next is I think would be... so far, in terms of like, in our part, yun ang parang pinaka sensible so far, daily process management for the students' side and then sa faculty na side and kanilang mga achievements and mga outcomes na kanilang pwede iupload, and yung mga reports.

Dean: Yan, so if you could .. I'm open to anything noh, I'd rather want you to suggest on something that you know at this point, something that can be done, something that is feasible, something that would not demand too much from you as students. Yun lang?

Student 4: Good afternoon ma'am, in what way should the system display the different skills or specializations that the faculty has obtained? Should it be through a ranking system? Or a matrix of specializations? Or do you have anything in mind that you want to recommend ma'am?

Dean: Well, in our case, because we already have a format to be filled out by the faculty so all the relevant information pertinent to the employment to SPC are there in that format, kung gusto niyong ma tingnan, perhaps I could show you the format noh, how it looks like. So tingnan lang natin hah, eto yung... wait lang. Eto yung format namin. So I'll try to open this in the drive. I'll send it to Theo. Baka Theo you can share it, eto lang yung information na ano, because it's hard for me to open the file here. Para makita ninyo kung ano lang yung information na hinahanap namin. Maybe you can share the uhm, I sent it to your messenger. Yan lang. That's the logo of the school of medlab science, sa educational background, professional licensure examinations, and we have the seminars. Kung, kasi nga eto, manual kasi eto diba, so every time na may bago ang faculty, they will have to write it here, upload. So if there is a system na eto na yung kanilang nasa portal so dyan nalanag sila magsusulat, and everytime they attend a new seminar, ilalagay nalang nila diretso, so it tracks in other words.

Student 4: Okay ma'am, and should the system under an offline or online environment ma'am?

Dean: Well if it works whether it's offline or online it would be better, but I know it's difficult if it's offline, kasi even our system does not work in an offline environment eh, it would be better talaga pag ganun.

Student 4: Okay ma'am, thank you.

Dean: Is there some more?

Student 1: Um, excuse me ma'am.

Dean: Yes Pau?

Student 1: Uh, pwede po ba kami makakuha ng copy po neto ma'am?

Dean: It should be already-

Student 1: Please

Dean: Yeah, I sent it to Theo so Theo can share it to the group.

Student 1: Thank you thank you po ma'am.

Dean: At ayan lan gsiguro, I mean, kung magagawa nyo lang, parang there is a portal where the faculty can have.. Like that,tapos kung meron silang update, they just go to their portal ba tawag dun? Then update lang nila, then we would

have an information with what's going on with their career. Challenging noh? Mahirap.

Student 2: Doable ang parang digital na CV, digitized na Curriculum Vitae na pwede ma update. Doable lang siya. Uh, meron kaming last na few questions, so what is the verification process when a faculty uploads trainings or seminars.

Dean: We do upload certificates to, the certificates that is submitted by the faculty, so they usually send the photo.'

Student 2: Ah, so after uploading the photo, i verify mo muna bago i next step?

Dean: Oo.

Student 2: Next is, in such case, how should the admins be notified if their would be an upload sa portal?

Dean: Perhaps through email, or hindi ko alam talaga noh, usually lang naman with how other departments are working on, theres just a daily monitoring in the portal, somebody is really into monitoring the portal, yun yung trabaho na tinitingnan lang, meaning our secretaries for example, will just open the portal and see what is going in the portal, what are the requests, what problems students are facing.

Student 2: Last question is, are there other necessary admin functions that are needed to be implemented? Admin specific functions?

Dean: One I think, we would like you to be flexible to anyone who are officers noh, for example din the dean, associate dean, the program coordinator can open it nog, while it may be flexible, the data privacy rights of the information that we handle are also protected.

Student 1: Um I think ma'am all of our questions po ma'am, basically like, the basic ones have been answer po ma'am, so I think that would be our last question ma'am and siguro po ma'am;am if we have some suggestions po we can like, I think set another meeting po or inform you po ahead of time if we have suggestions or like, magpacheck po kami ng proposal po namin.

Dean: Okay yeah, ako naman, I'm very flexible, you know my problem as a dean, so use your imagination, creativity, how do you think things can be properly

managed in a very small organization with the help of your platform, and that would be most welcome.

The interview lasted for 38 minutes and 38 seconds. The interview started at 1:45 PM and ended at 2:23 PM on March 1, 2025. The researchers conducted the interview in order to obtain information on the current processes the faculty uses. The researchers learned that the current processes needed an upgrade—a centralized automated system that allowed the quick upload of files, viewing of credentials, and a digitalized system for filing leave documents. The Dean also provided us the document for their credentials which is the faculty's curriculum vitae. The team asked permission to have a copy of the document and the Dean approved our request.

Second Interview:

Interview conducted on 5:37pm

Student 2: So, for now, mag ask kami about sa scale sa faculty. How big is the faculty? Ilan kayo sa faculty as of the moment?

Dean: 45. Yung full time ng program na ito.

Student 2: So, sa faculty, how do you allocate faculty members na magturo ng subjects?

Dean: Based on expertise.

Student 2: So base sa expertise.

Dean: Expertise, training, and based on tenure. So, the longer you stay, the appropriate qualifications, uh, you would have the chance to get a teaching load.

Student 2: Ahh, okay. So, when assigning teachers, do you go through their CVs one-by-one?

Dean: Yeah, the CVs actually, uh, an update. When you get updates from them, it is a document that we always refer to as to their progress, especially for those who are not yet qualified to teach in higher education. For you to teach in college, the minimum requirements is at least a master's degree.

Student 2: So, how do you know which faculty member to assign? How do you know which faculty member excels in a particular field?

Dean: Kasi nga all of us are medtech, so, that means to say we have the same preparations, yun nga, for those who have been in the institution for longer period of time so meaning they have already reach beyond three years. We really ask the faculty the subject that they are most comfortable to teach. So, they are confident in terms of their training, in terms of their skills and knowledge kasi nga in terms of academic preparations all of us are medtechs. Isa sa requirement: registered medtech ka, tapos for you to teach in that professional subject meaning those courses that will really be assess in the board exam, ang naga-handle lang noon ay master's degree holders na teachers. So, from there, our program coordinator will send a google sheet asking the faculty from among the curricular offering of this semester what subject are you most comfortable in terms of teaching, so, I align that with their preparation. So, for example, molecular biology. Most of us, the curriculum that we graduated from, wala pang molecular biology if we assign faculty members to teach molecular biology fully this semester. So, for an example, meron kaming 13 sections from molecular biology, at iilan lang ang mga faculty na may experience, so yung faculty na i-a-assign namin to teach that particular course we send them to trainings for them to teach that course.

Student 2: Next is, how often do you usually send faculty to trainings? Monthly ba?

Dean: It depends actually. Trainings come in any forms, merong institutional we called that in-service training, it is part of the faculty development podium San Pedro. Pangalawa is, there [are] invitations which we think is relevant to the training of the faculty, we send them. PAMET or the Philippine Association of Medical Technologists, we have PASMETH or Philippine Association of Schools of Medical Technology and Public Health. So, if they organize seminars and trainings, and we think that is relevant for the faculty, we send them. As to periodicity, it is really...it really depends. There are times that there are trainees, and there are times that there are not.

Student 2: Next is, when assigning faculty to specific subject to teach, do you find the process as of the moment very hard since walang centralized way to see all of their specializations?

Dean: Well, yeah. Kasi nga we always look into, yun nga, the readiness of the faculty, though all of us are medtech graduates, we really rely more on how ready is the faculty, how confident are they to handle the task. Though we are hoping na we rotate the courses taught by the faculty so everybody experiences teaching the different courses in the event na wala ang isa, somebody can handle the course. Yung ganyan, parang i-ikot mo lang siya, well lahat naman kami ay nakakuha ng ganung klaseng kurso. For example, I'm a medtech but I'm not comfortable teaching histopath, nadaanan ko siya pero hindi ko siya naging love, hindi ko talaga siya naging...parang napag-aralan ko siya for the sake that I have to study the subject because it is part of the curriculum, but if you ask me to teach for example, Para, Clinical Chemistry, or Immunology, so yun yung. I can accept. Though the faculty will be offered possible courses, but still, they have the chance to reject or to say no. Then they have to state the reasons why.

Student 2: So sa file na gisend mo sa amin last time, yung CV. So for example ang isang faculty naka gain ng new training, how do they add it to their CV? Do they reprint the whole thing tapos i-fill-up again?

Dean: They just add to that CV form, and then we have a parang ganito, I'll show you. This was made by [name inaudible]. Ipapakita ko sa inyo.

So katulad nito. Dito lang siya nga upload. Eto lang, supporting documents, so we upload our curriculum vitae here. Tapos eto lang, there's a Google Drive. Parang link-link lang.

Student 1: Hmm, link-link lang.

Dean: Then pag may upgrade, sila lang naga upgrade dun. Tas titingnan nalang.

Student 1: So naa pa silay need i-print Ma'am?

Dean: Wala na.

Student 1: So they need to upload lang Ma'am?

Dean: Oo, upload lang.

Student 2: Upload to Google Drive.

Dean: So our program coordinator will send the Drive tapos nandun na lahat yung ano, andun ang mga faculty. For example eto, si [name inaudible], eto yung Drive niya, nandito na lahat. So yan yung POR niya. So everything about the faculty is here: Kung may award, wala; kung may community involvement, wala pa. Ayan, wala pa. Hmm. So that's the license. Ganyan pala ang mechanism, it's ano palang, Ganyan lang.

Student 1: Google Drive based.

Student 2: Google Drive based. So ang next namin na question is, what if, example merong may mag resign or merong bagong hiree, how do you add it? Currently?

Dean: Ay actually wala pa kaming mechanism nyan, Ma'am Cha diba?

Associate Dean: Alin?

Dean: Kana gung mag resign, kahit na two years, three years na, bumabalik parin ang name noh. Sa amin kasi, resignation is not through us. Ang dean will just notify, or will just say noted by. Parang the dean will just accept the resignation, but the final decision will be from the HR, so walang mechanism na ma-remove siya kaagad sa system, wala. Because hanggang ngayon, bumabalik, diba Ma'am Cha? Naga balik-balik ang mga pangalan sa mga nag resign.

Associate Dean: Yeah, oo.

Dean: Mag gawa kasi sila ng project nila Ma'am Cha.

Associate Dean: Hmm.

Dean: sa ilahang subject.

Associate Dean: Hmm.

Dean: So akong gipa kuan sila sa atung struggle on our management information system sa atuang program.

Associate Dean: Hmm, uy magawa nila yan.

Dean: Hmm. So mao to. Unsa pa?

Student 2: Next is about sa leaves?

Dean: O leaves, wala rin. May leave form kami, pero hindi siya online.

Student 2: Ah, so paper based siya?

Student 1: Paper based.

Dean: Manual, paper based parin.

Student 2: Uhh, do you find it difficult parang, to track ang mga papers?

Dean: Oo, kasi the moment it goes out of us, wala nang tracking Ma'am diba?

Associate Dean: Yeah.

Dean: We don't know if it's approved. So hindi na siya bumabalik as amin, from the HR to the president, there's no confirmation if the approval of the dean is also approved by the HR.

Student 2: Hmm.

Dean: Kasi-

Associate Dean: Just like for example-

Dean: Dali sa Ma'am Cha. Ma'am Cha is our associate dean.

Associate Dean: Just like for example katung resignation ni [name inaudible] diba?

Dean: Oo.

Associate Dean: Ang complete ato kay wala, she did not know.. She did not know kung approved or hindi. So I told her "You go to HR and you ask. Kumusta?" Kasi, normally the resignation kasi is may time tayo na one month. At least one month from the time you apply, ganun. So sa kanya, because she's going to leave na, kay nag submit to siya, december first week, and then dapat by January 8 kasi, alis na sila ng Davao, punta siya ng Manila. Ngayon, pag January 6, yun yung official naming balik dito sa school, pumunta pa siya. So sabi ko "You have to go to HR so that you will not keep on spending your time going to school and waiting for nothing." ba, ganun. And so she went there and she was told na "Okay na po, approved na po." Kung wala pa siya nag adto, wala siya kabalo.

Student 1: Yes Ma'am, It's a waste of time.

Associate Dean: So yun, pagkalaman niya, and then she messaged me, kay we were on retreat man at that time, overnight. She told me "There is no need for me to come to school anymore to report." noh, ato na.

Student 1: Hmm.

Dean: So yun yung problema namin. Dami naming problema.

Student 1: Ay actually Ma'am, naga clarify lang mi sa mga certain details Ma'am cause, naa man gud miy title defence next week Ma'am. So basically kani among proposal, umm, problem ninyo Ma'am, is amo siyang i-pitch and defend Ma'am. So-

Associate Dean: Oohh, you can help us. A lot.

[laugh]

Student 1: Hopefully Ma'am.

Associate Dean: Kasi ganito, minsan mag sigi kaming hanap sa mga papel, wala pala.

Dean: Lahat halos kasi paper based.

Associate Dean: Hmmm. Wala. So ang mangyari... Kaya pinaka latest lang talaga, salary. Katund wala.

Dean: Walang salary

Associate Dean: Hinatid ng aming SA sa office na dapat i-submittan. Hindi tinanggap yung paper kasi busy. Bumalik siya kinabukasan, busy parin. So, ang nangyari, nakalimutan ng SA, pagka Monday, and deadline na.

Associate Dean: So, you're going to make a program for such (inaudible)?

Student 1: Yes ma'am.

Associate Dean: Oh.

skip – 13:22 to 13:30

Student 1: Actually ma'am, ang i-cover lang naming is...

Student 2: Mostly, uh, kanang faculty management, ma-optimized ang skills and expertise ng management. Ang plan namin is, uhm, what if there was a centralized na parang hub to see ang faculty and their specializations para when it comes to, uh, scheduling sa unsa makita dayun kung kinsa ang mga faculty na most suitable to teach a certain subject.

Associate Dean: Oh, okay that is nice. Pero in our case kay, ano man, anong subject gusto niyo, ilang units ang gusto niyo, so teachers were given the liberty.

Student 2: Pero, ano, like pwede siya i-basis.

Associate Dean: Yeah, pero nice siya, nice yan. Kay makita na talaga ang (inaudible) ba.

Student 2: Yes.

Associate Dean: Hmm, galing ah.

Dean: Wala na mo'y pangutana?

Student 2: Uh ma'am, pwede ka maka-share ng, ano, official logo ng SMLS?

Dean: Sure.

skip – 14:50 to 15:03

Dean: Naa na sa website namo, available ra so okay ra. Ara oh, San Pedro College na website.

skip – 15:11 to 15:57

Student 1: Sa among kuan man gud ma'am, subject ma'am is need ug other views sa mga faculty members ma'am so...

Associate Dean: Regarding what?

Dean: Kana, mao ni siya ang logo. Ma-grab ra na Ninyo.

Student 1: Yes ma'am.

Associate Dean: View on what? Regarding?

Student 1: Like, uh, problem lang sa mga documents, ma'am, na almost manually na, uh, unsay tawag ana? Manually lang siya, uh, gina-manage.

Dean: Gina-generate.

Associate Dean: Ang mga leave, actually, naa man ta'y leave form nga naka-butang online but still we have to...

Dean: Kuan lang man 'to, soft copy.

Associate Dean: Nga gi-butang online, pero i-download namo, fill up-an, i-submit, dili dyud sya automatic nga didto ka mag fill-up, and automatic maabot sa ilang office or just send e-mail, wala.

Dean: Pero kung ma-track pila na ka leave of absence or pila na ka sick leave, pila na ka kuan, wala pa ta'y kuan...

Student 1: Uh ma'am, naa pud ta'y problem about storage ma'am, like...

Dean: Opo.

Student 1: Like, too much papers kay murag...

Associate Dean: Ay, oo.

Dean: Very, very much. Nawala nag ani tungod sa kadaghan. Tan-awa nang kilid dira oh. Murag gihimong pader ang mga researches.

Student 1: Pwede picture-an ma'am?

Dean: Picture-i.

Student 1: Proof lang.

Dean: That needs to be digitized kay...kana. And there's more of that.

skip – 17:42 to 19:15

Student 2: Sa ano ma'am, sa data visualization, would you like to see, kanang, pila ang engagement sa nabuhat sa faculty for the month?

Dean: How many faculty accepted consultations with students?

Associate Dean: And nay mga case of what was the consultation about. Grade ba? Mental something problem?

Dean: Kay usually mao mana mga claims sa mga students karon, mental health.

skip – 19:52 until end

The interview lasted for 23 minutes and 13 seconds. The interview started at 5:37 PM and ended at 6:00 PM on March 11, 2025. The researchers conducted the second interview in order to confirm some information and clarify some details regarding the processes of form applications in the faculty and some problems they experience on the manual processes of some forms. The researchers learned that the structure of the Google Drive the faculty uses makes it difficult to retrieve information from each of the faculty members. It required the admin to sift through the folders individually elucidating the need for a system that helps visualize the faculty's information easily. The Dean also provided us the document for their credentials which is the faculty's curriculum vitae. The Dean also gave the team access to the Google Drive the faculty is using currently for their CVs and the leave form the faculty is using currently. The team asked permission to have a copy of the documents and the Dean approved our request.

C. Document Analysis

The SPC-SMLS' Google Drive system for tracking electronic records currently is based around an existing document as seen below.

San Pedro College
School of Medical Laboratory Science
CURRICULUM VITAE

2 x 2 photo with white background

Full Name, Degrees, Title
Academic Rank
Contact Information (email, phone, address, [LinkedIn/Website](#))

I. PERSONAL INFORMATION

Date of Birth:		Nationality:	
Civil Status:		Spouse (if applicable):	

II. EDUCATIONAL BACKGROUND

Degree	Institution	Program	Year Completed
Doctorate Degree			
Master's Degree			
Bachelor's Degree			

III. PROFESSIONAL LICENSURE AND CERTIFICATIONS

Professional Examination	Month/Year	License Number	Expiration

IV. PROFESSIONAL WORK EXPERIENCE (from most current to previous employment)

Institution	Position/Nature of Work	Inclusive Year/s
1.		
2.		
3.		
4.		
5.		

V. PROFESSIONAL AFFILIATIONS (Membership in Professional Organizations)

Organization	Positions Held (if applicable)	Inclusive Year/s
1.		
2.		
3.		
4.		
5.		

VI. AWARDS AND RECOGNITION (Professional Recognitions, Scholarships, Grants)

Award/Recognition	Award-Giving Body	Year
1.		
2.		
3.		
4.		
5.		

VII. CONTINUING PROFESSIONAL DEVELOPMENT (list all seminars/trainings attended for the last 5 years)

Title of the Seminar	Organizer	Date/Location
1.		
2.		
3.		
4.		
5.		

Page 1 of 4


Page 2 of 4

Figure 1a. San Pedro College - School of Medical Laboratory - Curriculum Vitae Form

The first two pages of the CV contain 7 parts, namely: Personal Information, Educational Background, Professional Licensure and Certifications, Personal Work Experience, Professional Affiliations, Awards and Recognition, and Continuing Professional Development. The personal information section contains boxes for the Date of Birth, Civil Status, Nationality, and the Spouse of the employee (if ever applicable). The Educational Background section contains 4 columns: Degree, Institution,

Program, and Year completed. The Degree column is simply a label as to the level of the degree the employee has completed. The Institution column contains the school/institution the faculty studied in. The Program column contains the specific program/course the faculty completed. And the Year column contains the year in which the faculty completed the course. In the Professional Licensure and Examinations section, there are 4 rows—Professional Examination, Month/Year, License Number, and Expiration. The Professional Examination column contains the specific professional examination the faculty has passed and completed. The Month/Year contains the date in which the faculty has received their professional status. The License Number column contains the specific license number of the faculty in their ID—Lastly, the Expiration column contains the date in which the faculty's professional license expires, needing a renewal. Professional Work Experience contains the previous professional work the faculty has been in. It contains 3 columns: Institution, Position/Nature of Work, and Inclusive Year/s. The Institution column in this section contains the previous institutions the faculty has worked for. The Position/Nature of Work column can contain either—the position the faculty held in the previous institution they worked for, or the nature of the work, describing the work the faculty has done previously. Lastly, the Inclusive Year/s column contains the time period/s the faculty member has worked for in the said institution. The next section is the Professional Affiliations, this section contains information pertaining to related professional organizations the faculty member is currently affiliated in. This section contains 3 columns: Organization, Position (only if applicable), and Inclusive Year/s. The Organization column contains the names of the organization/s the faculty member is/was a part in. The Position column contains the position the faculty member has held in the organization if applicable. Lastly, the Inclusive Date column contains the time period/s the faculty member is/was a part of the organization. The next section is the Awards and Recognitions, this section contains the awards the faculty member has garnered. It contains 3 columns: Award/Recognition, Award Giving Body, and Year. The Award/Recognition

column contains the specific award the faculty member received. The Award Giving Body column contains the organizations, institutions, etc. that presented/gave the award to the faculty member. Lastly, the Year column contains the year in which the faculty member received the award. The last section in the first two pages is the Continuing Professional Development section, this section contains the different trainings and seminars the faculty has attended for the last 5 years. This section contains 3 columns: Title of the Seminar, Organizer, and Date/Location. The Title of the Seminar column contains the name/title of the seminar or training the faculty has attended. The Organizer column contains the specific organizer of the event. And, the Date/Location column contains the date the faculty member attended the seminar and the place in which it was held.



San Pedro College
School of Medical Laboratory Science
CURRICULUM VITAE

VIII. COMMUNITY INVOLVEMENT (projects led or participated in, outreach activities and volunteer work)

Title of the Engagement	Role	Location/Date
1.		
2.		
3.		
4.		
5.		

IX. RESEARCH ENGAGEMENTS AND PUBLICATIONS

A. Research Engagements in the Undergraduate Program (Mentor or Panel)

Research Title	Role	Year
1.		
2.		
3.		

B. Research Engagements in the Graduate Program (Mentor or Panel)

Research Title	Role	Year
1.		
2.		
3.		


C. Research Projects

Research Projects	Role	Year
1.		
2.		
3.		

D. Published Articles

Research Title	Journal	Date of Publication
1.		
2.		
3.		

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San Pedro College
School of Medical Laboratory Science
CURRICULUM VITAE

E. Papers Presented at Conferences

Title	Event	Date/Location
1.		
2.		
3.		

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Figure 1b. San Pedro College - School of Medical Laboratory - Curriculum Vitae Form

The last 2 pages contain the remaining sections namely the Community Involvement and Research Engagements and Publications. The Community Involvement section contains information on community outreach programs and volunteer work the faculty member has taken part in. The section contains 3 columns: Title of the Engagement, Role, and Location/Date. The Title of the Engagement column contains information regarding the title or name of the engagement the faculty took part in. The Role column contains the role the faculty member took during the engagement highlighting the function/s they served. Lastly the Location/Date column contains information on the location where the engagement occurred and the date in which it started and ended. The last section is the Research Engagements and Publications section. This section contains the researches the faculty member has published over the years and is split into multiple subsections: Research Engagements in the Undergraduate Program, Research Engagements in the Graduate Program, Research Projects, Published Articles, and Researches Presented at Conferences. The Research Engagements in the Undergraduate Program and Research Engagements in the Graduate Program subsections contain the same three columns: Research Title, Role, and Year. The Research Title column contains the title of the research the faculty member finished. The Role column contains the role the faculty member took in the researches, and the Year column contains the column where the research was officially completed. The Research Projects section contains the Role and Year columns same as the previous subsections. Instead of Research Title, it is replaced by Research Project column. This contains the title of the research project that was completed. The Published Articles subsection contains the columns: Research Title, Journal, and Date of Publication. The Research Title column contains the title of the research that was published. The Journal column contains the journal in which the study was published in. The Date of Publication column contains the date in which the research was published. The last subsection is the Papers Presented at Conference which contains 3 columns: Title, Event, and Date/Location. The Title column contains the title of the study that was

presented. The Event column contains the event where the study was presented in. Lastly, the Date/Location contains the date when the event took place and where it was held.

Name	Owner	Last modified	File size
Academic Qualifications			—
Awards and Recognition			—
Community Involvement			—
Continuing Professional Development			—
Professional Affiliation			—
Research Engagements and Publications			—

Figure 2. *San Pedro College - School of Medical Laboratory Science - Folders for Updating Faculty Credentials in Seminars and Events*

At this moment, SPC-SMLS is using a Google Drive-Based system to track the faculty's credentials and documents. This is where the faculty update their credentials in the respective folders and upload necessary documents to prove their expertise. The SPC-SMLS has assigned 6 respective folders namely: Academic Qualifications, Awards and Recognitions, Community Involvement, Continuing Professional Development, Professional Affiliation, and Research Engagements and Publications. In every seminar or event a faculty attends, they must upload it in the respective google drive folders and email the administrators for reminders and approval. This medium is being utilized recently according to the management as this system is temporary as of the moment.

Compared to the digitized CV, Google Drive contains only 6 folders. Educational Background, and Professional Work Experience were omitted. Academic Qualifications contain the same information as Educational Background. Professional Work Experience was omitted as the HR Department handles that information rather than the faculty.

This is the lobby of the SPC-SMLS located on the 8th Floor of the Trinity Building at San Pedro College. This is where the office handles some requests and entertains some guests. Seen in the documentation are the doors to the SMLS Dean's Office and SAHS office.



Figure 9. *San Pedro College - School of Medical Laboratory - Office*

This is the SPC-SMLS Dean's office in which documents and research materials are stored, organized and utilized for academic, administrative, and institutional purposes. This is mostly the place where administrators manage and handle certain documents. Based on the documentation, there is an accumulation of documents, which can be seen piled up to the point where it consumes a lot of space in the office. The team asked about the documents and the Dean herself told us that these are the documents in the past years of SPC-SMLS. This situation emphasizes the need and the use of a skills and faculty management system which will make the process of the faculty more efficient and accessible to important documents.

CHAPTER 3

The System

This section presents the User Interface (UI) design of the proposed SMLS-SFMS system. Images will be presented that will provide a visual walkthrough of key pages and the functionalities aimed at achieving the objectives outlined earlier. Each screenshot is accompanied by a description explaining its features and their purpose.

CHAPTER 4

System Design

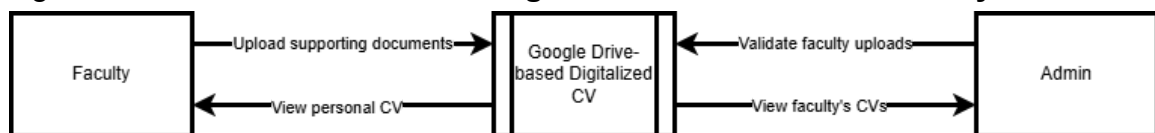
SMLS-SFMS has 2 levels of users namely: the Faculty and the Admins. Let us first discuss the functionalities that the faculty have access to. Faculty are able to upload their supporting documents into separate repositories similar to that of the existing Google Drive folders namely: Academic Qualifications, Awards and Recognitions, Community Involvement, Continuing Professional Development, Professional Affiliation, and Research Engagements and Publications. Once a certain repository is selected the user may now begin the process of uploading. The user can select a file or can simply drag and drop it into the system. To help with the admin-specific functionalities later, the user will be asked to provide the field in which they gained a specialization in, e.g. Gained specialization in the use of certain laboratory equipment, Field to be selected: Medical Laboratory Science. After these steps, the file upload will be sent to the admins for verification—Optionally, a report on the event/training/seminar attended can be uploaded as part of the supporting documents. If the verification of the uploaded document/s are successful it will immediately be reflected in the digital CV of the faculty—If not, the admin will state the reason as to why the documents cannot be verified e.g. Missing

Documents then provides changes/suggestions for the user. The system then prompts the user to upload again with the changes/suggestions mentioned.

The admins will have different functionalities. Firstly, they have access to a Matrix of Specializations—A bird's eye view of the whole faculty and the specializations they have garnered through time where each row represents a faculty member and each column represents a certain field. A shaded cell indicates that a faculty member has a specialization in a certain field. By simply pressing on the name of the faculty member, the admin is able to view the digital CV of the faculty.

Level 0/Context Flow Diagrams (CFD)

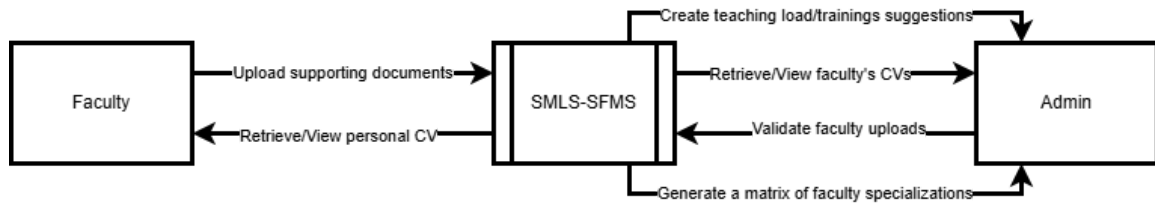
Figure 1: **Current Context Flow Diagram of the SPC-SMLS Faculty**



This Context flow diagram of the current processes of SPC-SMLS Faculty shows a simple system based on Google Drive-based Digitalized CV as the central process. In this diagram, the system follows a process that includes 3 main entities:

- **Faculty** - can upload supporting documents to the system and view their personal CV.
- **Admin** - can view faculty's CVs, validate faculty uploads, and also supporting documents.
- The central process (**Google Drive-based Digitalized CV**) handles document storage and CV management

Figure 2: **Proposed Context Flow Diagram SMLS-SFMS**

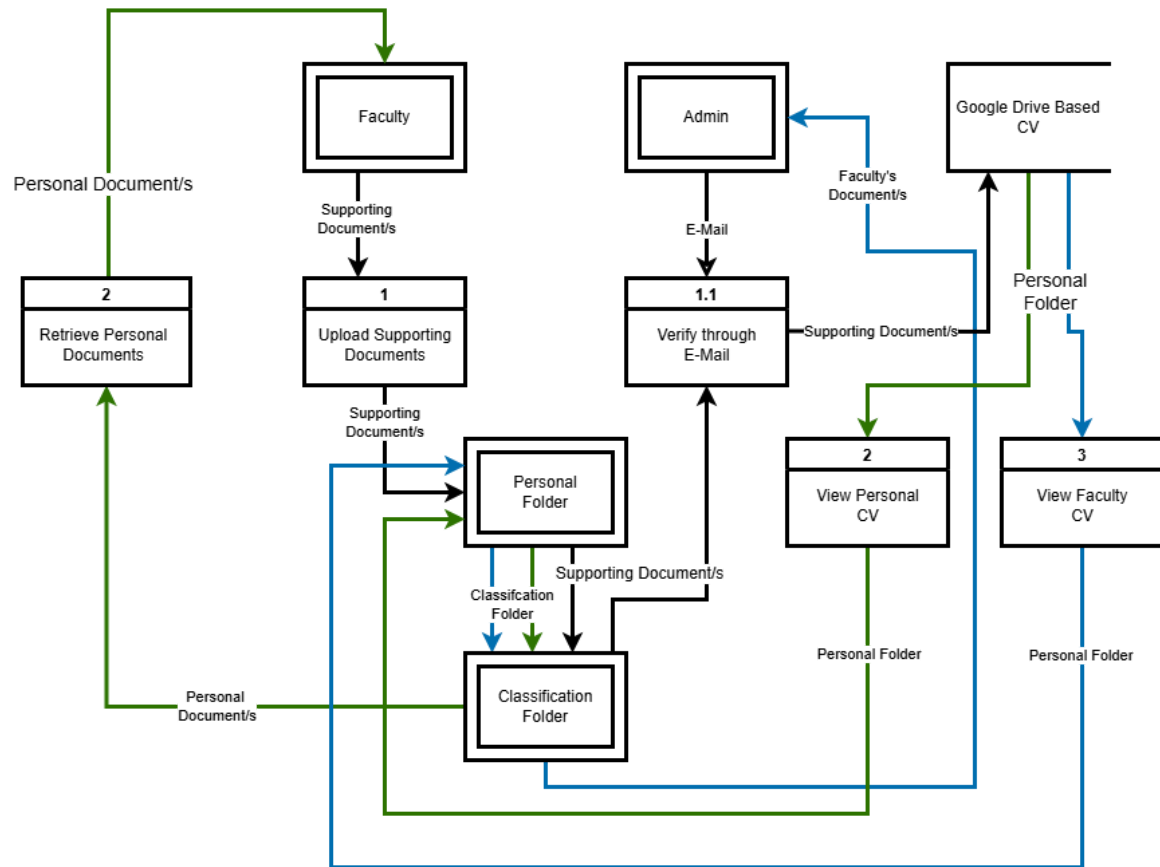


This context flow diagram presents the proposed SMLS-SFMS processes. This diagram shows the primary interactions and the flow of data between the faculty, the SMLS-SFMS system itself, and the admins.

- **Faculty** - engage with the system primarily by uploading their supporting documents and retrieving or viewing their personal Curriculum Vitae (CV)
- **Admin** - retrieves/views faculty CVs, validates faculty uploads, receives teaching load/training suggestions, and receives the matrix of faculty specializations.
- **SMLS-SFMS** - Manages these interactions, handles document uploads, storage/retrieval of CV data, admin validation processes, generation of matrix of specialization, and providing data to aid in admin for planning the teaching loads and training.

Level 1/Diagram Zero

Figure 3: Current Diagram Zero Workflow of the SPC-SMLS Faculty

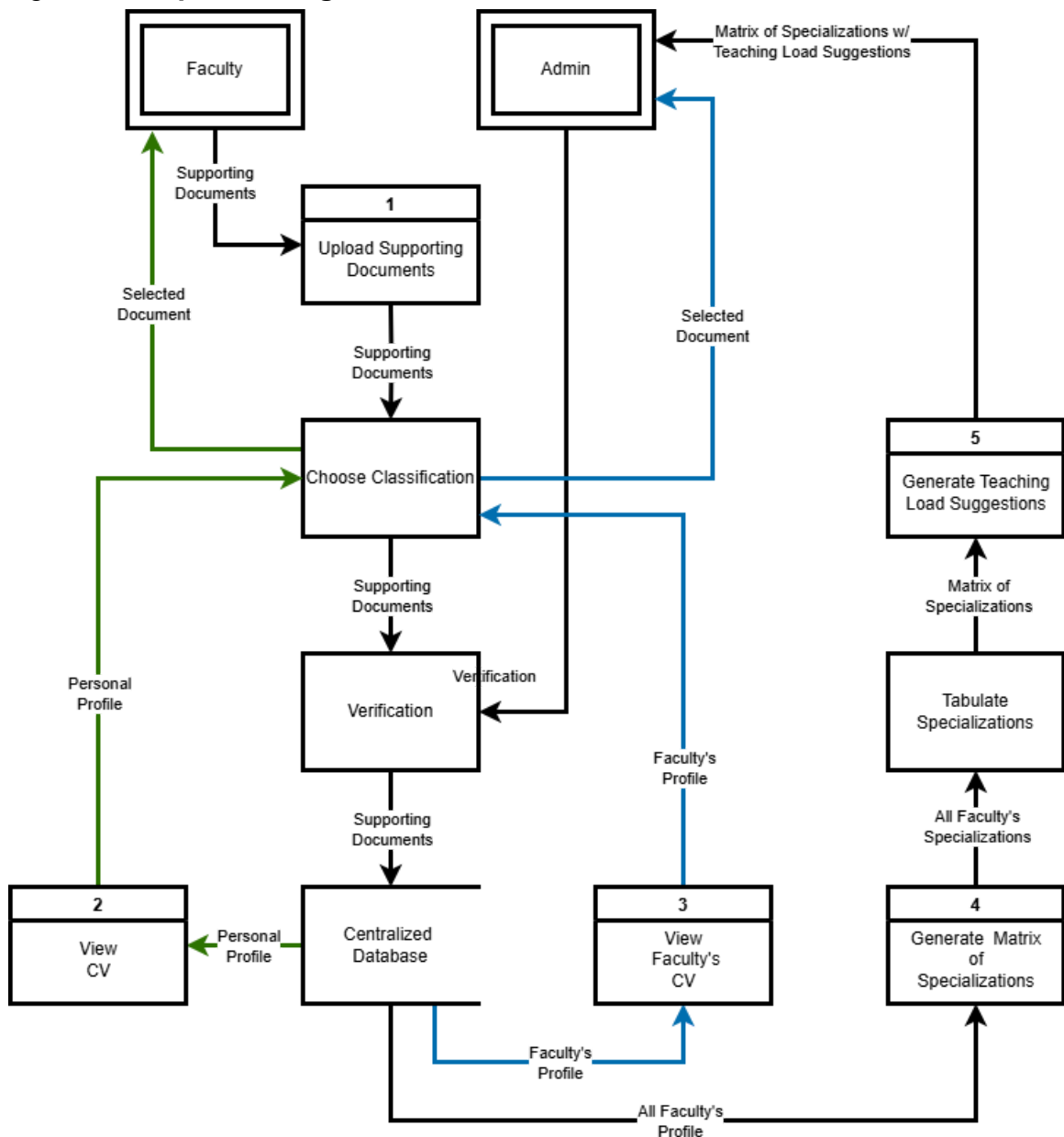


This diagram shows the breakdown of the internal processes of the current system in SPC Faculty.

- **Main Entities:** Faculty and Admin (external entities)
- **Core Processes:**
 - Retrieve Personal Documents: Faculty can access their existing documents
 - Upload Supporting Documents: Entry point for document submission
 - Verify through E-Mail: Admin validates documents via email
 - View Personal CV and View Faculty CV: Interfaces for viewing CVs
- **Data Stores:**
 - Personal Folder: Stores individual faculty documents
 - Classification Folder: Contains categorized supporting documents

- **Data Flow:** Green arrows represent faculty-related flows while blue arrows show admin-related processes
- **Central Component:** Google Drive Based CV serves as the storage infrastructure

Figure 4: **Proposed Diagram Zero Workflow of SMLS-SFMS**



This Level 1 Diagram Zero shows the detailed workflow of the proposed SMLS-SFMS (School of Medicine and Life Sciences - Staff/Faculty Management System). The diagram illustrates:

- **Main Entities:** Faculty and Admin (external entities)
- **Core Processes:**
 - Upload Supporting Documents: Initial entry point for faculty document submission
 - Choose Classification: Process for categorizing submitted documents
 - Verification: Structured validation of submitted documents
 - View CV: Interfaces for accessing compiled faculty information
 - Generate Matrix of Specializations: Creates comprehensive specialization overview
 - Generate Teaching Load Suggestions: Produces teaching assignments based on specializations
- **Data Stores:**
 - Centralized Database: Single repository for all faculty profiles and documents
- **Data Flow:** Green arrows indicate faculty-related processes while blue arrows represent admin-related workflows
- **Advanced Features:**
 - Tabulation of specializations across all faculty
 - Teaching load suggestion generation based on faculty expertise
 - Matrix of specializations for administrative planning

CHAPTER 5

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