UPGRADING YOUR LEGACY SYSTEMS – THE GAIN OUTWEIGHS THE PAIN

Introduction

I have seen a number of companies that may not want to remain reliant on decades old legacy systems but are hesitant to make the investment in newer software platforms because of cost uncertainty, risk, and the presumed level of effort. Utilities are great at finding creative ways to extend the life of existing systems and have always been very successful at developing point solutions for various business needs. Some examples are billing, procurements, work order, asset and inventory management. Other systems may have been developed or added to supplement the functionality of legacy systems that may no longer be capable of performing the heavy lifting required to feed the increasing needs of the enterprise for data and information. In addition, outdated programming languages, hardware, and operating systems may be retained well beyond their useful or supported lives because the legacy system is incompatible with more modern platforms. Matters are further complicated when there may have been one or more mergers that leave the combined utility with two or more different legacy systems performing similar tasks.

The main driver in keeping legacy systems alive is the notion that with a change to a newer platform, customer relationship management and enterprise resource planning, (CRM/ERP) will most likely result in a large investment of capital and human resources. Yes it will. Change introduces an inherent level of risk and could disrupt

business operations. Yes it may. Therefore, we must be smart about why a change is needed. What are the benefits of using a new, modern, robust and secure platform for managing customers, billing procurement or assets?

What is an ERP platform?

It is a company-wide (enterprise) computer software system used to manage and coordinate all the resources, information, and function of business from integrated data stores. All the ERP package modules are designed to allow the business units to integrate and distribute data from the centralised ERP system database. Common modules are:

Production planning module
This module optimised the utilisation of parts, components, materials, and resources using production and sales forecasting. This module is usually focused on increasing manufacturing capacity.

Purchasing modules
It streamlines purchase of raw materials, it automates the process of identifying the potential suppliers, pricing, procurements, and delivery of goods etc. This sometimes is referred to supply chain management.

Inventory control modules
This module facilitates the processes involved in maintaining an appropriate level of stock in the warehouse while considering lead times and just in time delivery concepts.

Sales and distribution module
Sales modules support the functions of order placement, scheduling, shipping and invoicing. It is closely integrated with production, marketing, and procurements.

Human resource (HR) module
HR is another area where the ERP system is broadly implemented. It streamlines the management of resources and human capital by routinely maintaining a complete employee database of contact information, salary details, attendance, payroll, performance evaluation, promotion etc.

Financial module
It gathers all the data from various functional departments and generates reports like, profit and loss accounts, trading accounts and balance sheets statements.

What is a CRM platform?

Customer relationship management (CRM) is a term that refers to practices and technologies that companies use to manage and analyse customer interactions. The primary goals of CRM systems usually focus on improving customer service and relationships while assisting with customer retention and driving sales growth. Common modules include:

1. Sales, prospecting and marketing
2. Contact/call centre (customer support-help desk)
3. Human resources
4. Analytics and reporting

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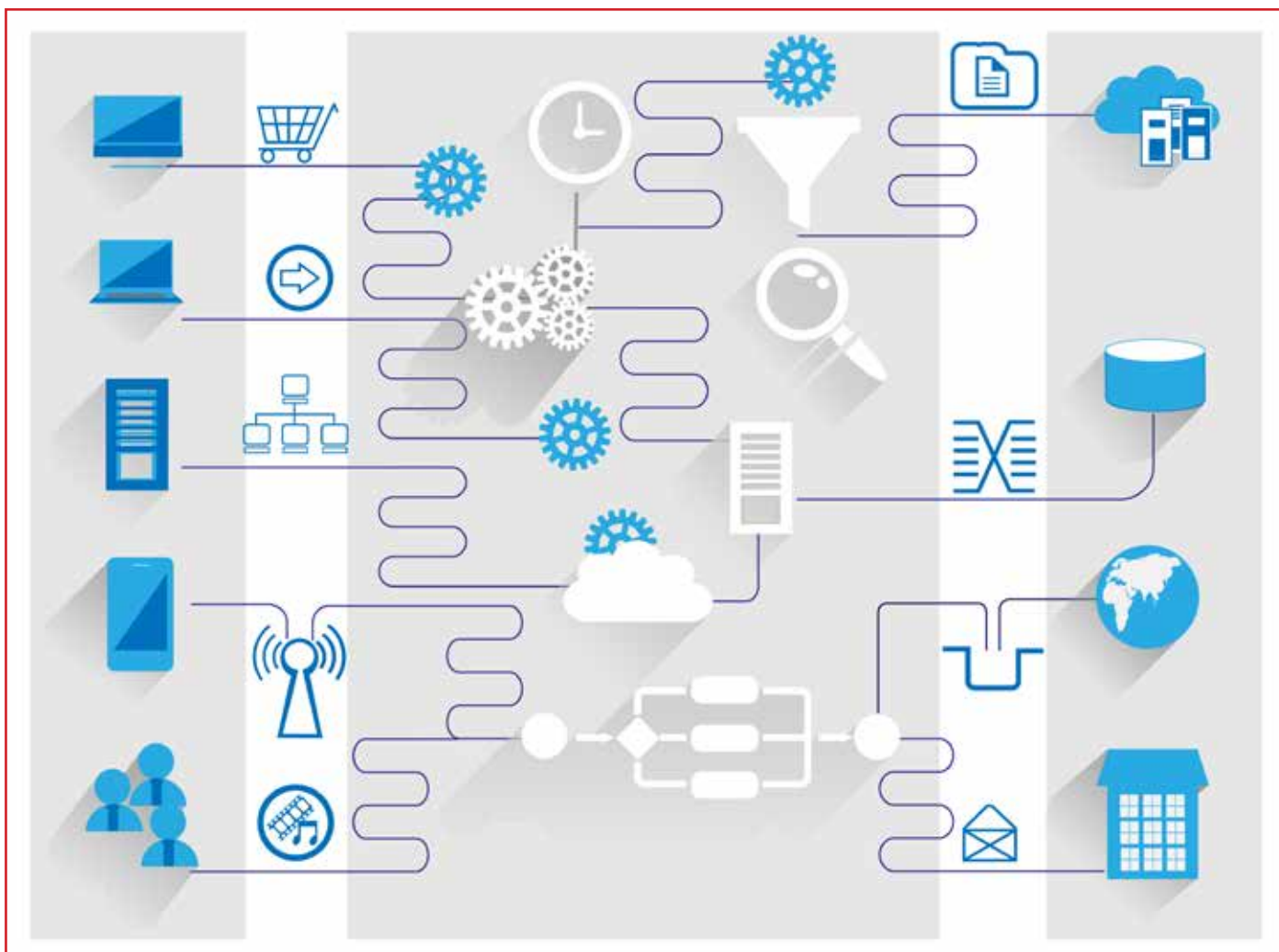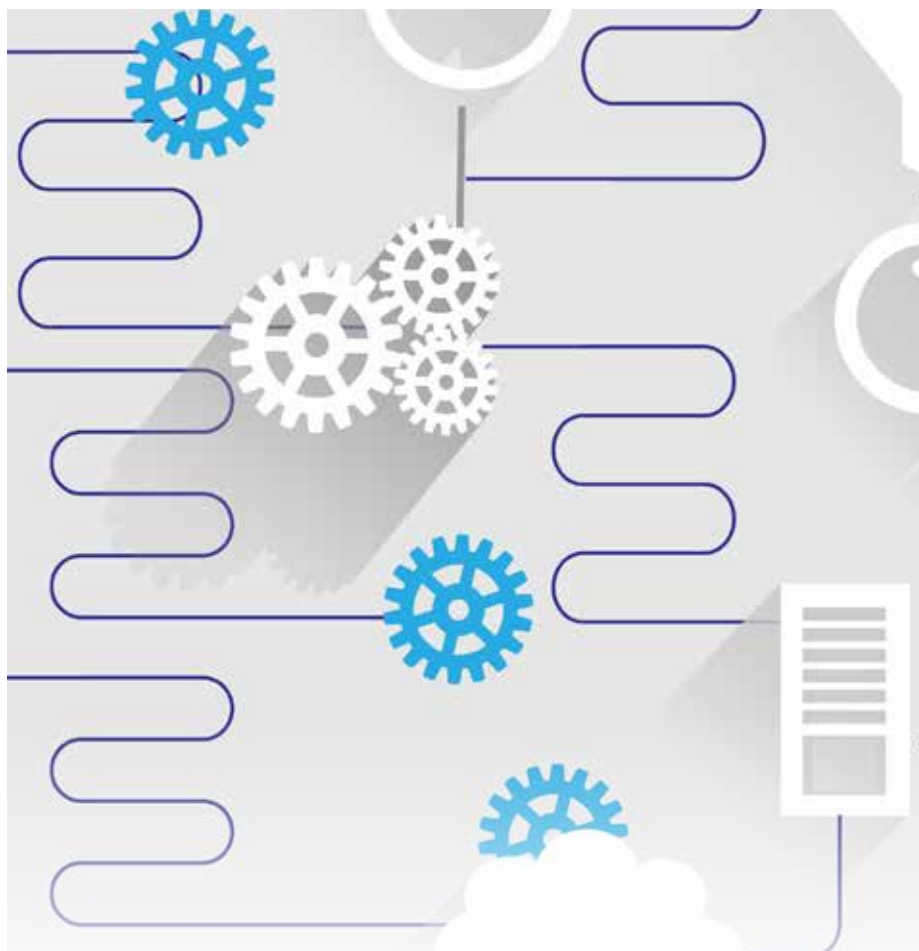
Common findings within utility companies

So, when analysing the similarities and differences of a CRM vs. an ERP, you will see a fair amount of overlap, but each has a unique perspective on which business operations are in play for that system. Customer information systems, CIS, have been purpose built for the way a utility company operates and may include some of the modules listed in either a CRM or an ERP. CIS systems are the back-bone of most utility companies and when considered for an upgrade, you must determine which business processes will be owned by the new platform or systems. Will the company need a massive ERP/CRM doing everything, or will the company be better suited by packaging related business functions together and only consider those for the new platform? This is the important step where many companies do not do their due-diligence. They must make decisions about what functionality goes into what system and how that system/data interfaces and operates within the organisation's portfolio. Which system will be the system of record for each business process and its set of associated data?

Niche enterprise software

Let's further complicate the scenario by adding in all the niche software platforms that can be used instead of a massive ERP or CRM system. These suppliers' products minimise the need to over architect a generic system through customisations. A niche platform is usually designed out of the box to conform to domain specific business functions and operations. One of the most important things to understand is you cannot be too careful when considering how much customisation will be required to configure your ERP/CRM system to match your business workflows/processes. The increased price tag usually warrants very close consideration of one or more niche providers. Usually the cost of the niche software and associated maintenance fees are smaller when compared to larger more integrated ERP/CRM systems. Niche platforms are purpose built and do not offer a product that is a mile wide and a foot deep that will "generally" be in line with the "standard" business process for most industries. For example, it may not be a wise choice to create/customise an ERP to perform meter shop and field operations. A niche supplier with purpose-built software must demonstrate that their solution is

enterprise grade and although smaller in size, will not be lacking in its ability to integrate with other ERP/CRM systems being used by the enterprise.

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The gains

One of the benefits of implementing a modern purpose-built software platform is that vendors invest an equal amount (or more) each year on R&D, functionality improvements, and other enhancements. These updates, in addition to leveraging the knowledge base of all their customers, keep the platform modern and relevant for the entire customer base. So essentially, the customers of these platforms will get more out of their enterprise software solutions because it allows them to realise better business results, enhanced productivity and increased visibility and transparency across the organisation. Many niche vendors will also provide enhancements and upgrades as part of a maintenance agreement...

Drivers for change can been classified accordingly
• Launching new product lines, new markets, complex channels, evolving business processes are requiring businesses to be more agile
• Global supply chains, quick response, unified business and data processing require collaboration and information sharing
• Mandated Regulatory Compliance – ever changing import and export requirements, retailer demands, consumer product requirements
• Processing Efficiencies – data accuracy, completeness, timeliness, consistency.

In Summary

Business operations are going to benefit from the new platforms and the modern technology they are built on; but implementing new platforms should never happen simply for the sake of technology. There should be a clear business benefit for doing so. Clearly articulate that the investment in a new platform is superior to alternative approaches and is less costly and provides a positive return on investment. Business and IT leaders must look before they leap and totally understand the portfolio landscape and business needs. From procurements, to inventory, through the meter shop and on to field operations, eventually to billing they must know what data will go where and who will own it. **MI**

What's holding you back?

Organisations that use modern platforms typically spend millions of dollars per year just to maintain their enterprise software systems and packages. The legacy systems have a deep vertical functionality that over the years has been tweaked to the organisations' needs and customised accordingly.

Some of the top reasons delaying change can be grouped into the following areas:
• Lack of senior management support
• Resistance to change and/or business disruption
• Inadequate business justification or unrealistic expectations and return on investment
• Inadequate resources

The Status quo might be seen as a less costly option than a change. That is not the case, for the following reasons
• At some point, support for your old hardware becomes unrealistic, unreliable, and maintenance becomes increasingly expensive as your old equipment is discontinued or the supplier is either acquired or goes out of business.
• Technology professionals who did much of the customisation have retired and so has the deep knowledge of the customisations made over the decades to the legacy systems. Businesses will spend many times the money on customisations as on the initial license fees, and still more money to support and carry these customisations.
• Legacy systems tend to be given inadequate resources for proper maintenance.
• Your legacy software may be so old that the provider who wrote the original software is out of business. The original software vendor might have been acquired by another company that no longer provides support for your system.
• Legacy systems are slow to respond to the ever-evolving business. They are usually difficult to use and are slow and inflexible. It doesn't support current business needs like business intelligence or collaboration. The result is that when new business processes appear in your market, your current system is preventing you from competing.
• Legacy systems are often full of information that cannot be accessed without significant investment of time and energy. In many companies with legacy system, people may still be using spreadsheets to get their jobs done.

ABOUT THE AUTHOR
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