



The Road Ahead

Value Today, Value Over Time

Michael Saucier

OSIsoft Milestones

**10,000+
Customer
Installations**

Recognized

Knowledgeable

Experienced

- 2004 ● RtPortal debuts
- 2004 ● RtReports released
- 2002 ● OSIsoft acquires ProcessPoint
- 2001 ● OSI becomes OSIsoft
- 2000 ● DEVNet is launched
- 1999 ● Web support with ActiveView allows users to publish to the Web
- 1996 ● OSIsoft becomes SAP-certified
- 1995 ● PI System 3.0 Released
- 1993 ● PI ProcessBook's superior batch-tracking a major accuracy resource
- 1993 ● OSIsoft enables direct support of a PC application
- 1989 ● DataLink allows any client to obtain and place data into the PI System
- 1985 ● The PI System debuts, providing control engineers with baseline accuracy, plus a long-term data historian
- 1980 ● Oil Systems, Incorporated founded by J. Patrick Kennedy





"Actually, I preferred 'Heaven' too, but then the marketing guys got a hold of it."

RtPM, Powered by PI

- RtPM addresses the growing demand for instant, critical, actionable information – across the site or across the enterprise
- Builds on what our customers already have and what they are already doing
- PI is the engine of the RtPM Platform
- The RtPM Platform unifies OSIsoft products



Real-time Performance Management

Know



- Immediate
- Role Based
- Actionable
- Secure

**Better
Metrics**

Act



- Relevant
- Timely
- Available
- Efficient

**Smarter
Decisions**

Profit



**Sustainable
Advantage**

Where Have We Been?

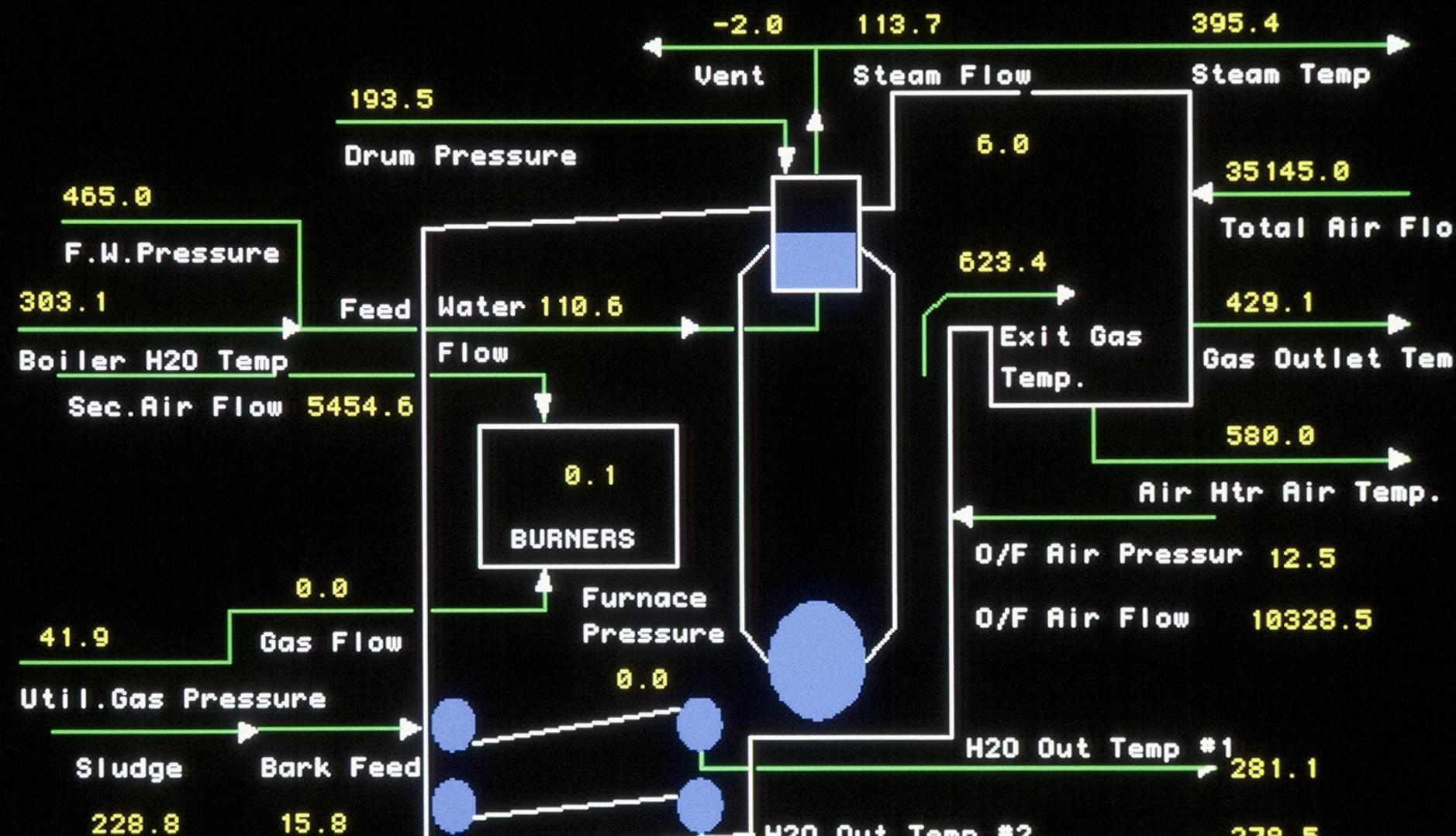
- Since the eighties, we've seen MANY changes
- Same type of product, very different implementation, FAR more functionality
- Can you easily migrate your 1985 phonebook to a new wireless device?



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Keeler Boiler Graph

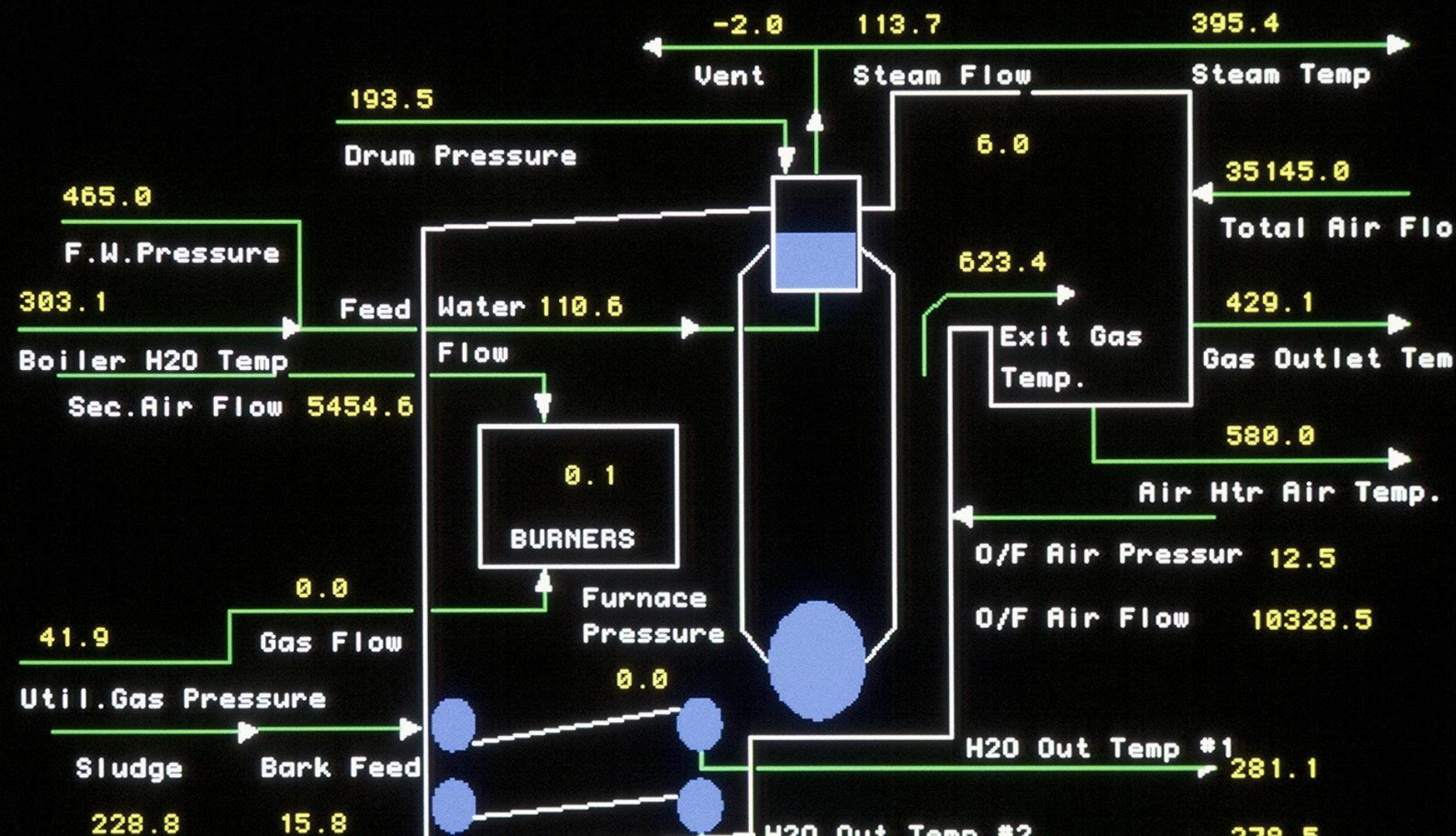
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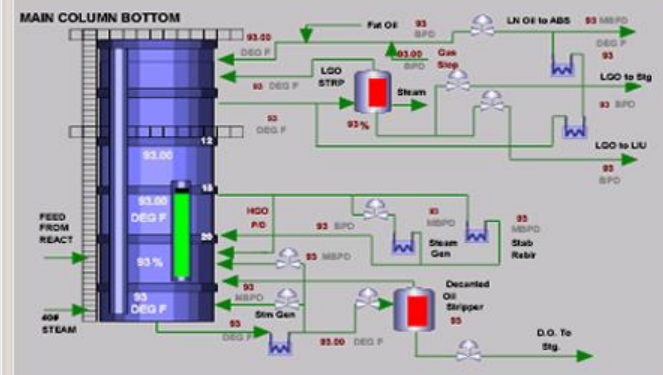
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How We Got Here Today

- Pervasive connectivity
- Quick roll-out
- Do-it-yourself tools
- Empowered, creative user base
- Unwavering commitment to upgradeability

Working to Preserve Your Investment

- As technology changes, migration happens
 - Moving between software and hardware platforms
 - Maintaining data integrity
 - Minimizing downtime on both the systems side and user training side



So, What Have You Been Up To Lately?

- Our customers tell us that they have recently:
 - Rolled out an ERP System
 - Rolled out a CRM System
 - Been building a compliance architecture for regulatory agencies
 - Been building out your security architecture



What's in Common With These Rollouts?

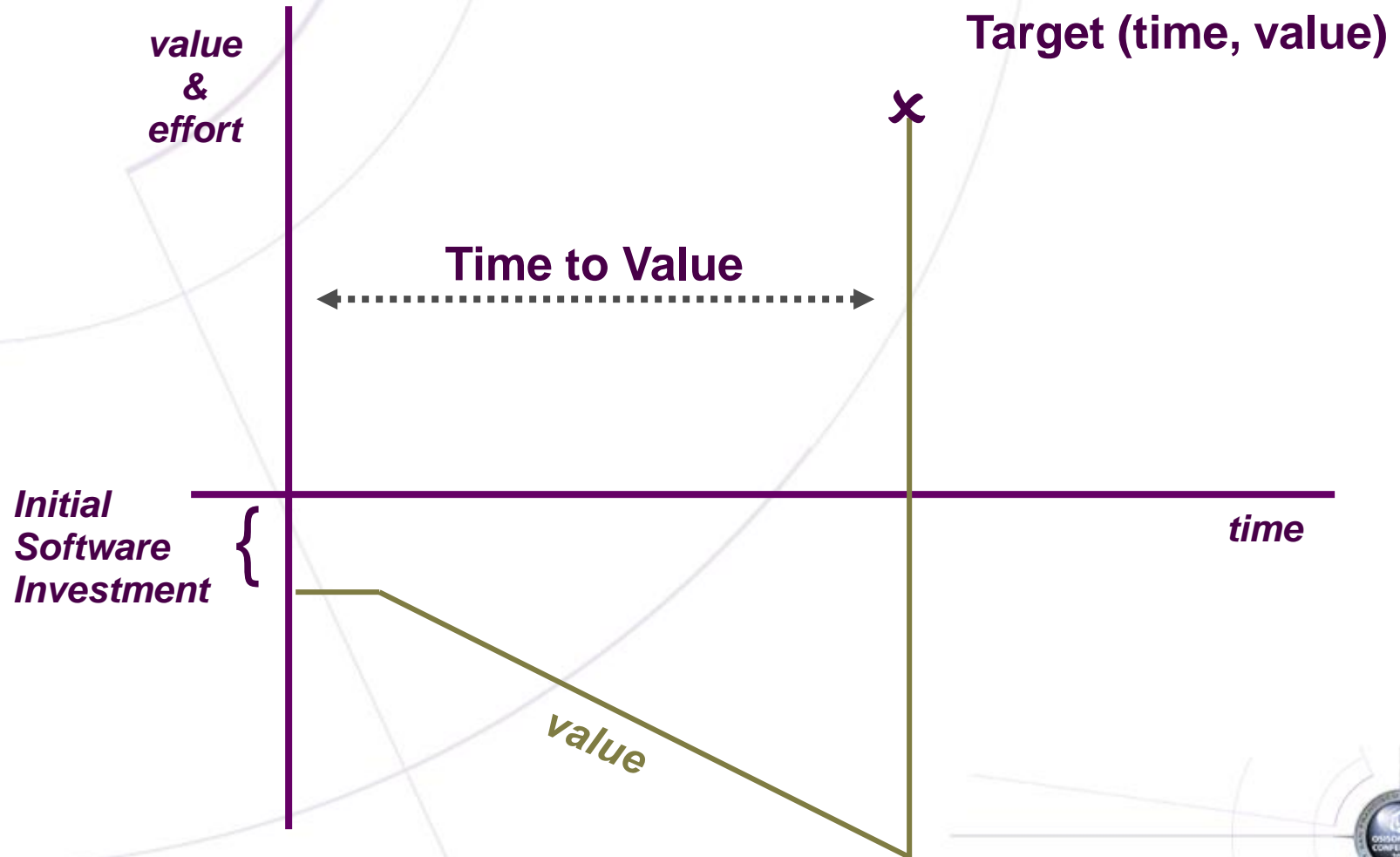
- These are less “Products” and more “Solutions”
- Many solutions are “Big Bang” projects
 - Little initial payout
 - Huge investment of time and money
 - Large projected value
- Yet, you still have to be profitable
 - Can technology help you be both profitable and meet corporate mandates?



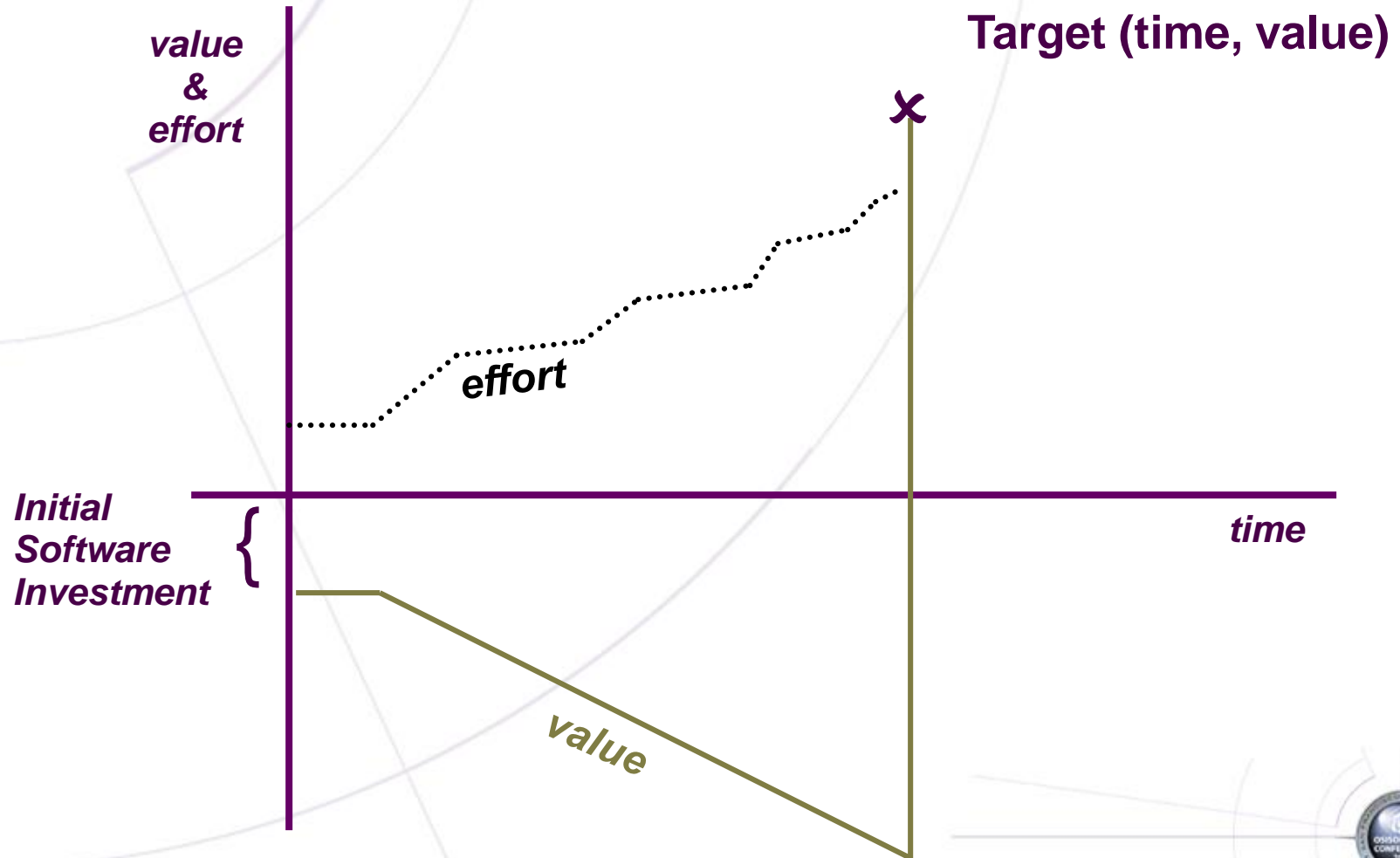
Implementation Approach



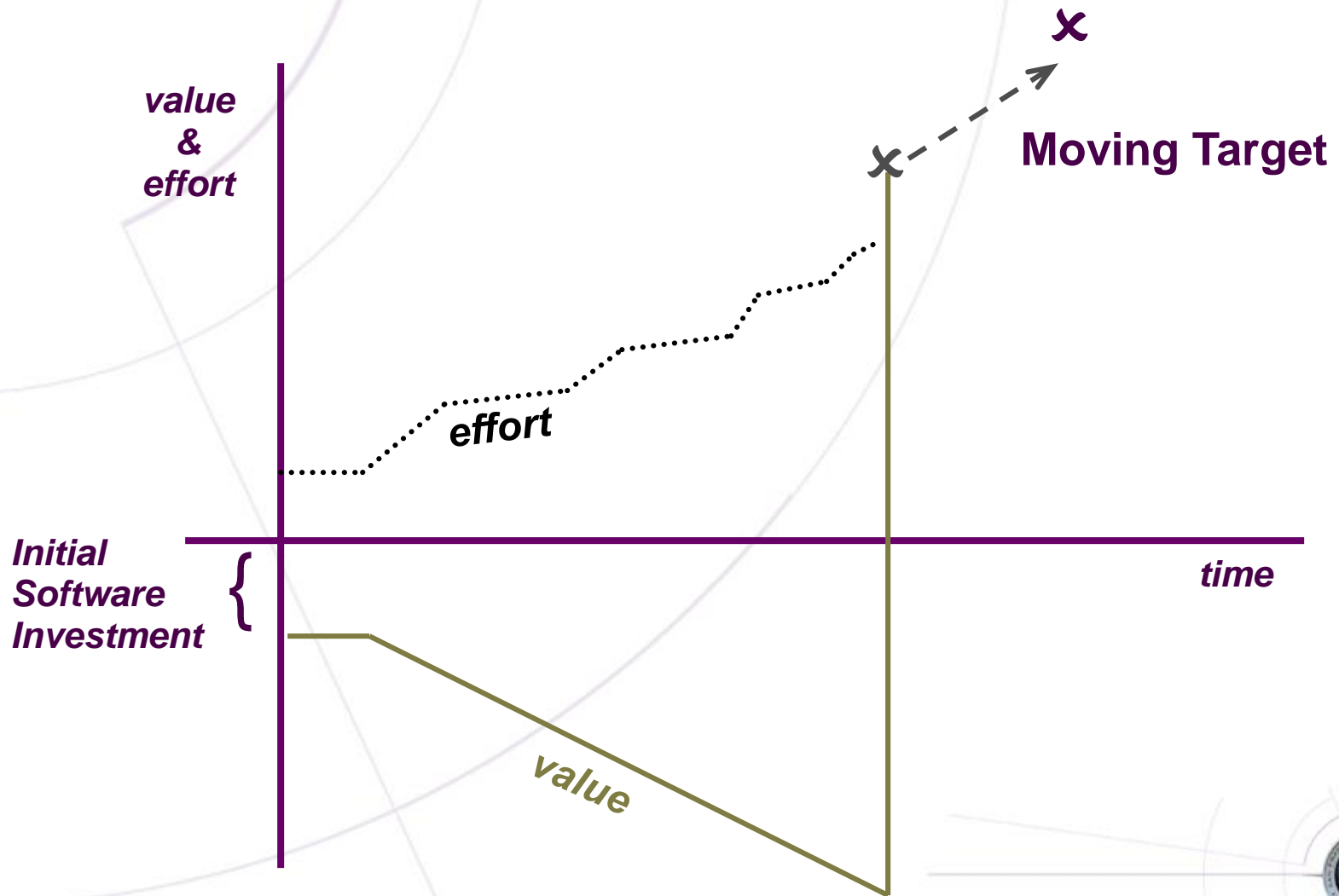
“Big Bang” – Value at the End



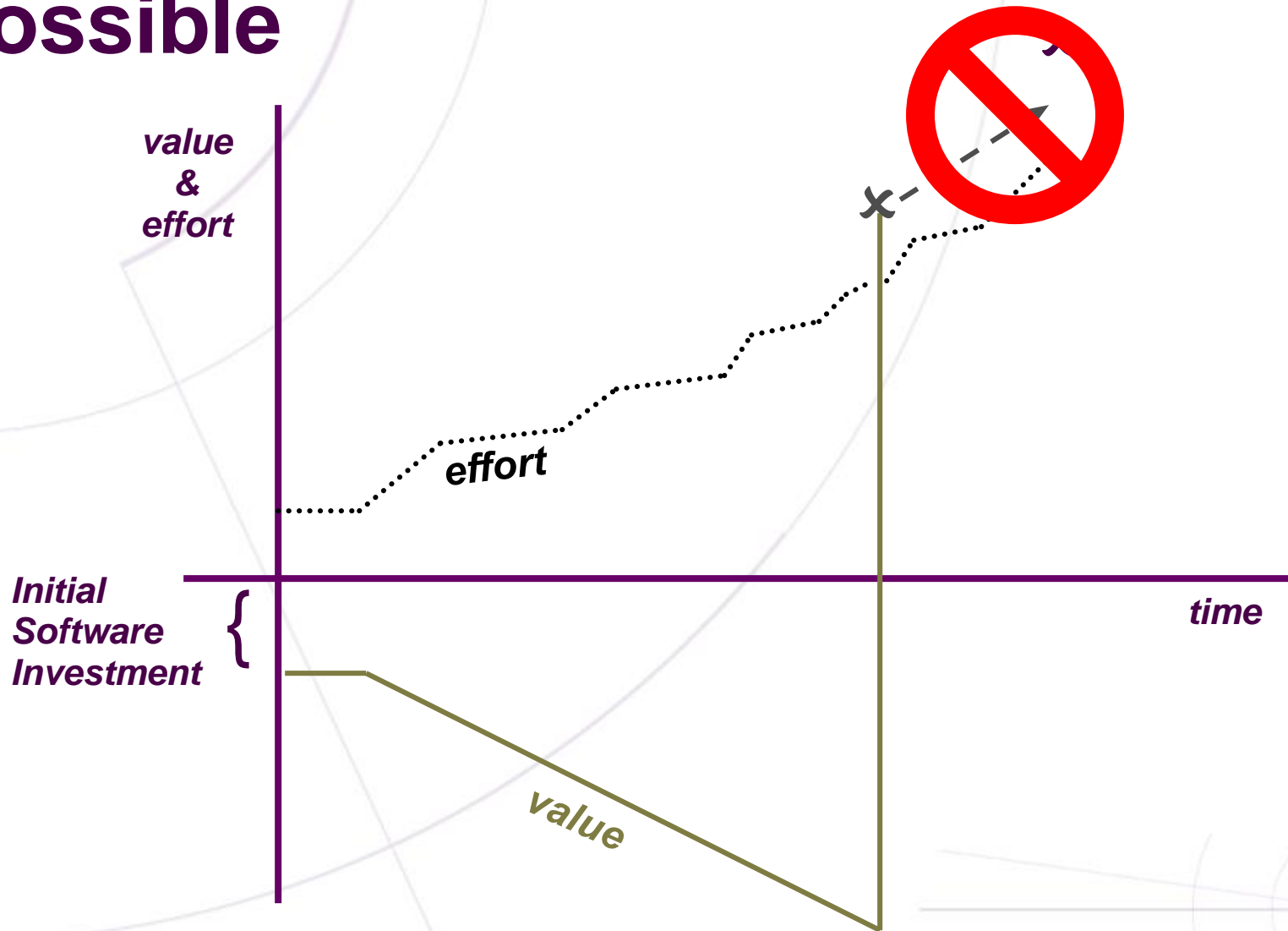
Large Investment of Time and Effort



Moving Targets...Happen!



Changing Course is Often Not Possible

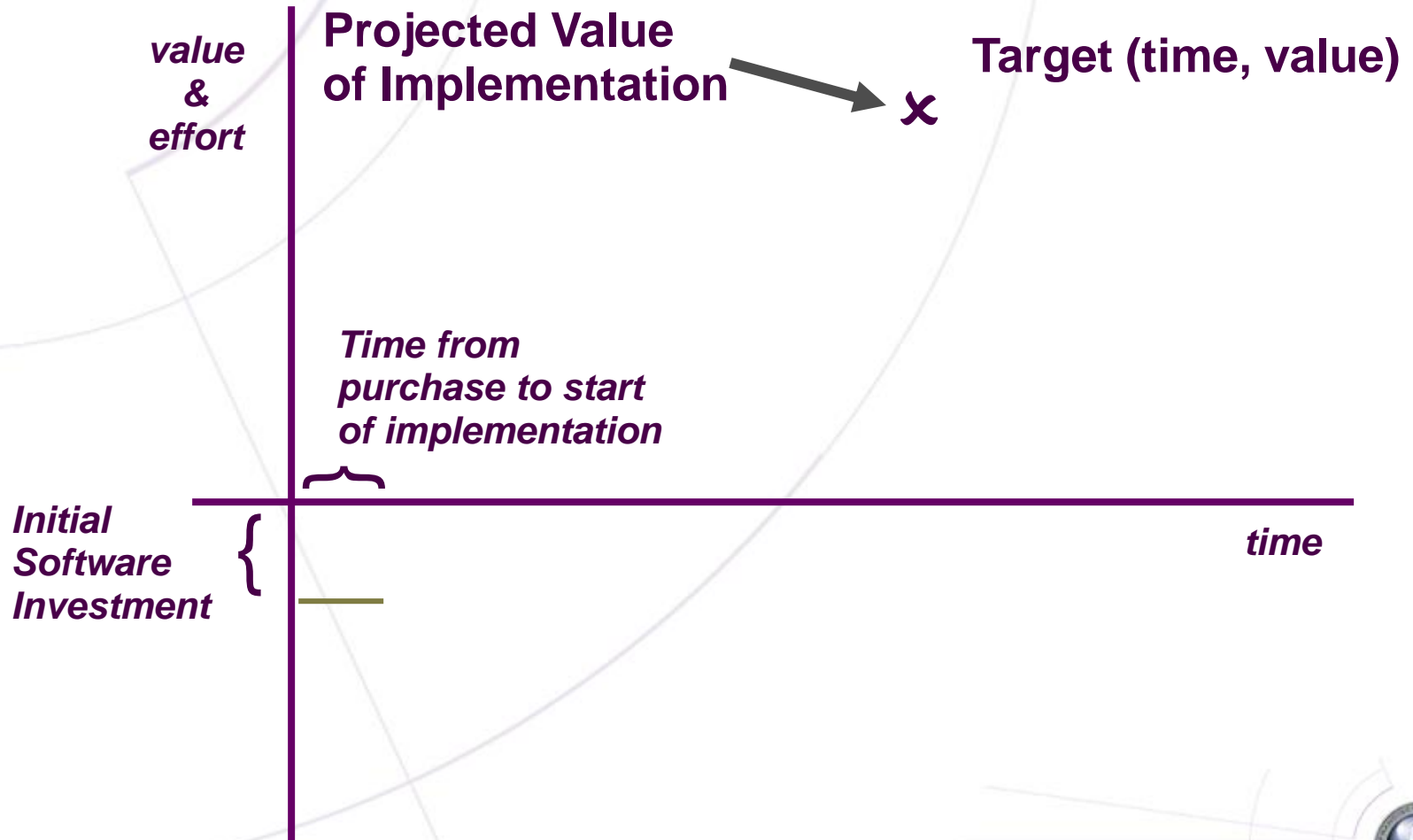


Big Bang Challenges

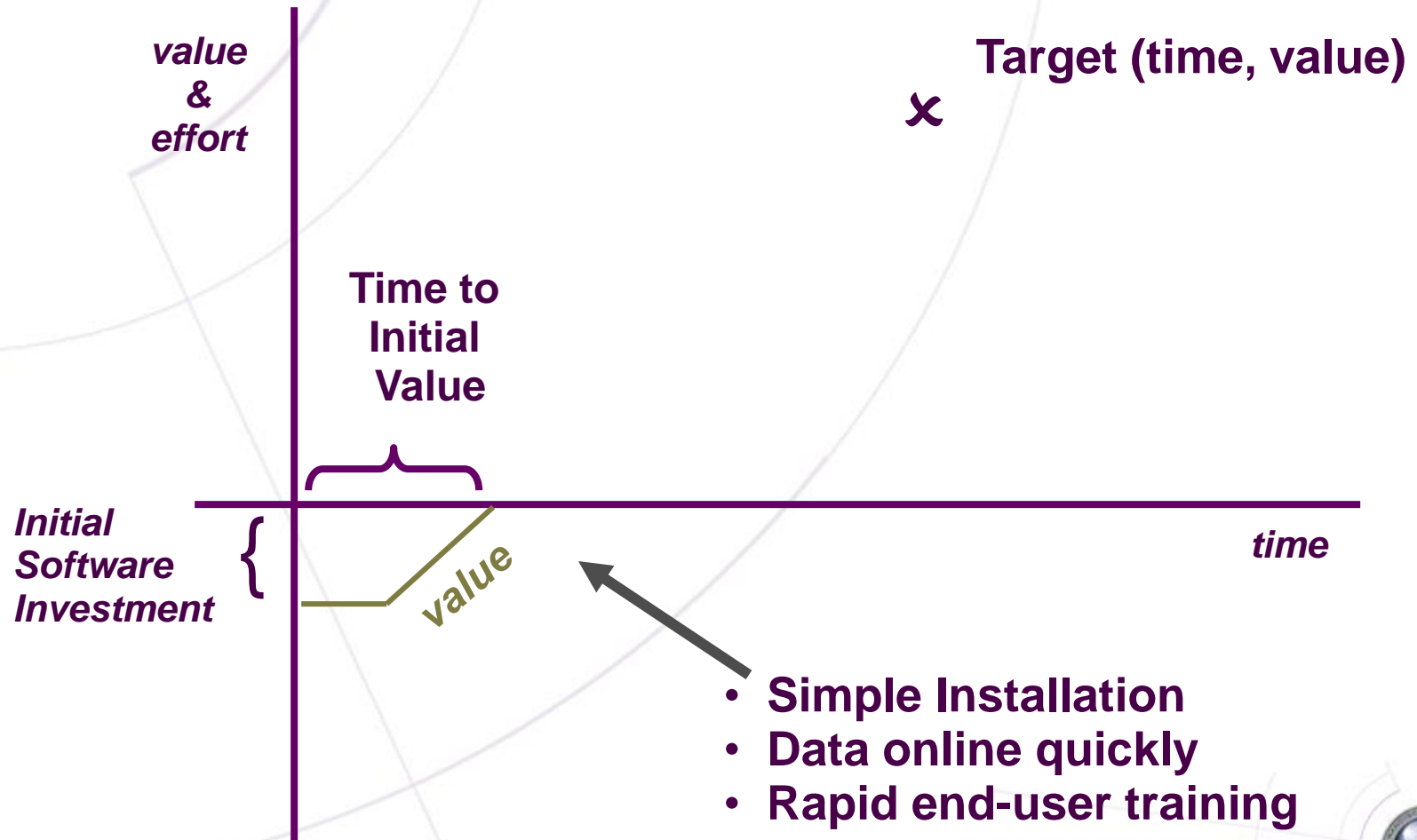
- Too much time invested before value accrues
- Rigid installed solution results in a difficult upgrade / expansion path
- Over time rigid solutions degrade in value and are costly to update
- Newly discovered requirements can not be accommodated
- How do you keep the value increasing over time?



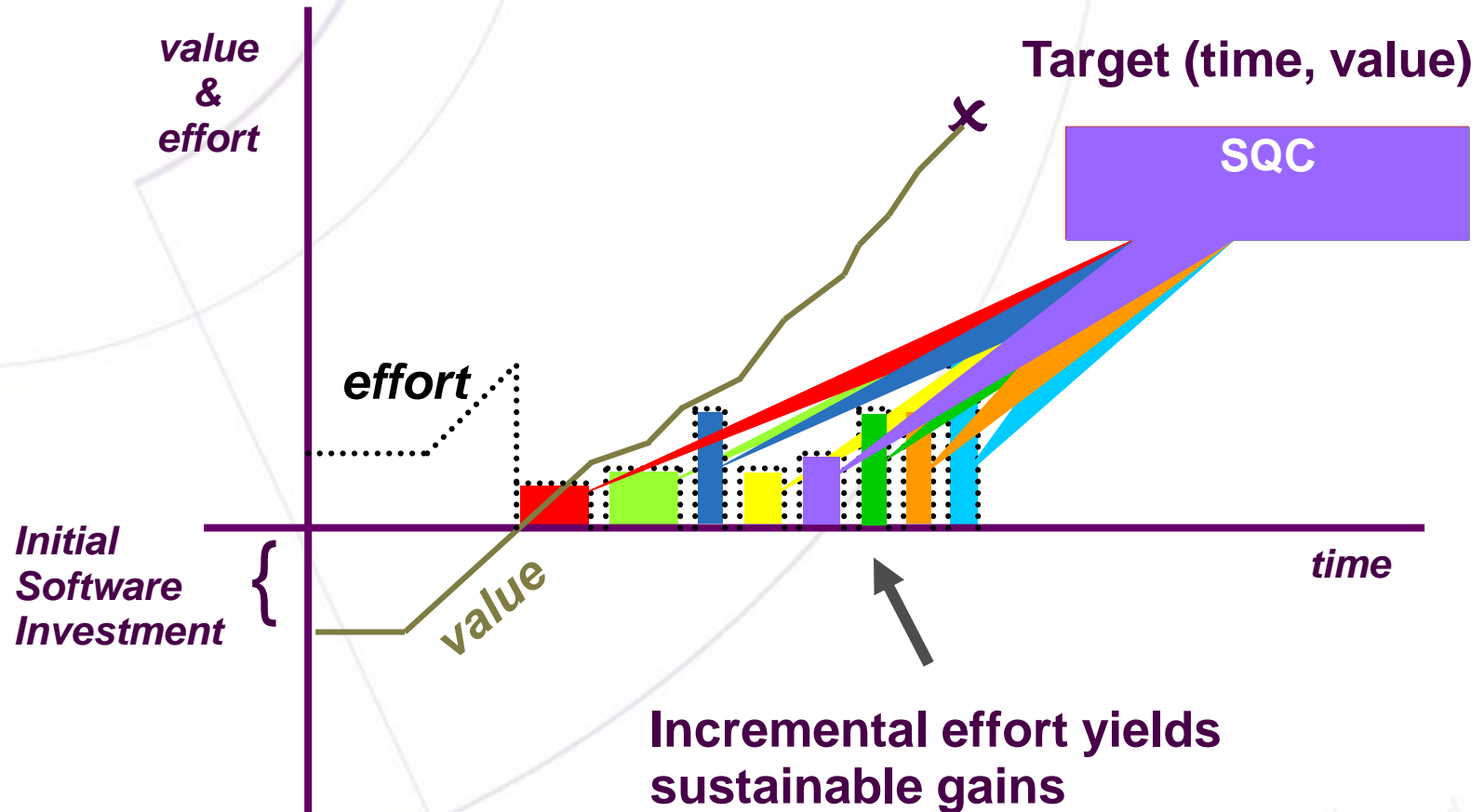
The OSIsoft Difference



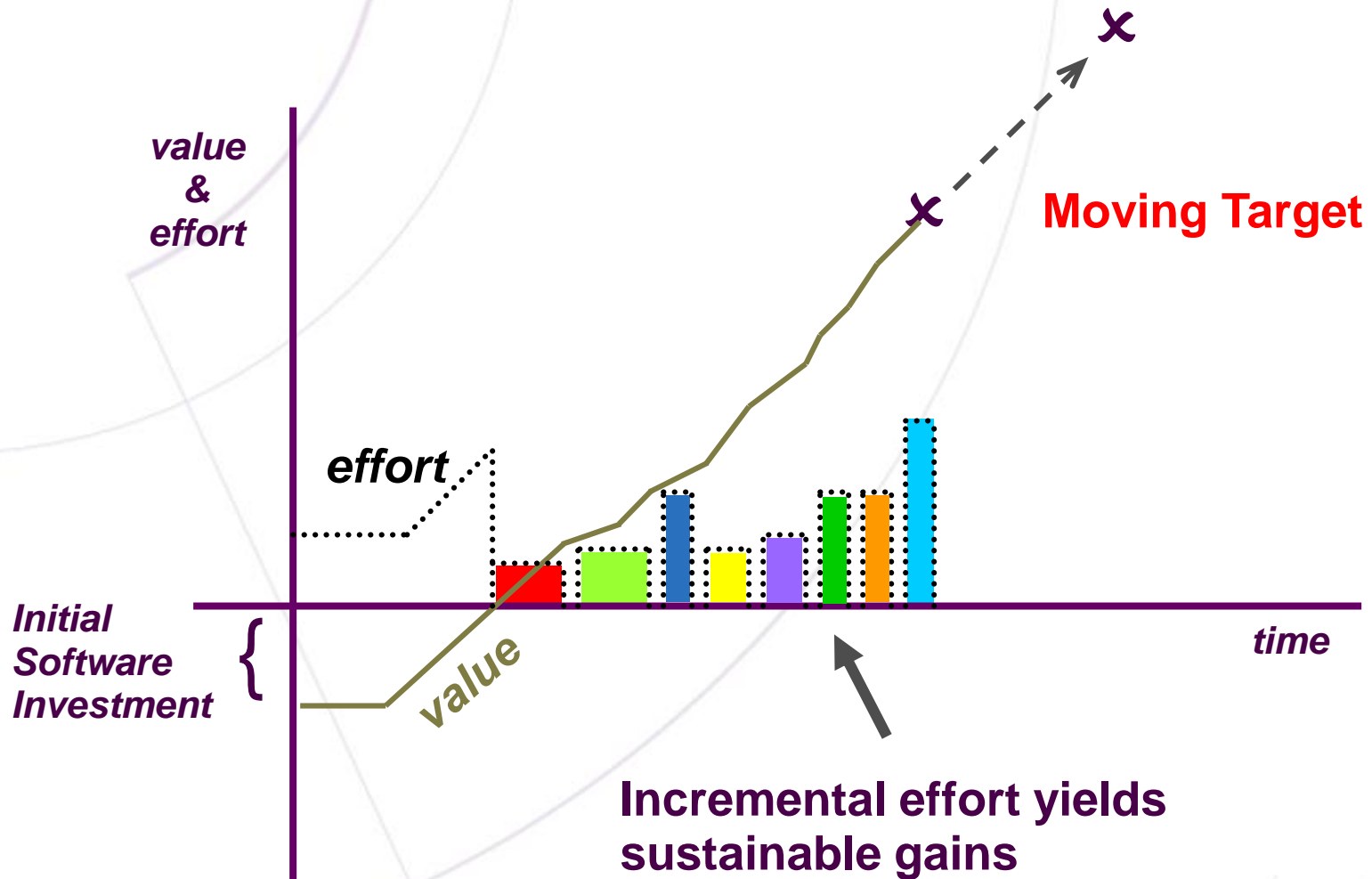
Quick Payout with Initial Value



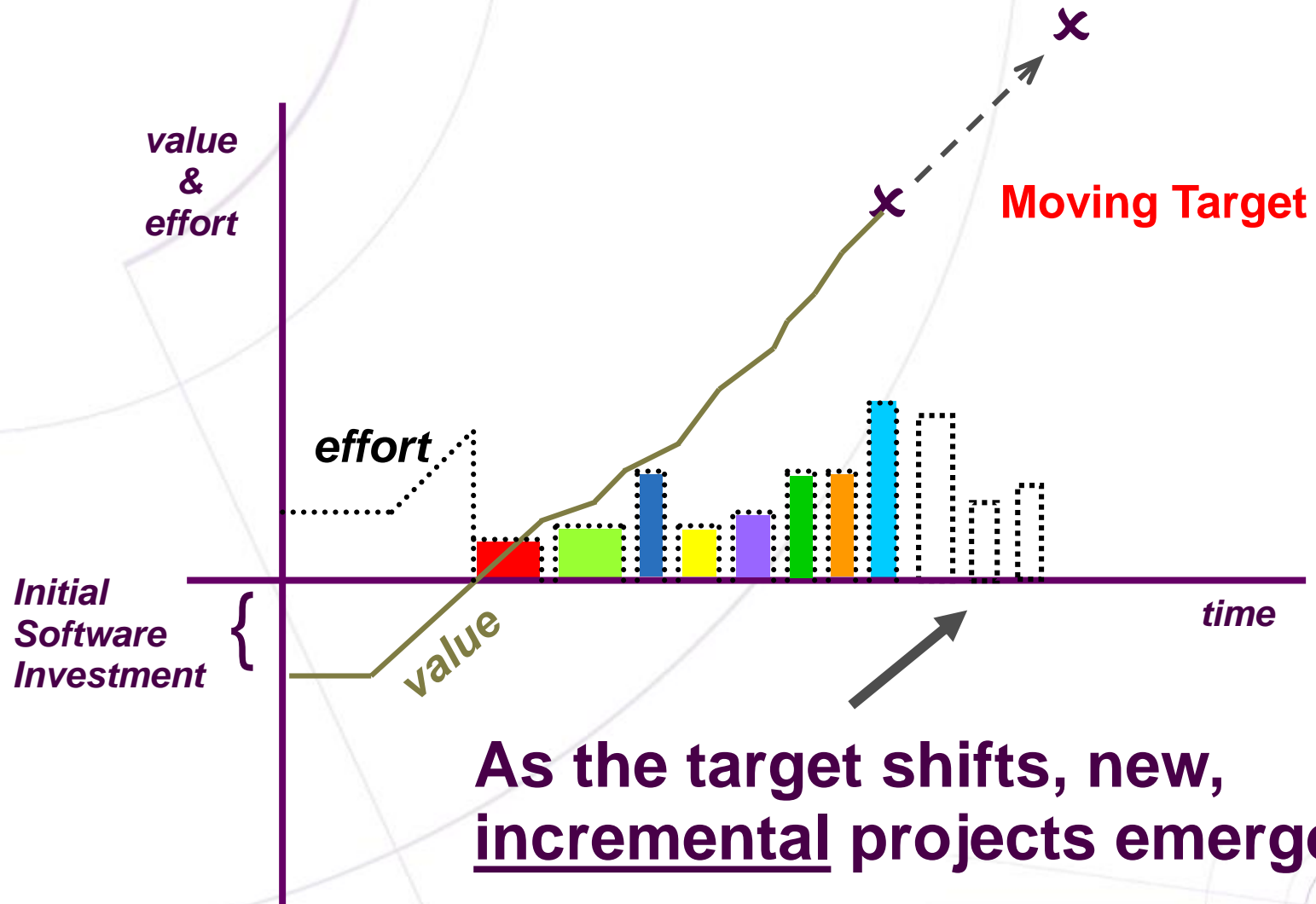
Pervasive Availability Yields Incremental Value



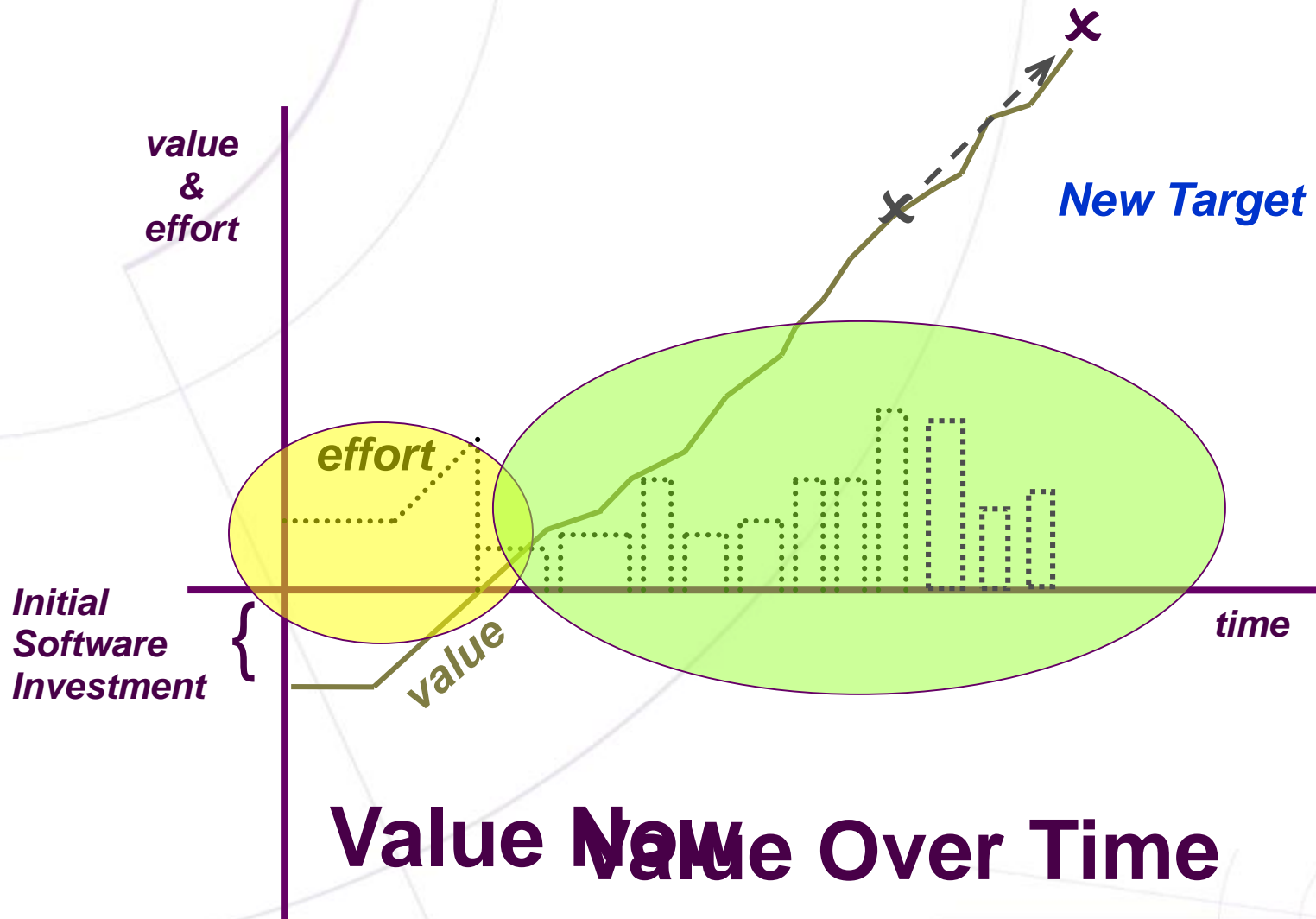
And If the Target Moves...



You Can Adapt – Easily and Quickly



RtPM Lifecycle Benefits



Data volumes are increasing

- Moore's Law
 - Computer power doubles every 18-24 months
- Parkinson's Law of Data
 - Data expands to fill available storage capacity
 - Memory usage doubles every 18 months
- Peterson's Law of PI
 - OS/soft will stay ahead of your data requirements



OSIsoft's Evolutionary Commitment

- Technology commitment (preserving investment)
 - VAX / VMS to UNIX to Windows
 - Windows to Windows 64 bit now and Longhorn later
- Data access commitment (enhancing access)
 - API access to ODBC access
 - ODBC access to OLEDB access
 - OLEDB access to Foundation
- Visualization commitment (fueling decisions)
 - Terminal displays to client / server architecture
 - Rich client applications to thin client displays
 - Thin clients to Smart clients



Companies that have an *infrastructure* in place to manage and deliver operating metrics and key performance indicators will be able to *react to the market faster and ultimately out perform* the others.

John Hagerty, “Take SOX to the Next Level” AMR Research, Monday, Oct 18, 2004



“Data is your only weapon for improving performance.”

Dr. Donald Paul
VP & CTO

ChevronTexaco



How are you using RtPM?

Alarm Management
Analyzer Performance
Automated Generation Control
Automated Reports
Balanced Scorecards
Baseline Best Practices
Batch Quality Monitor
Certificate Of Analysis
Compliance Documentation
Condition Based Maintenance (CBM)
Continuous Emissions Monitor (CEM)
Control Loop Monitor
Corporate Data Warehouse
Customer Load Management
Data Reconciliation
Down-hole Systems In O&G Production
Downtime Monitoring
E-Commerce
Energy Management System
Environmental Compliance Monitor
General Ops Docn And Equipment Specs
Hazardous Waste Tracking
Hierarchical Process Data Views
Hydrogen Manufacturing And Distribution
Incident Investigations
Inventory Management
IT / Systems Monitoring
Key Performance Indicators (Kpi)
Lab Quality Data Integration
LNG Terminal Operating Assistance
LNG Terminal Operations Reports
Maintenance History Or Status
Maintenance Lockout Procedures

Manual Data Recording
Manufacturing Intelligence Data
Material Balance
Material Usage Tracking
Multi-Plant Equipment Performance Monitor
O&G Production Remote Monitoring By Non-
Operating Partners And Customers
O&G Production Well Testing
Operating Envelope Data
Operations Data Warehouse
Operations Desktop
Operator Handover
Operator Training
Paper Machine Felt Monitoring
Paper Machine Grade Management
Paper Machine Lost Opportunity Module
Paper Machine Performance Monitor
Pipeline Equipment Remote Monitor
Pipeline Leak Detection Support
Pipeline Operations Planning
Pipeline Pigging Schedule For Paraffin Removal
Pipeline Solar Turbine Efficiency Remote Monito
Plant Performance Overviews
Power Delivery Capability For Gas Turbines
Power Generation Fleet Outage Management
Power Generation Supplier Scheduling
Power Turbine Trip Monitor
Process Monitoring
Process Performance Analysis
Product Compliance Reporting
Product Development Trials
Product Pricing
Product Separation In Multi-Product Pipelines
Production Analysis

Production Data Integration To ERP
Production Plan Versus Target Data
Production Plan Versus Actual Data
Pulp And Paper Mill Steam Energy Monitor
Pulp Mill Tracking
Quality Monitoring/Analysis
Reliability Centered Maintenance Support
Reservoir Control And Production Operations
Root-Cause Analysis
Shared Inventory Management Service
Shift Production Monitor
Six Sigma
SPC/SQC Production Quality Control
Steam Turbine Performance Analysis
Substation Load Monitoring
Substation Transformer Asset Management
Supply Chain Management
T&D Network System Load Forecasts
T&D Network System Load Planning
T&D Substation Equipment Monitoring
Tanker Fleet Current/Past Locations
Total Effective Equipment Productivity
Transmission Line Capacity Planning
Transmission Network Diagrams
Transmission Network Frequency Monitor
Troubleshooting Equipment Startups
Utilities Management
Virtual On-Line Analyzer In Refining
Waste Treatment Monitor
Weather Data Import



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Product Separation In Multi-Product Pipelines
Production Analysis

Production Data Integration To ERP
Production Plan Versus Target Data
Production Plan Versus Actual Data
Pulp And Paper Mill Steam Energy Monitor
Pulp Mill Tracking
Quality Monitoring/Analysis
Reliability Centered Maintenance Support
Reservoir Control And Production Operations
Root Cause Analysis
Shared Resource Management Service
Shift Production Monitor
Six Sigma
SPC/SQC Production Quality Control
Steam Turbine Performance Analysis
Substation Load Monitoring
Supply Chain Management
Supply Chain Asset Management
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T&D Network System Load Forecasts
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Transmission Network Diagrams
Transmission Network Frequency Monitor
Troubleshooting Equipment Startups
Utilities Management
Virtual On-Line Analyzer In Refining
Waste Treatment Monitor
Weather Data Import

Compliance Documentation

Quality Monitoring/Analysis

Manufacturing Intelligence Data

RtPM Case Study: Arkema

2.4 million savings in just one plant

“I don’t know of any other software that can positively impact every important business driver—environmental, safety, quality and ROI.” –Dwight Stoffel, Calvert City Plant, Arkema

Know

- Global, collaborative platform for real-time data
- Integration with other data sources/systems
- Access, visualize, share data/applications
- Operational data on the business desktop
- Complete data in the right context
- Every department working from consistent data

Act

- Real-time reporting & analysis from the desktop
- Every department improving processes
- Easy-to-build displays & applications for better, faster decision making & problem solving
- Reduced travel, maintenance, man hours
- Avoided capital expenditures (\$1.8mm)
- Automated data entry/reporting (\$250K/yr)

Profit

- Increased customer satisfaction
- Improved safety/health reporting
- Better compliance, regulatory and permit processes
- Improved product yield, quality
- Reduced, redirected or avoided costs by \$500,000+/year

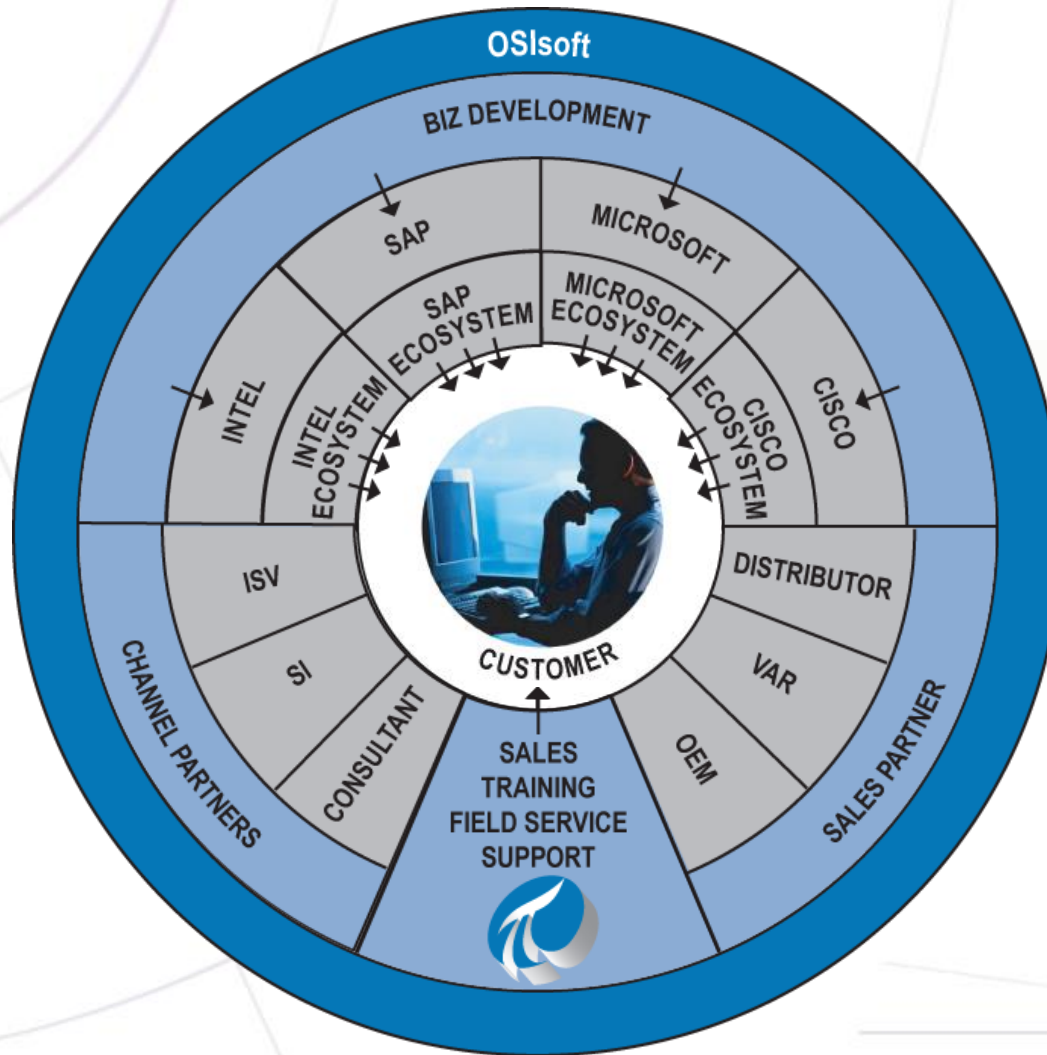


The Road Ahead for OSIsoft

- Technology partner and business stakeholder
- OSIsoft is more actively customer-centric
 - Strategic Influence Group for product feedback
 - Local User Conferences to propagate value
 - Enterprise Purchase Programs and Support Services to make OSIsoft ETDBW
 - Informative Webinars to stay current all year long
 - Robust Partner Ecosystem to augment your scarce resources



The OSIssoft Partner Ecosystem



What the Future Holds – Emerson and OSIsoft

- PI Clients in the DeltaV Ecosystem
 - DeltaV v7.3 - ready now
 - Coming soon! PI Protocol Converter enables visibility for v7.4 and later



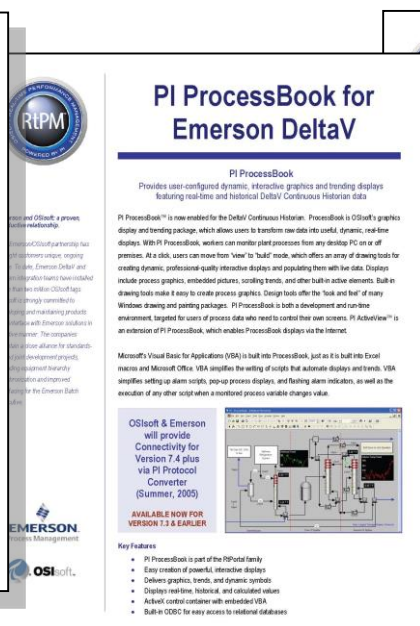
PI DataLink for Emerson DeltaV

PI DataLink
Brings your DeltaV Continuous Historian data into PI's premier spreadsheet analytics and reporting tool!

OSIsoft & Emerson will provide Connectivity for version 7.4 plus via PI Protocol Converter (Summer, 2009)
AVAILABLE NOW FOR VERSION 7.3 & EARLIER

Key Features

- PI DataLink is part of the RtPortal family
- Superior reporting tool with extensive analytical capabilities
- Updates on demand
- Connects process and relational data
- Powerful query expression builder
- Spreadsheet integration of process, recipe, and other data
- Allows relative and information (plant and trend) to create report templates
- Stored report templates can automatically update



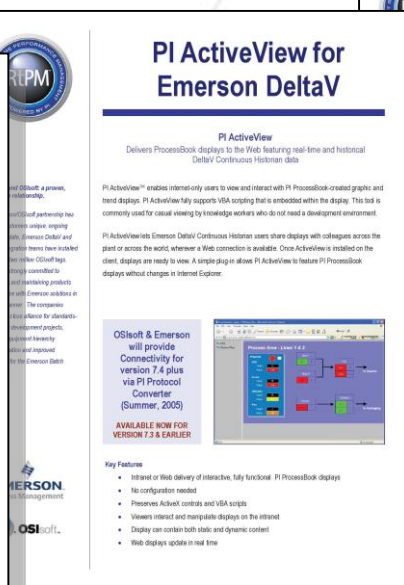
PI ProcessBook for Emerson DeltaV

PI ProcessBook
Provides user-configured dynamic, interactive graphics and trending displays featuring real-time and historical DeltaV Continuous Historian data

OSIsoft & Emerson will provide Connectivity for version 7.4 plus via PI Protocol Converter (Summer, 2009)
AVAILABLE NOW FOR VERSION 7.3 & EARLIER

Key Features

- PI ProcessBook is part of the RtPortal family
- Easy creation of powerful, interactive displays
- Delivers graphics, trends, and dynamic variables
- Displays real-time, historical, and calculated values
- ActiveX control container with embedded VBA
- Build-in ODBC for easy access to relational databases



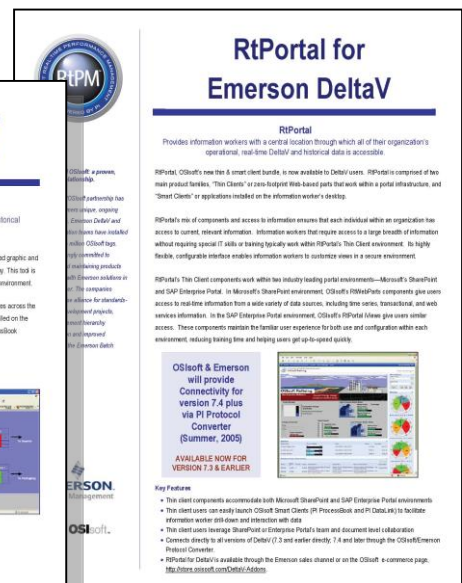
PI ActiveView for Emerson DeltaV

PI ActiveView
Delivers ProcessBook displays to the Web featuring real-time and historical DeltaV Continuous Historian data

OSIsoft & Emerson will provide Connectivity for version 7.4 plus via PI Protocol Converter (Summer, 2009)
AVAILABLE NOW FOR VERSION 7.3 & EARLIER

Key Features

- Intranet or Web delivery of interactive, fully functional PI ProcessBook displays
- No configuration needed
- Preserves ActiveX controls and VBA scripts
- Views interact and manipulate displays on the intranet
- Displays can contain both static and dynamic content
- Web displays updates in real time



RtPortal for Emerson DeltaV

RtPortal
Provides information workers with a central location through which all of their organization's operational, real-time DeltaV and historical data is accessible

OSIsoft & Emerson will provide Connectivity for version 7.4 plus via PI Protocol Converter (Summer, 2009)
AVAILABLE NOW FOR VERSION 7.3 & EARLIER

Key Features

- The client components accommodate both Microsoft SharePoint and SAP Enterprise Portal environments
- The client users can easily launch OSIsoft Smart Clients (PI ProcessBook and PI DataLink) to facilitate information worker task flow and interaction with data
- The client users leverage RtPortal or Enterprise Portal's search and document level collaboration
- Connects directly to all versions of DeltaV (7.3 and earlier directly, 7.4 and later through the OSIsoft/Emerson Protocol Converter)
- RtPortal for DeltaV is available through the Emerson sales channel or on the OSIsoft e-commerce page, <http://www.osisoft.com/DeltaV/Advisors>

Visit Emerson at Solutions Expo

The Road Ahead for RtPM

The merger of enterprise application and infrastructure technology

- Code name “Foundation”
 - A way to name and access all data, whether stored in PI or not
 - A configurable integration environment that facilitates agile, incremental projects
- Makes it easier to create and maintain RtPM-based solutions for enterprise-wide business challenges



OSIsoft in the News

OSIsoft Named “Cool Vendor”

“The value of RtPM is in the depth and completeness of the solution, addressing problems about real-time monitoring that most businesses and technology providers have yet to consider.”

– Bill Gassman, Analyst

Gartner

Frost & Sullivan Product Innovation Award

“The significance of OSIsoft in grid monitoring is crucial because the RtPM Platform, which is powered by the PI System, provides operators a way to easily configure and exchange data on a real-time basis.”

– Balaji Raman, Research Analyst

F R O S T & S U L L I V A N



Value Today, Value Over Time

Know

- Drive Operational Efficiency
- Real-time, Relevant Information
- Scalable Across a Site or Enterprise
- Fast Response Time and Analysis

Act

- Accelerate Decision Making
- Visualize, Collaborate on Standard Platform
- Measure Regulatory Compliance

Profit

- Measure Operational Performance
- Enable Performance-Driven Manufacturing
- Future-proof for Next 20+ years
- Fuel Critical, Informed, Profitable Actions



REAL-TIME PERFORMANCE MANAGEMENT FOR THE ENTERPRISE

RtPM



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RtPM