HOW PROJECTS, TECHNOLOGY AND SOLUTIONS WERE IMPACTED BY COVID-19: THE ISSUES AND SOLUTIONS WE FACED

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ABSTRACT
This article looks at the impact of COVID-19 on various consulting projects in which I was involved and looks at the challenges posed by the shutdown and clients working from home.

INTRODUCTION
As records and information management professionals, we have always worked well offsite with our clients, using tools such as conference calls and remote desktop sharing to develop, implement, execute and deliver everything from policy development to system architecture, in order to support custom development.

2020 started off with a number of great projects. Looking back at project timesheets, I started my research for this article to see where my time was actually spent in the first few months of the year. To preface this, my role varies significantly throughout the projects we will look at. This article provides a view that is not specific to my application developer role, records consulting role or software implementer and trainer role including an in-depth look at some specific projects. The following is a breakdown of the categories of tasks undertaken within each project from the review of those early timesheets.

- Records Management and Software Implementation
  - Content classification
- Training, Webinars and Documentation
  - We did a multi part webinar series on one of our software tools
- Legacy Database Migration
  - A few projects regarding legacy databases from old Microsoft Access, spreadsheets and servers.
• Reporting
  o This mainly included security and auditing.

When COVID-19 first appeared we had to look at all the projects to see what was involved, the focus on what we could do and next steps. The world (or offices) was our oyster and things were moving along.

Pre-COVID-19 PROJECT Management Process

Before diving into some specific projects, the issues and ultimately how they were handled, let's look at the good and bad of managing projects pre COVID-19.

**Pros**

The approach to managing the projects pre COVID-19 was very structured. Projects had been done for years and followed a set process/template, which varied depending on the project type and client industries. Each one required the creation of a Request for Information/Request for Proposal (RFI/RFP); receiving a Purchase order and preparing a contract with the client, signing a non-disclosure agreement (NDA); creating the necessary reports and documentation and following a series of predefined steps to incorporate project planning, set up and completion with client sign-off. Given that the processes were well defined, project documentation and planning steps were created quickly with amendments made according to client needs.

**Cons**

Pre COVID-19 times, while being structured has a positive side, it also has a negative side – it can lead to rigid processes that can sometimes slow projects down and create obstacles. Strict and rigid processes around creating and gathering required project paperwork, and scheduled meetings can also slow up progress. For example, there is a need for certain paperwork to be completed between the company and the client before a project can start, NDAs, Statements of Work (SOW), Purchase Orders (POs)) or contracts in general. Often clients require a non-disclosure agreement prior to starting a project and in order for us to bill a client, we need a purchase order. I am always the worst when it comes to doing work on the project before the NDA or even a PO is complete because I want to get started on the project. The “legal” paperwork as discussed above, does not impact my role directly.

In the following sections, we'll outline our experiences and show how different methods of approaching projects have worked out during this time of COVID-19.
COVID-19 AND MID PROJECT ADJUSTMENTS

As projects moved along from the beginning of the year, little did we know what was coming or how much it would affect existing projects that were at many different stages of implementation. Many steps in the process were slowed down because people were working from home, which affected such activities as paperwork being signed. In general, access to resources required for projects was the main factor in slowing projects down.

There were many projects where there was an increase in urgency, created because people were working from home. Working from home created issues around data security and accessing both physical and electronic information.

Hindsight is always 20/20; if we knew now what we did then things may have been different. For the remainder of this article, let us look at what did happen, and what the issues were.

WHAT DIDN’T CHANGE

As a Records Management Consultant and Developer, my day to day didn’t change. With our office setup, I continued to work from the office while following the “new normal” guidelines and restrictions. Days were filled with data analytics, software feature development, documentation creation and other aspects of the projects in which we were involved. Many of our clients are outside of our immediate vicinity and to reduce project costs most of our work has been completed remotely for years, so our day to day activities continued. Given our use of desktop and screen sharing tools such as ZOOM and Microsoft Teams, we were able to continue to move work forward using the technology available to us without having to be onsite.

While some things changed, others did not - meeting deadlines, applying Microsoft patches and licensing continued. Current projects had a number of time bombs with the timers ticking.

Through the next sections I will break down some of the mid project adjustments required, focusing on three project types:

1. Legacy Database Conversion
2. Electronic Document Management Software Upgrade
3. Corporate Strategy for Records Management

Using each of these projects, I will look at the time bombs, how they were impacted by the global pandemic and how we handled them. Section 1 describes the challenges of each scenario.
1. Legacy Database Conversion - Resource and Deadline Challenges

For this project, a client had many home-grown Access Databases that were being migrated to a cloud implementation of WesternIM’s Records and Information Management Tool – WISPIR (WesternIM’s Information System for Physical Inventory Recording). This project had been approved for about a month but the actual project work was in the early stages. With only a half a dozen people involved, we will look at how mid project resources were cutback, limited, transitioned to new jobs or given other priorities. How did we succeed where other projects were in jeopardy of failing?

In terms of the Legacy Database Conversions, the perfect storm happened. Not only did we have a transition to client personnel working from home because of COVID-19, there was a personal leave coming for the individual with the required corporate knowledge, compounded by which, the project that had to be finished by the end of the fiscal year!

2. Electronic Document Management Software Upgrade - Agility

Let’s look at a large Electronic Document Management Software (EDRMS) upgrade. Here we had a brewing pot of issues that could only have been handled with an Agile approach. The Agile methodology is something we use in the IT development world to break down a process that involves more back and forth consultation in terms of client acceptance for our implementations and allows for work to be done, reviewed and adjusted quickly as the project moves from start to finish. This is a skill set that has allowed us to adapt our projects and accommodate large changes to scope and timelines.

The existing situation with the EDRMS upgrade was a recipe for disaster:

1. Old browser technology support for user functionality was being discontinued
2. There were requirements to move to a newer browser.
3. Microsoft was rolling out the requirement for Active Directory to have secure connections.
4. Security implementation was not adequate in previous implementation.
5. Unstructured content was filed through a very stringent strainer.

To focus on a couple of ingredients here, between project management, IT and WesternIM as the consultant, we had to be very agile in order to make sure the brewing pot didn’t sit on the fire for too long and that the result was palatable on both sides.

3. Corporate Strategy - Access to Information

Remote access was not something widely available to support all of the organization’s activities. Security, control and even physical information were limiting factors on accessing
content. With our corporate strategy for the Records Management project, it was very clear that accessing information was the number one issue for staff working from home. The lack of remote access to both the physical and electronic information created a roadblock for the RM team to support the organization’s need to access information.

A new data map was required and processes for requests for information needed to be developed. How do you get from point A to point B without the data map that identifies corporate vital records? As a result of COVID-19, new records were being created around personal or financial information.

A couple of years ago, a software system was installed that the client was having some difficulties with. Collaboration was already an issue; the tools were not easy to use for the work being done in various departments. Compounded by that, licensing was coming due, data centres were being moved and software was out of maintenance.

In this case, we’ll see how it was a reason to accelerate a strategy.

**COLLABORATION**

Before the arrival of COVID-19, the physical work space was a great asset for allowing people to collaborate. Conference rooms, the water cooler or just peeking over a cubical made working with others easy. Onsite work was great to get a better understanding of what really happens. RFPs, requirements documents and contract arrangements are a great start but real-time collaboration, from our experience, always increases your success rate as well as the end product.

Over the past few months since the COVID-19 pandemic began, projects have been managed on the fly and ad hoc virtual meetings have become the new norm. As a result, we have seen more success with projects becoming easier to manage allowing more work to get done.

In the pre COVID-19 days it was normal to schedule a meeting for every Tuesday but working during the pandemic has shown me the light. In the new work environment, it has become a great habit to respond to emails promptly. We are all sitting in fewer meetings, but we should be talking (emailing, text, video calling) more.

**COVID-19 IMPACTED PROJECT SOLUTIONS**

With what did happen, let’s revisit the three main projects touched on in the previous section - Mid Project Adjustments. What were the solutions and how did we keep projects on the rails and ultimately get to successful conclusions?
1. **Legacy Database Conversion**

The success in this one was relatively easy. We were working with great clients. First, we did miss the window for working with the main corporate knowledge holder before they went on leave. The leave was coming and we all knew it. Early into the project and COVID-19, we brought in the reinforcements. Working with the client project lead, we needed an internal resource, which resulted in being beneficial since the new resource was going to be the main corporate knowledge on the next project. Bringing the person up to speed meant a little more work on this project up front but put us well ahead in the next.

Yes, we missed the deadline of the end of fiscal year by weeks. Arrangements were made that the work could continue after the deadline, but the project was “officially” completed on paper for it to fall into last year’s fiscal year. Again, even though the deadline was missed for full system rollout, with the next project already in line with the new reinforcements, the projects worked well running into each other. As we worked through the second project, we were able to take lessons learned from things like naming conventions and data maps on the first project directly into the next. This also worked the other way, as lessons were learned in the second project, we were able to go back to the first and apply improvements since the project work was able to continue after the official wrap up.

2. **Electronic Document Management Software Upgrade**

Like most projects, User Acceptance Testing (UAT) played a big part in getting through successfully. We discovered that the software didn’t have all the functionality the user wanted. With the initial recipe not quite getting us the end meal that was going to be filling, adjustments to the ingredients were necessary to avoid the disaster we referred to in the recipe earlier.

While working through UAT with the client, issues of user functionality being unsupported and not available were identified so other methods were brought in. As the consultants, we looked at work arounds and brought a few options to the table that assisted the client in getting what they needed. The client had a number of tools they could leverage to fill in any gaps found. By using other software they already had, undertaking some custom work to make their software work the way they wanted and even designing a simple manual process, the upgraded system fulfilled their requirements.

In the end, what ended up solving one of the main issues was a patch made available from the software vendor! Apparently, we weren’t the only ones missing the deprecated functionality which was only available on the old browser.
3. **CORPORATE STRATEGY FOR RECORDS MANAGEMENT**

For this, success was migrating the data with the risk high that records and documents were going to be unavailable and potentially lost due to licensing, cost and time to process paper work, something had to be done, and quickly.

Given the risk, we managed to get some pre-approved support time, worked many late nights and with the use of our WISPIR tool, a full migration of the records and documents to the new solution was successfully completed. All content was backed up and migrated into the new environment which was more familiar to the internal IT staff of the client.

Even with all the project red tape because of working in the COVID-19 environment and with strict and rigid processes around required paperwork, sometimes all it comes down to is just hard work.

**PRESENT COVID-19 SITUATION**

Getting through the projects during COVID-19 was both difficult and rewarding. Not only did we succeed, we developed new and better project management strategies we otherwise would never have needed. Even if everything goes back to normal tomorrow, we can take the lessons learned and apply them. How we handle deadlines and resources, apply our agile methodology, access and secure information remotely and finally collaborate with our clients have all changed as a result of personnel working from home.

With remote work as an option going forward, technology tools have become more valuable. Access, stability and security have come to the forefront. Things we often took for granted have now become our essential tools.

This is new territory for us, which can lend itself to allow the implementation of bigger and better solutions. As things change, we are seeing the introduction of new ways of working, from new routines and processes to setting up home work spaces, new tools being introduced like the online conferencing applications and even just adapting to, working and communicating with each other without the physical cues that make up a large part of getting your message across.

Just like history, we learned from this and made the future of our projects better. With more flexibility, better collaboration with clients and within our team and increased and secure access to information, at the end of the day, success came from a lot of simple hard work. When the going got tough, we got smarter.
NEW PROJECTS

With most of the projects we started at the beginning of COVID-19 wrapping up, what is next for new projects? The key points that I believe contributed to our success are:

- Communication and hard work.
- Staying connected by whatever way makes sense for you and your organizations, whether it is using better email communication, or webcams during online conference calls.
- Replying to that email today, or just making the call if you need an immediate response
- Lastly, the more work done, the more that is completed, however you work today.

As we settle in to the new normal, we found that you should not hesitate to start new projects even during a pandemic. For a while there, anything new was unlikely to get traction until priorities were re-evaluated against the impact of the pandemic. Even during periods of uncertainty, the deficiencies in our processes and procedures came into focus. Based on the various situations we found ourselves up against there are several positive outcomes: we’ve learned from what we’ve run into and now understand how such factors as agility, access to information and collaboration helped us succeed during such interesting times.

ABOUT THE AUTHOR

Partner and Lead Developer of Western Information Management. Troy has a diverse background in and out of the Information and Records Management world. Troy is the architect and lead developer for WesternIM’s software applications including WISPIR – WesternIM’s Records and Information Management Tool and WesternIM’s Connector for Outlook, as well as many custom solutions for integration and software customization. Troy’s background spans physics and technology, chemistry, system development, programming for many platforms and industries, data and system analysis, education and teaching, energy and environmental air emissions. With project experience ranging from independent contractors to large international shipping companies in both the private and public sectors.