



THE ROLE OF SOFTWARE IN LOCAL GOVERNMENT:

**Assessing Impact, Priorities, and Challenges of Software
Across Eight Different Areas of Local Government**

August 26, 2020

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About *CivicPulse Insights* and the Publishers

About *CivicPulse Insights*. CivicPulse and Power Almanac have teamed up to bring you *CivicPulse Insights*, a research service dedicated to analyzing critical issues of local governance, providing national and regional benchmarks for local governments, and identifying strategic implications for their suppliers. Using Power Almanac's comprehensive contact information for local government officials across the US, CivicPulse conducts random-sample surveys of township, municipal, and county officials, and completes careful analyses to identify key trends and insights that will guide your decision-making.

About CivicPulse. CivicPulse is a nonprofit, nonpartisan organization dedicated to filling the gap in access to high quality information about local government. Founded in 2018 by a few PhD students at Stanford University's Department of Political Science, and led by Dr. Nathan Lee, professor of public policy at the Rochester Institute of Technology (RIT), CivicPulse combines recurring national surveys of local government leaders with a variety of other data sources to provide trustworthy insights for policymakers, citizens, and the broader stakeholder community.

About Power Almanac. Power Almanac's mission is to make it easy for organizations with the ability to help local governments serve their citizens more efficiently and effectively to reach out and connect with key decision makers at the right local governments. We provide the most comprehensive and accurate database of contact information for local government decision makers, with more than 250,000 records from 21,000 cities, counties, and townships. 100% phone-verified every 6 months.

Report Introduction

In this report, we investigate the role of new software in local government, bringing to bear *original data and analysis from a national survey of ten different leadership positions in township, municipality, and county governments all over the United States, including top appointed executives, heads of IT, and heads of 8 different types of departments/functions.*

We divide the report into two sections.

In the first section of our report, called ***“Top-level Analysis,”*** we offer a series of broad insights about the role of new software in local government. We examine what impact new software is having, in which areas of local government it is being more or less prioritized, what the key barriers are to further its adoption, and how local officials learn about new software.

In the second section, called ***“Full Results,”*** we take a deeper dive into our survey results. We break down the results for each of the ten government positions surveyed. In addition, we break down the results along different dimensions of local government, including the government’s level (county vs. subcounty), population size of the locality, and the region of the country.

For the second section, we advise the reader to flip to the particular graphs that interest them. You can use our guide for navigating this section found at the beginning of the section (pg. 12) as well as a Table of Figures (pg. 13–15).

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Section 1: Top-level Analysis

Executive Summary

Here's a summary of the 5 key findings from our top-level analysis and the page numbers on which you can find more details about them.

1. **Whether a local government has “up to date” software varies greatly by department.** For example, over 90% of law enforcement departments have acquired new software in the last three years, while less than 50% of financial administration departments have done so (pg. 2).
2. **New software acquisitions overwhelmingly yield positive impacts.** Though departments vary in their likelihood of adopting new software, when they take the leap, they seem to like the outcome. Over 90% of respondents whose departments acquired new software in the last three years reported a positive outcome (pg. 4).
3. **Positive impacts lead to greater prioritization of software in the future.** Governments are almost twice as likely to prioritize a software upgrade if their past experience went well, which is an incentive for vendors to provide quality support. Only about 22% of those *without* a positive experience share the same view—instead, nearly half of them rate software a “low priority” (pg. 5).
4. **Why local governments don't update their software is not just about cost—it's also about implementation.** When asked about what may bar acquiring new software, the number one concern was cost. A close second was implementation, and in particular, the time and energy required to train staff on the software (pg. 6).
5. **Officials ask their peers about software.** When local officials are looking to learn about software, they overwhelmingly turn to their peers in other local governments, and to the associations they are a part of. Software vendors also play a role in informing local governments about software (pg. 8).

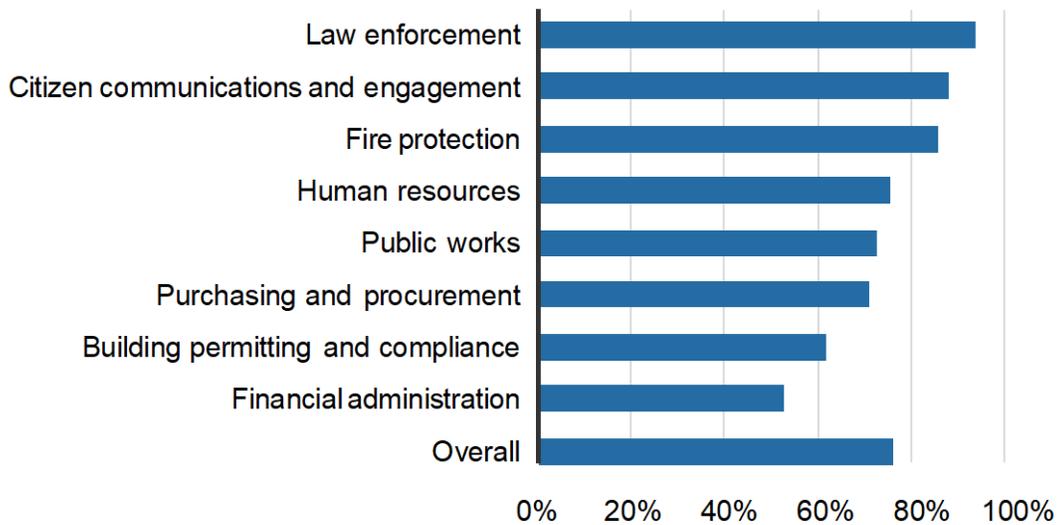
The Role of Software in Local Government:

Section 1: Top-level Analysis

Likelihood of Updating Software Varies by Department

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To what extent are local governments in the U.S. staying up to date with new software developments? About three-quarters of department heads in local government (74%) say they have had experience acquiring software in the last three years. While that is promising, the real statistic varies based upon one's specific service area: about nine-in-ten law enforcement heads (91%) said their departments had acquired new software in the last three years, while about half of the head financial administrators (51%) had done so (Figure 1.1).



Source: CivicPulse Insights

Figure 1.1: Experience with new software among department heads. For each of the department areas displayed, the bar represents the percentage of respondents in that area who acquired new software in the last three years. The data suggest while certain departments are fast to adopt new software, others are not.

The Role of Software in Local Government:

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Likelihood of Updating Software Varies by Department

We didn't ask respondents to specify software features that were most important to them. However, in analyzing the open-ended responses, we saw some interesting patterns about key features among communications directors, fire chiefs, and police chiefs:



- **Some communications directors** noted that they are looking for systems that allow them to collect, organize, and respond to citizen comments across existing and emerging mediums and social networks. “The challenge is engaging our community. It's great to have a new/different platform but building an audience (again) can be tiresome.”
- **Several fire chiefs** reported needing systems that bring relevant firefighting data — CAD, Inspections, and pre-plans — linked to the current call. They also stressed that they need these services to work seamlessly even where wireless coverage is spotty, and lives are on the line.
- **A number of police chiefs** reported needing fast record management systems that are NIBRS compliant with next year's retirement of the FBI's Summary Reporting System (SRS). “Some software comes with different bells and whistles, but the basic tasks of data collection, historical data and the availability is needed for any platform, no matter the jurisdiction.”

The Role of Software in Local Government:

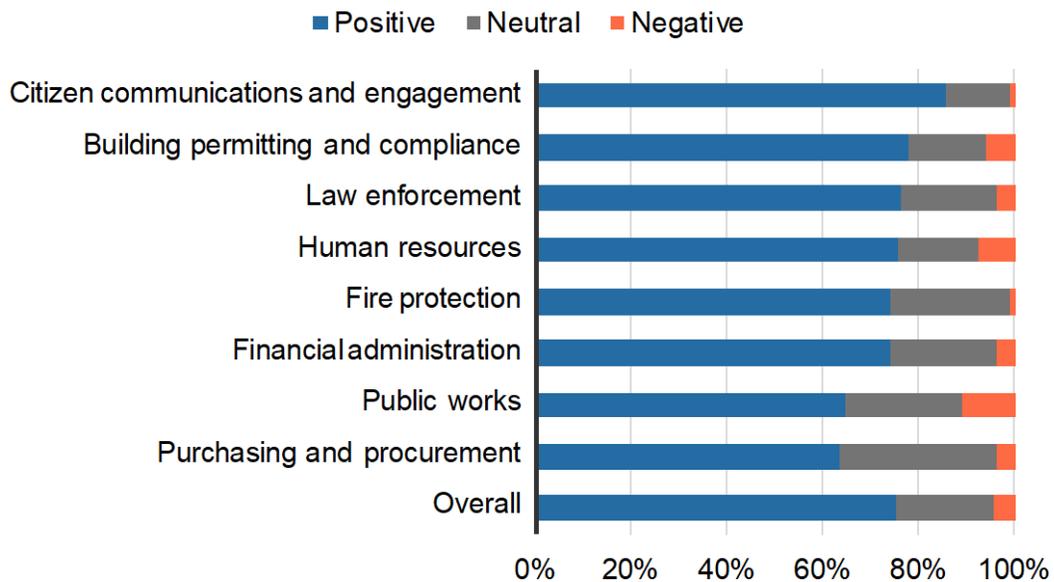
Section 1: Top-level Analysis

Most New Software Acquisitions Yield Very Positive Impacts

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Is new software having a positive impact on local governments in terms of reliability, productivity, or user experience? Overall, local officials report a resounding yes across a broad range of departments (Figure 1.2, blue segments).

In particular, the survey responses of department heads responsible for **communications** and **law enforcement** deserve a second glance, in light of the coronavirus pandemic and the role of local governments in delivering essential information and services during this time. In our previous *CivicPulse Insights* report, “*Local Government Spending Priorities in the Wake of COVID-19*,” which looked at the post-COVID-19 budget outlooks of local governments, we projected that spending on citizen communications and engagement as well as law enforcement were among those *most likely to increase* in the year following the pandemic. In this report, we show that these two same areas have experienced a positive impact from new software acquisition and will likely be prioritized in terms of obtaining new software (see pg. 34 and 54 for priority graphs).



Source: CivicPulse Insights

Figure 1.2: Impact of new acquisitions among department heads. Bar segments represent the percentage of respondents who selected positive, neutral, or negative. Local governments have seen a mostly positive impact from their software acquisitions.

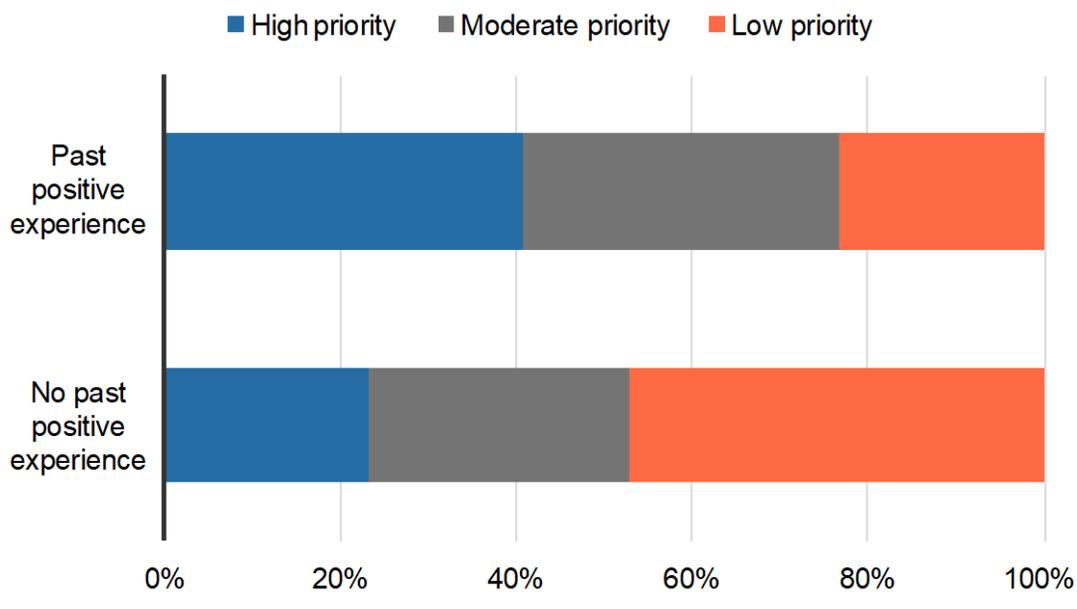
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Positive Impacts Lead to Greater Prioritization of Software

Positive Impacts Lead to Greater Prioritization of Software

We found that local officials with positive software experiences are significantly more likely to prioritize adopting new software in the future (Figure 1.3). Dividing our survey respondents depending on their experience with software acquisition (using data from Figure 1.2), we find that four-in-ten officials (41%) who had a positive experience consider adopting new software a “high priority” (Figure 1.3, top bar, blue segment). Meanwhile, only two-in-ten of those *without* a positive experience (23%) share the same view—instead, nearly half of them (47%) rate software a “low priority” (Figure 1.3, bottom bar, orange segment).



Source: CivicPulse Insights

Figure 1.3: Prioritization of new software depending on past experience. Bar segments represent the percentage of respondents (all department heads combined) who see software acquisition as a high, moderate, or low priority. Local officials who have had positive experiences in the past with software acquisitions are more likely to prioritize them in the future.

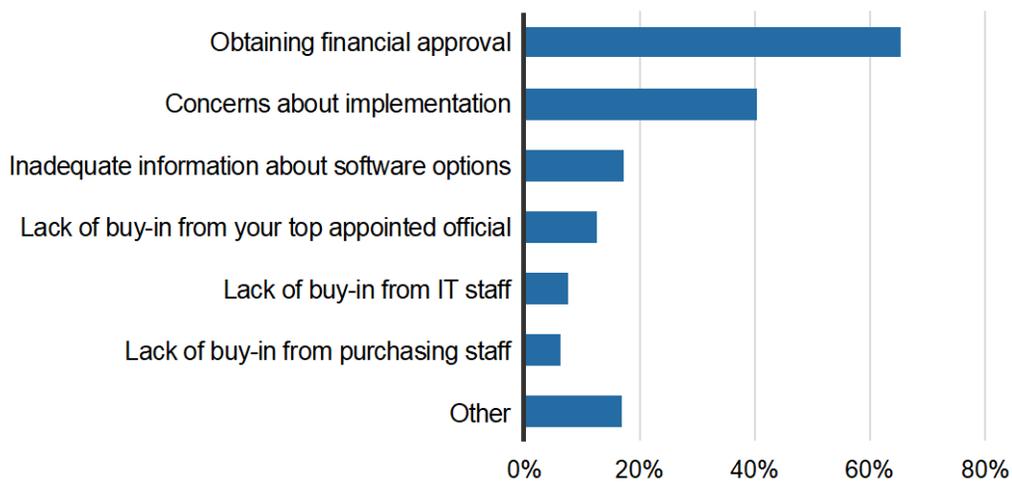
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Section 1: Top-level Analysis

Key Barriers to New Software are Cost and Implementation

Key Barriers to New Software are Cost and Implementation

It should come as no surprise that nearly seven-in-ten department heads (67%) cite **obtaining financial approval** as a challenge in software acquisition — our most frequent response (Figure 1.4, top bar). And perhaps this is true now more than ever given the pandemic's impact on local government revenues, as we discussed in our June *CivicPulse Insights* report.



Source: CivicPulse Insights

Figure 1.4: Challenges to software acquisition among department heads. For each of the challenges displayed, the bar represents the percentage of respondents who selected it. Concerns about financial approval and implementation are the greatest barriers to adopting new software.

What may be surprising is that the next most substantial barrier to software acquisition are **concerns about implementation** (Figure 1.4, second bar from top). In fact, concerns about implementation pose far greater of an obstacle than gathering information about software or getting the “buy-in” of key officials.

Illustrating this concern, in our open-ended questions several department heads lamented a lack of initiative on the part of software

Most government software is not designed for specific government applications. Software written for broad based audience — and “customized” to each user — does not work. Government users tend to have very high user support expectations, and most software firms either do not provide that level of live support, or offer only technical support (e.g., IT based)

— Top appointed official in the northeast

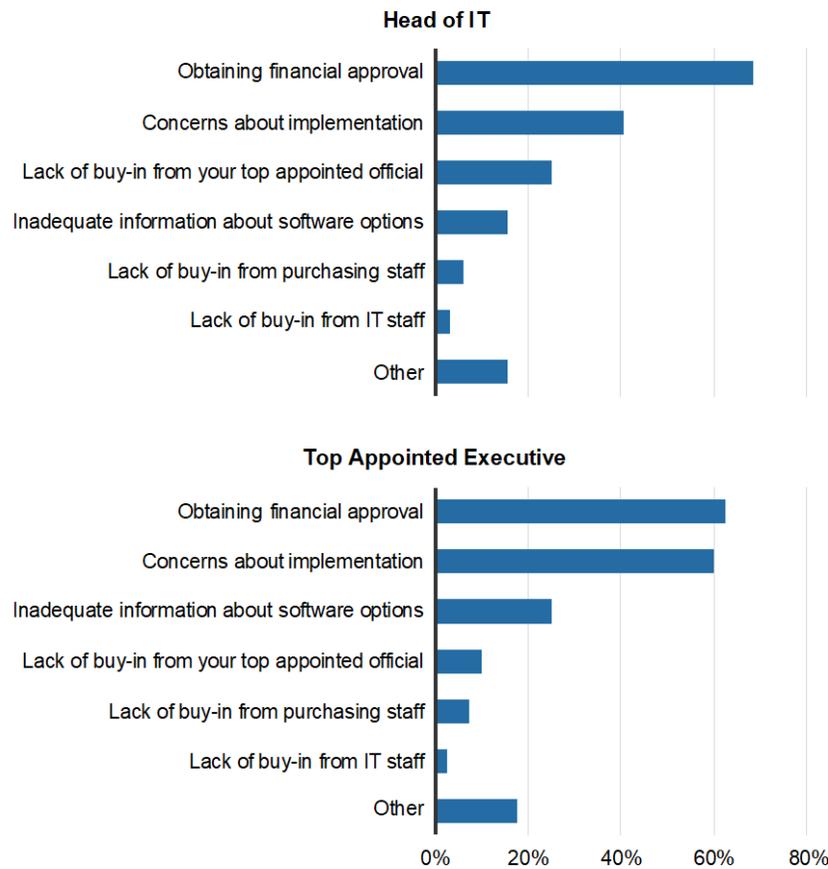
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Key Barriers to New Software are Cost and Implementation

vendors for providing training, which exacerbates concerns about implementation.

Our quantitative response showed that four-in-ten department heads (40%), four-in-ten heads of IT (42%), and six-in-ten top appointed executives (60%) held this concern (Figures 1.4 (above) and 1.5, respectively).



Source: CivicPulse Insights

Figure 1.5: Challenges to software acquisition among heads of IT and top appointed executives. For each of the challenges displayed, the bar represents the percentage of respondents who selected it. 60% of top appointed officials are concerned with implementation of new software, compared with only 40% of IT heads.

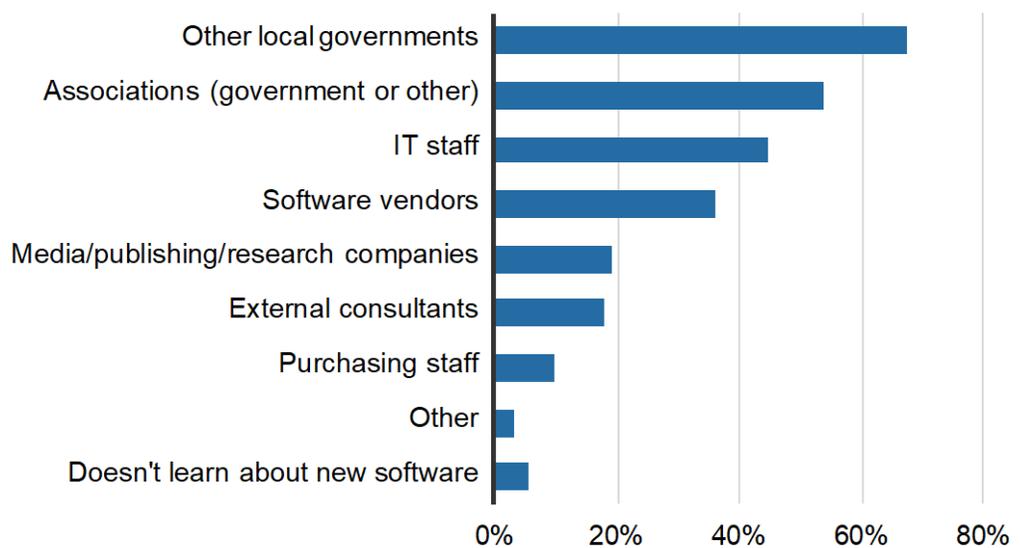
The Role of Software in Local Government:

Section 1: Top-level Analysis

Local Officials Tend to Learn about Software from Each Other

Local Officials Tend to Learn about Software from Each Other

When we asked local officials what sources of information they rely on to learn about new software, we found that a large majority of them learn from their peers in other governments (Figure 1.6, top bar). In a similar vein, many officials also learn from local government associations, where governments and their counterparts come together to discuss industry and governance issues.



Source: CivicPulse Insights

Figure 1.6: Sources of information about new software among department heads. For each of the information sources displayed, the bar represents the percentage of respondents who selected it. Most departments heads get information about new software from their peers in other governments.

Some of our additional analysis further highlights the importance of seeking information. We found that, on average, those who had a positive experience with software selected **three sources** of information, while those who did not selected **two sources** of information. In other words, local officials who seek out a wider variety of information sources tend to also report having had more positive experiences with software.

Lastly, our survey also revealed that IT officials are notable in that they consult a greater number of information sources than all other positions (see Figure 2.20 in the “Full Results”

The Role of Software in Local Government:

Section 1: Top-level Analysis

Local Officials Tend to Learn about Software from Each Other

section). In particular, they turn to software vendors for information more frequently than other officials reported doing.

Section 2: Full Results

Section 2 allows the reader to critically analyze and utilize our data by providing data-visualisations based on region, government type, position, and other relevant factors. Our graphs have been compiled into two larger sections: (1) *Results by Population Size, Government Type, and Region*; and (2) *Complete Results by Position*. The graphs are ordered by question (Impact, Priority, Challenges, Information) and detailed explanations of each graph are provided in their respective captions.

Depending on your specific needs, you may use the data differently. We crafted two scenarios below – one for a local government official, another for a software vendor – to help you navigate our full results, either to provide a benchmark or assist with segmentation.

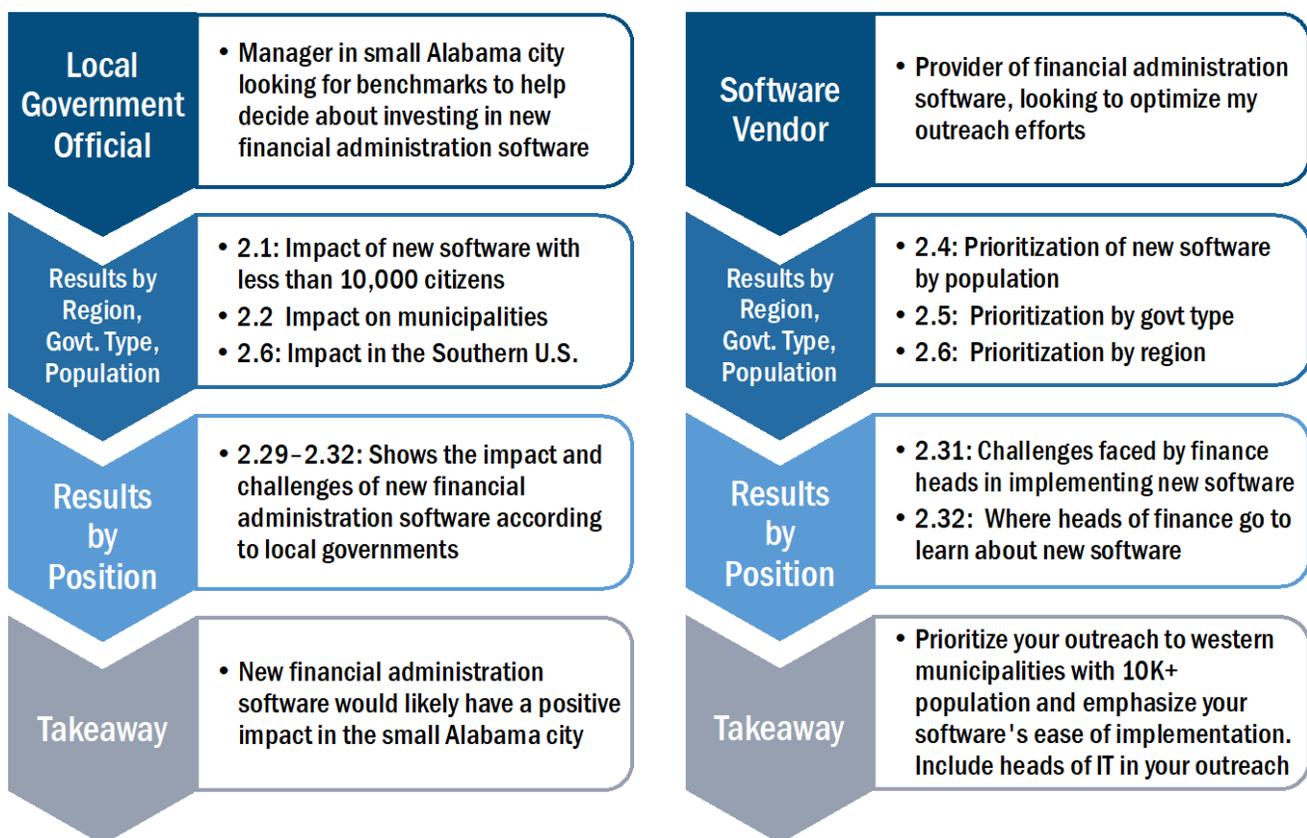


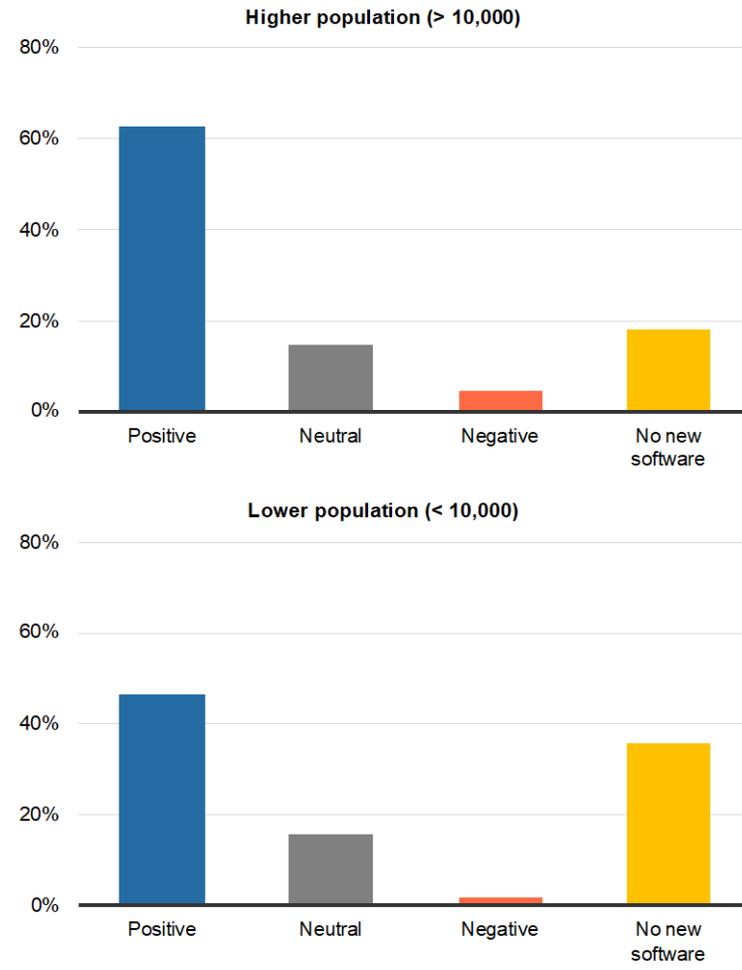
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Results by Population Size, Government Type, and Region

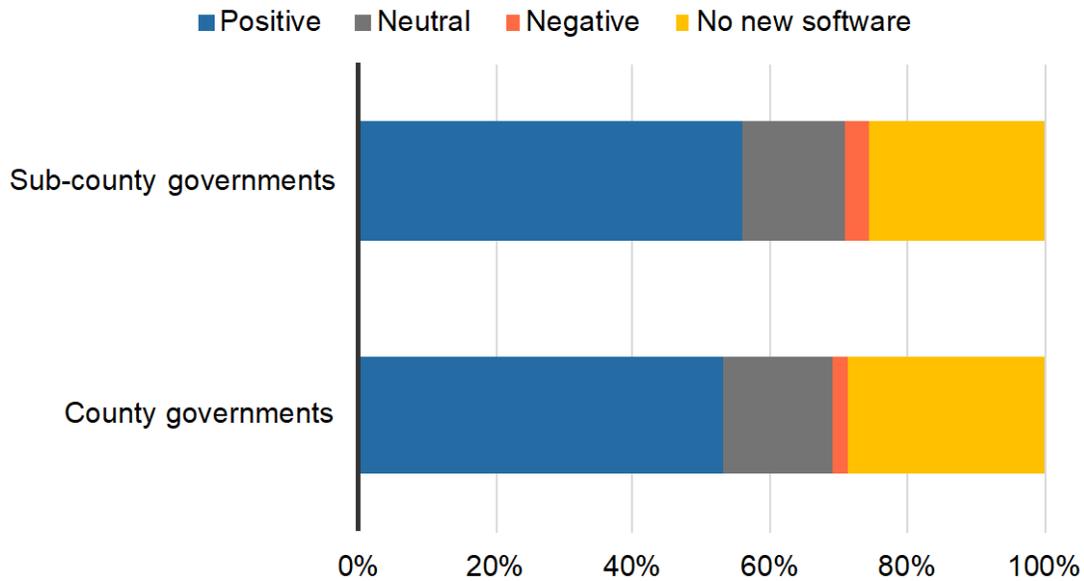
Impact of New Software in the Last Three Years



Source: CivicPulse Insights

Figure 2.1: Impact of new software among department heads by population size. This data reports the percentage of respondents, split by the locality’s population size, who believed that software had a positive, neutral, or negative impact for their department, or did not adopt new software in the last three years. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

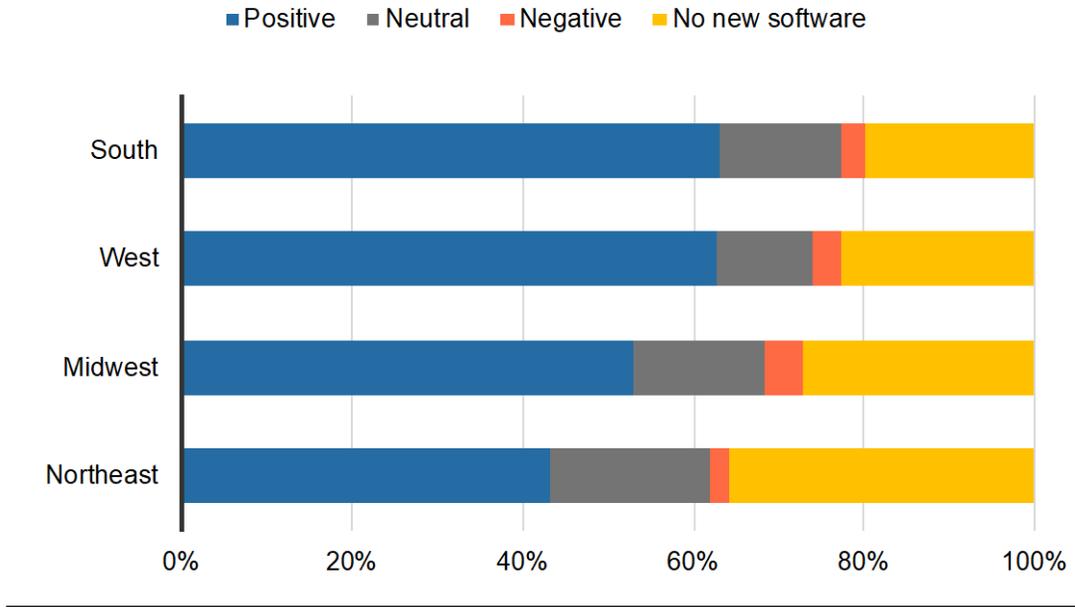
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Impact of New Software in the Last Three Years*



Source: CivicPulse Insights

Figure 2.2: Impact of new software among department heads by government type. This data reports the percentage of respondents, split by government type, who believed that software had a positive, neutral, or negative impact for their department, or did not adopt new software in the last three years. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

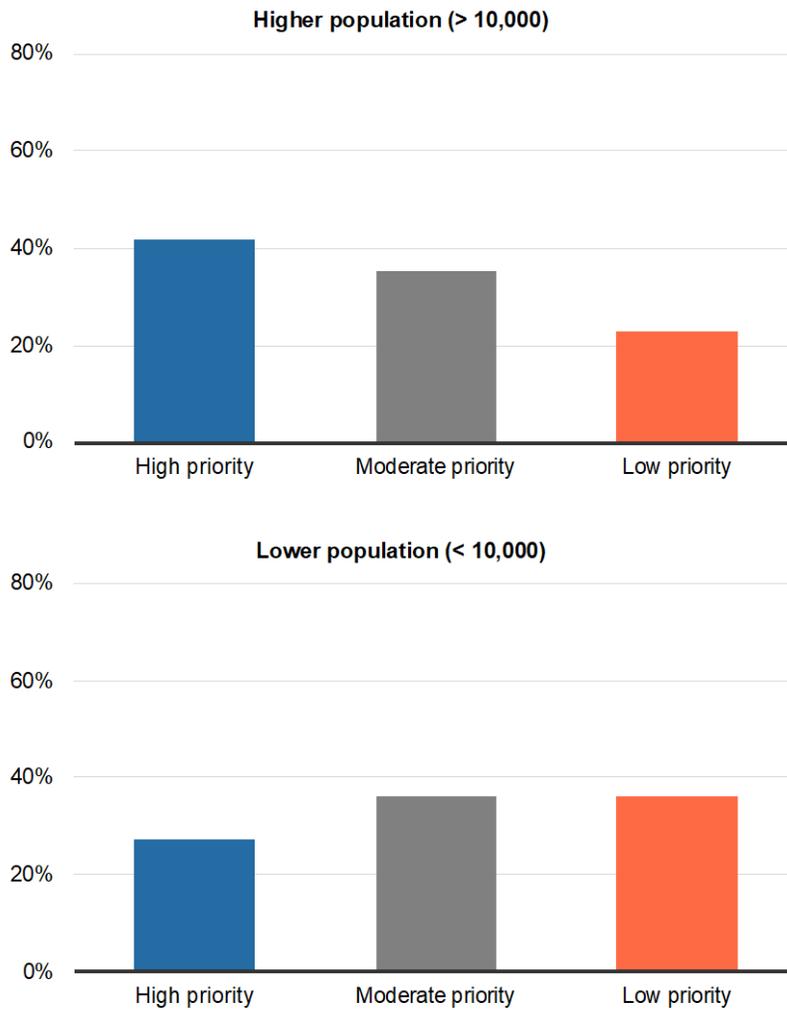
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Impact of New Software in the Last Three Years*



Source: CivicPulse Insights

Figure 2.3: Impact of new software by region. This data reports the percentage of respondents, by U.S. census region, who believed that software had a positive, neutral, or negative impact for their department, or did not adopt new software in the last three years. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

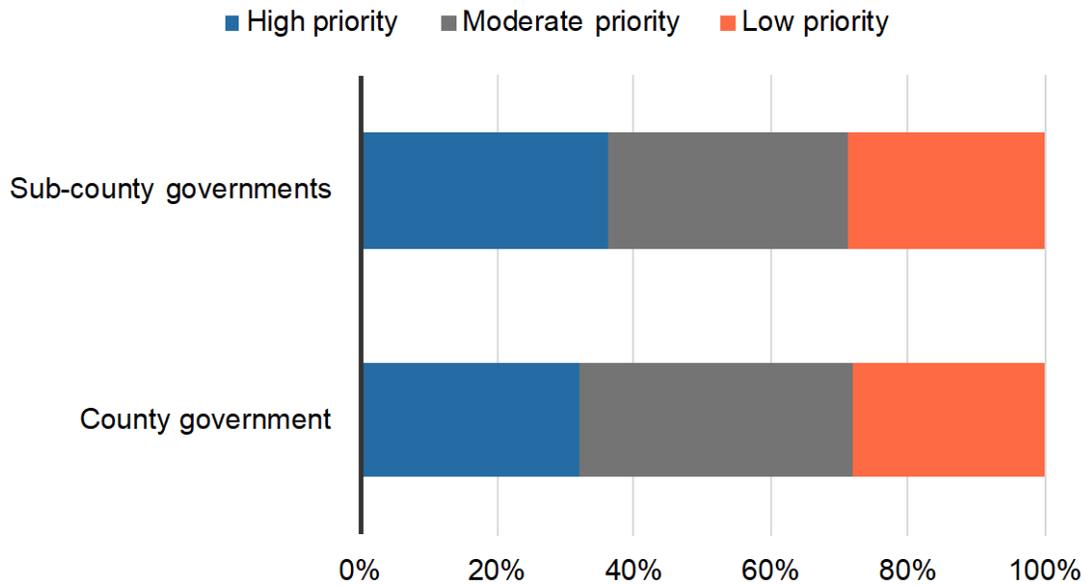
Prioritization of Adopting Future Software



Source: CivicPulse Insights

Figure 2.4: Prioritization of new software by population size. This data reports the percentage of respondents, split by the locality's population size, who believed that adopting new software is a high, moderate, or low priority. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

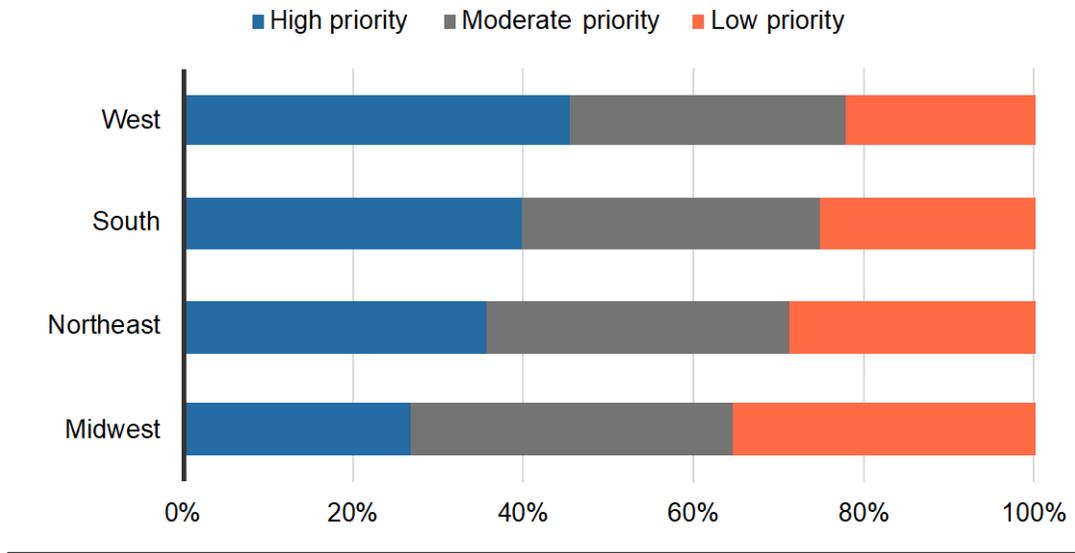
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Prioritization of Adopting Future Software*



Source: CivicPulse Insights

Figure 2.5: Prioritization of new software by government type. This data reports the percentage of respondents, split by government type, who believe that adopting new software is a high, moderate, or low priority. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

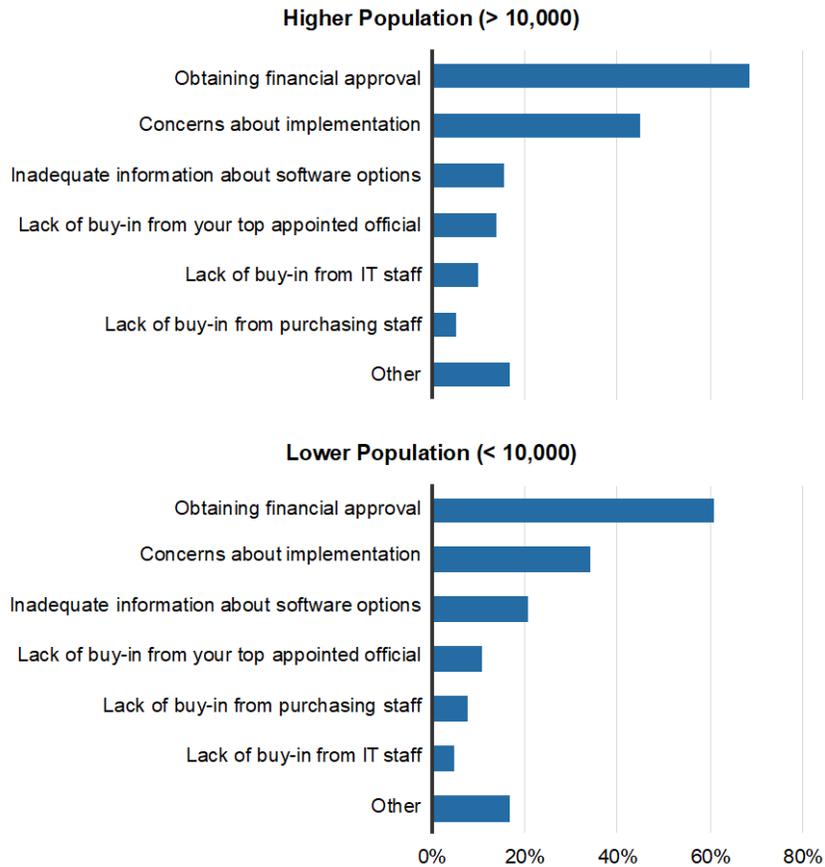
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Prioritization of Adopting Future Software*



Source: CivicPulse Insights

Figure 2.6: Prioritization of new software by region. This data reports the percentage of respondents, by U.S. census region, who believed that adopting new software is a high, moderate, or low priority. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

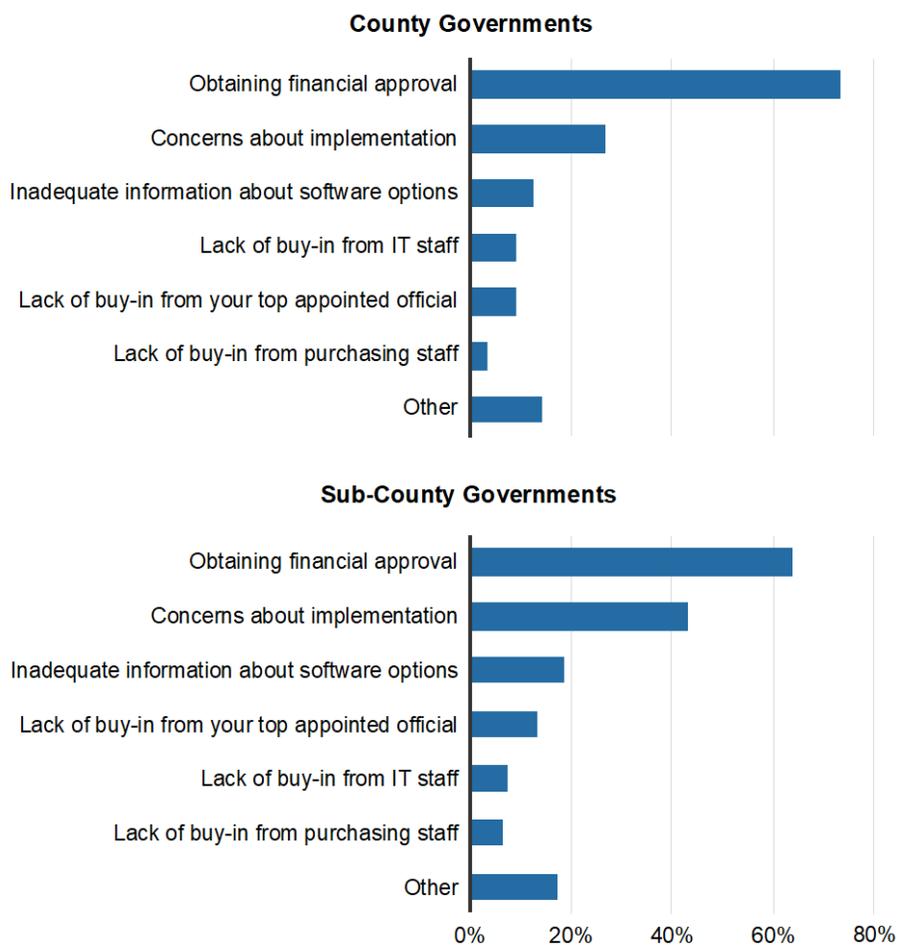
Challenges to Acquiring New Software



Source: CivicPulse Insights

Figure 2.7: Challenges in adopting new software by population size. This data reports the percentage of respondents, split by the locality’s population size, that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

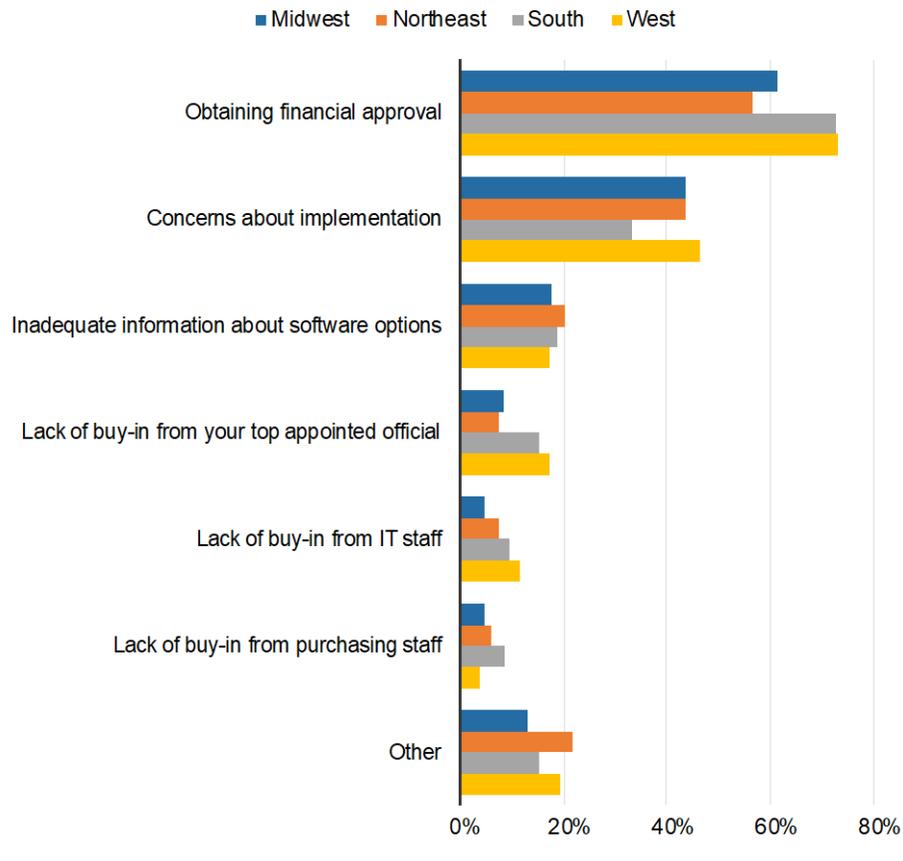
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Challenges to Acquiring New Software*



Source: CivicPulse Insights

Figure 2.8: Challenges in adopting new software by government type. This data reports the percentage of respondents, split by government type, that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

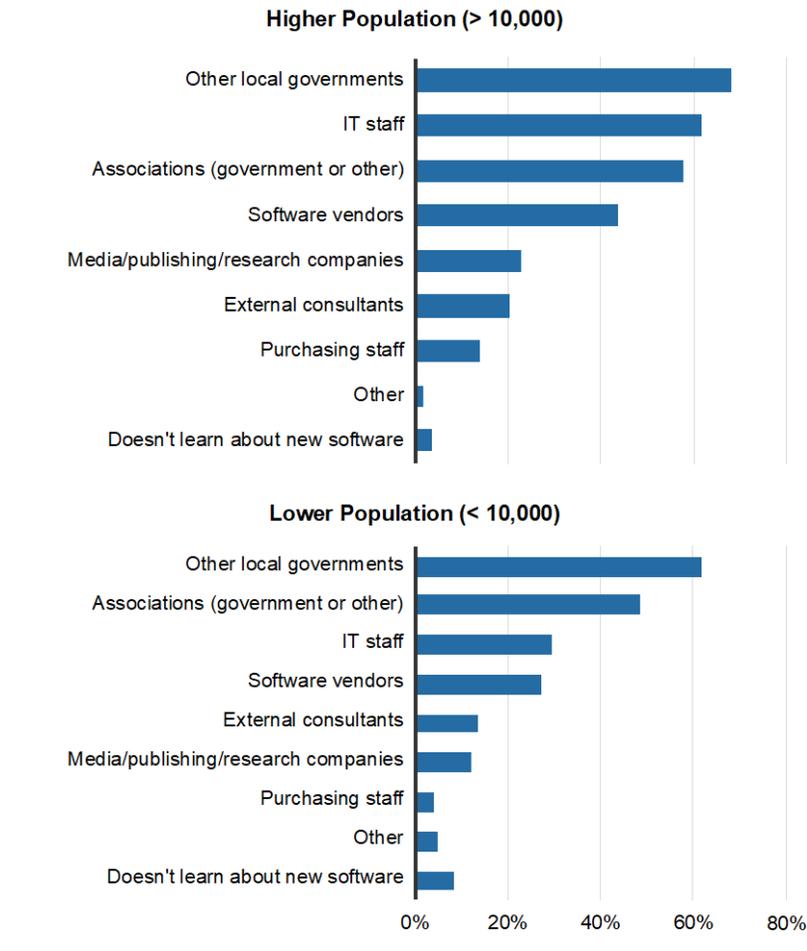
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Challenges to Acquiring New Software*



Source: CivicPulse Insights

Figure 2.9: Challenges in adopting new software by region. This data reports, by U.S. census region, the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

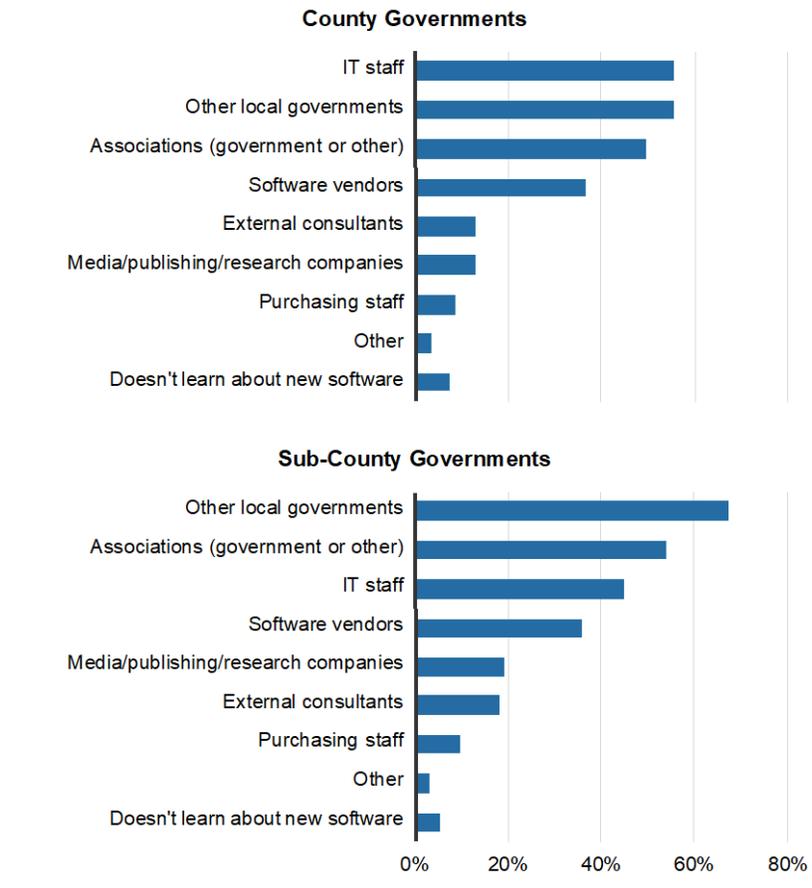
Information Sources in Acquiring New Software



Source: CivicPulse Insights

Figure 2.10: Information sources on software by population size. This data reports the percentage of respondents, split by the locality’s population size, that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

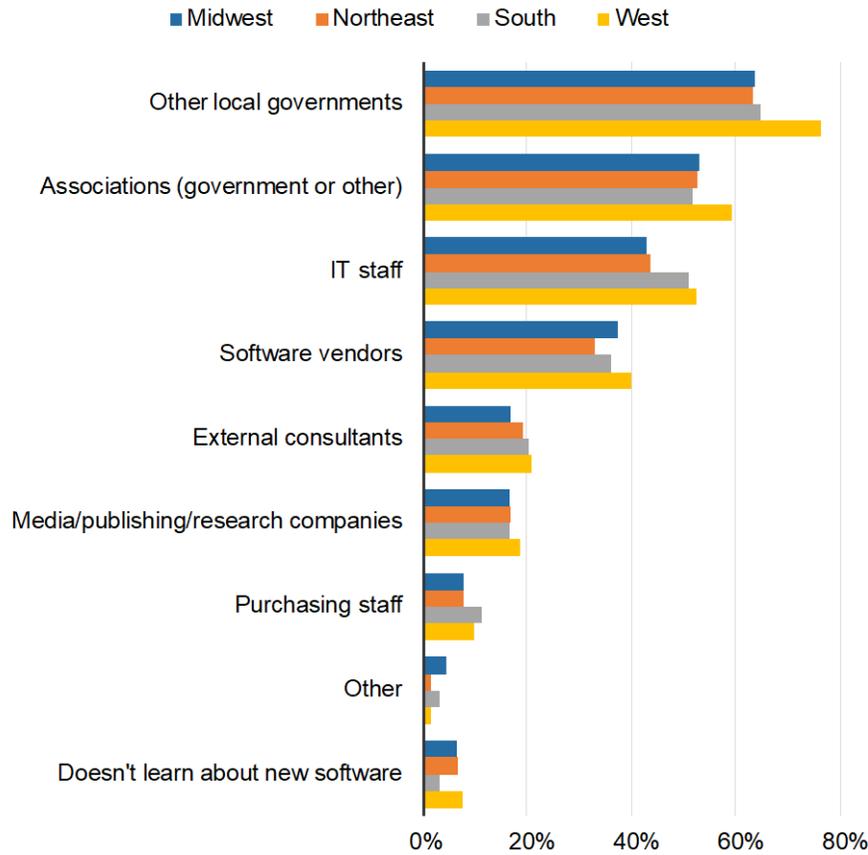
The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Information Sources in Acquiring New Software*



Source: CivicPulse Insights

Figure 2.11: Information sources on software by government type. This data reports the percentage of respondents, split by government type, that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

The Role of Software in Local Government: Results by Population Size, Government Type, and Region *Information Sources in Acquiring New Software*



Source: CivicPulse Insights

Figure 2.12: Information sources on software by region. This data reports, by U.S. census region, the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent. This data combines respondents from the eight departments listed in Table A.1 (all positions except Head of IT and Top Appointed Official).

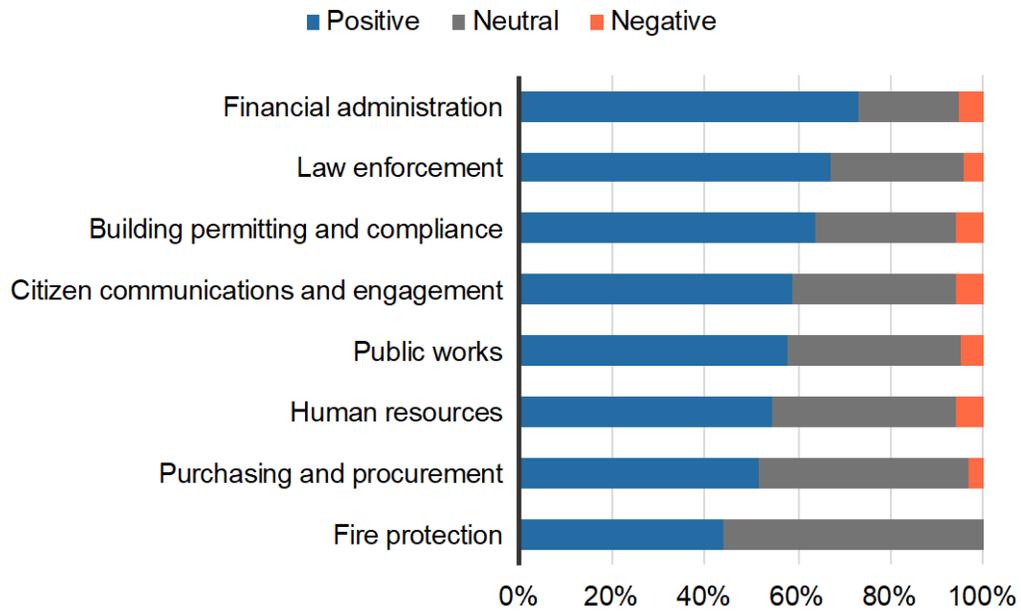
The Role of Software in Local Government:

Complete Results by Position

Top Appointed Officials

Complete Results by Position

Top Appointed Officials



Source: CivicPulse Insights

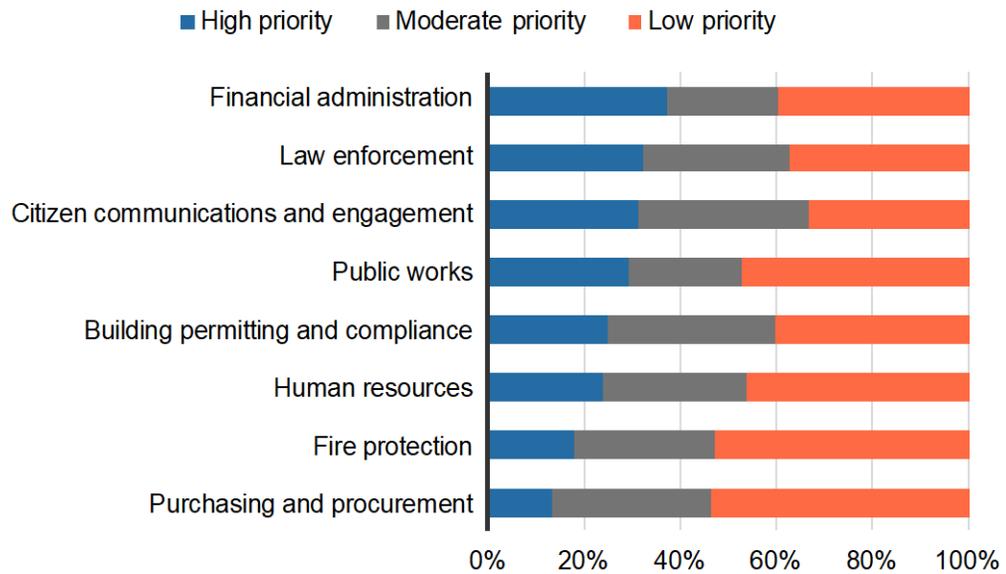
Figure 2.13: Impact of new software, top appointed officials.

This data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for eight different areas of local government.

The Role of Software in Local Government:

Complete Results by Position

Top Appointed Officials



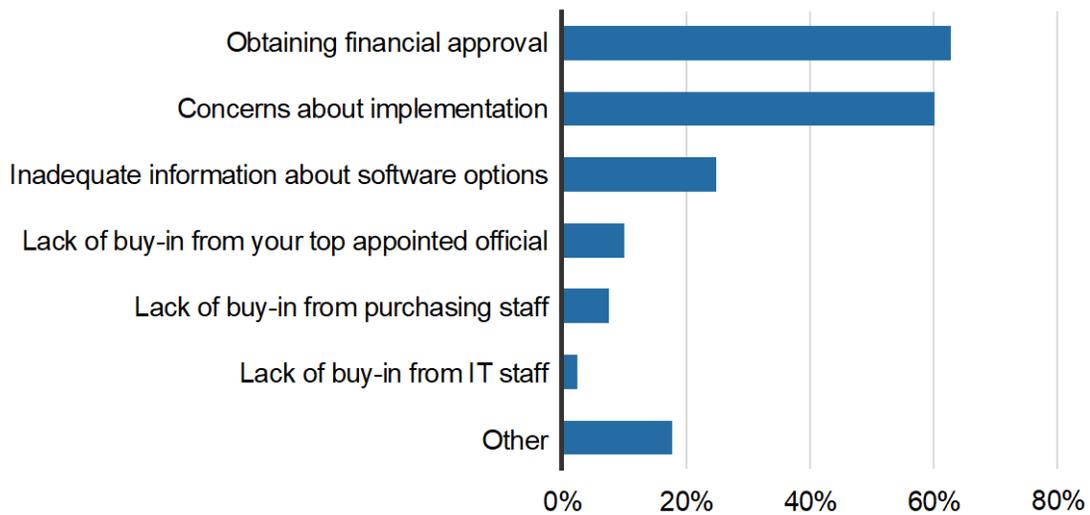
Source: CivicPulse Insights

Figure 2.14: Prioritization of new software, top appointed officials. This data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority for eight different areas of local government.

The Role of Software in Local Government:

Complete Results by Position

Top Appointed Officials



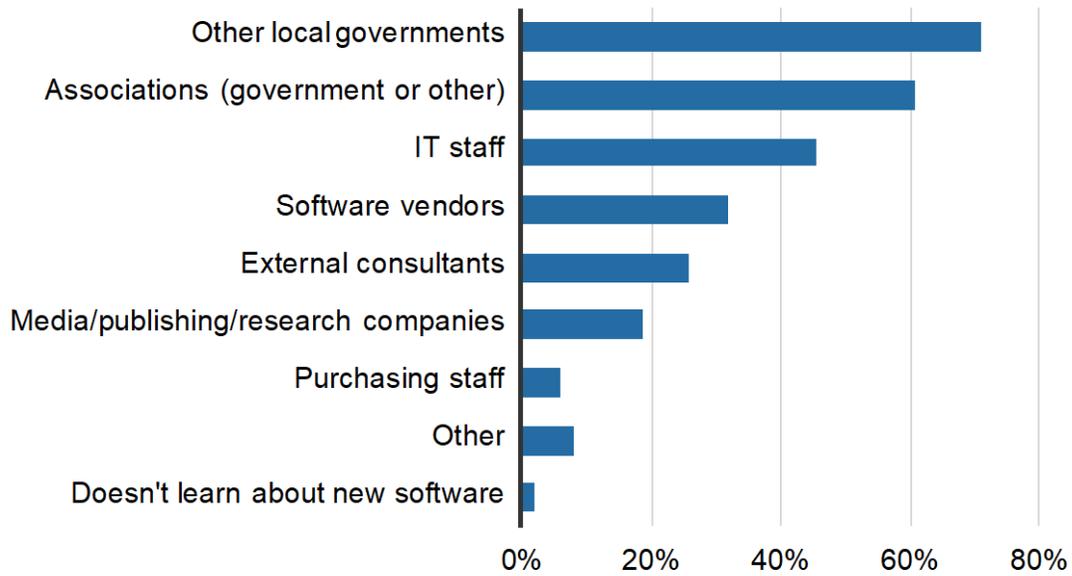
Source: CivicPulse Insights

Figure 2.15: Challenges in adopting new software, top appointed officials. This data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

Top Appointed Officials



Source: CivicPulse Insights

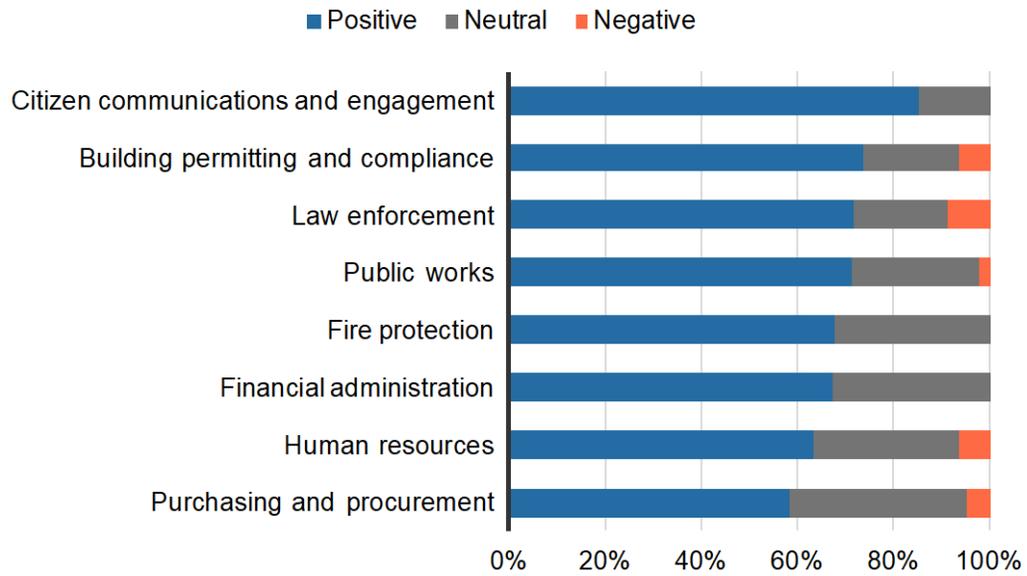
Figure 2.16: Information sources on software, top appointed officials. This data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

Head of IT

Head of IT



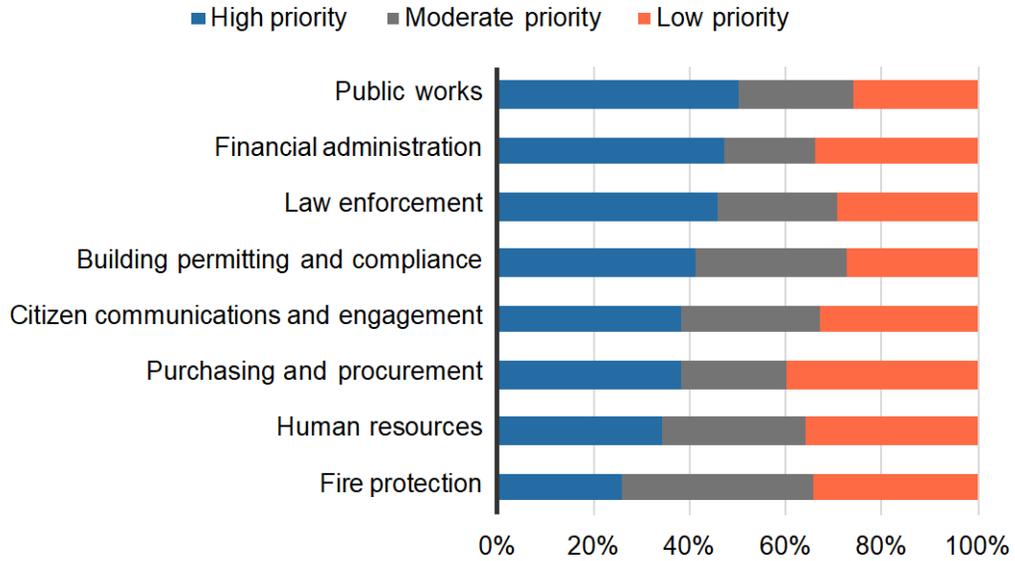
Source: CivicPulse Insights

Figure 2.17: Impact of new software, head of IT. This data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for eight different areas of local government.

The Role of Software in Local Government:

Complete Results by Position

Head of IT



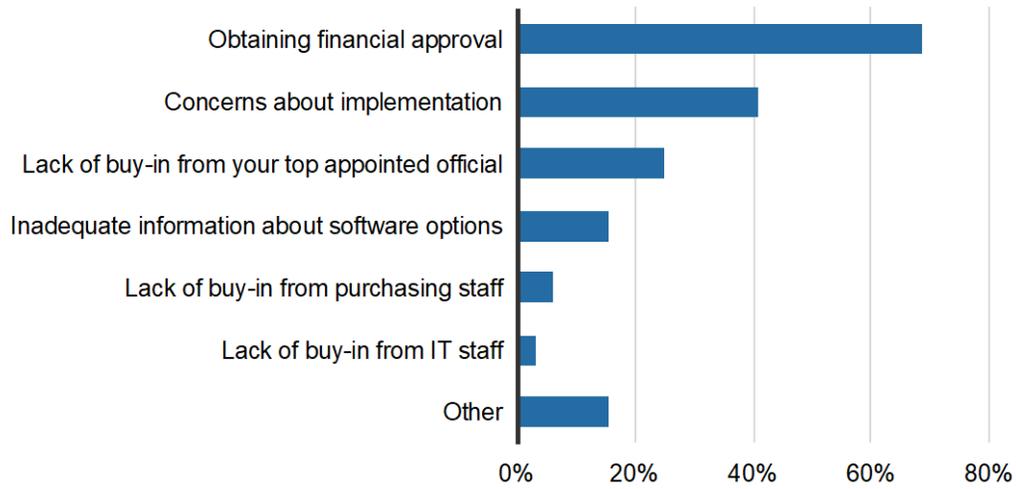
Source: CivicPulse Insights

Figure 2.18: Prioritization of new software, head of IT. This data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority for eight different areas of local government.

The Role of Software in Local Government:

Complete Results by Position

Head of IT



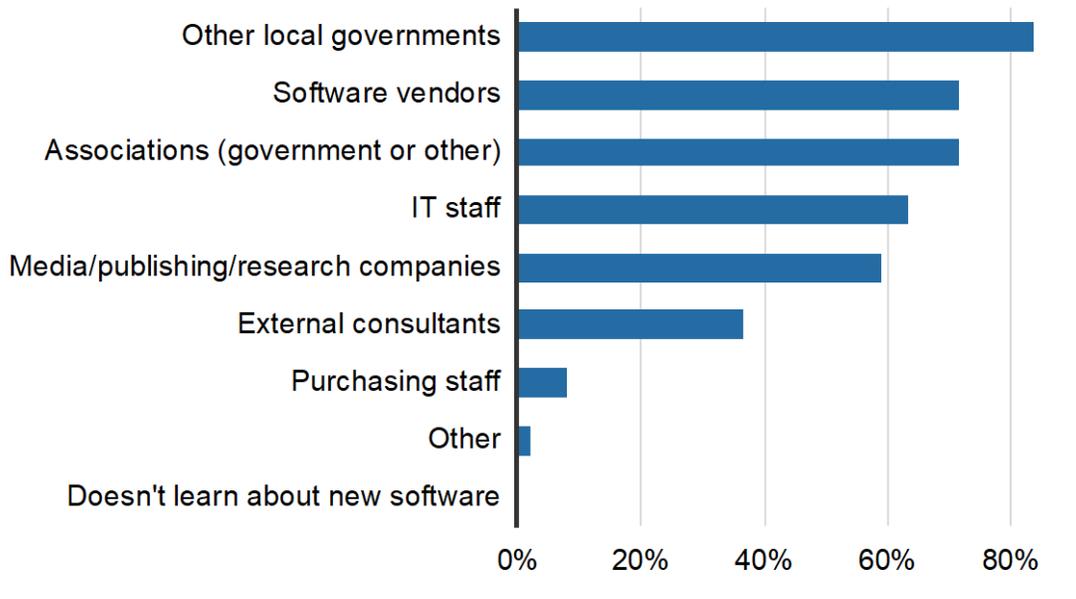
Source: CivicPulse Insights

Figure 2.19: Challenges in adopting new software, head of IT. This data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

Head of IT



Source: CivicPulse Insights

Figure 2.20: Information sources on software, head of IT.

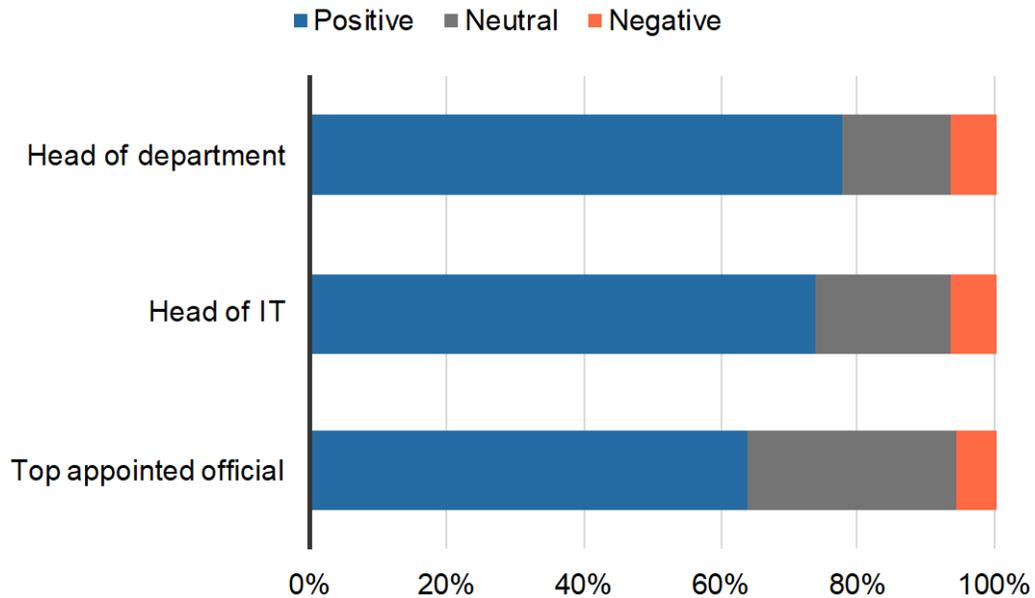
This data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

Head of Building Permitting and Compliance

Head of Building Permitting and Compliance



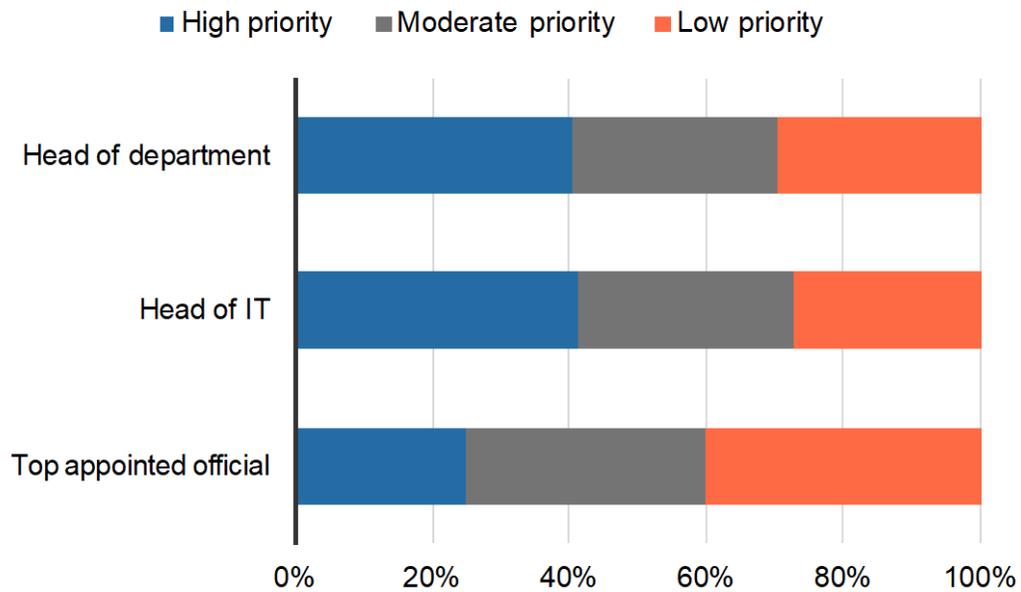
Source: CivicPulse Insights

Figure 2.21: Impact of new software, compared by position, building heads vs. others. Comparing among heads of building and permitting, heads of IT, and top appointed officials, this data reports the percentage of respondents from subcounty governments who believed that software had a positive, neutral, or negative impact for their department, or did not adopt new software in the last three years.

The Role of Software in Local Government:

Complete Results by Position

Head of Building Permitting and Compliance



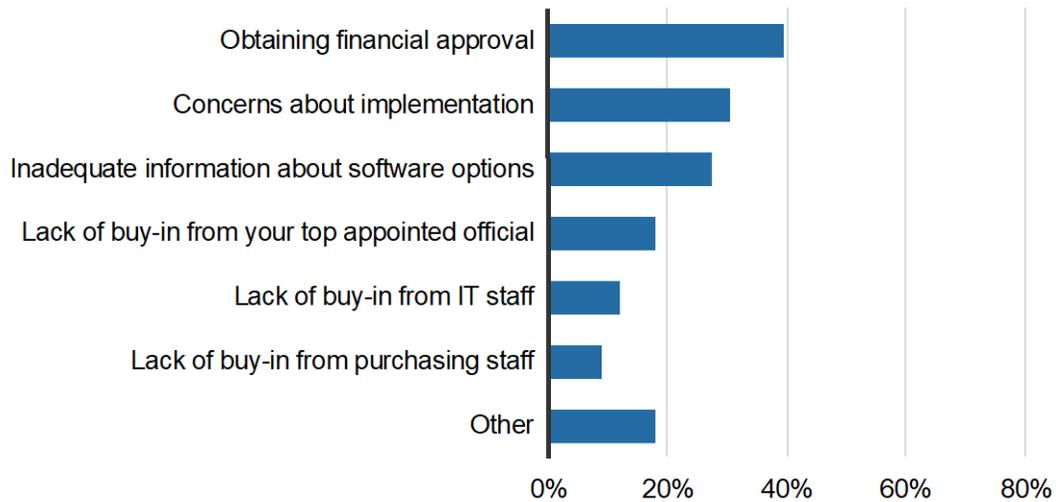
Source: CivicPulse Insights

Figure 2.22: Prioritization of new software, compared by position, building heads vs. others. Comparing among heads of building and permitting, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Building Permitting and Compliance



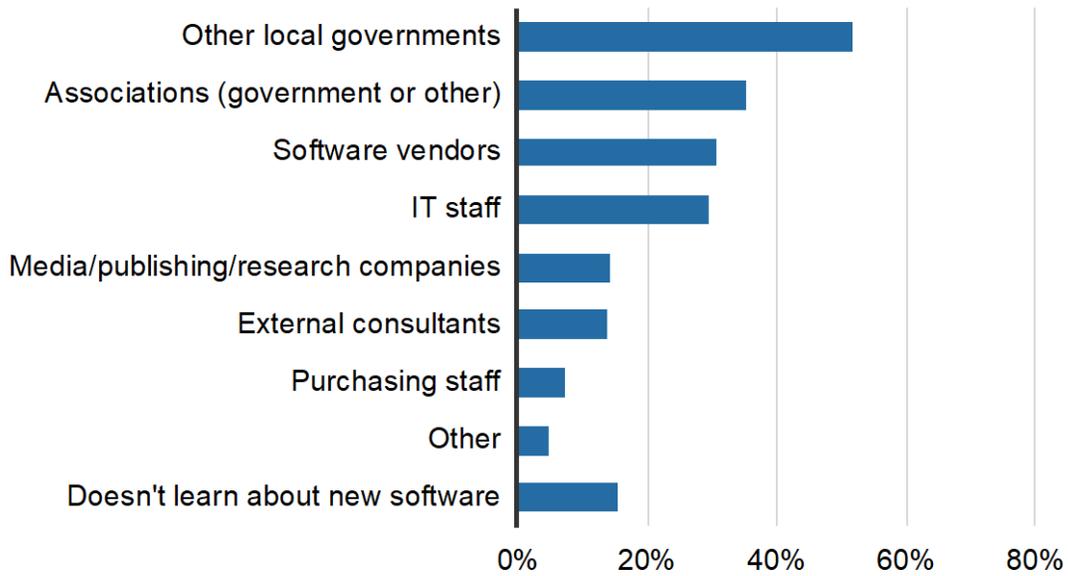
Source: CivicPulse Insights

Figure 2.23: Challenges in adopting new software, building heads. Looking only at department heads of building permitting and compliance, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

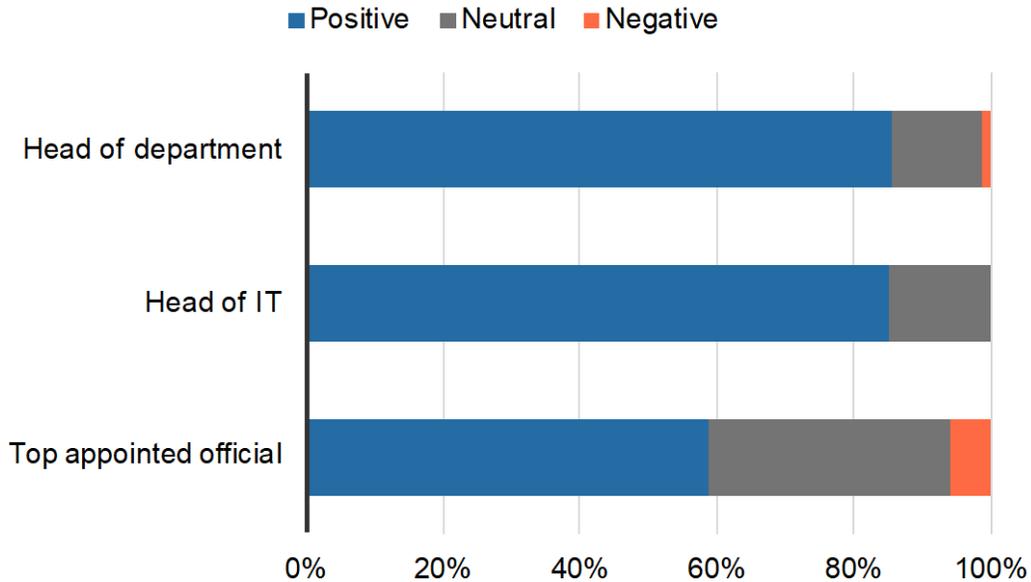
Head of Building Permitting and Compliance



Source: CivicPulse Insights

Figure 2.24: Information sources on software, building heads. Looking only at department heads of building permitting and compliance, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Communications



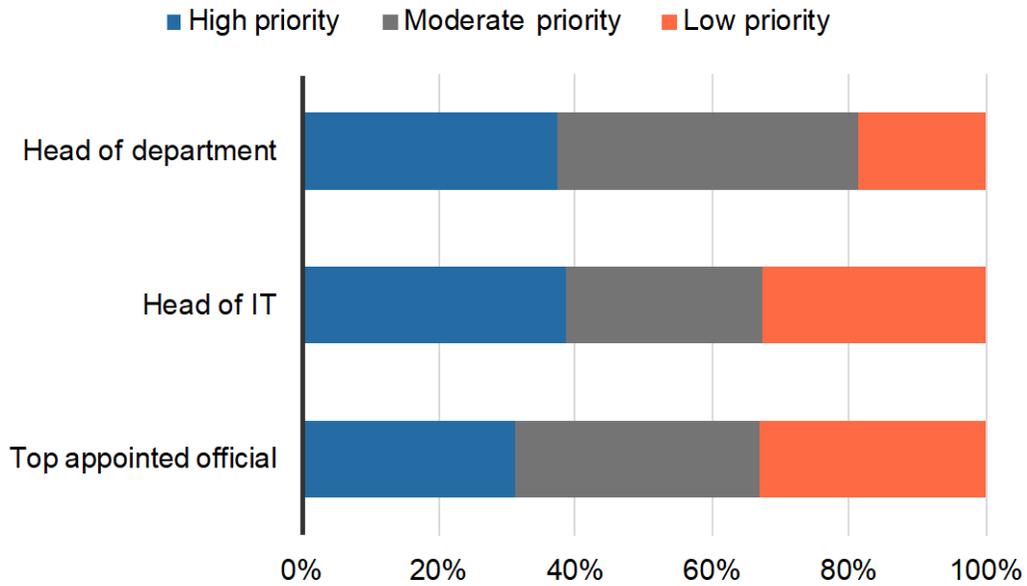
Source: CivicPulse Insights

Figure 2.25: Impact of new software, compared by position, comms heads vs. others. Comparing among heads of communications, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Communications



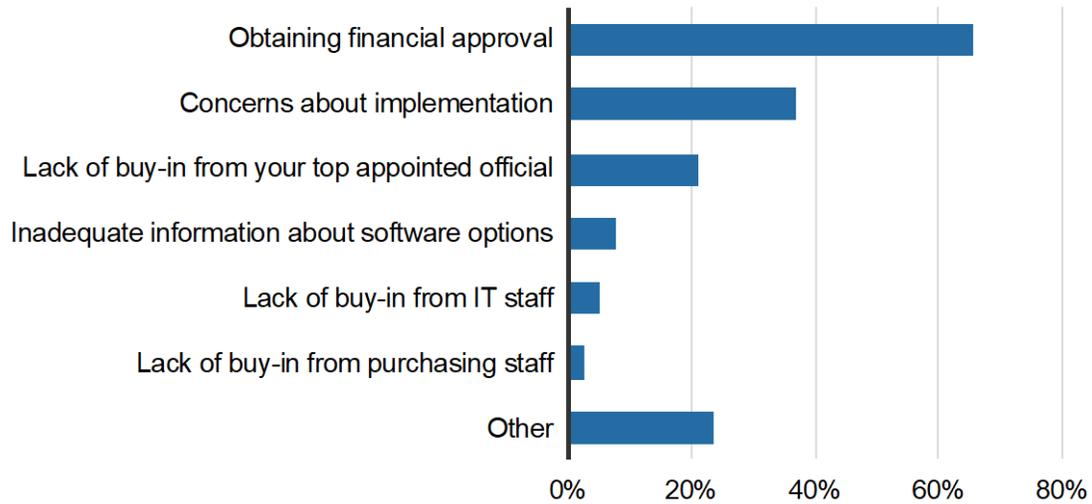
Source: CivicPulse Insights

Figure 2.26: Prioritization of new software, compared by position, comms heads vs. others. Comparing among heads of communications, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Communications



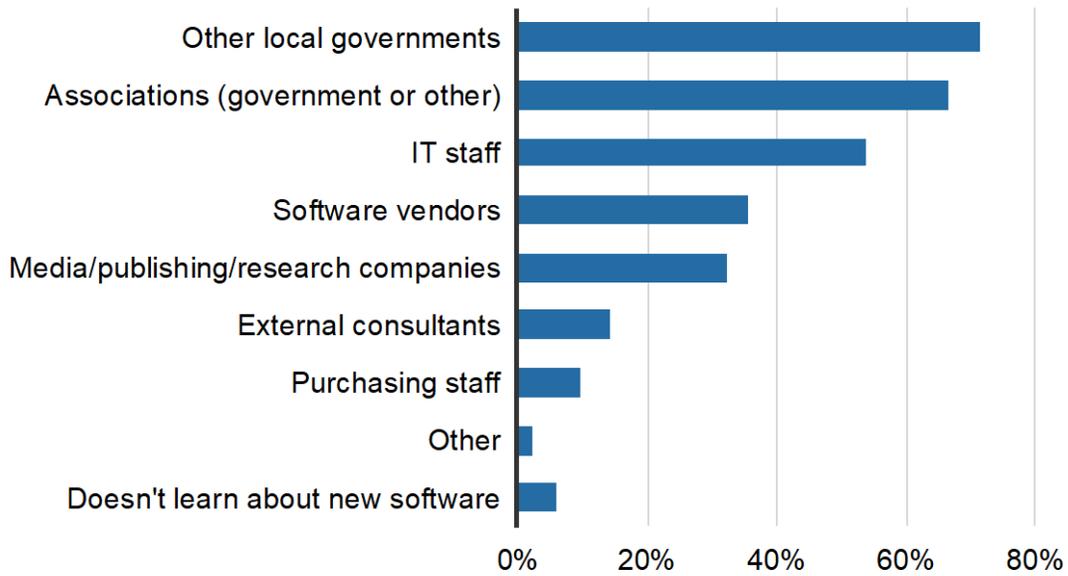
Source: CivicPulse Insights

Figure 2.27: Challenges in adopting new software, comms heads. Looking only at department heads of communications, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

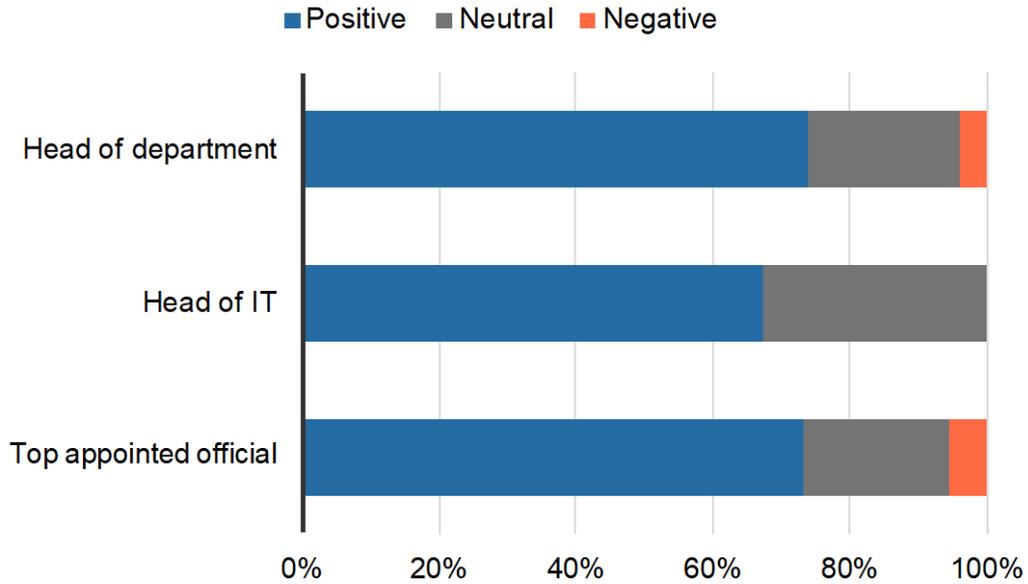
Head of Communications



Source: CivicPulse Insights

Figure 2.28: Information sources on software, comms heads. Looking only at department heads of communication, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Finance



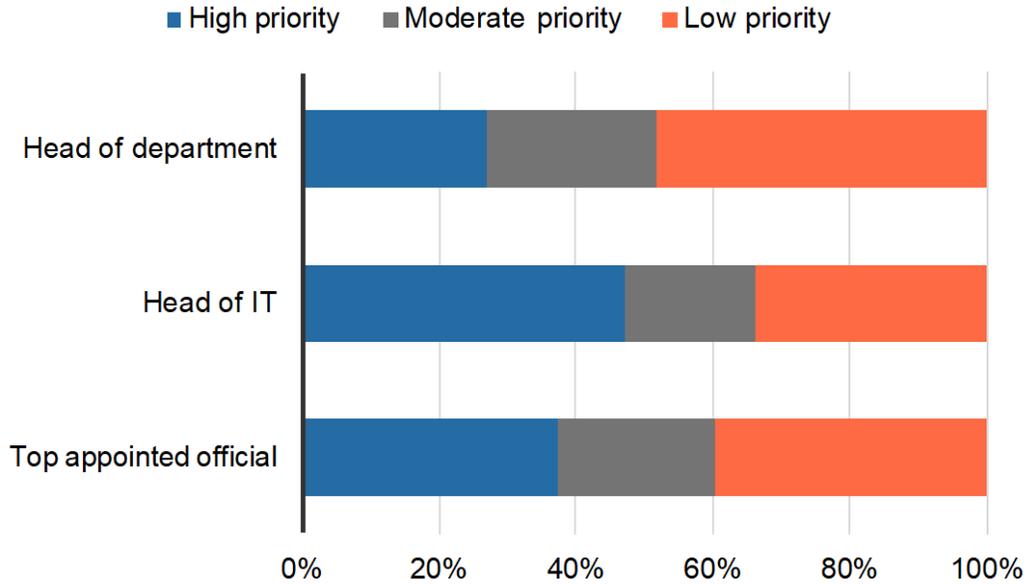
Source: CivicPulse Insights

Figure 2.29: Impact of new software, compared by position, finance heads vs. others. Comparing among heads of financial administration, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Finance



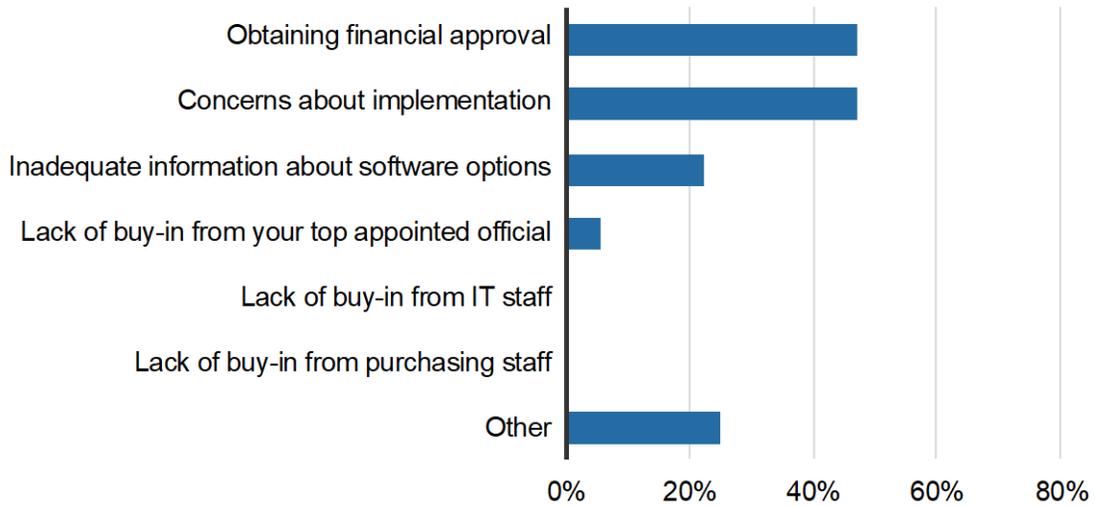
Source: CivicPulse Insights

Figure 2.30: Prioritization of new software, compared by position, finance heads vs. others. Comparing among heads of financial administration, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Finance



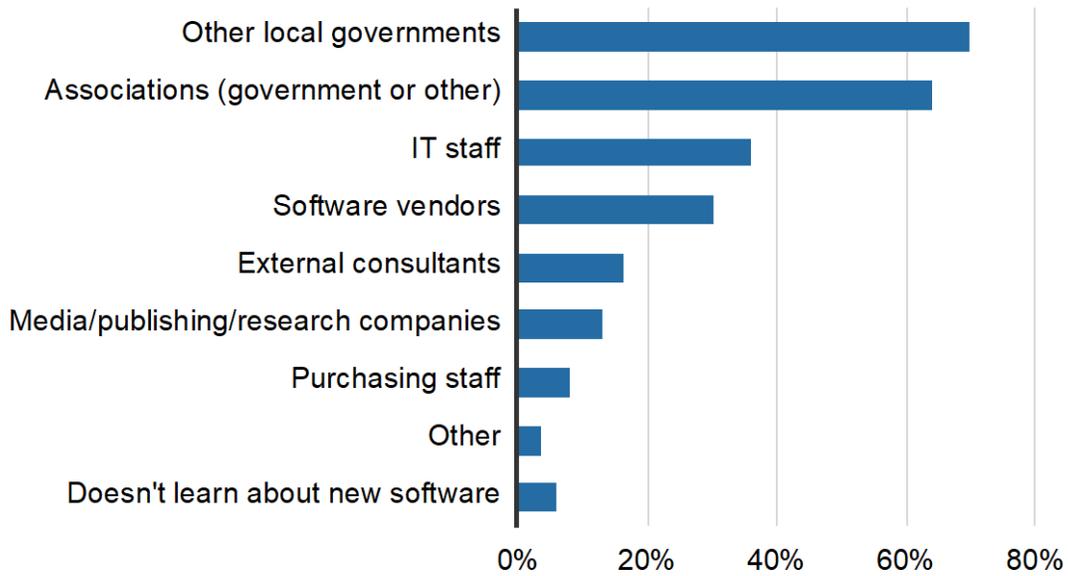
Source: CivicPulse Insights

Figure 2.31: Challenges in adopting new software, finance heads. Looking only at department heads of financial administration, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

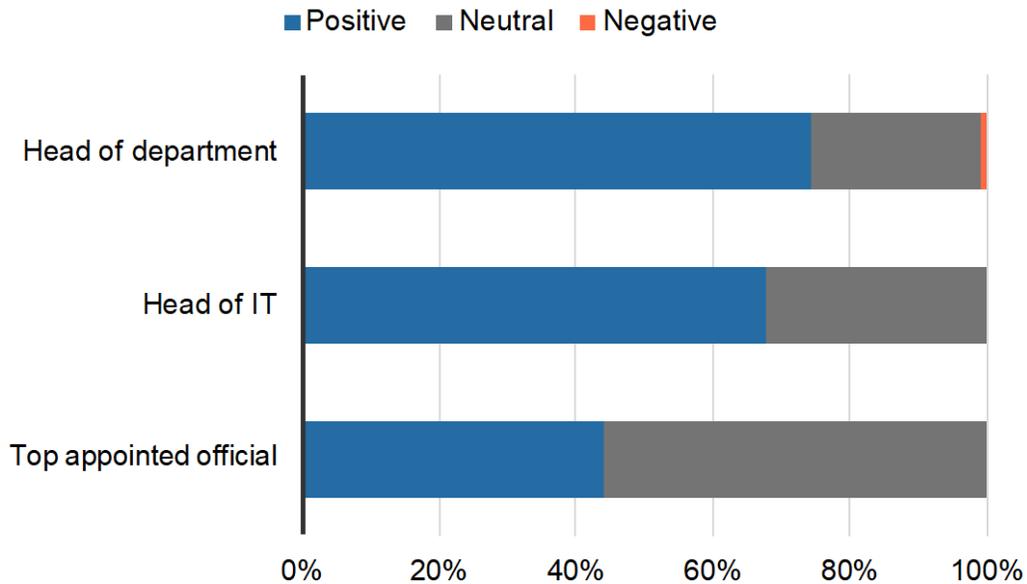
Head of Finance



Source: CivicPulse Insights

Figure 2.32: Information sources on software, finance heads. Looking only at department heads of financial administration, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Fire Protection



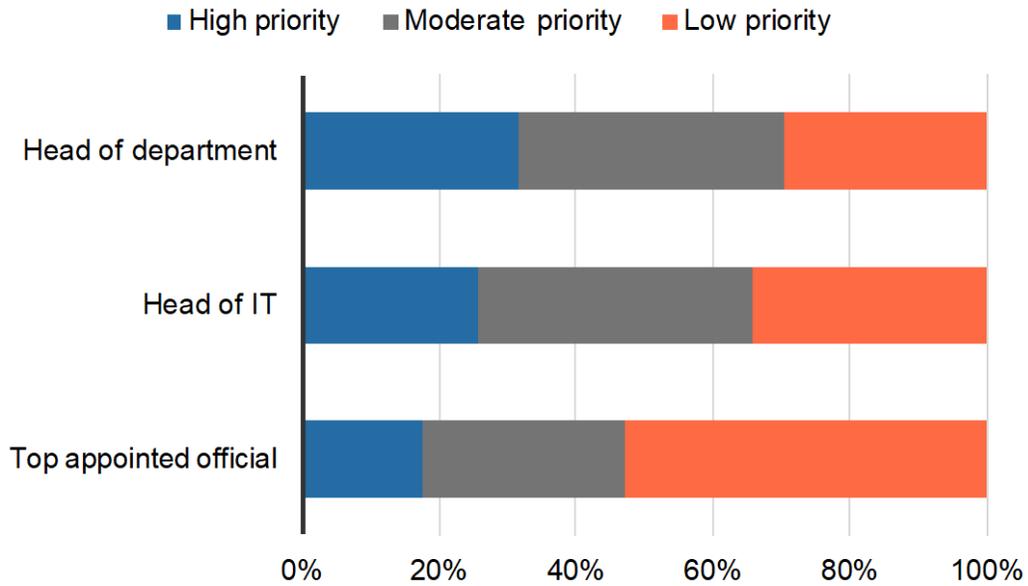
Source: CivicPulse Insights

Figure 2.33: Impact of new software, compared by position, FP heads vs. others. Comparing among heads of fire protection, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Fire Protection



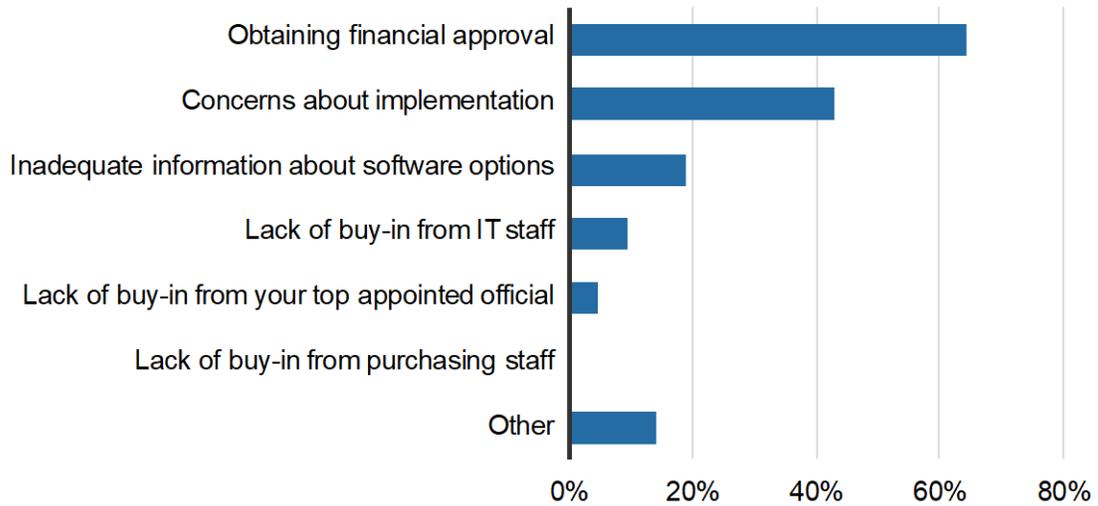
Source: CivicPulse Insights

Figure 2.34: Prioritization of new software, compared by position, FP heads vs. others. Comparing among heads of fire protection, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Fire Protection



Source: CivicPulse Insights

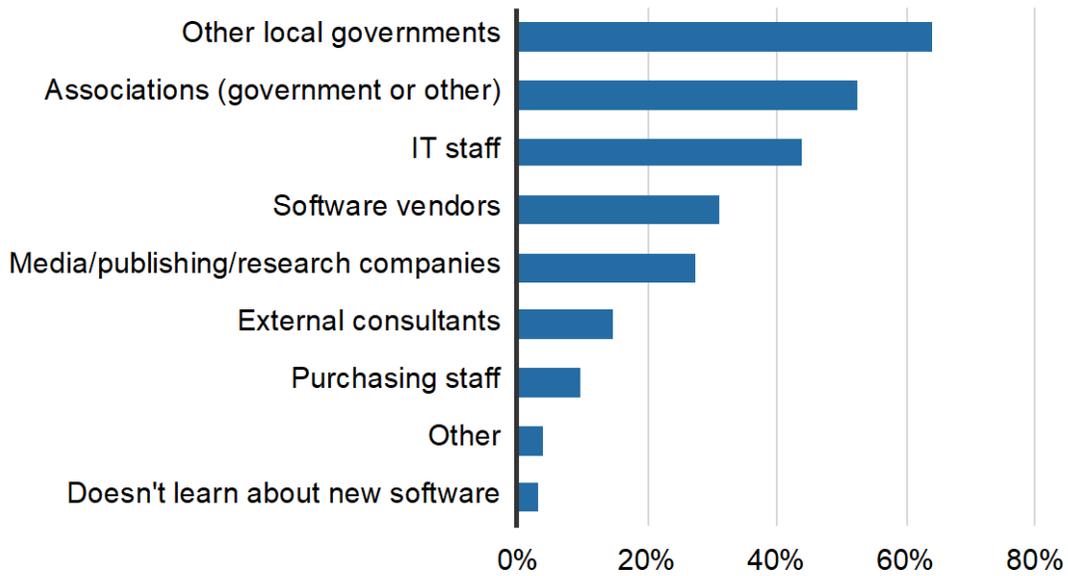
Figure 2.35: Challenges in adopting new software, FP heads.

Looking only at department heads of fire protection, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

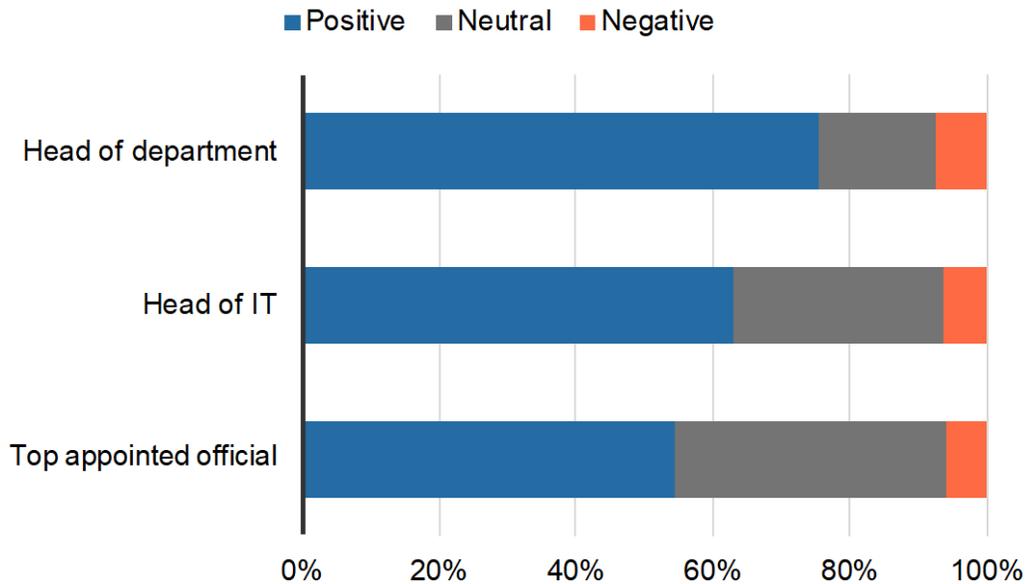
Head of Fire Protection



Source: CivicPulse Insights

Figure 2.36: Information sources on software, FP heads. Looking only at department heads of fire protection, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Human Resources



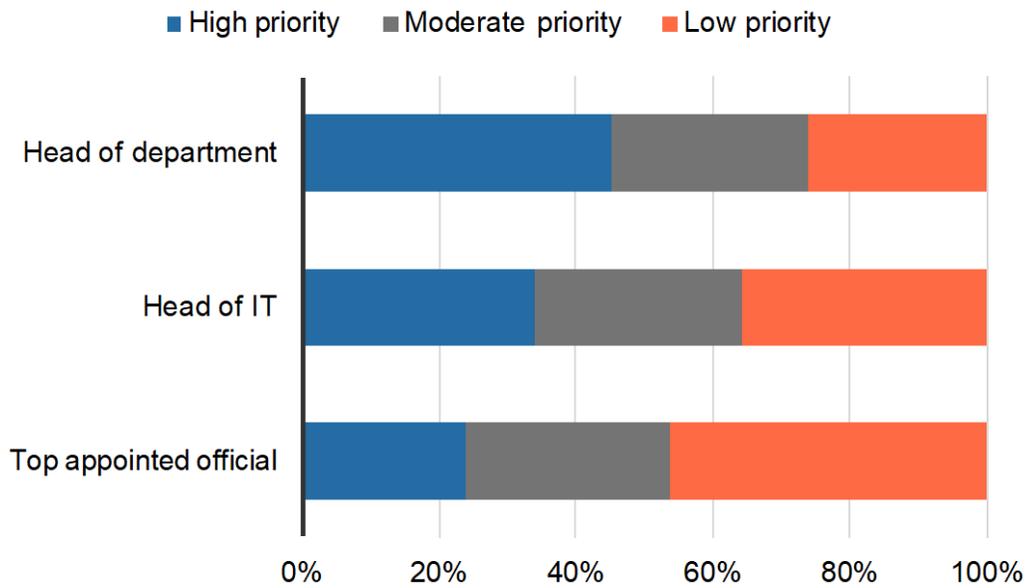
Source: CivicPulse Insights

Figure 2.37: Impact of new software, compared by position, HR heads vs. others. Comparing among heads of HR, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Human Resources



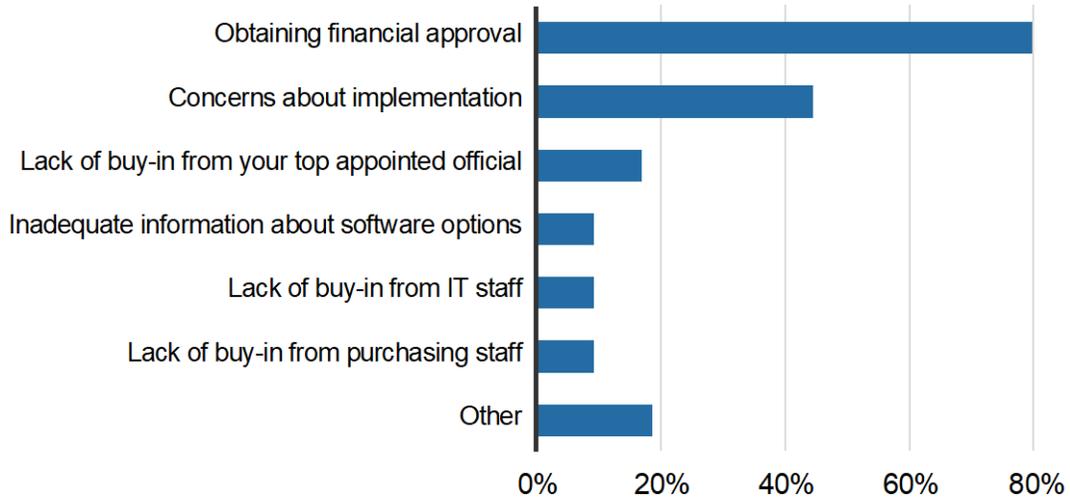
Source: CivicPulse Insights

Figure 2.38: Prioritization of new software, compared by position, HR heads vs. others. Comparing among heads of HR, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Human Resources



Source: CivicPulse Insights

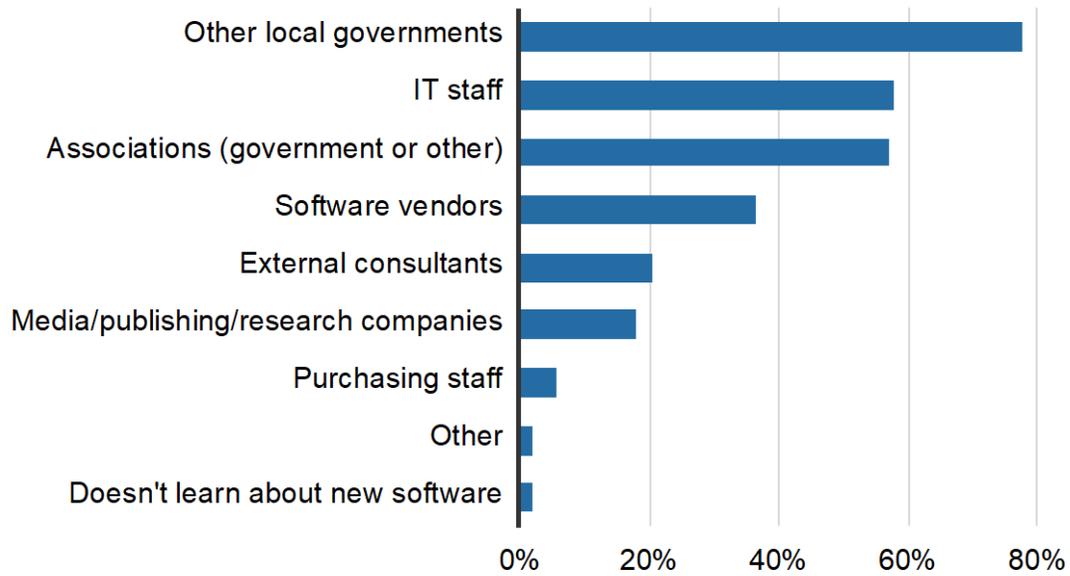
Figure 2.39: Challenges in adopting new software, HR heads.

Looking only at department heads of HR, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

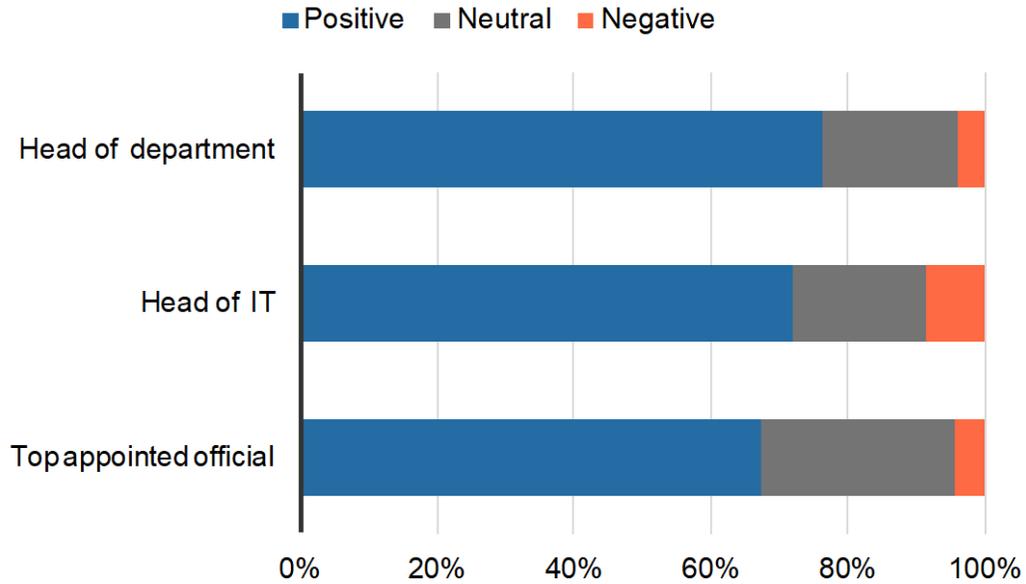
Head of Human Resources



Source: CivicPulse Insights

Figure 2.40: Information sources on software, HR heads. Looking only at department heads of HR, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Law Enforcement



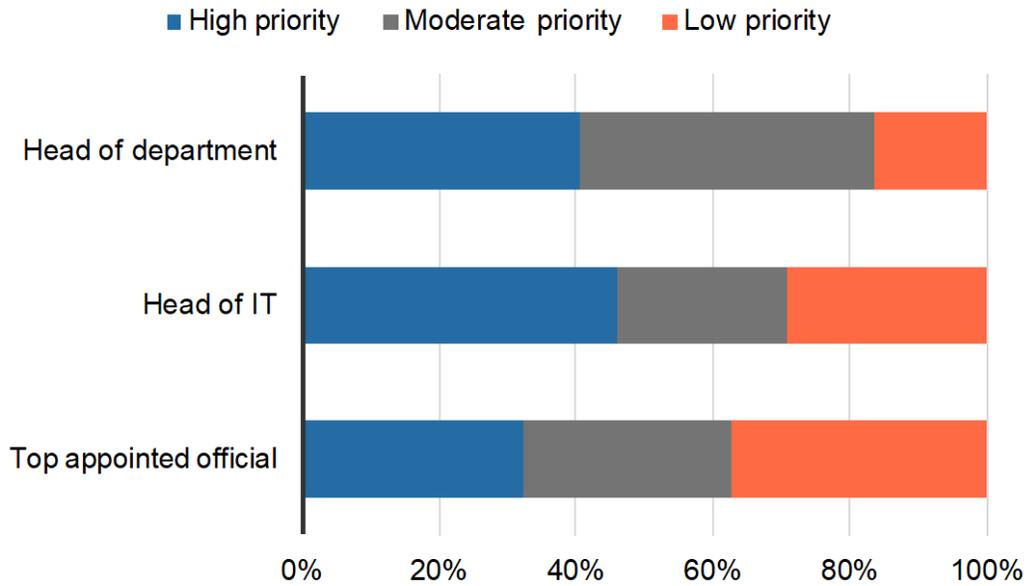
Source: CivicPulse Insights

Figure 2.41: Impact of new software, compared by position, LE heads vs. others. Comparing among heads of law enforcement, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Law Enforcement



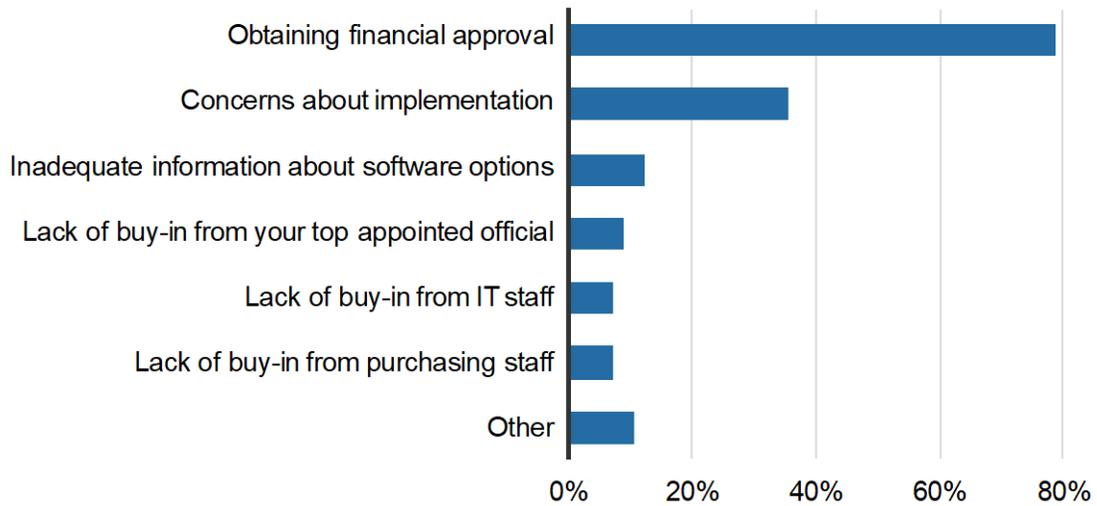
Source: CivicPulse Insights

Figure 2.42: Prioritization of new software, compared by position, LE heads vs. others. Comparing among heads of law enforcement, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Law Enforcement



Source: CivicPulse Insights

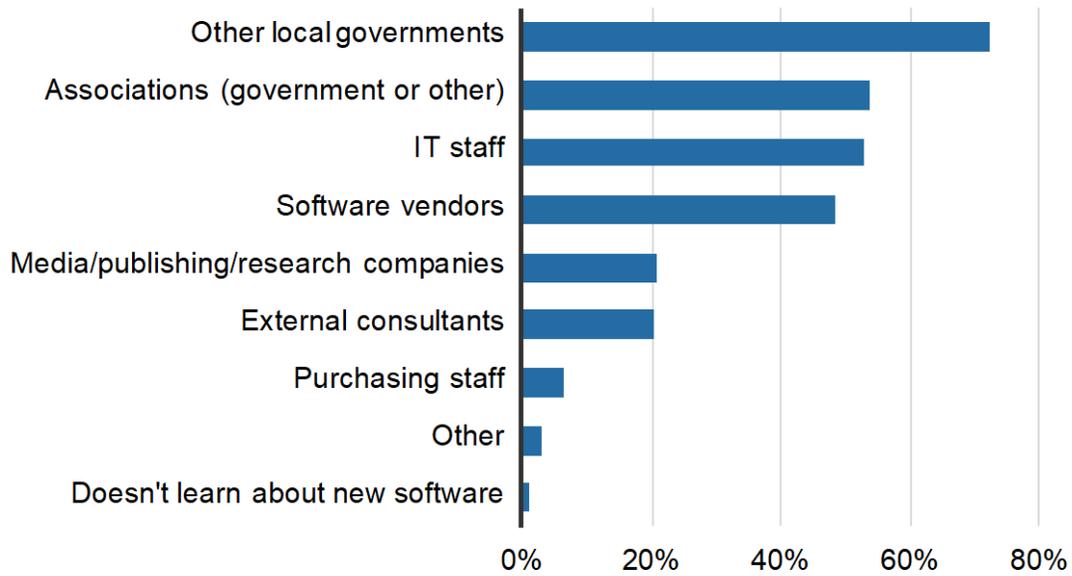
Figure 2.43: Challenges in adopting new software, LE heads.

Looking only at department heads of law enforcement, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

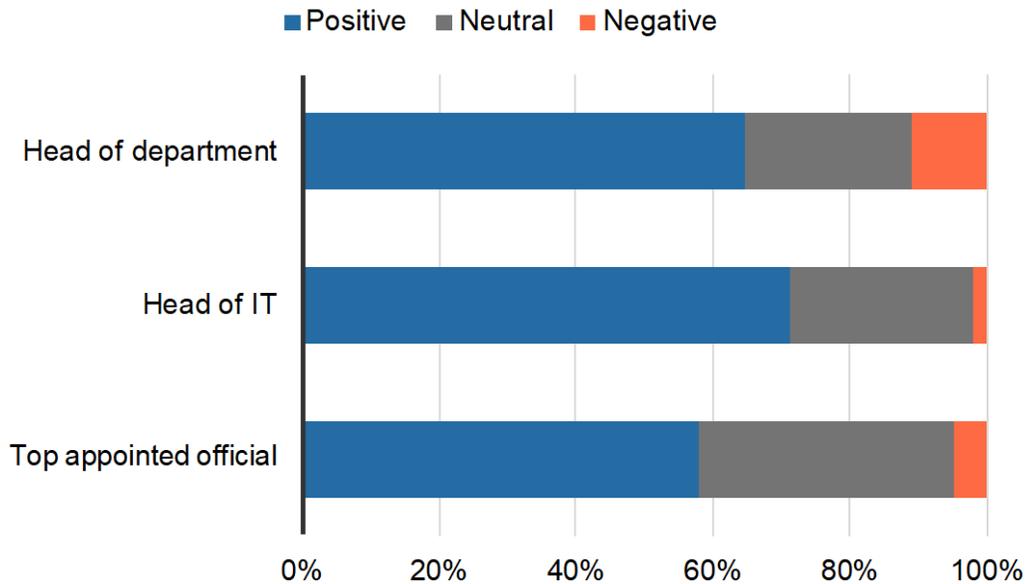
Head of Law Enforcement



Source: CivicPulse Insights

Figure 2.44: Information sources on software, LE heads. Looking only at department heads of law enforcement, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Public Works



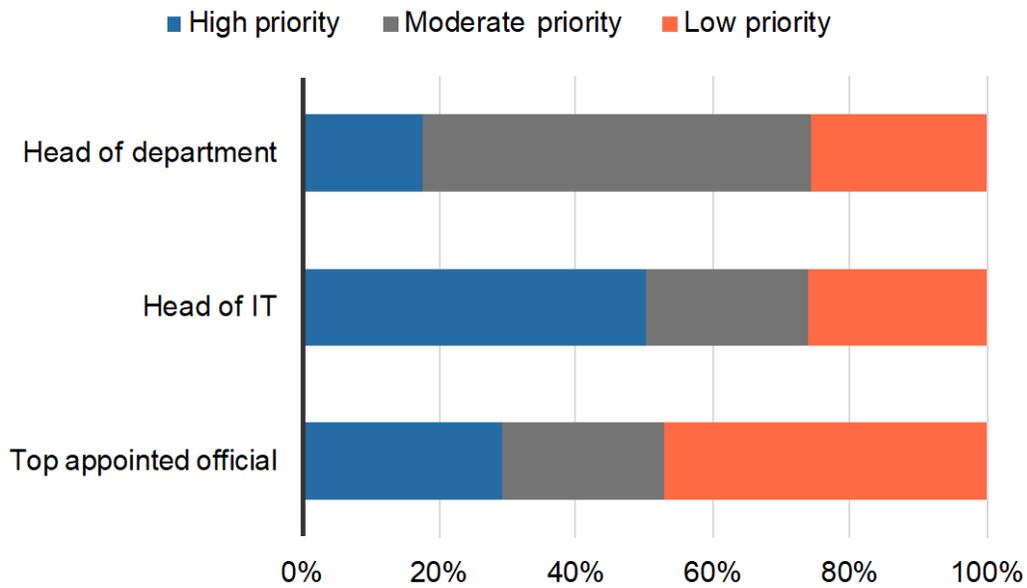
Source: CivicPulse Insights

Figure 2.45: Impact of new software, compared by position, public works heads vs. others. Comparing among heads of public works, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Public Works



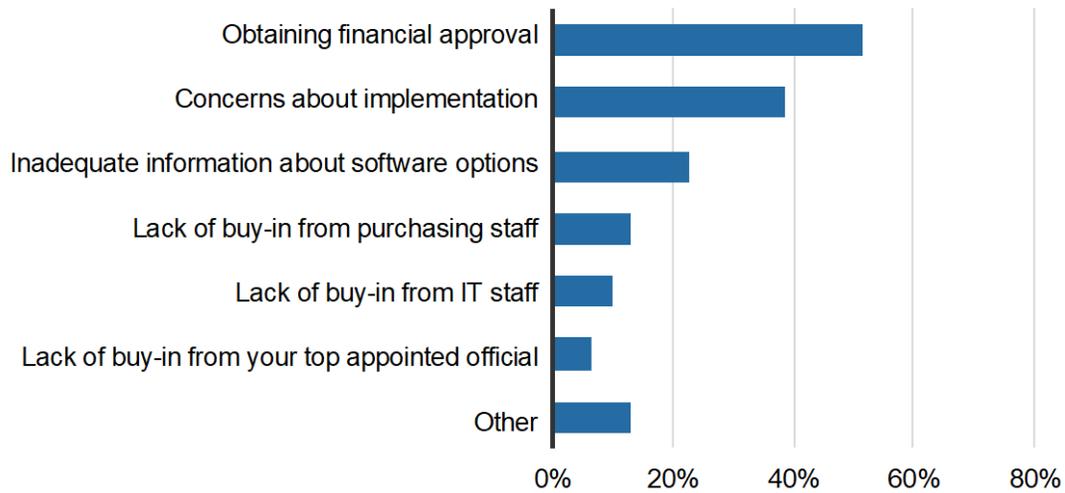
Source: CivicPulse Insights

Figure 2.46: Prioritization of new software, compared by position, public works heads vs. others. Comparing among heads of public works, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Public Works



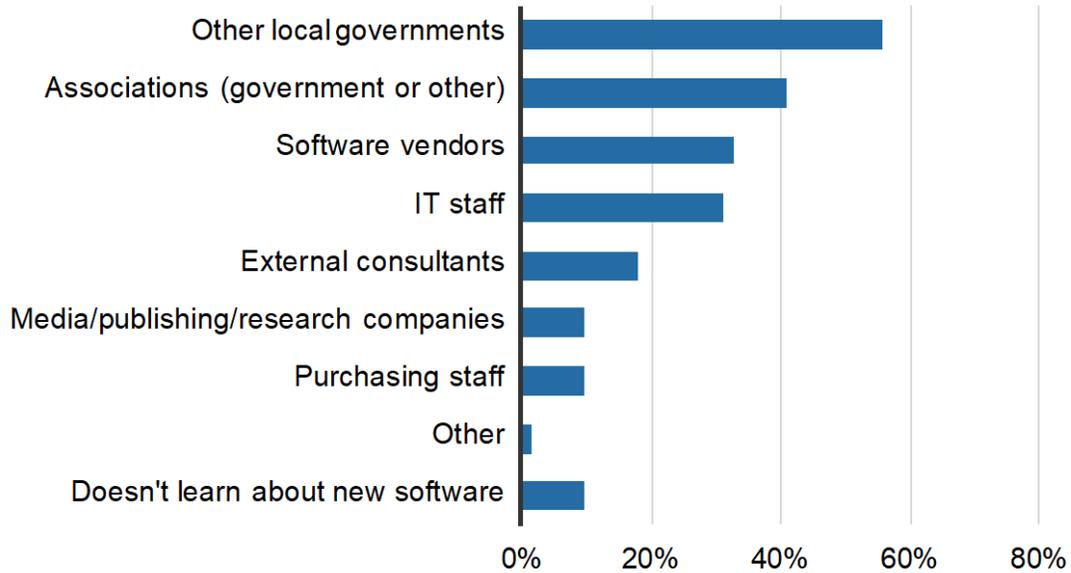
Source: CivicPulse Insights

Figure 2.47: Challenges in adopting new software, public works heads. Looking only at department heads of public works, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

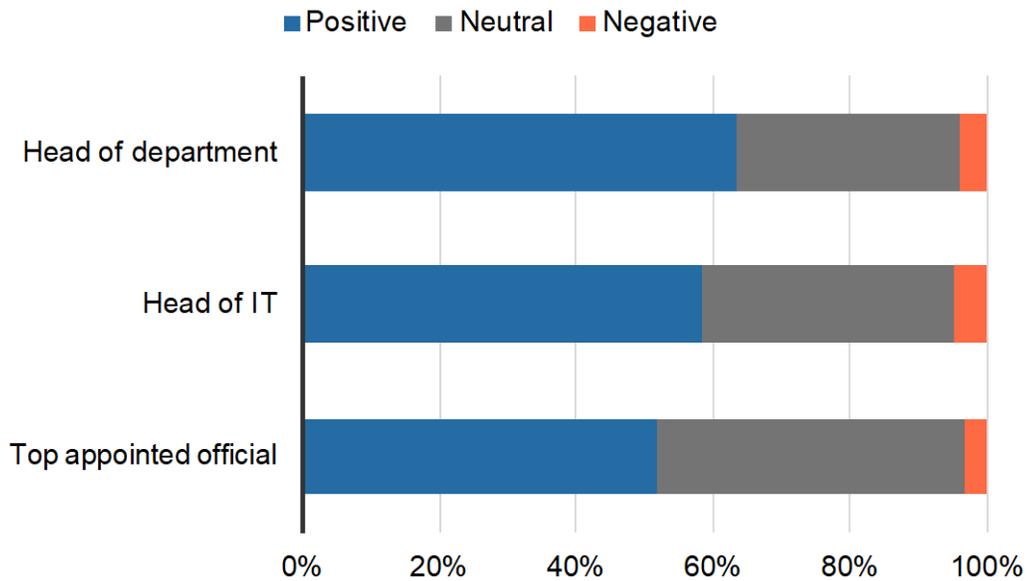
Head of Public Works



Source: **CivicPulse Insights**

Figure 2.48: Information sources on software, public works heads. Looking only at department heads of public works, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Head of Purchasing and Procurement



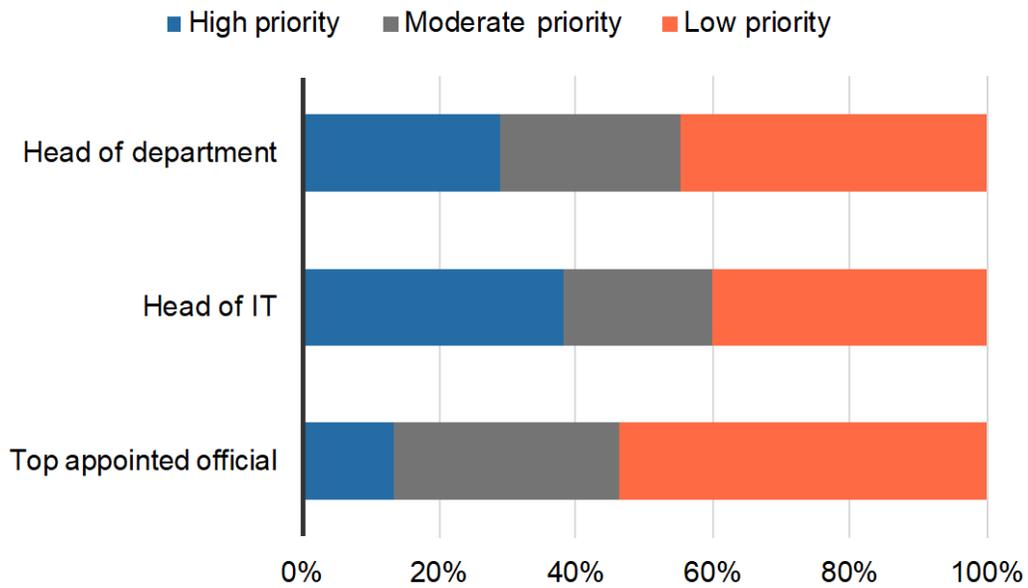
Source: CivicPulse Insights

Figure 2.49: Impact of new software, compared by position, purchasing heads vs. others. Comparing among heads of purchasing and procurement, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that software had a positive, neutral, or negative impact for their department.

The Role of Software in Local Government:

Complete Results by Position

Head of Purchasing and Procurement



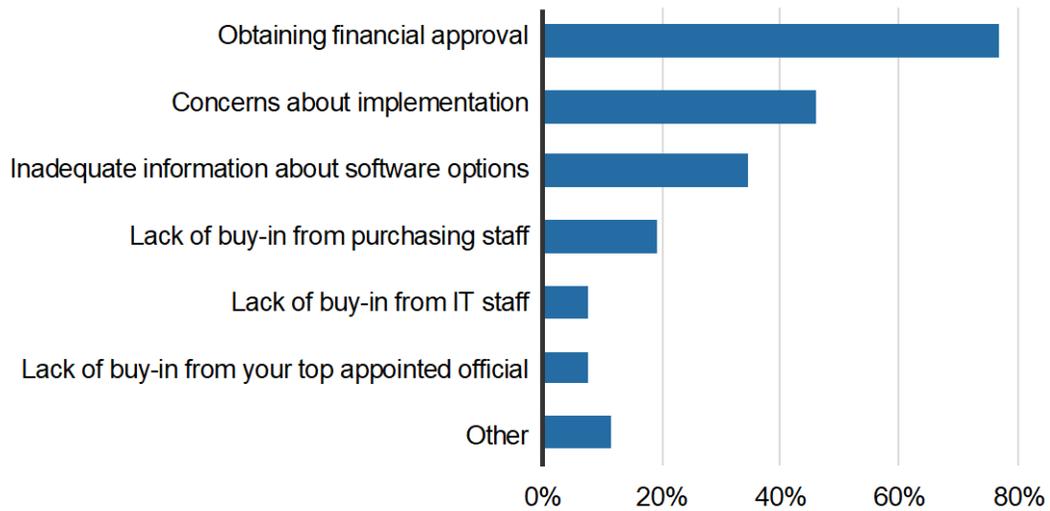
Source: CivicPulse Insights

Figure 2.50: Prioritization of new software, compared by position, purchasing heads vs. others. Comparing among heads of purchasing and procurement, heads of IT, and top appointed officials, this data reports the percentage of respondents who believed that adopting new software is a high, moderate, or low priority.

The Role of Software in Local Government:

Complete Results by Position

Head of Purchasing and Procurement



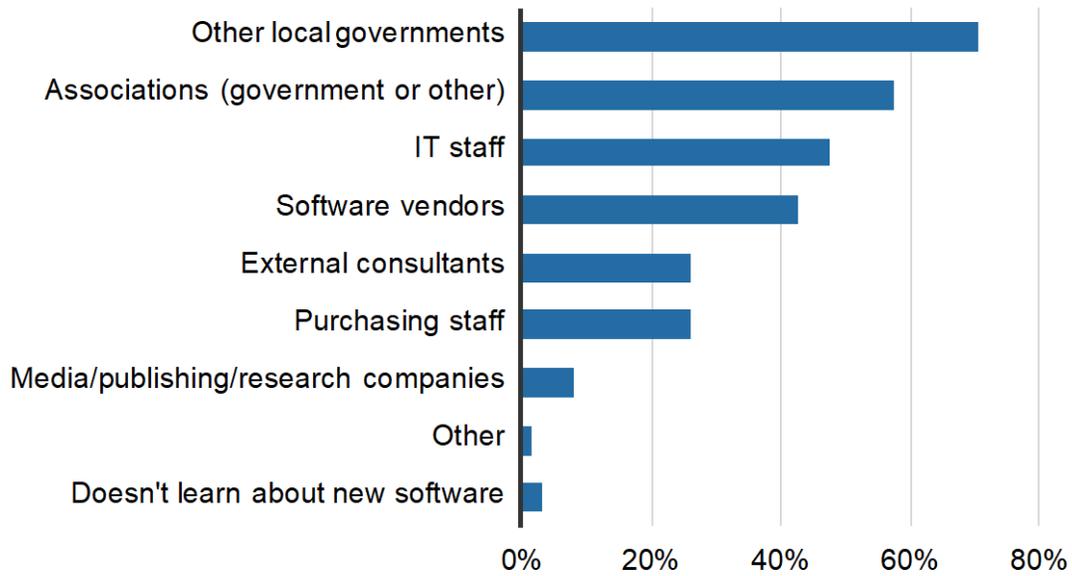
Source: CivicPulse Insights

Figure 2.51: Challenges in adopting new software, purchasing heads. Looking only at department heads of purchasing and procurement, this data reports the percentage of respondents that faced various challenges in adopting new software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

The Role of Software in Local Government:

Complete Results by Position

Head of Purchasing and Procurement



Source: CivicPulse Insights

Figure 2.52: Information sources on software, purchasing heads. Looking only at department heads of purchasing and procurement, this data reports the percentage of respondents that consult various information sources about software. Respondents were able to select more than one choice, so the sum of responses may add up to more than 100 percent.

Appendix

Methodology and Sample

CivicPulse uses Power Almanac’s continuously updated contact list of the appointed and elected officials associated with all townships, municipalities, and counties in the United States with populations of 1,000 or more (98% coverage).

Each survey includes a random sample of officials from this list. The data used in this report is from a survey of 1,199 responses collected in July 2020.

We invited local government officials from ten different positions to answer our survey (See Table A.1). Respondents from the first two positions (top appointed officials and heads of IT) answered a version of the survey about how software is used across various department in their local government. In contrast, respondents from the remaining eight positions answered version of the survey about how software is used in the respondent’s specific department only.

Table A.1: Survey Respondents by Position.

	Respondents
Top Appointed Official	130
Head of IT	86
Head of Building Permitting and Compliance	132
Head of Communications	138
Head of Finance	123
Head of Fire Protection	123
Head of Human Resources	165
Head of Law Enforcement	133
Head of Public Works	83
Head of Purchasing and Procurement	86
Total	1,199

Table A.2: Survey Respondents by Position.

	Respondents
Townships	208
Municipalities	787
Counties	204
Total	1,199

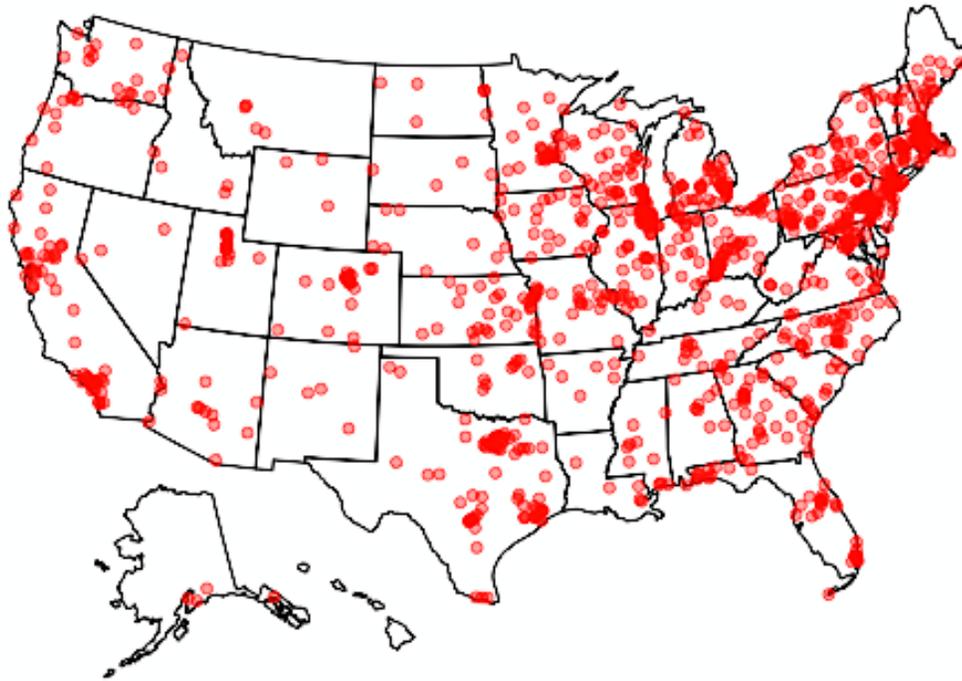


Figure A.1: Geographic distribution of respondents.

The Role of Software in Local Government:

Appendix Methodology and Sample

The geographic distribution of the survey respondents approximates the population distribution of the United States (Figure A.1). To characterize the representativeness of our survey sample, we match these respondents to the U.S. Census using the FIPS system. Tables A.2-A.3 compare the sample and population medians for four Census-area spatial characteristics: population size, urbanicity, the proportion of residents with a 4-year college education, and the proportion of residents who voted for Trump in 2016.

Table A.3: Sample Representativeness among Sub-County¹ Officials

	Sample Median	Population Median
Proportion Urban	0.98	0.85
Proportion College-educated	0.26	0.21
Population Size	8,000	3,700
GOP Vote Share ²	0.52	0.57

¹ This group includes officials from townships and municipalities

² Vote share estimated at the county level. Each sub-county government is matched to the relevant county in which it is contained.

Table A.4: Sample Representativeness among County Officials

	Sample Median	Population Median
Proportion Urban	0.50	0.40
Proportion College-educated	0.21	0.19
Population Size	33,000	26,000
GOP Vote Share	0.63	0.67

Questionnaire

Question 1. Impact of New Software.

New software can have a range of impacts, whether in terms of reliability, productivity, or user experience.

Thinking about the last three years or so, to what extent has the adoption of new software had a net positive or negative impact on {each of the following areas/[**specific area**] in your local government?

If the respondent is the top appointed official or head of IT of their local government, then (1) the question displays “each of the following areas” and (2) the respondent answers the question for each of the 8 different areas of local government (grid format):

Areas

- Financial Administration
- Purchasing
- Public Works
- Law Enforcement
- Fire Protection
- Building Permitting and Compliance
- Citizen Communications and Engagement
- Human Resources

Answer choices

- Very negative
- Somewhat negative
- Neutral
- Somewhat positive
- Very positive
- Not sure/Not applicable

The Role of Software in Local Government:

Appendix

Questionnaire

If the respondent is a head of one of the 8 departments surveyed, then (1) the question displays “[specific area]” where the specific area corresponds to their department, and (2) the respondent answers the question only with respect to their department:

- Very negative
- Somewhat negative
- Neutral
- Somewhat positive
- Very positive
- Not sure
- No new software adopted in the last three years or so

Question 2. Prioritization of Adopting New Software

For {each of the following areas/[**specific area**]} in your local government, do you think the adoption of new software should be a low or high priority in the next year or so?

If the respondent is the top appointed official or head of IT of their local government, then (1) the question displays “each of the following areas” and (2) the respondent answers the question for each of the 8 different areas of local government (grid format):

Areas

- Financial Administration
- Purchasing
- Public Works
- Law Enforcement
- Fire Protection
- Building Permitting and Compliance
- Citizen Communications and Engagement
- Human Resources

The Role of Software in Local Government:

Appendix

Questionnaire

Answer choices

- Very low priority
- Low priority
- Moderate priority
- High priority
- Very high priority
- Not sure/Not applicable

If the respondent is a head of one of the 8 departments surveyed, then (1) the question displays “[specific area]” where the specific area corresponds to their department, and (2) the respondent answers the question only with respect to their department:

- Very low priority
- Low priority
- Moderate priority
- High priority
- Very high priority
- Not sure/Not applicable

Question 3. Challenges in Software Acquisition (All respondents are shown this question)

In trying to acquire new software for {your local government/[**specific area**]}, which of the following has been a challenge? *Please select all that apply.*

- Obtaining financial approval
- Inadequate information about software options
- Lack of buy-in from IT staff in your government
- Lack of buy-in from purchasing staff in your government
- Lack of buy-in from your elected leaders
- Lack of buy-in from your top appointed official
- Concerns about implementation
- Other (please specify): _____
- I have no applicable experience to answer this question.

Question 4. Information Sources (All respondents are shown this question)

Which of the following information sources do you rely on to learn about new software for your government? Please select all that apply.

- IT staff in your government
- Purchasing staff in your government
- Other local governments
- Associations (government or other)
- Software vendors
- Media/publishing/research companies
- External consultants
- I don't learn about new software
- None of the above



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