

Standish Technologies International

# Revitalizing your legacy software investments

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### CREATING A NEW LIFE

#### FOR AGING, OBSOLETE

#### OR MAINFRAME SOFTWARE

Legacy software. Those custom-designed programs that were state-of-theart years ago but are now a thorny cog in the works–incompatible with other programs and difficult to use, upgrade or maintain. They're our specialty.

## Adds Value

Here's how we can recover your legacy software investments.

#### PORTABILITY

Move your legacy software from a mainframe environment to a convenient platform, workstation or laptop.

#### USABILITY

Bring your legacy software into the world of Windows. Watch it interact smoothly with other Windows-compatible office tools.

#### COMPATIBILITY

Integrate your software with other digital devices-scanners, point-of-service registers, production control devices, and more.

#### MAINTAINABILITY

Make your legacy software easy-to-maintain by documenting its functionality and, when necessary, reverse engineering its logic.

#### UPGRADEABILITY

Transform your legacy software from a one-of-a-kind solution into an office standard with upgrade capability.

## Too Valuable to Discard, Too Difficult to Use

**Y**our legacy software investments may have several shortcomings. Do these sound familiar? Check all that apply.

Obsolete applications are required to operate vital programs.

Mainframes are required to run powerful programs that would be more convenient on a desktop or laptop computer.

Semi-automated applications require hand-calculations that should be fully automated.

Customized programs are incompatible with other Windows software.

"Mysterious" software that must be reverse-engineered to learn its logic.

Aging porting programs that transfer data from mainframes to other computers.

Database information that's crowded into restrictive fields or obscure codes.

Custom software developed by long-departed programmers that can't be upgraded.

Standish Technologies International can bring your legacy software to life by making it compatible with current platforms, applications and modern software features.

## **Business Case: Energy Cost Calculations**

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The utility's aging program was written in legacy Fortran code for mainframe.

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We moved it to a PC. upgraded its Fortran code and added Windows compatibility.

The public utility executives came to Standish looking for a way to port a power plant's energy cost calculation software from a mainframe to a workstation.

We exceeded their expectations.

Standish engineers began by converting the legacy mainframe-based Fortran program into a newer, more powerful Fortran code for a PC. Then we added a Windows interface so any experienced operator can use the program–no special training required. And finally, we used new array tools to make the program completely automated–eliminating hand-calculated entries and the unnecessary risk for error. Adding on-line help was an added bonus.

The result? One happy customer.

## **Business Case: Payroll Data Entry System**



The manufacturer's legacy software required an obsolete applications program.

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We preserved its functionality while adding Windows features and maintainability.

This mid-sized manufacturer was getting by with a DOS payroll system, but it was difficult to learn, cumbersome to manipulate and impossible to integrate with other Windows programs used throughout the office.

And it was based on commercial software that was no longer supported.

Standish engineers began by reverse-engineering the software's functions-learning how the custom-written code gathered, analyzed and reported data. Once the program was dissected, we documented it and designed Windows-compatible screens, menus, reports and on-line help. The resulting program will remain usable, adaptable and maintainable for years to come.

Another satisfied customer. Another excellent business reference.

# **Business Case: Nuclear Software Compliance**

It was costing the client substantial time and effort to comply with all the "verification and validation" (V&V) mandates every time they changed a piece of software–even if programmers changed only a single number. It's a Nuclear Regulatory Commission requirement.

Our solution? We restructured the software.

Standish engineers began by identifying the parts of the programs, the data, most likely to change on a routine basis. Then they divided the programs into chunks, separating the programs' instructions from the data. Now, with the new structure, engineers can change the data routinely without disturbing the programming code–and without the expense of V&V compliance.

Extensive tests have confirmed that the new programs work as promised, performing their tasks completely and accurately.

Standish software complies with the following Nuclear Regulatory Commission requirements.

- NUREG/BR-0167: Software Quality Assurance Programs and Guidelines
- Regulatory Guide 1.152: Criteria for Programmable Digital Computer System Software in Safety-Related Systems of Nuclear Power Plants
- NUREG/CR-4640 (PNL-5784): Handbook of Software QualityAssurance Techniques Applicable to the Nuclear Industry

## **About Standish Technologies International**

**A** world of service and a standard of excellence-that's Standish Technologies International.

Whether it's software design, implementation, engineering or business development consulting, our engineers are ready to meet the challenge.

With headquarters in Deerfield Beach, Florida and a satellite office in Pittsburgh, PA, Standish is conveniently located to serve your needs.

We're at your service.

Standish Technologies International

#### HEADQUARTERS:

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