The Business Case for Replacing an Underperforming Permitting & Inspection Solution

"Our permitting & inspection software is outdated, performs poorly, and the support is nearly non-existent, but we can't afford to replace it!"

As the staff of Computronix travel across North America meeting with government agencies of all sizes, statements like this are becoming an increasingly common refrain.

On one hand, government leaders fully appreciate the critical necessity for modernization to serve the escalating demands for digital services and data transparency, with infrastructure capable of defending against the growing threat of cyberterrorism. On the other hand, many agencies are increasingly feeling the budget squeeze from untenable licensing and support costs tied to underperforming legacy software that offers little in the way of future cost savings from efficiency improvements or budget gains from new revenue streams.

For many jurisdictions, the very real desire for technology innovation falters at the sight of seemingly insurmountable budget constraints. However, this often 'first blush' assessment overlooks two crucial considerations that are vital for any local government or region truly desirous of achieving a paradigm shift in its land management services:

1. Have you fully considered the costs of NOT replacing your current Permitting and Inspections ("P&I") software solution?

2. Do you have a true sense of the real budget gains to be achieved from implementing a consolidated land management system?

First, let's look at the costs of staying status quo with outdated software:

The Costs of Staying Status Quo

Skills Erosion

One of the most punitive aspects of staying 'too long at the fair' with legacy software is the inevitable skills erosion that occurs BOTH inside and outside of your agency. Whether it is your internal IT staff or external vendor support and development staff, human capital and skills application in the technology arena consistently gravitates towards the most modern and user-friendly technologies. As a result, the stewards of legacy and/or highly customized and proprietary government software platforms inevitably find themselves fighting a war of attrition on both the internal staff retention and external vendor support fronts, with the inevitable market forces poaching your most qualified and adroit personnel.

This leaves agencies in the unenviable position of counting on 'internal experts' reliant on oft outdated and infrequently used skillsets OR diminishing returns from external vendor support systems incentivizing your operational migration towards a more modern and supportable platform. Depending on your chosen maintenance and development model, the bottom-line impacts are a depreciation in human capital internally, an escalation in supports cost externally, or both!

Widening the scope beyond platform support and development staff, skills erosion can also occur with operational staff growing weary of outdated software leading to inefficiency and repetitive task frustrations. Much like their IT counterparts, front-line staff eager to gain expertise with more modern and marketable toolsets represent potential employee turnover risks when end-of-life solutions linger too long as the internal systems of choice. Conversely, the introduction of leading-edge technologies creates a resonant recruitment and retention tool, one that can be leveraged effectively to attract and keep top tier talent within your agency.

Opportunity Costs

Inflation

The opportunity costs associated with not replacing your outdated P&I solution are many, but first, let's not belabor the obvious one—inflation. Unless you are planning on never replacing your current solution, there is never a better time to act than the present with your purchasing power at its maximum. Delaying the inevitable down the road will only cost more in actual budget outlay. Unfortunately, it is the additional unseen opportunity costs that can often prove most prohibitive.

Protracted Development Process

From a land management perspective, the most prohibitive of these unseen costs is the opportunity costs associated with an inefficient or prolonged development approval process.

For land management agencies, protracted development approval cycles directly impede the timely receipt of tax revenues restricting positive operational cash flow until Certificates of Occupancy are issued.

For land and property developers, development approvals in many parts of the continent have gone from taking 2-3 months to as long as 10 or 11 months in some of the fastest growing cities in the US ([Source](#)). Costs from such delays are doubly punitive for developers: impacting them both directly via increased capital, carrying and interest costs, and indirectly via increased time and labor spent managing complex and manually intensive processes that can vary drastically between jurisdictions.
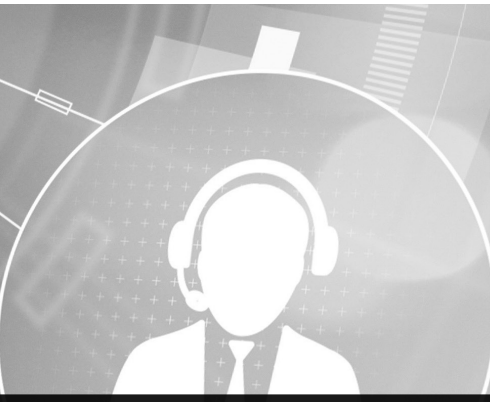
Reputation Cost

In addition to the economic impacts associated with an unwieldly or frustrating development process, there is also the associated reputational costs. The never-ending competition that local governments face to [attract the best companies, workers, and investment capital to your community](#) is interwoven with your tools for creating and maintaining vibrant infrastructure and amenities. A development friendly software platform gives you a substantial head-start on the competition in fast-tracking winning development projects to create amenities that attract the best and brightest companies and talent, thus growing your overall tax-base.

No Viable Upgrade Path or Product Roadmap

One of the surest signs that your current P&I solution is overdue for replacement is its marginalization in ongoing product roadmap and upgrade path considerations. Whether your solution is a mature internal build or an external vendor COTS solution, there can arrive an extinction threshold in its lifecycle when the costs associated with a theoretical upgrade path to compete with more modern platforms and user experiences approach or exceed the costs associated with an actual replacement system. This is particularly the case with underperforming enterprise systems hobbled by data access and compatibility constraints across a typically siloed operational footprint.

Given the paramount focus now on "single door" data access, transparency and citizen engagement, the vast majority of outdated Permitting & Inspections solutions with more limited datasets are giving way to wider-scope Land Management Systems capable of performing as true enterprise pillar applications for multiple Community and Economic Development-oriented stakeholders, including planning and development, building permitting and inspections, business and professional licensing, neighborhood code enforcement AND external builders, developers, licensed business operators, and citizens.

"Computronix is helping us be a leader in our industry because all of our stuff is seen as very forward-thinking. A lot of municipalities in our region look to Surrey first...We are considered a leader, and without Computronix we wouldn't be."
Melanie Atkinson, Business Analyst, City of Surrey, British Columbia

Potential Cybersecurity Damages

Another key contributor in the decision to remove a solution from further roadmap considerations is the inability of the system to provide adequate defense against escalating cybersecurity threats.

With cyber threats against State-/Provincial-level and local governments [increasing in both frequency and severity](#), it is mission critical that you give your legacy P&I systems an honest appraisal to decide if they can be truly secured for the long-term to achieve the necessary data security while still delivering effectively against the often contrary remit for improved information transparency and citizen accessibility. One key question to consider is whether your current software platform has already been compromised via an exploitation with another agency in another jurisdiction? Given the organized syndicate structure of modern hacker networks, successful incursions are often attempted and replicated in other locales where cyber-terrorists recognize an opportunity to leverage similar security deficiencies to their advantage. [Examples of such incursions](#) should be monitored closely to ascertain if the compromised systems in question pose a similar threat to your own P&I solution and architecture.

Much like the theoretical cost of a prohibitive cyber-ransom attack, the various costs associated with not replacing an underperforming P&I system (skills erosion, escalating support costs, inflation, development economic impacts, reputation costs, loss of upgrade path, cybersecurity gaps, etc.) can seem more abstract than real, but that doesn't make them any less impactful on the bottom line. Moreover, when all these costs are considered in unison, it becomes abundantly clear that there is a significant price to be paid for staying status quo with a system nearing or past its end-of-life.

Budget Wins From P&I System Replacement

Wider Scope Solution Facilitates Economies of Scale

One of the big wins associated with modern land management systems such as POSSE LMS is the ability of these low-code solutions to be configured for the benefit of a much larger organizational footprint than conventional P&I solutions. Unlike the previous generation legacy systems, stakeholders across the organization (in building, planning, engineering, permitting, inspections, code enforcement, licensing and more) can leverage the much improved data accessibility and workflow automation of these highly configurable platforms to facilitate a diverse range of internal business processes, citizen services and revenue streams. The net result is a wider scope business case and funding opportunity that better positions government procurement efforts to allocate budget for overdue system replacement from a forecastable revenue gains perspective, as opposed to evaluating solely through an internal infrastructure lens.

"Permits, authorizations, tenures, licenses and more. The e-Licensing experience has proven that the business processes of their issuance and management is very similar across government, and lends itself to opportunities for automation and subsequent reuse of a single, integrated solution."
Mike Kelley, Director of E-Licensing, Government of British Columbia

Budget Friendly Licensing Model

In addition to achieving true economies of scale in software procurement efforts, many jurisdictions are fast-tracking the procurement process for a new [land management solution](#) to escape an outdated and untenable licensing model. One common and particularly archaic model scales the active user pricing for citizen portal access based on population bands, thereby penalizing larger jurisdictions.

Another particularly prohibitive licensing model charges user access for each individual module within a much larger system architecture, creating a corresponding increase in licensing, support AND maintenance costs. Such policies unnecessarily confine technology utility within an organization preventing ease of access during absences, vacations or peak operational cycles.

Modern software solutions steadfastly avoid such punitive usage models, and should your jurisdiction find itself hamstrung by an unsustainable licensing model carried over from a previous generation legacy solution, this can form the foundation for a solid business case for system replacement going forward.

Operational AND Environmental Savings

One of the most obvious and visible budget wins is the operational efficiencies achieved following implementation of automated, citizen-centric land management services. The replacement of outdated service desk processes with interactive citizen portals greatly reduces submission errors and permit throughput times while also facilitating a quicker and-more collaborative citizen experience and improved data integrity across the breadth of the organization. Moreover, the elimination of in-person visits and paper-centric processes creates numerous positive environmental impacts reducing the overall carbon footprint and reinforcing the public perception of your agency as an innovation leader delivering new and improved opportunities for automation-led digital transformation and citizen engagement.

"The software is configurable and adapts to meet the business requirements. We consistently have a number of projects underway at any given time that are expanding the use of the system to other business areas. We use POSSE as part of our ERP landscape and it is, by far, the best value for the City."
Tim Beauchamp, Enterprise Architect, City of Edmonton

Ability to Leverage a 'Risk Based' Operating Model

Finally, a major shift is underway within regulatory agencies towards a risk-centric operating model in which technology becomes a central strategic asset for identifying and assessing level of risk and for understanding where an agency can best focus its limited resources and funds for maximum public safety benefit and efficiency. Government agencies are under increasing pressure to do more with less. **Limited resourcing – especially in the areas of inspections and enforcement – means agencies must find ways to identify and focus most on problem areas, while releasing highly compliant, lower-risk operators to a higher level of trust and less routine scrutiny.**

Modern land management systems, such POSSE LMS, include an ability to create and apply algorithm-based "Risk Assessment Program" (or "RAP") paradigms to your business so that staff can quickly assess at any given time where inspections and enforcement efforts should be focused. Further automation can be used to manage frequency of inspections cycles on Inspectors' To Do List workloads as those RAP indicators change over time for each operator. Similarly, automation can also be leveraged to "auto-approve" low-risk permits, licenses, and other approvals without any need whatsoever for staff intervention and oversight, thereby elevating staff time for more important functions.

Economic Impact of Streamlined Development Process

As a number of recent studies confirm, expediting the land development and review process not only speeds the time to market for entrepreneurial businesses that play a vital role in the economic growth engine, but an expedited development process also fundamentally improves the availability of affordable local housing. With affordable housing projects disproportionally impacted by escalating costs associated with regulatory delays (due to the smaller profit margins of such projects), a protracted development and review cycle inevitably results in fewer affordable housing units being built (Source). Faced with this challenge, shorter turnaround times for development approvals have now become a key metric for consideration by government leaders keen to address the nationwide issue of affordable housing stocks in their communities.

"Since replacing our legacy building permitting system with POSSE, we have experienced significantly reduced waiting times and greatly increased customer satisfaction. Computronix understood our business requirements and delivered a first-rate system."
Theresa O'Donnell, Chief Planning Officer, City of Dallas

White Paper By:

Computronix provides state and local government agencies with transformative enterprise software solutions for land management, alcohol beverage control and enterprise licensing. Powered by POSSE, an award-dinning platform cited in the Smithsonian Institution's collection of ground-breaking software, this wholly integrated suite of enterprise products empowers public sector agencies to automate critical processes and streamline business workflows for improved efficiency, accessibility and civic engagement.

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Distinctive Software. Exceptional Service.