

**TO:** ALA Executive Board

**RE:** ALA Technology Investment Plan

**ACTION REQUESTED/INFORMATION/REPORT:** Discussion

**ACTION REQUESTED BY:** Sherri Vanyek, Information Technology & Telecommunication Service (ITTS), Director Ron Block, Chair, Information Technology Advisory Committee (ITAC)

**CONTACT PERSON:**

Sherri Vanyek, 312-735-2597, svanyek@ala.org

**DRAFT OF MOTION:** None

**DATE:** January 29, 2018

**BACKGROUND:** The document attached contains both background on ALA's "technology debt" and a proposed pathway forward to implementation of a stable, flexible platform that will support ALA's membership and programs into the future. The plan calls for a multi-year, phased approach. In addition to the baseline systems addressed in the plan, the increased capacity allows ALA ITTS, working with program units, to realistically explore implementation of targeted products to address specific volunteer and staff productivity needs. These include a CRM system to support advocacy nation-wide and a data dashboard to enable staff to serve members more efficiently and effectively.

FY2019 budget discussions have focused strongly on reinvestment in the Association's future. These discussions continue to explore these parallel strategies: (1) improve core resources and baseline systems and (2) make spot investments in carefully targeted productivity products. Planning assumes a multiyear strategy. It should also be noted that the plan aligns with other major ongoing activities, notably the Board-led conversation about simplifying and reinvigorating ALA. The plan document

repeatedly notes the negative impact of excessive complexity, combined with siloed structure. To the extent these issues can be addressed in both ALA's member-facing structure and internal organization, it is reasonable to expect corresponding gains in ALA IT effectiveness.

## ATTACHMENTS:

### ALA Technology Investment Plan

Updated January 29, 2018

Submitted by Sherri Vanyek (Director ITTS) and Jenny Levine (LITA Executive Director)

#### Background

There is a name for what ALA members and staff are experiencing: technology debt.

“Technology debt is more than just the sunk costs of hardware, software and code. It is the inefficiencies, duplicate processes and extra work created by an outdated or out of control technology architecture. Recognizing the full scope of technology debt allows organizations to address it, and, in doing so, tip the balance from maintaining to innovating.

“In response to the push and pull of innovation vs. legacy, enterprises try to address their technology debt with a short-term view. This approach is ineffective in managing debt, and may actually add to it. Instead, organizations must take a step back and plan strategically across all technology platforms, processes and people”.<sup>i</sup>

We need to address this technology debt while there are still paths forward to do so. The [external IT review](#) performed two years ago and the recent [Alexander Haas report](#) indicate areas where ALA can improve its long-term viability. A recurring theme is simplification and standardization. ALA has a demonstrated history of not being able to hit IT target dates due, among other things, to lack of funding for projects.

We have many examples of areas where we need to simplify. The duplication of effort, negative impact on user experience, and inefficiencies created by our complex structure and lack of collaboration have brought us to the point where we cannot function effectively, and it is affecting all of our engagement and revenue streams.

Traditionally, ALA has insisted that it needs 100% specialized functionality to recreate its complex structure and different needs for every group in its software. This results in ALA spending staff time and resources on building new services from scratch or heavily customizing existing software to make it fit our model. There are additional costs required to maintain even basic functionality of heavily customized software once it has been developed. ALA can no longer afford the costs associated with this approach. It is time for ALA to move past this mindset and make our model fit existing software if it gives us 80% of the functionality we need.

Changing this mindset and simplifying our structure so that our model fits existing software is the single most effective way to create a technology environment that will support ALA's data needs, free up resources to implement more projects, and successfully launch projects on time.

The ALA website supports almost 8 million annual visitors, 1 million file downloads, and 2.5 million site referrals, most sending visitors to our own satellite sites, such as Annual Conference, JobLIST, the ALA Store, CQREngage/ALA and division conference sites. Going forward the ALA Website will transition to focus on the profession, media, and public, and ALA Connect will be where we provide member-focused content and engagement. The new My ALA dashboard in ALA Connect will provide an easy-to-use, real-time starting point where members will be able to network with other members, get customized recommendations for communities of practice, and take advantage of a personalized ALA experience that is unique to them.

To do this, ITTS submits the following proposal to erase our technology debt and free up money and resources for innovation and strategic investments in technology.

### Overview of ALA ITTS

ALA ITTS currently has 12.5 staff members supporting over 200 desktop applications, 150 servers, and a massive public facing presence, and managing 25 consulting relationships. The fiscal 2018 operating budget is \$3,068,117. Any capital expense is eventually recognized as part of the operating expenses. While this is a slight increase from recent years, it represents 6% of ALA's total revenue. In *The Road to Relevance*, the authors recommend spending a minimum of 10% of an organization's total revenue on technology, suggesting that for some organizations it should be closer to 17%.<sup>2</sup> Over the last decade, the increasing gap between what ALA has spent on IT and this recommendation is what has produced our current technology debt.

Because ITTS has no central authority over technology used by individual units, some of them have implemented their own technology projects using their own money, which is then not reflected in ITTS' budget. Sometimes this is because ITTS lacks the resources to meet division deadlines, sometimes it is because the division prefers to go its own way. While this means ALA's overall spending on technology could be considered higher than 6%, those implementations do not consider the burden that is placed on ITTS staff to integrate those systems into our ecosystem, fully test pricing categories for all our membership types, test for ADA compliance (in some cases, continuously), and sometimes, to advise on support or training issues when problems occur.

These conditions lead to a situation where maintenance and implementation of systems aren't prioritized for upgrade or replacement until they reach a crisis level, at which point ITTS has to stop what it's working on to resolve the crisis. The most illustrative example of this is that a virtual disaster recovery service was not implemented until 2016 due to lack of resources and the constant re-prioritization of other projects. Had ALA experienced a catastrophic event that affected the physical server room in the Chicago office, it would have been days, possibly weeks or even months, before we could have returned to business as usual.

### Barriers to Quick and Successful Implementations

ITTS must recreate ALA's complex hierarchy in all new systems, most of which are not designed for organizations with so many different types of users, disparate pricing structures, and multi-level hierarchies. This means that we can never just upgrade to the latest version of a software package

because previous customizations we've made must be re-tested and sometimes even re-coded for the new version based on every type of user, every pricing level, and every hierarchy.

It is nearly impossible for ITTS to implement a new instance of an existing service as is (e.g., conference registration, an election ballot, etc.) because pricing, ADA-compliance, and other customizations must be fully tested to make sure they still work properly since we've customized the vendor's software so heavily. Even something as simple and predictable as dues increases must be carefully implemented and tested across multiple systems because most software/services are not set up for the number of dues categories and complex calculations required by ALA (33 types of membership, 150 dues-generating products, 671 special pricing rules for dues).

As new priorities and initiatives are submitted by ALA units and member leaders (including new presidential initiatives every year), the same staff working on current high-priority projects are diverted to work on these new ones with no additional support. Staff at external vendors/consultants routinely turn over or are assigned to new clients, which means we must constantly educate new consultants to get them up to speed on all of ALA's complexities and requirements, which takes up valuable project time and further delays implementation.

There are no staff members in ITTS devoted to strategic planning across resources. Instead, each project is implemented as a silo by one staff project manager, with no thought to how it will integrate with other ALA resources due to lack of staff time and training. At best, this results in issues with navigation between sites, completely disparate interfaces, incomplete search results, duplication of effort, and the lack of a unified approach. At worst, it makes it impossible for members to understand ALA and use its online services. Lack of tolerance for true risk assessment results in deadlines that are not attainable. Target dates are set according to arbitrary factors such as end of fiscal year dates, deadlines that must fall within the single year of a presidential initiative, or launch windows around major conferences and events. True risk assessment includes budget for mitigating foreseeable problems and resolving those issues which would greatly affect timelines; however, this type of forecasting has not been included when developing project plans, so budget is never set aside to mitigate these potential problems should they arise.

Although ITTS has been able to achieve some cost savings by moving some services to virtual servers and cloud-based vendors, over the past 10 years costs have also increased to accommodate new services (online courses, webinar software, ALA Connect, virtual disaster recovery services, etc.).

## How to Remove these Barriers

1. Our complex dues structure and the number of dues-based units requires customization of most of our foundational systems: the iMIS Association Management Software (AMS), our conference registration and hotel reservation software, registration systems for online education and in-person events, our join/renew ecommerce system (the graduated dues for student and beginning librarian members are particularly difficult to recreate), our election software, our appointments database, the ALA website, ALA Connect and more.

ALA needs to reduce the number of member categories, the disparate pricing across the ones that remain (for membership, online education, in-person event registration, etc.), move to flat

division pricing (ALA + 1 division = x price, ALA + 2 divisions = y price, etc.), and remove the special pricing dues structure.

2. While we made sections free, members still had to join them as part of dues processing function. This process must be revisited when the new ALA Connect launches.
3. ALA needs to reduce the number of internal hierarchies so that HR and financial systems can be implemented with less customization of software.
4. While some existing applications may have to be grandfathered in, going forward, ALA Management should not allow use of multiple platforms for services like conference registration and webinar delivery and consolidate to one system for each service to standardize the member experience and make it easier to train both members and staff. To foster innovation, pilot programs to test new applications will be possible.
5. ALA must perform realistic risk assessment for each new project (or phase of a project) to create achievable timelines. If there are valid can't-miss deadlines, the budget needs to include money to resolve potential issues that would delay the launch.
6. ALA must fund more than the bare minimum for each project including resources needed to make sure projects are integrated to work together rather than separately. Projects must not be awarded to vendors based solely on which one submits the lowest bid.
7. ALA Management, based on ITTS assessment, must say no to projects that do not meet ALA's business requirements, or do not provide enough Return on Investment (ROI) for the expenditure.
8. ITTS needs to perform an Association Management Software (AMS) needs assessment to determine if iMIS continues to be the best solution for ALA. iMIS is the foundational center for all our processes and services. We need to take the time to do a proper environmental scan to determine if it can do everything we need it to do or if we should seek an alternative.

## ALA STRATEGIC TECHNOLOGY RATIONALE

User experience is a key factor for ensuring success in recruiting and retaining members and customers. Investing in technology for FY2018 and beyond positions us to support the member and customer experience in the following ways:

### Outcomes

- Promotes ALA's objectives by making it easy for the public to learn about our mission, access information about libraries and advocacy, join ALA, and purchase goods and services.
- Provides the resources to focus ala.org on the public and the profession while moving member information, engagement, and resources to a different site.
- Creates an internal site and an external one to give us the ability to create strong calls to action focused on external audiences, supporting our work through donations, sponsorships, and partnerships.
- Creates a central resource for the profession that coordinates advocacy campaigns, outreach to funders and policymakers, and concrete actions on ALA policy initiatives.
- Engages members at all levels to help shape Association directions through meaningful virtual discussions and a suite of online tools for true collaboration to move ideas and projects forward.
- Refocuses ALA work on getting things done rather than working around technology barriers.

- Uses technology to aggregate and display a personalized “My ALA” view of the most relevant content, recommendations, learning opportunities, networking options, pathways to leadership, and interest-based advocacy for each user.
- Provides focused learning activities and communities for engaging in group work outside of face-to-face meetings.
- Streamlines systems and processes for donations, registrations, and the purchase of goods and services to increase revenue and support.
- Ensures ALA is able to maintain strict privacy protections for user data, maintain the highest level of security to protect systems, and recover quickly from any physical or virtual technology disasters to restore service with minimal downtime.

### Impact on Staff

- Provides access to real-time member demographics and data to facilitate data-driven decisions, personalized marketing, and focused services.
- Provides data mining and business intelligence systems to enable predictive analytics that will assist with strategic planning.
- Improves technology resources to make ALA staff more efficient, allows for remote access to critical tools, reduces workflow inefficiencies, moves ALA to paperless processes, ends the need for manual re-entry of data, and integrates disparate systems and data.

**The items below are in priority order and the salary estimates represent market value including benefits.**

### Benefits of Phase 1 (FY18)

**Simplify membership categories and dues pricing to reduce organizational complexity.**

The number of pricing rules required to handle memberships and registrations is prohibitively expensive to implement and maintain.

#### *Member Benefits*

- Streamlines the join and renew process to reduce the number of steps required and makes it easier to purchase and register for dues-based products and services.
- Makes pricing easier to understand.
- Offers a faster path for ALA to implement new ways to pay dues, such as monthly payments.
- Makes ALA’s organization easier to understand.

#### *Staff Benefits*

- Allows ALA to implement existing IT systems that don't require extensive and costly customizations to build and maintain our unique structure within the software.
- Removes delays to upgrading systems by reducing the need to re-test all of the customizations and permutations of pricing rules.
- Reduces the need for constant Quality Assurance testing for the join/renew, conference registration, elearning registration, ALA Store, and other services that have to be customized to accommodate the pricing rules, 671 for dues, potentially 30 for every function at an event, every online learning opportunity, and every product we sell. Decreases the cost and bureaucracy of our elections, which cost staff hundreds of hours in time and manual effort every year.

## Hire a consultant to do a process analysis to optimize internal workflows and efficiencies (\$150,000)

There are workflows related to most, if not all repetitive tasks that staff must complete. Because these workflows have not been analyzed recently (if ever), we are sure to find ways to streamline and optimize so that staff can focus on more creative challenges.

### *Member Benefits*

- Improved member engagement, communication, and customer service when staff can focus on member-centric service instead of internal processes and workarounds.
- Member dollars are spent supporting ALA's mission and objectives, rather than legacy systems and processes.
- Reduced errors on member records and customer service issues due to manual or incorrect data entry in iMIS.

### *Staff Benefits*

- Staff will be able to focus on more compelling tasks in support of ALA's objectives once repetitive tasks and workflows have been optimized.
- Staff time is no longer spent on manually re-entering data from one system to another.
- Confidential user information is handled in secure online systems rather than on paper documents sent through interoffice delivery.
- Time to completion on IT projects is reduced and does not encounter substantive delays because ITTS is staffed properly, with project oversight led by project managers, and time is spent on integrating systems efficiently rather than building out customizations.

## Benefits of Phase 2 (FY19)

### Project Manager (\$140,000)

The primary advantage of having a dedicated project manager is to help ALA reach desired goals and achieve those goals within specific time and cost parameters. Other benefits include:

### *Member Benefits*

- Improved Stakeholder/Customer Satisfaction: The project manager will make it possible for more projects to be completed on time and within budget, ensuring staff have the tools and resources they need to quickly serve member needs.
- More tools and resources can be implemented online and made self-service.

### *Staff Benefits*

- Risk Management: Potential risks become obvious when a strategy is mapped, so a mitigation plan can be put into place to create workarounds in advance.
- Practical Flexibility: The project manager will determine the strategy to achieve project completion but will use an agile approach to allow for new integrations and functionalities that will enhance or improve service when possible without jeopardizing deadlines.
- Quality and Quantity Improvements: Increased efficiency will make it possible to accomplish additional projects, enabling the Association to achieve more of its objectives.
- Timelines will be measured in months, rather than years, with much faster times to implementation replacing the current cycle of delays.

## Increase staffing dedicated to the new ALA Connect

### Hire an Automation Rules/Informz Specialist (\$84,500)

### Hire a Personalization Specialist (\$84,500)

In the world of ecommerce, personalization is known to increase sales by 30% or more.<sup>3</sup>

#### *Member Benefits*

- Quicker connections to groups of interest.
- Provides a more efficient path for onboarding new or newly-active members.
- Personalized MyALA dashboard of content, events, and member-based networks.
- More relevant marketing that matches user preferences and interests.
- Reduction in the overall amount of email received from ALA due to coordination across groups and the combination of content from multiple sources.
- Service and achievement-based badges added to member profiles automatically.
- Members realize increased value in their ALA membership due to recognition of their contributions and are encouraged to progress through their personal member engagement journey.

#### *Staff Benefits*

- Coordinated and automated membership and marketing email campaigns.
- Centralized source for coordinating and managing ALA's hundreds of automation rules.
- Allows ALA to implement web tracking in Informz to provide targeted follow-up emails.
- Automation rules save staff time by automatically inviting users to interest-based networks, giving members the correct permissions in ALA Connect, and sending automated touchstone emails to connect with members throughout the year.
- Specialist who will create, document, refine, and report on automation rules and the resulting outcomes at both the ALA and microsite level.
- Specialist who will provide reports showing the effect of personalization on member progress in the membership engagement journey.
- Specialist who will develop metrics and reports to inform data-driven decisions.

### Hire a Drupal Content Management System Administrator (\$150,000)

Having an in-house, dedicated Drupal Administrator means security updates can be implemented more rapidly than is currently possible, increasing the safety and integrity of our three large Drupal-based sites. In addition, staff and stakeholders will benefit from:

#### *Member Benefits*

- Gives ALA a way to test the compatibility of Drupal modules and add those that are stable to the microsites to improve the user experience.

#### *Staff Benefits*

- More display and visual options. Administrators can alter site theme installations to make it easier for site admins to refine their site's branding.



### Hire a Drupal Developer for 1-year (\$115,000)

This position will allow us to accelerate the pace of change on our Drupal-based sites, but the following benefits will also accrue:

#### *Member Benefits*

- As new functionality is identified on our individual Drupal sites: the primary ALA website, the ALA Store, and the Join-Renew-Donate site, ALA's response will be more nimble having an in-house implementation team. ALA can simplify workflows and adapt the sites to better serve our needs. For example, when discussions about simplification proceed to action plans, the developer will be able to simplify join/renew workflows.
- An example of area where in-house development would improve delivery is website accessibility. Every ALA project has required extensive and expensive time consuming accessibility remediation.

#### *Staff Benefits*

- Essential changes will happen more quickly, easing staff time invested in member and customer assistance and various workarounds.
- Reduce reliance on third parties.

### Hire a Data Analyst to work with the Development Office (\$90,000)

A Data Analyst with iMIS expertise to seek out patterns in donation data to assist with strategic planning, to increase Development Office staff awareness of iMIS capabilities, and provide marketing benefits to ALA.

#### *Member Benefits*

- Recipients of fewer, but more targeted, messages to support areas of personal and professional interest.

#### *Staff Benefits*

- Enables targeted appeals that will lead to increased donations.
- Improves utility of iMIS fundraising functionality.
- Allows Development staff to analyze data without relying on ITTS staff as gatekeepers.
- Increases Development's reporting ability at the ALA, division, and round table level.

### Run a RFP process to select and implement a new Learning Management System (LMS) (\$85,000)

Professional development will continue to be both a service to the profession and a revenue source for ALA. This is another area where systems have been evolving and maturing, and ALA would benefit from the right system.

#### *Member Benefits*

- A more modern, unified system implemented across all of ALA will improve both the participant and instructor experience.
- A new LMS system that works with a Single Sign-on (SSO) system will allow members to seamlessly move back and forth between the courses and other ALA resources.
- An association-focused LMS that connects out-of-the-box with other ALA systems could allow integration of LMS content and data into Higher Logic groups, Informz target groups, and member profiles.

#### *Staff Benefits*

- The right tool would simplify course management and record-keeping activities.
- Data from the LMS could be integrated into member profiles and an ALA data dashboard.
- A more intuitive interface would reduce staff support time.

**Do an environmental scan to determine if there is a better Single Sign-On (SSO) solution (\$10,000)**  
Ongoing security concerns and ease of system integrations make it essential that ALA have a SSO solution that provides a seamless user experience and allows users to remain logged in to ALA systems longer.

#### *Member Benefits*

- A different SSO system that allows users to stay logged in longer means personalized templates and content are immediately visible when members return to ALA Connect, online courses in a new LMS, conference schedulers, and other ALA sites.
- Would reduce frustration with ALA sites that time out on members and force them to manually re-enter data in forms.

#### *Staff Benefits*

- Saves time because staff won't have to constantly log in to ALA sites.
- Would reduce frustration and time spent re-entering data in forms and content on sites when the authentication times out.

### **Benefits of Phase 3 (FY20)**

#### **Hire a Systems Integration Specialist (\$100,000)**

Hire a Systems Integration Specialist to take the big picture view of our various IT systems and make sure they're working together for maximum efficiency, to reduce duplication of effort, and to offer the best possible user experience. When a new system is implemented, this person will be responsible for making sure it is seamlessly integrated with existing systems.

#### *Member Benefits*

- Provides a more seamless user experience across ALA resources.
- Ensures more intuitive interfaces and functionality.
- More one-stop shopping instead of time spent visiting multiple sites to find services and resources.

#### *Staff Benefits*

- More reliable hand-offs between systems reduces time spent troubleshooting issues.
- Replaces a siloed implementation approach in which systems don't (and in fact, can't) interact with each other because they weren't built for integrated functionality.
- Allows data to be integrated throughout multiple systems when and wherever necessary.
- Ensures that phased implementations progressively build on each stage to maintain forward progress, rather than constantly going back to refine and fix work already done.

#### **Hire an AMS Trainer (\$90,000)**

This position will allow an ITTS person to help ALA staff maximize use of our most important system.

#### *Member Benefits*

- Increased integrity of iMIS data means more accurate and robust member profiles on ALA Connect and fewer committee roster issues.

#### *Staff Benefits*

- Educates staff about standardization and accuracy of data, which is essential to the success of a data dashboard.
- Helps standardize staff processes and procedures for maximum efficiency and implementation of best practices for data management.
- Provides granular training on features so that more staff can take advantage of them.
- Ensures a smooth transition from use of the desktop client to web-based access.

### **Migrate the financial system to an externally hosted service (\$86,000)**

#### *Member Benefits*

- Easier to share information with member-leaders.

#### *Staff Benefits*

- Upgrades taken care of by the cloud vendor.
- Reduces our need for remote access software.

### **Consolidate our file storage and sharing systems to an externally hosted service (\$50,000)**

#### *Member Benefits*

- Increases and simplifies information sharing between staff and members.

#### *Staff Benefits*

- Automatic upgrades will be handled by the cloud vendor.
- Reduces our need for remote access software.
- Allows for greater collaboration between staff at remote ALA locations and staff at ALA HQ in Chicago.

### **Perform a needs assessment to determine if iMIS is the best AMS solution for ALA (\$100,000)**

New players have emerged in the AMS market with systems built in the 21<sup>st</sup> century. New features include more functions and integrations, better user experience design, and cloud-based access and storage. A review of the state-of-the-art and pricing will make it possible for us evaluate options and develop a strategic plan.

#### *Member Benefits*

- We want to ensure that members always receive the best possible benefit from each membership dollar.
- Our AMS is the underpinning for all of our member interactions. Having the best fit in place facilitates implementation and interactions of all other components.

#### *Staff Benefits*

- Would allow staff to determine what functionality we truly need and then determine the best product to meet our goals, rather than shoe-horning what we needed into an existing system and hoping it does what we need in a way that works for us.

## Implement all necessary modules to make iMIS work the way we need it to or replace with a new AMS (\$500,000-1.7 million)

### *Member Benefits*

- Staff productivity increases make it possible to serve members' needs effectively and ultimately saves ALA money.
- This process will force us to clean up and standardize our data, regardless of whether we stay with iMIS or migrate to a new system. Removing duplicate member records and standardizing fields and the data in them will reduce member frustration, make committee roster maintenance easier, and allow for more robust member profiles and connections in ALA Connect. This will also be both an outcome and a generator of process review.

### *Staff Benefits*

- Better workflows and additional functionality to enable us to better support the fulfillment of our mission.
- A system that is easier to use will save staff time in terms of committee maintenance and data analysis.
- A more intuitive system will give staff direct access to data and reports, without having to wait on ITTS capacity to provide these services for them on a request-by-request basis.
- A cloud-based system would allow remote access to member and committee data.

## Implement a new Single Sign-On service if a viable solution was found in phase 1 (\$50,000)

### *Member Benefits*

- A different SSO system that allows users to stay logged in longer means personalized templates and content are immediately visible when members return to ALA Connect, online courses in a new LMS, conference schedulers, and other ALA sites.
- Would reduce frustration with ALA sites that time out on members and force them to manually re-enter data in forms.

### *Staff Benefits*

- Saves time because staff won't have to constantly log in to ALA sites.
- Would reduce frustration and time spent re-entering data in forms and content on sites when the authentication times out.

## Hire a consultant to design our migration to a Desktop as a Service (DaaS) environment (\$62,500)

### *Member Benefits*

- Staff productivity increases make it possible to serve members' needs effectively and ultimately saves ALA money.

### *Staff Benefits*

- Would make it much easier for ITTS to maintain user desktops and programs.
- Would allow staff to access their full desktop with all programs from anywhere.
- Makes it easy to get a staff member up and running almost immediately if their primary ALA computer dies or is replaced.
- Allows ITTS to purchase less expensive devices and enable remote office work for \$500 per device instead of \$1,500 per device for 300 users, as well as save us \$100,000 in consulting fees.

## Hire a consultant to design our migration to a Datacenter as a Service (DCaaS) environment (\$65,500)

### *Member Benefits*

- Staff productivity increases make it possible to serve members' needs effectively and ultimately saves ALA money.
- Reduces the likelihood of network and server outages, which affect the availability of ALA's online services.

### *Staff Benefits*

- Allows us to host our servers and network infrastructure offsite at a physical data center using the resources of the DCaaS provider instead of paying for and maintaining our own.
- Gives us 24/7/365 support without requiring costly overtime charges from consultants who help maintain our infrastructure.
- Frees up ITTS staff time to work on data analysis, project implementation, improving services, and increasing efficiency rather than maintaining software and hardware.
- Allows staff to access the datacenter, view their dashboards, and run reports from anywhere at any time.

## Benefits of Phase 4 (FY21)

### Hire a User Experience Director (UXD) (\$150,000)

UXD would be responsible for managing the member and customer experience across all of ALA's websites and improving the customer journey through all aspects of the ALA relationship.

### *Member Benefits*

- Provide a more seamless user experience across ALA resources.
- More intuitive interfaces mean less time spent searching and browsing for the information users are seeking.

### *Staff Benefits*

- Gives staff more time engaging with members around goals and objectives, rather than troubleshooting problems.
- Standardized interfaces mean less time spent on maintaining customizations.

### Hire a Server Administrator for our virtual server farm (\$120,000)

Servers require security patches, updates, and constant monitoring. This position will be evaluated as part of a Data Center as a Service(DCaaS) decision. DCaaS providers offer a suite of services, possibly including those this position might provide.

### *Member Benefits*

- Helps protect personally identifiable information and user privacy.
- Ensures security updates are always current.

### *Staff Benefits*

- Servers underlie a great deal of what staff need to do their jobs, so keeping our servers in prime running order benefits all staff and members.

### Implement Desktop as a Service (\$610,000)

This will allow staff to access their applications from anywhere at any time.

#### *Member Benefits*

- Staff productivity increases make it possible to serve members' needs effectively and ultimately saves ALA money.

#### *Staff Benefits*

- Would make it much easier for ITTS to maintain user desktops and programs.
- Would allow staff to access their full desktop and all programs from anywhere.
- Makes it easy to get a staff member up and running almost immediately if their primary ALA computer dies or is replaced.
- Allows ALA to purchase less expensive devices and enable remote office work for \$500 per device instead of \$1,500 per device for 300 users, as well as save us \$100,000 in consulting fees.

### **Implement Datacenter as a Service (\$816,667)**

#### *Member Benefits*

- Staff productivity increases make it possible to serve members' needs effectively and ultimately saves ALA money.
- Reduces the likelihood of network and server outages, which affect the availability of ALA's online services.

#### *Staff Benefits*

- Allows us to host our servers and network infrastructure offsite at a physical data center using the resources of the DaaS provider instead of paying for and maintaining our own.
- Reduces on-premise space, electric, physical security, and cooling requirements.
- Gives us 24/7/365 support without requiring costly overtime charges from consultants who help maintain our infrastructure.
- Frees up ITTS staff time to work on data analysis, project implementation, improving services, and increasing efficiency rather than maintaining software and hardware.
- Allows staff to access the datacenter, view their dashboards, and run reports from anywhere at any time.

### **Investigate and implement a Digital Asset Management Service (DAMS) (\$100,000)**

This project potentially goes hand-in-hand with a new CMS. ALA units need to be able to track and reuse all their assets, whether born digital or converted.

#### *Member Benefits*

- Provides a collaborative environment so that ALA's media library can be shared with members and others to coordinate advocacy campaigns and calls-to-action.

#### *Staff Benefits*

- Allows staff to easily locate and repurpose digital assets instead of constantly creating their own, saving time and budget.
- Makes ALA's branding and advocacy messages more consistent and unified in appearance.
- Controls access so that resources can't be used without permission before they are approved for distribution.
- Embeds digital rights, copyright, and contact information on every image or file to make it easier for external parties to contact the right person prior to use.

- Supports compliance with copyright information and licensing terms.

### Run a RFP process for a new Content Management System (CMS) for the static, non-personalized portion of ala.org websites (\$20,000)

CMS platforms have been evolving, and ALA should investigate new software that would support a transition to an externally-focused website.

#### *Member Benefits*

- Allows us the opportunity to organize ala.org by topic with a focus on our external audiences instead of forcing all users to try to find content organized by ALA's internal structure.

#### *Staff Benefits*

- Reducing the overwhelming amount of content on ala.org and organizing it by topic helps staff collaborate more effectively, concentrate on the most critical and current information, and focus on content.
- Saves staff positions currently focused on building and maintaining Drupal-based services.

### Budget summary for what it will take to erase our technology debt

- Phase 1 = \$ 150,000 + TBD
- Phase 2 = \$ 759,000
- Phase 3 = \$ 1,653,000 – 2,853,000
- Phase 4 = \$ 2,555,667
- Total = \$5,117,667 - 6,317,667

Subsequent years will require an increase in operating expense of \$876,000 hosted services + \$1,009,000 salaries = \$1,885,000. We expect a reduction in our depreciation expense as we move services off premise, but we cannot currently estimate that reduction. Given our phased implementation and the changing landscape of technology expenses, we expect our estimates to change over time.

New operating budget for ITTS would be \$1,885,000 + current budget of \$3,068,117 = \$4,953,117.

<sup>1</sup> Accenture, Inc., "Is Technology Bankrupting Your Competitiveness," © 2017 Accenture.

<https://www.accenture.com/us-en/insight-technology-debt-bankrupting>

<sup>2</sup> Road to Relevance: 5 Strategies for Competitive Associations; 61pp., © 2013 Harrison Coerver and Mary Byers

<sup>3</sup>2011. Forrester Research. The Business Impact of Customer Experience.

<https://www.forrester.com/report/The+Business+Impact+Of+Customer+Experience+2011/-/E-RES59072>.

## APPENDIX A – Detail of budget required to properly resource ALA’s technology services

- iMIS Membership Engagement System
  - \$100,000 = Perform an iMIS needs assessment to determine if iMIS is the best solution for ALA.
  - \$90,000 = hire an iMIS Specialist to manage training, recommend new modules, guide implementations, manage the needs assessment and the recommendation, manage the migration to a new system or the streamlining of our iMIS implementation.
  - \$90,000 = Hire a Data Analyst for the Development Office to assist with data extraction projects from the membership, financial, and fundraising databases systems and present data in a usable format that meets their requirements.
  - If we determine that iMIS is the best solution, the cost will be \$500,000 to:
    - Implement task and automation tools.
    - Improve our ability to generate reports and provide them in more usable formats in order to support fundraising, advocacy, membership, and other initiatives.
    - Ensure we have the capability to perform iMIS upgrades in a timely fashion for security purposes and to take advantage of the latest features.
  - If iMIS is not the best solution, the cost will be \$1.7 million to:
    - Run a RFP process for a new Association Management System (AMS) and select a vendor.
    - Implement the new solution with integration to 27 systems.
    - Implement the new system’s automation tools and reports.
    - Ensure we have the capability to perform upgrades in a timely fashion for security purposes and to take advantage of the latest features.
  
- Drupal-based ALA.org websites = \$1.3 million
  - \$150,000 = Hire a Drupal Administrator to support the ala.org sites, new eCommerce/eLearning sites, implement new modules, and perform software and security updates for the 100+ modules, 46 of which are customized for ALA.
  - \$115,000 = Hire 1 Drupal Developer for one year to assist the Drupal Administrator with installing, maintaining, and upgrading Drupal modules and core software.
  - Implement Google Analytics and Tag Manager for the new ALA Store, eLearning, and join-renew-donate sites in order to aggregate data about all of these sites in one place and develop an action plan to integrate the data into decision-making processes and continuous improvement of the user experience.
  - Set up the Google Search Appliance across all ala.org microsites.
  - Shift our focus from building desktop-centric websites and services to new processes that prioritize mobile design and services.
  - \$830,000 = Complete implementation of the eCommerce/eLearning systems:
    - Implement joint student-chapter joins and renewals
    - Complete online corporate joins and renewals, including associate and Exhibitor Round Table memberships.



- Add the ability for donors to direct their donations to more specific goals/funds, e.g. the Disaster Relief Fund to Puerto Rico.
  - Implement alternate payment processes for paying membership dues and donations.
  - Consolidate the join-renew-donate, ALA Store, eLearning, and small events registration into a single shopping cart.
  - Implement the ability to contextually display relevant ALA Store and eLearning items on all ala.org sites.
  - Run a RFP process and select a vendor for a modern, association-wide eLearning platform that integrates with iMIS.
- ALA Connect = \$169,000
  - \$84,500 = Hire an Automation Rules/Informz Specialist to manage ALA's growing list of automation rules, implement new ones, coordinate marketing through Informz, and provide staff training on both automation rules and Informz.
  - \$84,500 = Hire a Personalization Specialist to create personalized dashboards for members, further customize member profiles, implement personalized widgets, and implement personalized data from third-party services in the Higher Logic interface.
- Network Infrastructure = \$2.25 million
  - \$120,000 = Hire a Server Administrator to manage and support the ALA server farm, which currently consists of 100+ virtual servers.
  - Investigate a new single sign-on technology that lets users stay logged in longer and handles authentication from site to site better.
  - Hire a consultant to help us move to a Desktop as a Service environment (DaaS) which will allow us to give staff virtual desktops where the software they use is hosted by a third-party cloud service provider, thereby removing the need for ITTS staff to maintain individual installations on every user's desktop.
  - Purchase all new user devices in order to implement Desktop as a Service. This will let us buy less expensive devices and enable remote office work for \$500 per device instead of \$1,500 per device for 300 users, as well as save us \$100,000 in consulting fees.
  - Hire a consultant to help us move to a Datacenter as a Service (DCaaS) environment which will allow us to host our servers and network infrastructure offsite at a physical data center using the resources of the DaaS provider instead of paying for and maintaining our own.
  - Move remaining software hosted on ALA servers, such as the financial system, to cloud-based systems.
  - Implement a new, cloud-based Help Desk support system that allows ticketing across ALA units with remote access.
  - \$50,000 = Evaluate and implement a cloud-based, collaborative file storage system that can be used by all staff remotely.
  - Research and implement a Digital Asset Management (DAM) solution for storing, organizing, and retrieving all media assets and managing digital rights and permissions.
- Department-wide

- \$140,000 = Hire a Project Manager to track major ITTS projects, monitor for delays and problems, and help mitigate issues for resolution. Tasks include representing users' and the organization's interests; working to maintain project timelines; carrying out and monitoring risk assessment; making sure that all the aims of the project are met; and making sure the quality standards, including accessibility requirements are met.
- \$100,000 = Hire a Systems Integration Specialist to take the big picture view of our various IT systems and make sure they're working together for maximum efficiency, to reduce duplication of effort, and to offer the best possible user experience. When a new system is implemented, this person will be responsible for making sure it is seamlessly integrated with existing systems.
- \$150,000 = Hire a consultant to perform a complete Process Analysis of every workflow and interaction that touches any IT system and recommend new processes and procedures to streamline workflows, reduce manual entry of data, ensure data integrity, improve the user experience, and ensure ALA is using its technologies to maximum effect.