THE $1,000,000 DOCUMENT

Why Good Documentation Can Make or Break Your Digital Transformation

© PITSS America LLC

AGENDA

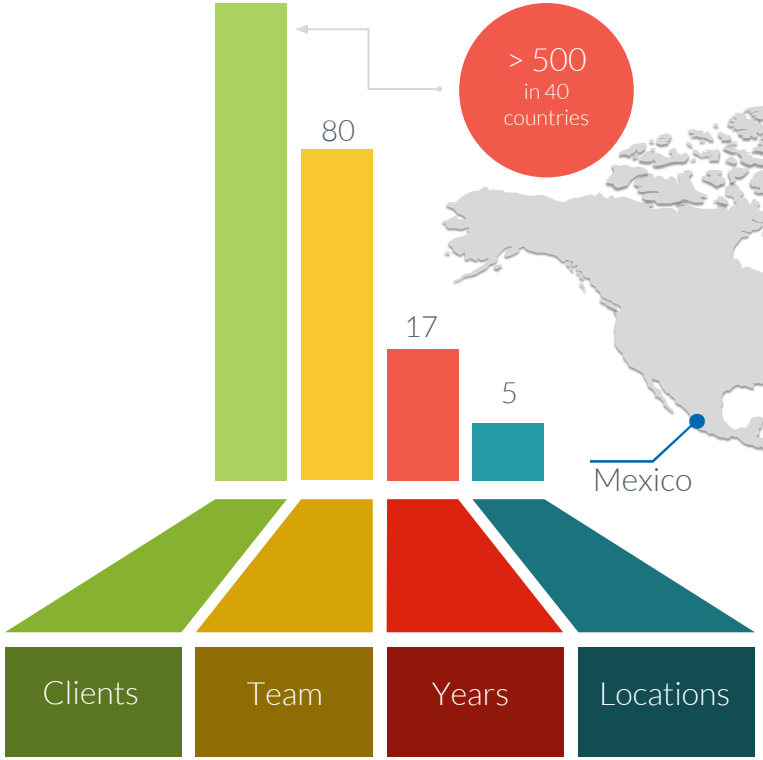
The $1,000,000 Document

- **About PITSS**
- **Documents: To Thrive and to Drive**
  - Thriving: Get Value from Legacy Systems
  - Driving: Successful Legacy Digital Transformation
- **How Prepared Are You?**
- **How We Can Help**

© PITSS America LLC

ABOUT US

No one knows Oracle Modernization like PITSS



© PITSS America LLC

Enterprise Architecture

We enable customers to pursue cloud deployments, fast-moving modern development practices, vendor unlocking and more with our architectural consulting practice.

Mobile

Modernizing our industry clients with needs ranging from hand-held WinCE scanners all the way up to iPads and Android devices.

HTML5, Java and .NET

Successful modernization to a variety of application frameworks, including ADF, Spring, ASP.NET, AngularJS, jQuery UI, and more.

SOA

Our earliest modernizations up to today target SOA, leveraging business logic over web services and OSS.

Oracle Forms

Collective experience covers everything from Forms 2.0 right up to 12c. Expert in all Forms-related technologies.

1

Documentation: To Thrive and to Drive

Documents to Thrive and to Drive

What Makes Documentation Important

- **Thrive**
  - Smooth Out Operations
  - Reduce Maintenance Labor
- **Drive**
  - Plan and Deliver
  - Achieve Consensus and Accuracy in Goals

© PITSS America LLC

2

Thriving: Get Value from Legacy Systems

THRIVING: GET VALUE FROM LEGACY SYSTEMS

Why Document a Legacy System?

- **Value in Legacy Investments**
  - Generally, 10 - 20% of legacy systems code delivers 80%+ of the business value
  - Legacy digital transformation is all about knowing what you want to maintain and preserve
  - To know what to keep, you need exhaustive detail about the system
  - … How real users actually interact with it
  - … Where the code is that gives the value

© PITSS America LLC

THRIVING: GET VALUE FROM LEGACY SYSTEMS

Why Document a Legacy System?

- **A Rock and a Hard Place**
  - Getting that detail about usage and value can be time-consuming
  - … User interviews, source code audits, and manual code review
  - … Original developers are not always available
  - Working without it passes over the value of crucial hidden components
  - … Risk of under-serving new business processes that touch the system
  - … Risk to legacy transformation projects that need a clear picture of the system

© PITSS America LLC

THRIVING: GET VALUE FROM LEGACY SYSTEMS

Cost-Effective Legacy Documentation

- **Getting The Right Documentation Quickly**
  - For more than 10 years, PITSS are the legacy digital transformation experts
  - Your software's health, business value, and re-usability can be evaluated almost automatically. This approach allows you to expertly identify the critical elements of your legacy system

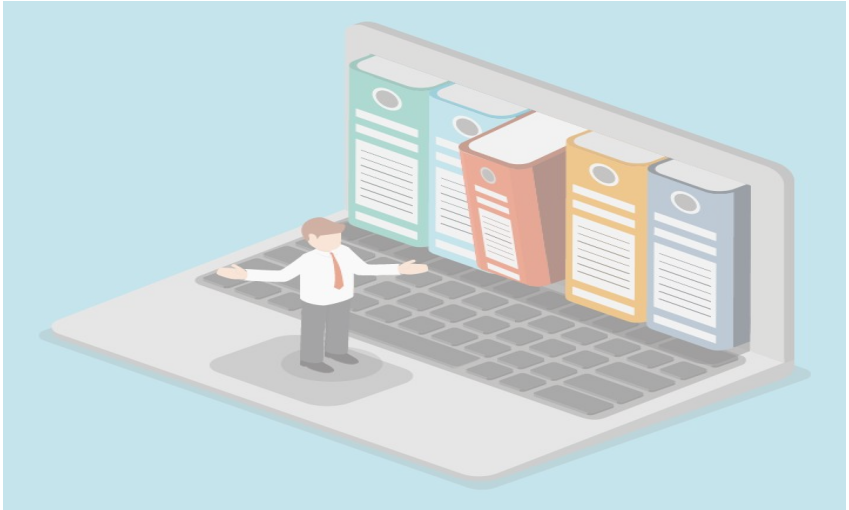
- **Lower Maintenance Costs**
  - Automated source code analysis condenses functionality and simplifies code documentation
  - A semi-automated approach saves on the time cost of manual investigation
  - Provides confidence and scope reduction for the maintenance of your legacy system

© PITSS America LLC

THRIVING: GET VALUE FROM LEGACY SYSTEMS

Cost-Effective Legacy Documentation

- **Results: Empowered Teams, Lower Overhead**
  - Your team gets the source code documentation needed to run systems with less effort
  - You get the architectural and health documents to plan the long view of your legacy system

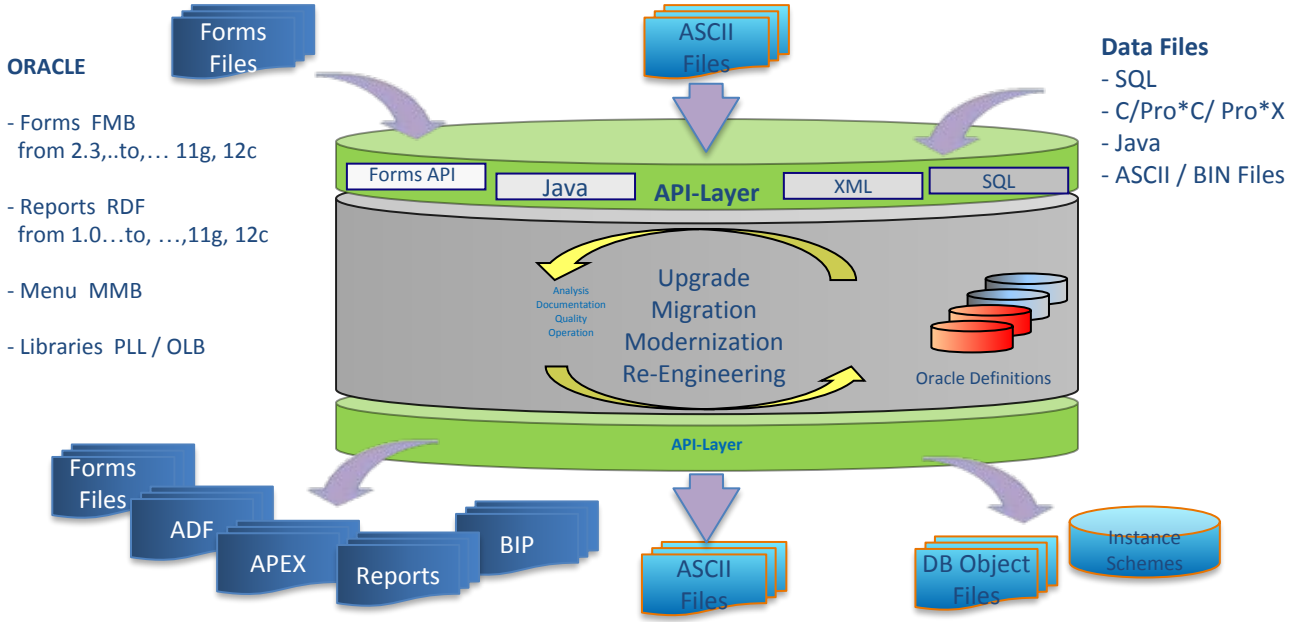


© PITSS America LLC

THRIVING: GET VALUE FROM LEGACY SYSTEMS

How It Works

- **PITSS.CON, Our Expert Tool Suite**
  - Source Code Re-Engineering and Analysis modules

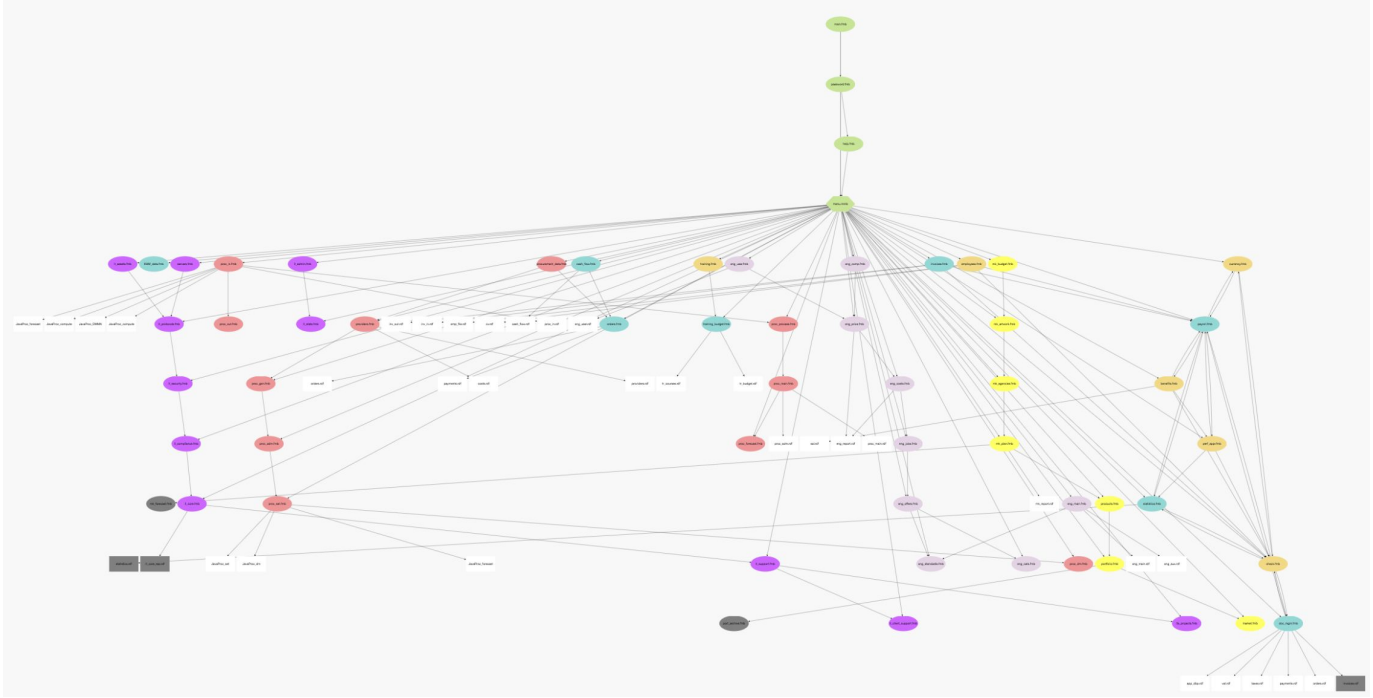


© PITSS America LLC

THRIVING: GET VALUE FROM LEGACY SYSTEMS

How It Works

- **PITSS.CON, Extended Project Health and Complexity Analysis**



THRIVING: GET VALUE FROM LEGACY SYSTEMS

How It Works

- **PITSS.CON, Source Code Commenting and Quality Documentation**

```
                              , p_prior       IN dss.orders.prior_code%TYPE
                              , p_orgrole     IN dss.orders.orgrole_id_customer%TYPE
                              , p_type        IN VARCHAR2
                              , p_last_status IN VARCHAR2
                              , p_last_date   IN DATE
                              , p_hist        IN VARCHAR2) RETURN DATE;

END PKG_AAR_QUERIES;

/

create or replace PACKAGE BODY PKG_AAR_QUERIES AS
------------------------------------------------------------------
--  OBJECT:         PKG_AAR_SV_DETAILS
--  TYPE:           PACKAGE BODY
--  PROJECT :       [illegible] MVP Development
--  CREATED BY:     [illegible] - PITSS America LLC
--  CREATION DATE: 04/18/2017
--  COMMENTS:
--  VERSION:        1.0
--  CHANGES:
------------------------------------------------------------------
   FUNCTION func_is_not_error ( p_orditm_id IN dss.ordered_items.id%TYPE
                              , p_status    IN VARCHAR2) RETURN NUMBER AS
   BEGIN
     IF p_status IS NOT NULL THEN
        IF NVL(p_status,'IS ERROR') <> 'IS ERROR' THEN
           RETURN 1;
        ELSE
           RETURN 0;
        END IF;
     ELSE
        IF UPPER(pkg_orders.get_orditm_status (p_orditm_id)) <> 'O' THEN
           RETURN 1;
        ELSE
           RETURN 0;
        END IF;
     END IF;
   END func_is_not_error;

   FUNCTION func_below_minimun ( p_ordsch_id IN dss.ordered_item_schedules
      lnum return dss.ordered_item_schedules.below_minimum%TYPE;
```

```
/*****************************************************************************/
/*                          ON SITE functionality                            */
/*****************************************************************************/

   FUNCTION func_on_site_request_fx ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_request_fx
   BEGIN                                                                                                 --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_request_fx ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN func_qry_dt_svrequested ( p_ordsch_id => p_ordsch_id );
      END IF;

   END func_on_site_request_fx;

   FUNCTION func_on_site_request_ro ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_request_ro
   BEGIN                                                                                                 --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_request_ro ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN NULL;
      END IF;

   END func_on_site_request_ro;

   FUNCTION func_on_site_ord_fx ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_ord_fx
   BEGIN                                                                                              --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_ord_fx ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN func_qry_dt_svordered ( p_ordsch_id => p_ordsch_id );
      END IF;

   END func_on_site_ord_fx;

   FUNCTION func_on_site_ord_ro ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_ord_ro
   BEGIN                                                                                              --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_ord_ro ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN NULL;
      END IF;

   END func_on_site_ord_ro;

   FUNCTION func_on_site_ship_fx ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_ship_fx
   BEGIN                                                                                               --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_ship_fx ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN func_qry_dt_svshipped ( p_ordsch_id => p_ordsch_id );
      END IF;

   END func_on_site_ship_fx;

   FUNCTION func_on_site_ship_ro ( p_ordsch_id IN dss.ordered_item_schedules.id%TYPE ) RETURN DATE IS --This function will be used instead of func_qry_dt_bfl_ship_ro
   BEGIN                                                                                               --that enables the ON SITE functionality.
      IF func_below_minimun ( p_ordsch_id => p_ordsch_id ) = 'Y' THEN
         RETURN func_qry_dt_bfl_ship_ro ( p_ordsch_id => p_ordsch_id );
      ELSE
         RETURN NULL;
      END IF;
```

THRIVING: GET VALUE FROM LEGACY SYSTEMS

Example: Reduced Risk from an IT Gatekeeper

- **Risks**
  - Strongly dependent on one person or team for success
  - Control flow of knowledge
  - If lost, investigated by new teams and developers
- **Removing gatekeeper is best practice**
- **Create accessible information beyond one person or team**
  - Steward of documentation
  - Path to find and understand information

© PITSS America LLC

3

Driving: Successful Legacy Digital Transformation

DRIVING: SUCCESSFUL LEGACY DIGITAL TRANSFORMATION

Why Do Documents Drive Digital Transformation?

- **The Reasons to Transform Are Clear**
  - Competitive Opportunity
  - Numerous Risks
- **Reduce Risk, Reduce Time, Reduce Effort**
  - Planning is Vital
  - Documentation is Planning

© PITSS America LLC

DRIVING: SUCCESSFUL LEGACY DIGITAL TRANSFORMATION

Why Do Documents Drive Digital Transformation?

- **Documents Enable All Team Roles to Contribute**
  - Stakeholders
  - Project Managers
  - Technologists

- **Documents Give Clarity and Structure to Teams**
  - Consistent Knowledge Transfer
  - Walk readers through complex topics
  - Separation of Responsibilities

© PITSS America LLC

DRIVING: SUCCESSFUL LEGACY DIGITAL TRANSFORMATION

How to Make Your $1,000,000 Document

- **Own It: Align Document to Process, Process to Owner**
  - Driving Accountability and Action
- **Focus It: Keep Continuous Improvement on Rails**
  - With Documents, Form Follows Function: What Are Your Goals?
  - Solve Only the Real Problems, the Right Way
- **Feed It: Reflect the Transformation Process**
  - The Team Review Cycle
  - Add Clarification as Regular Process

© PITSS America LLC

DRIVING: SUCCESSFUL LEGACY DIGITAL TRANSFORMATION

Consensus and Accuracy: Focusing your $1,000,000 Document

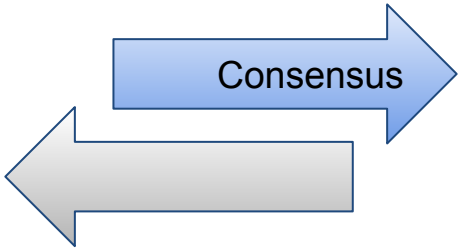
- **Consensus-Focused Documents**
  - Visionary documents to express objectives and establish credibility with stakeholders
  - Drives agreement to project vision, establishes value of the undertaking
  - Gives intangible context and guidance to technologists to carry out the work

- **Accuracy-Focused Documents**
  - Narrow, detailed documents focused on specific aspects of technology
  - Defines technical, verifiable standards for work to follow
  - Itemizes work and processes for executing and managing portions of the whole

© PITSS America LLC

TWO EXAMPLE DOCUMENTS

The Content Strategy

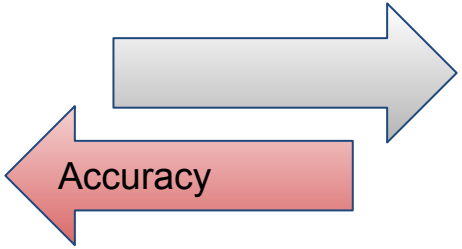


- A series of pictures showing what a new application will look like in its completed state. Gives the customer, designer, and business process analyst an opportunity to collaboratively decide how screens link together, how users move through the app, and the data they see at every step.

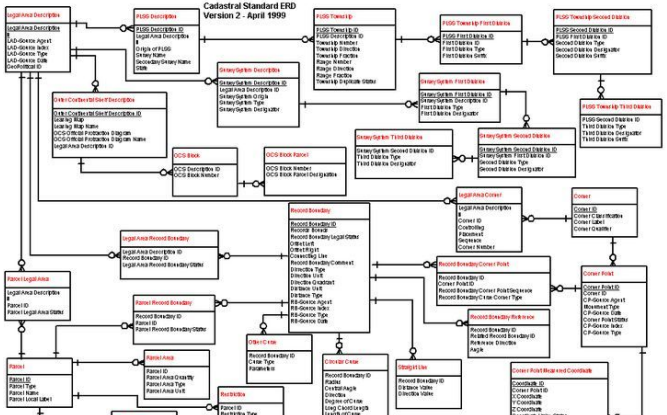
© PITSS America LLC

TWO EXAMPLE DOCUMENTS

The Entity Diagram



- Shows the complex relationships between parts of a database. Shows how data about users, customers, products, services, transactions, paperwork, and more all relate to one another. Helps database administrators and software developers understand how to retrieve and update company data.



© PITSS America LLC

4

How Prepared Are You?

HOW PREPARED ARE YOU?

The documentation checklist.

- **Check for contingencies, communication plans, etc.**
  - Functions of the organization that would run smoothly if documentation was tightened
  - Without them, could be at risk without knowing it
- **Document is clear and concise**
  - Other developers, team leads, project managers, etc. can understand
  - Those new to the project can understand

© PITSS America LLC

HOW PREPARED ARE YOU?

The documentation checklist.

- **Running record of current version framework**
  - Standard set of all connection information
  - Developer's environment is up and running for transformation to save time
- Do developers understand business requirements?
- Business requirements, use cases, end-users, workflow easy to understand
- Contingency if this application goes down?
- Proper deployment process for next release of the application?

© PITSS America LLC

PLANNING YOUR LEGACY DIGITAL TRANSFORMATION WITH PITSS

Our Full-Stack Development Team

- **Work With the Experts**
  - For more than 17 years at PITSS, our Solutions Architect, Developers, and Project Managers exclusively handle Legacy Digital Transformation for Oracle Customers
  - Our integrated teams bring the experience of extracting and documenting vital business processes from Oracle systems, unlocking your legacy investments
  - Contact our team about your transformation initiative

© PITSS America LLC

THANK YOU

Contact PITSS if you need help with your documentation.

us.info@pitss.com

248.740.0935