NanoArk CORPORATION

*Preserving the past, Insuring the future...*

# NanoArk's Image Capturing & Digital Archiving Services

Long-term preservation of vital documents is a fundamental component of what we do at NanoArk. In previous months we have discussed our patented Waferfiche™ technology and the benefits of archiving documents on a medium tested for durability and sustainability. Apart from document storage and preservation on Waferfiche™, we have also developed products and services for image capture, restoration and dissemination of documents and records.

## IMAGE PRESERVATION COMPETENCIES

### IMAGE CAPTURE

Image capture involves the digitization of physical documents (paper, microfilm, microfiche, etc.) by means of commercially available digital scanners. For documents greatly aged, fragile, or needing specialized handling, NanoArk provides image capturing services that includes the expertise of professional document preservation consultants who are on NanoArk's team. Often the image capture can be done on site at NanoArk's main office. However, image capture resources at customer's site is possible.

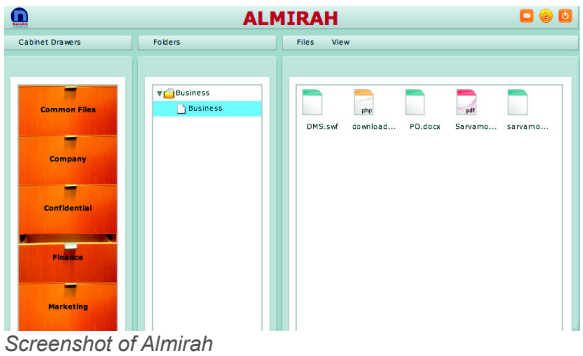

*(Top): Scanned image of palm leaf with illegible text due to low contrast. (Bottom): Restored image of palm leaf with discernable text.*

### RESTORATION

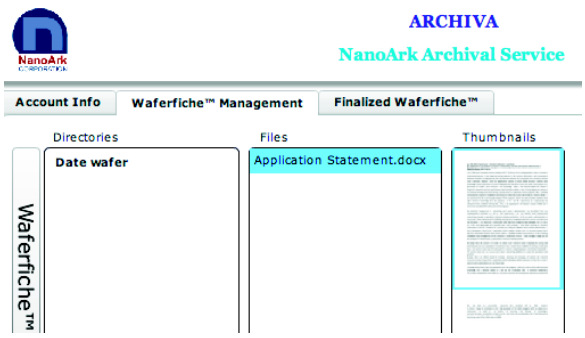
It is not uncommon for images, especially those captured from old microfilm/microfiche, or scanned images of type writer documents to have variations in quality when converted to digital format. To counter the negative effects of image capture, such as illegibility, blurriness, noise, fading, over exposure, etc., NanoArk possesses the expertise to enhance poor quality images via proprietary image processing techniques.

### DISSEMINATION

When the image restoration process is complete, the final stage in image restoration and preservation is making the stored or archived information available and easily accessible to clients. To accomplish this, NanoArk created the user-friendly Document Management System called *Almirah*, which enables users to share documents residing on their own server with up to three other users. The documents are secure behind authorization algorithms and an encryption enabled database. *Almirah* is a personal, small business virtual filing cabinet application that allows for logical, "drop and drag" organization with no software training required. For customers wishing to archive their electronic documents off site NanoArk created *Archiva*, a web based service providing secure servers where files can be uploaded and reviewed interactively by customers. Files can also be managed, organized, reviewed and metadata operations can be executed and entered, storing the data in an XML format.




*Screenshot of Almirah*




*Screenshot of Archiva*

# Costumer Projects in the University Market

## Transcripts Archived on Waferfiche™

The registrar's office at the Rochester Institute of Technology has started to archive older student transcript records on Waferfiche™. These transcripts had originally been archived on Microfilm; however due to the well known problems associated with Microfilm, namely incorrect lighting and exposure during creation and fogging of microfilm due to storage conditions not being stringently controlled, many of the transcripts had deteriorated.

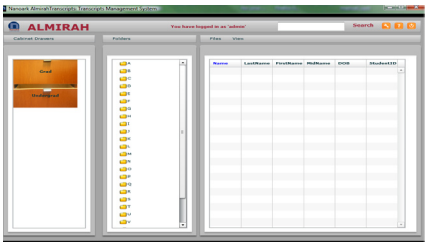
NanoArk provided the end to end service of converting the Microfilm rolls into digital images, performing necessary image restoration, creating metadata, and ultimately archiving the images on Waferfiche™. The images needed considerable restoration before being converted to binary format for transferring on to Waferfiche™.

The first phase of the project was completed with ten years worth of student transcript records being archived on about twenty two Waferfiche™. The convenient USB compatible flash memory on the Waferfiche™ contains all the images in a searchable database, searching based on five fields of metadata. This additional convenience has made it very easy for the registrar's office to easily locate documents while also being sure that they are archived on stable long lasting media that can be stored in general office environment.


## Transcripts stored in Almirah

The registrar's office at SUNY Geneseo plans to archive all their old student transcript records on Waferfiche™. As a first step they have elected to store the images in binary format in NanoArk's lightweight, intuitive, secure, and searchable database called *Almirah*.

NanoArk provided the end to end service of converting the paper records into digital images, creating metadata, and storing the records in Almirah. The records were organized in Almirah in separate drawers for Undergraduate versus Graduate records. Each drawer contains folders, one for each letter of the alphabet. The individual records are contained in the folder. Five fields of metadata were created for each record. The data is searchable on any of the five fields of metadata. The metadata can be edited if needed. The database is shareable between four users with one user acting as the administrator. New records can be added, and unwanted records deleted at the user's convenience. The next step is to archive the binary images on Waferfiche™ for long term preservation.




# A Message From Our CEO

by Dr. P.R. Mukund

*The Case for Digital Records Storage*

It is common knowledge that when a document is digitized and stored in digital form, be it an image or some other format, the actual information is stored in the form of 1s and 0s. It takes the right software to reconstruct the image. Therefore, transition and migration of formats over time is critical.

This is where an archiving technology such as NanoArk's Waferfiche™ technology that requires only illumination and magnification for information retrieval offers a better and more permanent alternative. However, one cannot underestimate the value of digital storage for ease of search and retrieval.

With this in mind NanoArk offers very easy to use document management software tools such as *Almirah*. This also is the stepping stone to permanent archiving in Waferfiche™ technology. At NanoArk we offer end to end solutions in digitization, indexing, and digital document management. Please contact us for a free demonstration and quote of our digital document management and permanent archiving technologies.

# Upcoming Conferences: March 2010

**March 2-4**, Search Marketing Expo-SMX West, *Santa Clara, CA*, Third Door Media, http://searchmarketingexpo.com/west

**March 9-10**, Managing Social Media, *Calgary, AB*, The Canadian Institute, http://canadianinstitute.com/socialmedia.htm

**March 14-18**, Enterprise Data World 2010, *San Francisco, CA*, Wilshire Conferences, http://edw2010.wilshireconferences.com

**March 17-18**, Library Technology Conference 2010, *St. Paul, MN*, Organizing Committee, http://digitalcommons.macalester.edu

**March 18**, 8:30 AM - 4:30 PM, ARMA All-Day Education Conference, *NY, NY,* ARMA NYCMetro, http://armanyc.org/w/?p=2050

**Mar 19, 2010**, Project Management for Archivists, *Amherst, MA* The Society of American Archivists, http://saa.archivists.org

**March 22-26**, Search Engine Strategies, *New York, NY*, Incisive Interactive Marketing LLC, http://searchenginestrategies.com/newyork

**March 29-31**, 11th International Conference on Multimedia Information Retrieval, *Philadelphia, PA*, ACM, http://riemann.ist.psu.edu