



ORGANIZATION

**INDIANA HOUSING AND COMMUNITY
DEVELOPMENT AUTHORITY**

INDUSTRY

PUBLIC HOUSING

DIVISION

**EMERGENCY RENTAL
ASSISTANCE PROGRAM**



CASE STUDY

IHCDA Sends Hundreds of Personalized Emails in Seconds with APEX

Background: In response to the devastating economic impact of the COVID-19 pandemic, Congress passed two phases of nationwide rental assistance totaling of \$47 billion. In conjunction, the Indiana Housing and Community Development Authority (IHCDA) began administering its Emergency Rental Assistance (IERA) Program in 2021 as a buffer to the exacerbated affordable housing crisis. To-date, the program has provided over 36,000 Hoosier households more than \$378 million of rent and utility assistance. The IERA program continues to accept new applications and remains a beacon of hope and stability across the State, decreasing evictions, increasing housing stability and preventing homelessness.

Challenges: With 92 counties actively participating in the program, the IERA team has faced the daunting task of processing an extensive and ever-growing queue of applications while concurrently reviewing large volumes of data related to current rental assistance beneficiaries. Given the capricious economic landscape, the imperative to optimize efficiency with respect to daily administrative duties is essential to achieving the primary goal of maximizing available funding resources against the backdrop of impending eviction and utility disconnection deadlines. Notably, managing the intricacies of thousands of check payments, including daily email communication with numerous applicants and vendors regarding overpayments and uncashed checks, emerged as a particularly formidable challenge. The prevalent methods of program-related outreach involved onerous manual efforts, severely constraining the team's capacity to meet critical, time-sensitive deadlines.

Solution: To address the challenges faced by IHCD, Integrative Analytics employed its proprietary Automated Personalized Email Exchange (APEX). APEX is a proprietary Excel-based solution that enables IHCD to provide correspondence to hundreds of participating tenants and vendors seamlessly and in mere seconds. Core features of the APEX include:

Created from Existing IHCD Excel Databases: IHCD meticulously manages a centralized Excel workbook with comprehensive line-item records for every IERA program participant. These records include details such as names, application numbers, affiliated vendors, payments issued, corresponding check numbers and outstanding balances with respect to uncashed checks and assistance overpayments. Furthermore, line-item data is intricately linked to external workbooks, routinely updated by various members of the IHCD team as new information emerges. Leveraging the repository database as its foundation, APEX was crafted to ensure that all correspondence precisely reflected the latest program-related information.

Enhanced Line Item Filtering Capability: APEX integrates an input-driven assumptions tab that empowers IHCD with the flexibility to derive correspondence groups based on diverse parameters. Examples of such criteria include:

- ❖ Payment amount range
- ❖ Applicable federal funding program (ERA1 vs. ERA2)
- ❖ Vendor name or type
- ❖ IERA payment date
- ❖ Months associated with IERA payments
- ❖ Amount of uncashed IERA check amounts
- ❖ Overpayment balances

The advanced filtering capability of APEX allows for precise customization, ensuring that correspondence groups align with criteria specified in the user-input assumptions tab. The robust adaptability of APEX affords IHCD a streamlined approach to communication management, enhancing efficiency and accuracy in correspondence.

Ability to Include Actionable Deadlines: Beyond its capability to generate highly-customized correspondence lists, APEX empowers IHCD to define actionable deadlines and associated requests within email communications. The inclusion of this feature not only increases the level of correspondence personalization but also facilitates prompt and targeted responses. Requests may pertain to:

- ❖ Cashing or depositing unused emergency assistance checks
- ❖ Returning funds related to overpayment balances
- ❖ Providing account ledger documentation for program applicants
- ❖ Furnishing supporting documentation for pending cases

Dynamic Email Content Creation: Incorporating the entirety of criteria defined in the Assumptions Tab, APEX dynamically generates the body of prospective correspondence. In this regard, it is important to note that compared to popular online batch correspondence distribution services that generate emails with identical content, APEX offers the same benefits of seamlessness and instantaneous delivery with the capability to deliver personalized messages to large groups containing information unique to each recipient. APEX achieves this by leveraging Visual Basic, the programming language implemented by Microsoft to develop Office applications, as well as various Excel conventions such as:

- ❖ Functions, such as CONCATENATE, VLOOKUP, and IF statements to pull relevant information from the Excel database.
- ❖ Implementation of conditional logic within formulas to personalize email content based on specific data criteria.
- ❖ Dynamic cell references to create a flexible and responsive system, ensuring that email content is automatically updated as the underlying data in the Excel database changes.

Deployment of Various Automation Levels: The dynamic interface of APEX is driven by Microsoft Visual Basic for Applications (VBA) scripting, empowering IHCDAs to specify the level of automation that best suits their needs. The result is a communication workflow that is not only highly customizable but also significantly reduces the manual effort traditionally associated with email distribution. For example, the IHCDAs team might choose to:

- ❖ Completely automate the email distribution process, including scripting of the email body and transmission of related correspondence
- ❖ Partially automate the correspondence process, such as automatically generating the body of emails through APEX and manually sending emails; or manually scripting the content of emails and automating the email distribution process.

Scalability and Maintenance: APEX is designed with scalability in mind, ensuring that it can accommodate a potential increase in the number of applicant line item records without compromising performance or automation functionality. Furthermore, copious in-cell comments and notations as well as data validation checks facilitate easy maintenance and troubleshooting for IHCDAs, promoting long-term usability of the dynamic email generation system.

Salesforce Integration: APEX boasts comprehensive functionality, ensuring effortless access to external data sources for enhanced communication capabilities. The model interfaces seamlessly with Salesforce applicant files, enabling users to access and incorporate pertinent applicant details directly into their email communications such as the unique 15-digit record ID. This integration ensures that correspondence is not only personalized but also reflective of the most current information available in the Salesforce system. By offering these diverse external data access points, APEX maximizes its utility, providing users with a comprehensive and efficient communication solution.

Real-Time Reporting and Email Response Tracking: To enhance the tracking and response management process, a strategic element of APEX is the incorporation of a "Status" column. This column serves as a dynamic indicator of the response status for each email recipient, allowing for the real-time monitoring of engagement. The status column can include categories such as "Not Responded," "In Progress," and "Completed" to denote the various stages of recipient interaction. As recipients engage with the emails, their responses dynamically update the corresponding status in the Excel model. Whether acknowledging receipt, providing requested documentation, or completing a specified action, the status column captures these responses in a systematic and organized manner. Moreover, this status information can be aggregated and tabulated in a dedicated statistical tab within the Excel model. The statistical tabulation offers a comprehensive overview of response trends, allowing for quick insights into the effectiveness of the email distribution campaign, areas requiring follow-up, and overall engagement metrics. This approach not only streamlines communication but also provides valuable data for continuous improvement and strategic decision-making.

Results:

Streamlined Communication Workflow: The implementation of APEX for IHCDCA has yielded substantial benefits. To-date, APEX has generated thousands of email notices and related follow-up correspondence seamlessly, showcasing the breadth of its versatility and effectiveness.

Efficient Data Handling: By automating the process of compiling and organizing data for email distribution, APEX eliminates the need for repetitive, time-consuming and error-prone manual data entry. This achieves the IHCDCA administrative objective of ensuring data accuracy and reducing the risk of errors.

Personalized and Timely Outreach: APEX's ability to dynamically generate personalized email content based on individual line item data enables more targeted and effective communication. This, in turn, enhances the program's ability to reach applicants with timely and relevant information.

Quick Response to Changing Conditions: With APEX, staff can promptly adapt email content and distribution strategies in response to changing program requirements or external factors. This agility contributes to a more responsive and effective outreach process.

Resource Optimization: Labor hours that were previously allocated to manual email distribution can now be redirected towards more critical and strategic aspects of program management, maximizing the overall efficiency of the program staff.

Enhanced Reporting and Analysis: APEX facilitates the tracking and analysis of email responses, allowing staff to gain valuable insights into recipient engagement. This data-driven approach supports informed decision-making and continuous improvement.

Reduced Workload During Peak Periods: During peak periods of program activity, such as application deadlines or increased correspondence volume, APEX handles the increased workload without a proportional increase in manual effort, ensuring that staff can manage high demand periods more effectively.

Ownership and Regulatory Compliance: IHCDCA maintains highly sensitive and confidential applicant information. As such, it is critical that the agency prioritize security, customization and compliance in all communication. While services such as Intuit Mailchimp and Housecall Pro are affordable online platforms for mass email distribution, APEX offers several critical advantages over these solutions. In particular, IHCDCA maintains complete control over the storage and handling of sensitive information. This reduces the risk associated with relying on external platforms, providing a higher level of data security, which ensuring compliance with data protection regulations.

Conclusion: The implementation of the Integrative Analytics APEX Model has transformed IHCDCA's approach to communication and recovery efforts related to applicant overpayments and uncashed checks. In harnessing the power of an automated Excel-based mass email system for its Emergency Rental Assistance Program, IHCDCA has accomplished its goals of streamlining communication, resulting in greater program efficiency through the strategic redirection of valuable team hours. Through the innovative approach developed by Integrative Analytics leadership, IHCDCA has enhanced the capacity of the IERA program to reach more families in need, ensuring that its efforts are better aligned with the overarching goal of providing timely and impactful assistance to those facing housing insecurities.