The Critical Importance of User Adoption

Today we live in a world in which firms in various types of industries are adopting mobile technology to facilitate business practices that allow for faster, cleaner data capture & access, streamlined processes and improved productivity for employees not constrained by paper. This technology has become increasingly flexible, with the advancements made by mobile solutions firms. In fact, this flexibility has become a key factor that has pushed companies to switch from paper-based to paper-free procedures.

Mi-Co, the Mobile Information Software Company, a 13-year leader in Tablet solutions, has analyzed what makes these projects successful and when they fail. The summary of the analysis is that the majority of Mobile Data Capture projects fail not due to technology reasons, but primarily due to poor end-user adoption, for a number of reasons detailed below.

User Adoption Failure Points

Mi-Co analysis has found that majority of Mobile Data Capture projects fail due to poor user-adoption (see graph). There are many reasons for poor adoption that include, but are not limited to:

- User-interfaces that are not paper-like, intuitive & friendly
- Limited involvement of end-users in the design process
- Lack of effective iterative testing by end-users
- Insufficient training of end-users prior to launch
- Absence of parallelized processes during initial launch
- Technology that forces end-users to change their processes
- And, lack of incentives & benefits for end-users in the project

After 13 years of experience, Mi-Co has developed very effective ways to manage these projects such that they maximize for user adoption success, whilst meeting other needs enterprises have such as security & integrity of data, managing a complex device landscape, centralized management and more. Mi-Co’s best practices, tips and methods in minimizing user adoption risk include, but are not limited to:

- Strong User Training programs (outlining need for project, identifying benefits, goals, specialization)
- Effective communication feedback loops (to track progress pre & post-launch, affect design)
- Superior ROI measurement tools & methodologies (to measure success & communicate it back)
- Incredibly flexible technology that can adapt to any use case & changing process (more info below)
Flexibility & Usability are KEY to Mobile Data Capture Success

The proliferation of Tablets in the marketplace and trends like BYOD (Bring Your Own Device), along with changing business processes that require one business unit to capture photographs, but another to use voice recognition input for instance, have made Flexibility a key attribute of the Mobility software platform allowing any enterprise to future-proof and meet evolving needs. This flexibility in technology allows employees with all levels of technological skills to use mobile data capture in a user-friendly way that can still evolve with the organization.

Some ways that data can be captured electronically (online and offline) with Mi-Forms technology are:

- **Touch input**: employees can quickly input data onto their electronic forms with either their fingertips or a digital pen. Some elements of mobile forms that work with touch input are checkboxes, pick lists, date pickers, and toggles.
- **Handwriting recognition & inking mechanisms**: users can handwrite notes onto a Tablet PC with a Stylus, and Mi-Forms will automatically prompt users to clarify unclear data to prevent errors. Then, the data is then digitized and automatically transferred to the company’s main server.
- **Keyboard text input**: users can also type data onto their e-forms using laptops and PC keyboards, improving data accuracy and reducing input time.
- **Speech recognition & recording**: users can record notes by speaking out loud, and Mi-Forms will record the audio and transcribe notes in a neat and easy-to-access manner; Mi-Forms can even accept voice commands in conjunction with Voice Recognition software providers.
- **Time stamping**: users will know precisely when a form was last updated, in order to ensure the most up-to-date information is being used.
- **Photo capture & annotation**: pictures can be attached to mobile forms using the camera on the device, visually substantiating the form’s preexisting data and permitting easy annotation.
- **Barcode scanning**: users have the ability to scan documents, packages, badges, etc... in order to facilitate faster identification and to reduce task completion time.
- **GPS stamping**: Mi-Forms are stamped with a time, date, and location at point of data creation, speeding up the data input process.
- **RFID capture**: Mi-Forms can utilize RFID technology to enable faster form completion.

Some of these options give employees the ability to continue using their current data input methods, but with a more accurate and efficient method of doing so, eliminating costly data transfer errors and inconsistencies. This reduces the learning curve associated with introducing new technology, but still reduces the time required to input data.

Finding a suitable type of mobile data processing technology depends heavily on the firm itself, in addition to the industry in which the firm operates, the firm’s nature of work, and the technological background of its employees. Overall, Mi-Co’s survey in 2012 of 123 organizations, found that most e-forms users preferred keyboard, handwriting recognition/inking, and touch data entry methods over speech recognition entry, at that time.
However, business needs vary greatly from firm to firm. Therefore, mobile data firms have created flexible
data solutions that can be used on several different types of software and hardware. Now, one company can
use the same e-forms on several different types of devices, improving the efficiency and flexibility of
these e-forms. Companies have the flexibility to use platforms with which they are most accustomed to for
different jobs, further easing the new process implementation. This technological flexibility is highly valued
by companies, as found in Mi-Co’s survey; the survey unearthed that firms place an extremely heavy
emphasis on technological flexibility, followed by enterprise architecture and scalability, and price when
selecting a type of mobile-forms technology.
Moreover, this flexibility must span across all types of devices—and it does. Data capture firms now have the ability to create an electronic form that can be used on an Android Slate, an iPhone, and a Microsoft Surface, simultaneously. This is extremely beneficial for companies that have varied device preferences. Mi-Co’s survey found that **iPads and iPad Minis are the preferred business touch device by over half of surveyed organizations, however these same organizations also hold Android and Windows tablets in high regard.**

**What is your organization's tablet preference?**

<table>
<thead>
<tr>
<th>Tablet Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPad/iPad Mini</td>
<td>55%</td>
</tr>
<tr>
<td>Android Tablet</td>
<td>30%</td>
</tr>
<tr>
<td>Windows 8 Tablet (Non-Microsoft)</td>
<td>15%</td>
</tr>
<tr>
<td>Microsoft Surface Windows 8 Tablet</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Conclusion**

The importance of user adoption can't be overemphasized, in playing the key role in success of mobile solution projects. People have been using paper for thousands of years, and if your mobile solution is harder than paper to use, they will reject it and go back to paper. Think carefully about the usability & flexibility of the mobile technology platform you choose to work with, as well as the number of years of experience your vendor has to effectively support you and provide best practices expertise. This will put you on a path to successful mobile solution projects and on a journey to a paperless, efficient & productive world!

**Implementing Mobile Solutions & About Mi-Co**

For companies implementing, or thinking of deploying, Tablet e-Forms for their field personnel, Mi-Co offers online demonstrations, evaluation copies of Mi-Forms software, and project consultation services. To get started, please visit [http://www.mi-corporation.com/products/demos-and-download/](http://www.mi-corporation.com/products/demos-and-download/) or contact Mi-Co at 866-610-1942 or [info@mi-corporation.com](mailto:info@mi-corporation.com).

Mi-Co is the developer of Mi-Forms, the market’s leading Tablet e-Forms software platform that has been used for 13 years. Mi-Co provides solutions for smart, flexible mobile e-Forms data collection in a variety of industries, and has worked with customers like AT&T, the United Nations, Sutter Health and many others. For more information on Mi-Co, please visit [www.mi-corporation.com](http://www.mi-corporation.com).