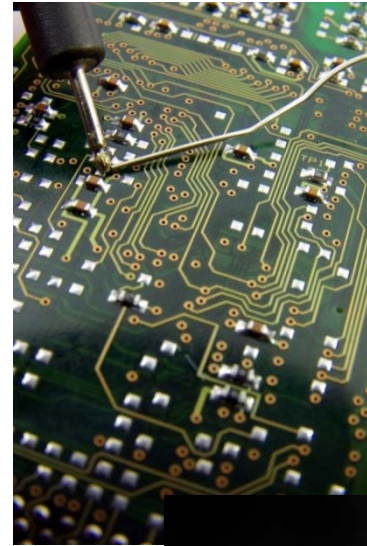


Define Workgroup Data Management

Obstacles to Adoption

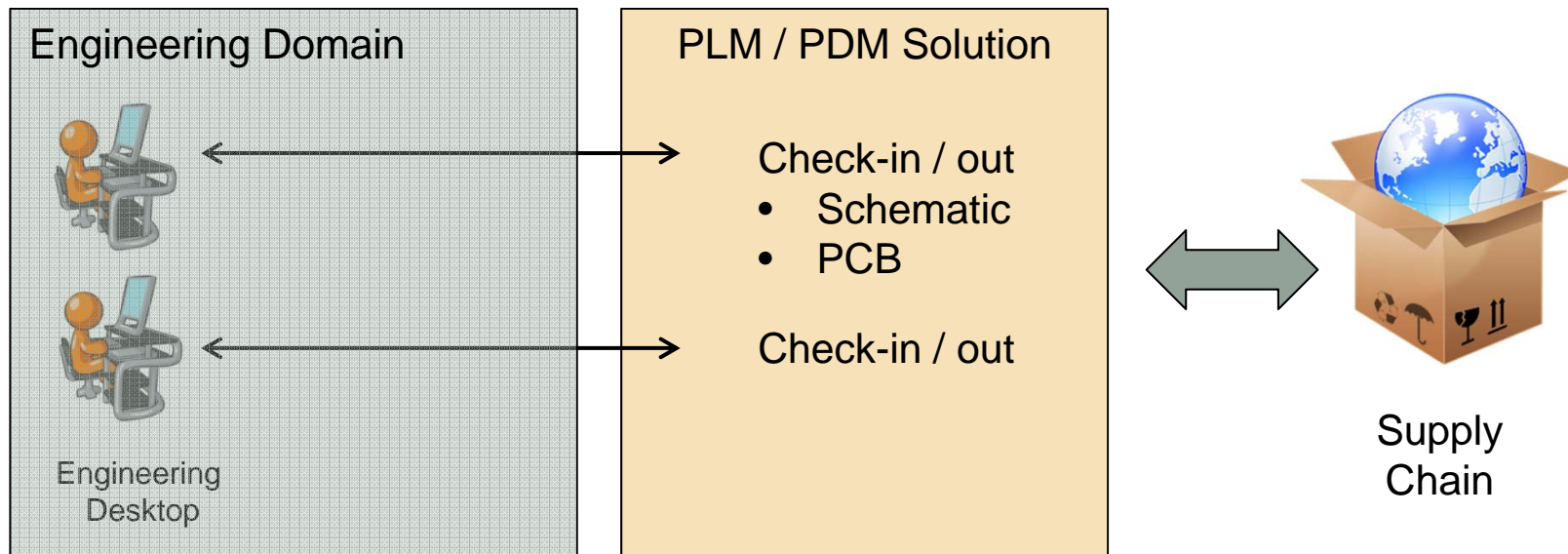
Goal: Improve Data Integrity

- Enable design versioning / lifecycle
 - What changed in version 1.2?
 - Can I go back to v3.7?
 - Change history?
- Improve design quality
 - ERC / DRC test pass?
 - Schematic & PCB in sync
 - All changes implemented / accepted?
- Improve manufacturing data readiness
 - Are we using the latest design version?
 - Can I trace back to the source files?
 - Are all the parts in the BOM approved?
 - Is this component used anywhere else?



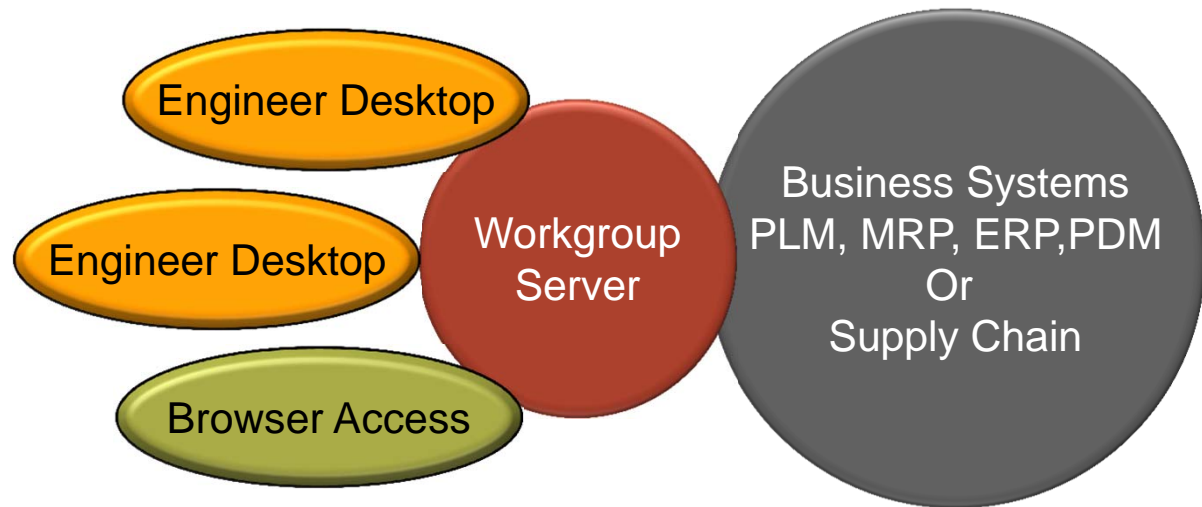
Obstacles to Adoption – Traditional Solution

- Lack of engineering domain solution – PLM derivative
- Lack of design process support
- Limited desktop integration
- Cost of solution plus customization is high
- Not a solution !



What if...

- Engineering domain solution
- Natural extension of the engineering desktop
- Unified component, reuse and release data
- Robust lifecycle and release management
- Scalable
- Web aware
- Affordable



Release Management

- Desktop repository to workgroup vault
- Configurable release process
 - Parts approved
 - DRC /ERC checks
 - Source snapshot
- Lifecycle status
 - Planned
 - New From Design
 - Prototype
 - Production



Peak Detector-B.2 For Production
[No Description]

Major-Revision A	Major-Revision B
Planned	For Production
Rev. A.1	Rev. B.2
Planned 08-Jul-11 15:00	New From Design 08-Jul-11 16:45
	For Prototype 08-Jul-11 17:04
	For Production 08-Jul-11 17:04

Peak Detector - Multi channel
1 Configurations
Up To Date

Default Configuration
Peak Detector
A.1 [New From Design]

Design Source (highlighted)

Configuration of Peak Detector - Multi channel
Peak Detector - Multi channel is synchronized with version control. Projects which are synchronized with version control can be released.

Revision A.1 of Peak Detector
Revision A.1 of Peak Detector is New From Design. Revisions must be in the Planned state to be released.

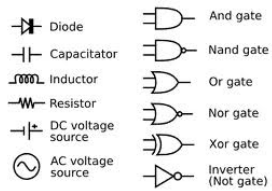
Target Vault (highlighted)

Workflow: Checkout Snapshot Validate Design Generate Outputs Commit Release

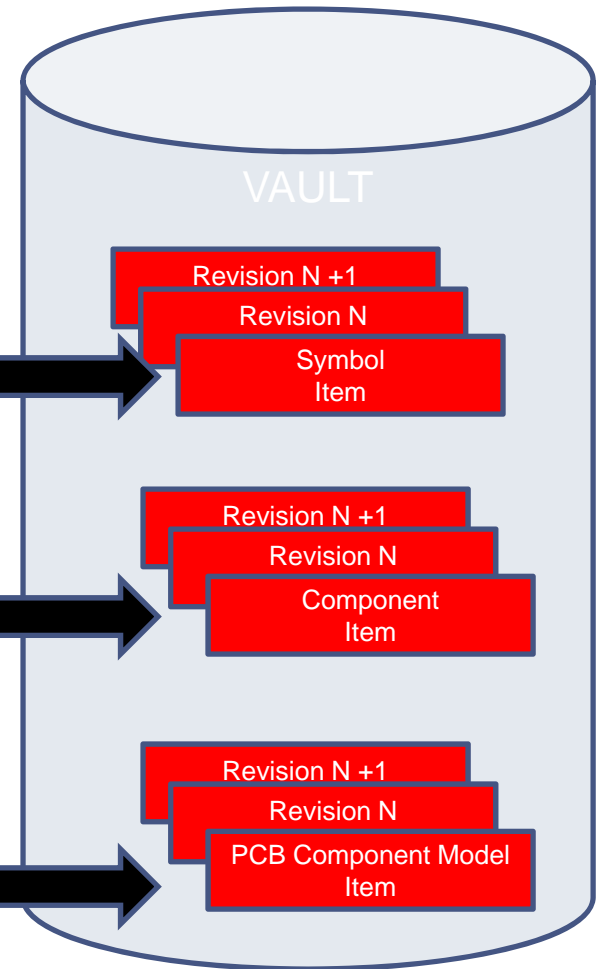
File Name	Output Job	Output Medium	Output Name	Category	Source	Status
BOM						
Bill of Materials	Default Assembly O...	Folder Structure	Bill of Materials	Report	[Project]	Up To Date
[Peak Detector-A.1] Bill of Materials-Peak Detecto	Default Assembly O...	Folder Structure	Bill of Materials	Report	[Project]	Up To Date
Component Information	Default Assembly O...	Folder Structure	Component Informal Report	Report	Peak Detector With I	Up To Date
[Peak Detector-A.1] Component Information-Peak	Default Assembly O...	Folder Structure	Component Informal Report	Report	Peak Detector With I	Up To Date
Pick Place						
Generates pick and place files	Default Assembly O...	Folder Structure	Generates pick and p...	Assembly	Peak Detector With I	Up To Date
[Peak Detector-A.1] Pick Place for Peak Detector	Default Assembly O...	Folder Structure	Generates pick and p...	Assembly	Peak Detector With I	Up To Date
[Peak Detector-A.1] SystemBOM.xml				Assembly		Up To Date

Component Definition...

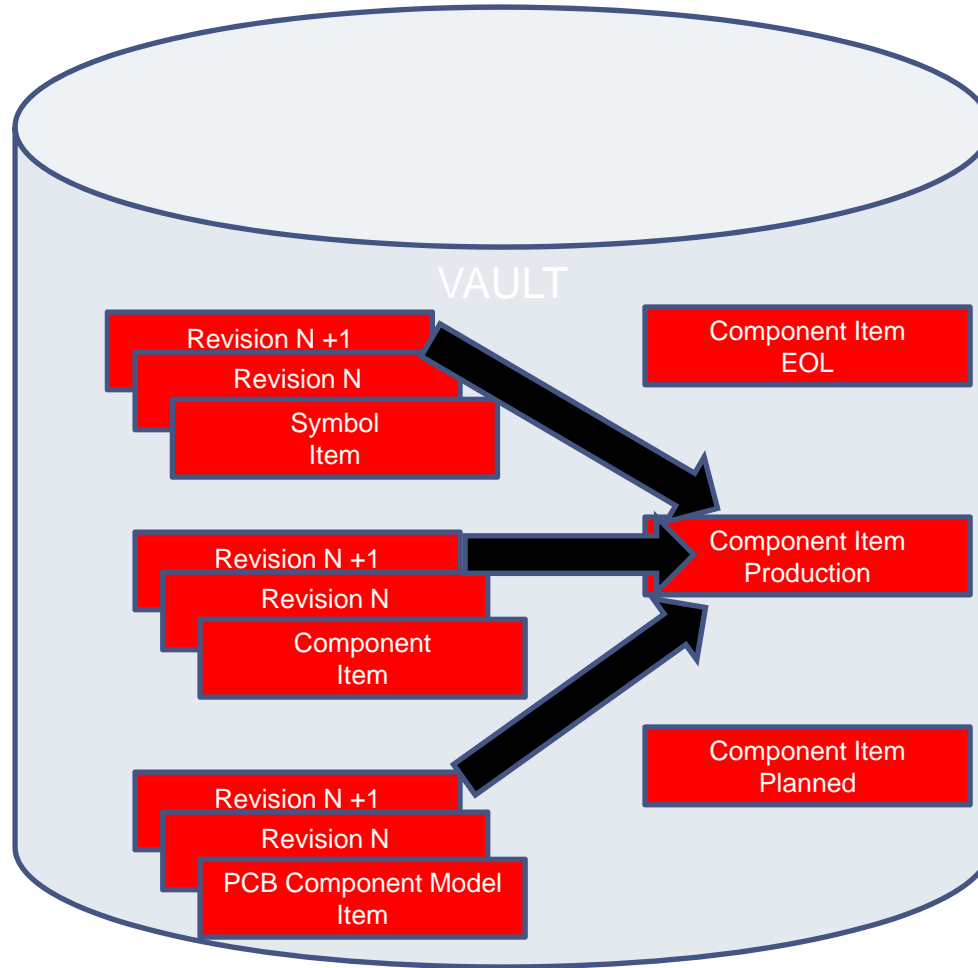
Nothing is ever deleted from this vault, ever!



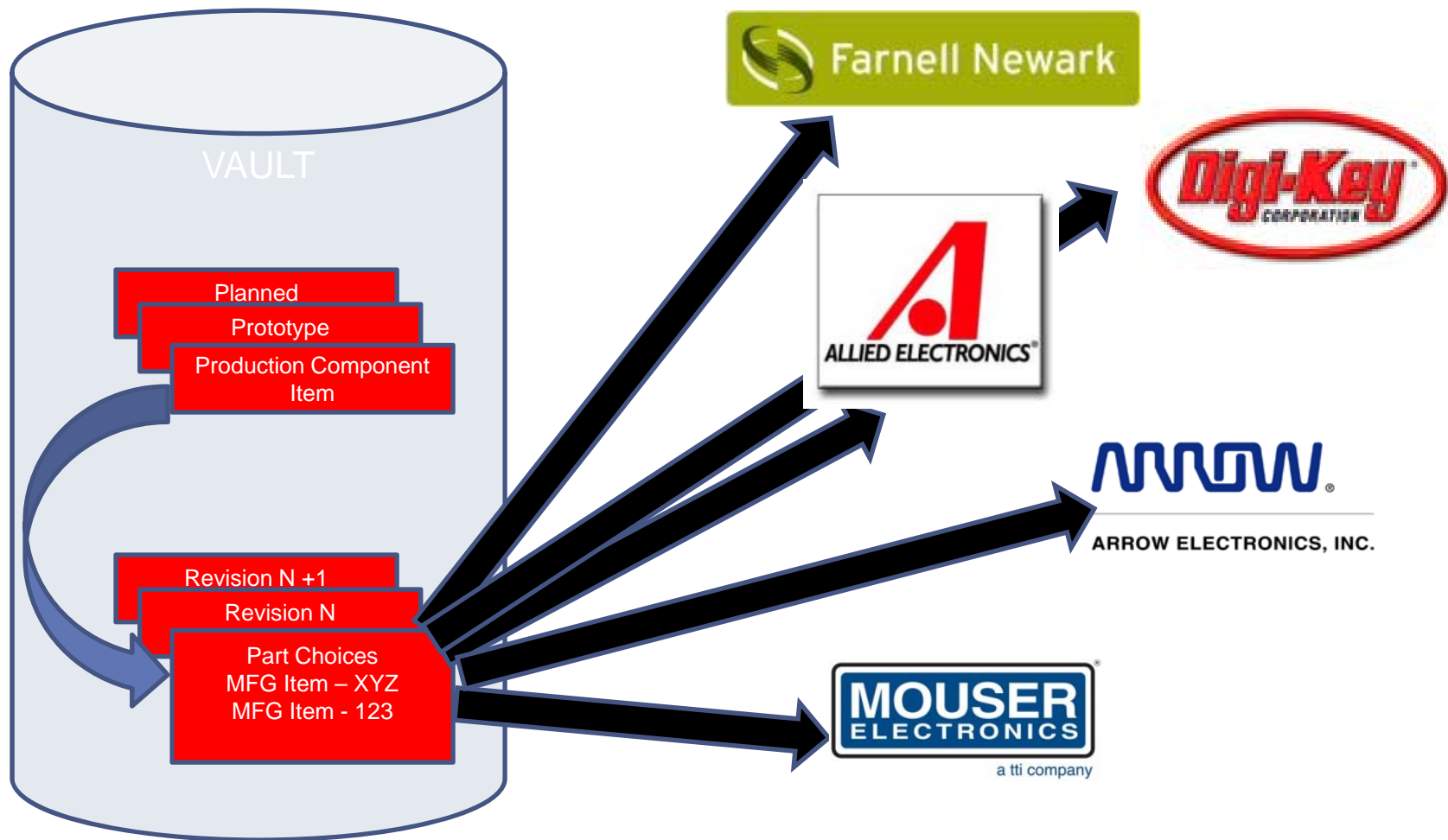
Name	Description	Quantity
1000	Resistor	1000
1001	Capacitor	1000
1002	Inductor	1000
1003	Diode	1000
1004	DC Voltage Source	1000
1005	AC Voltage Source	1000
1006	And Gate	1000
1007	Nand Gate	1000
1008	Or Gate	1000
1009	Nor Gate	1000
1010	Xor Gate	1000
1011	Inverter (Not Gate)	1000



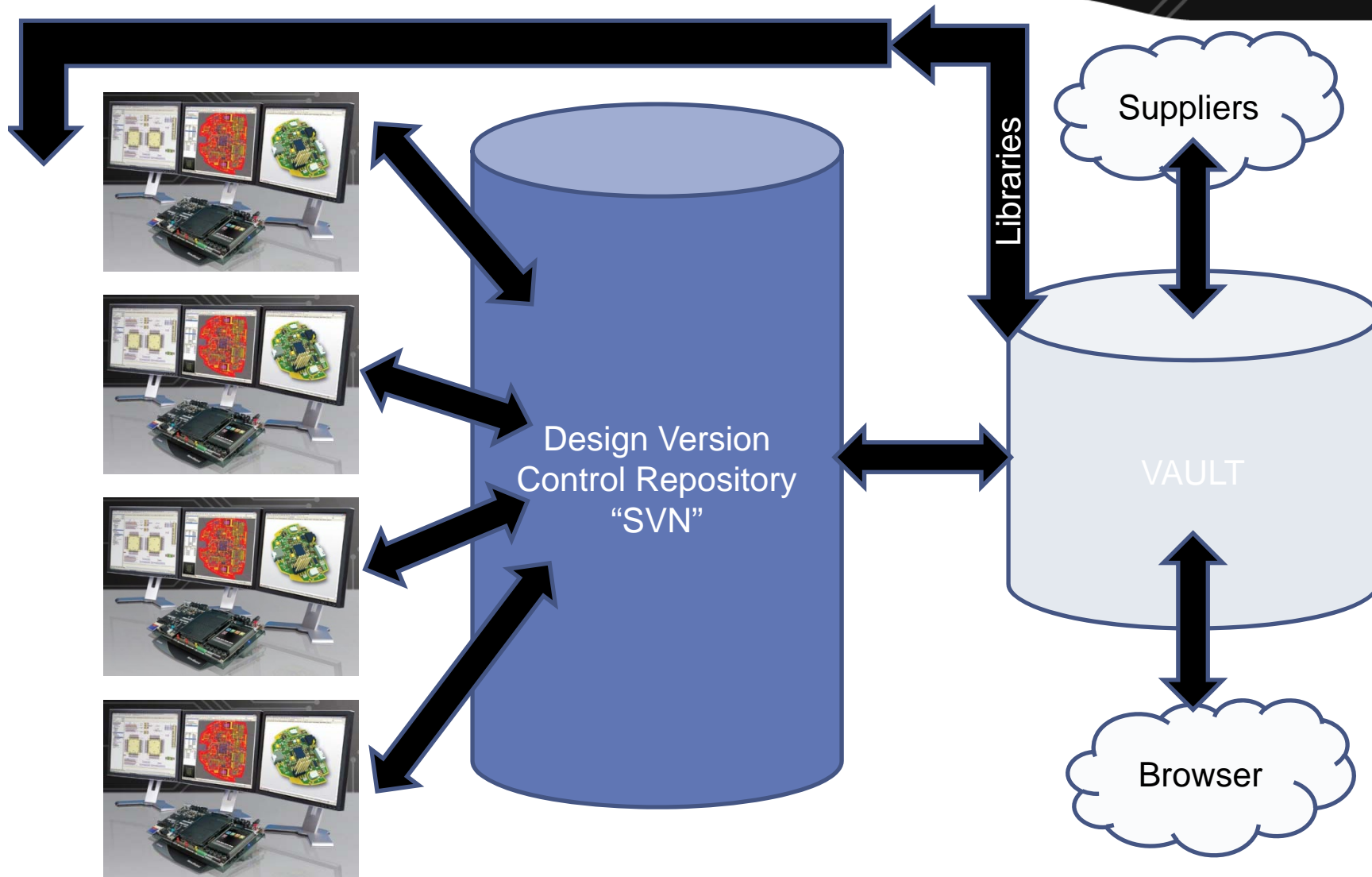
Creating a released component...

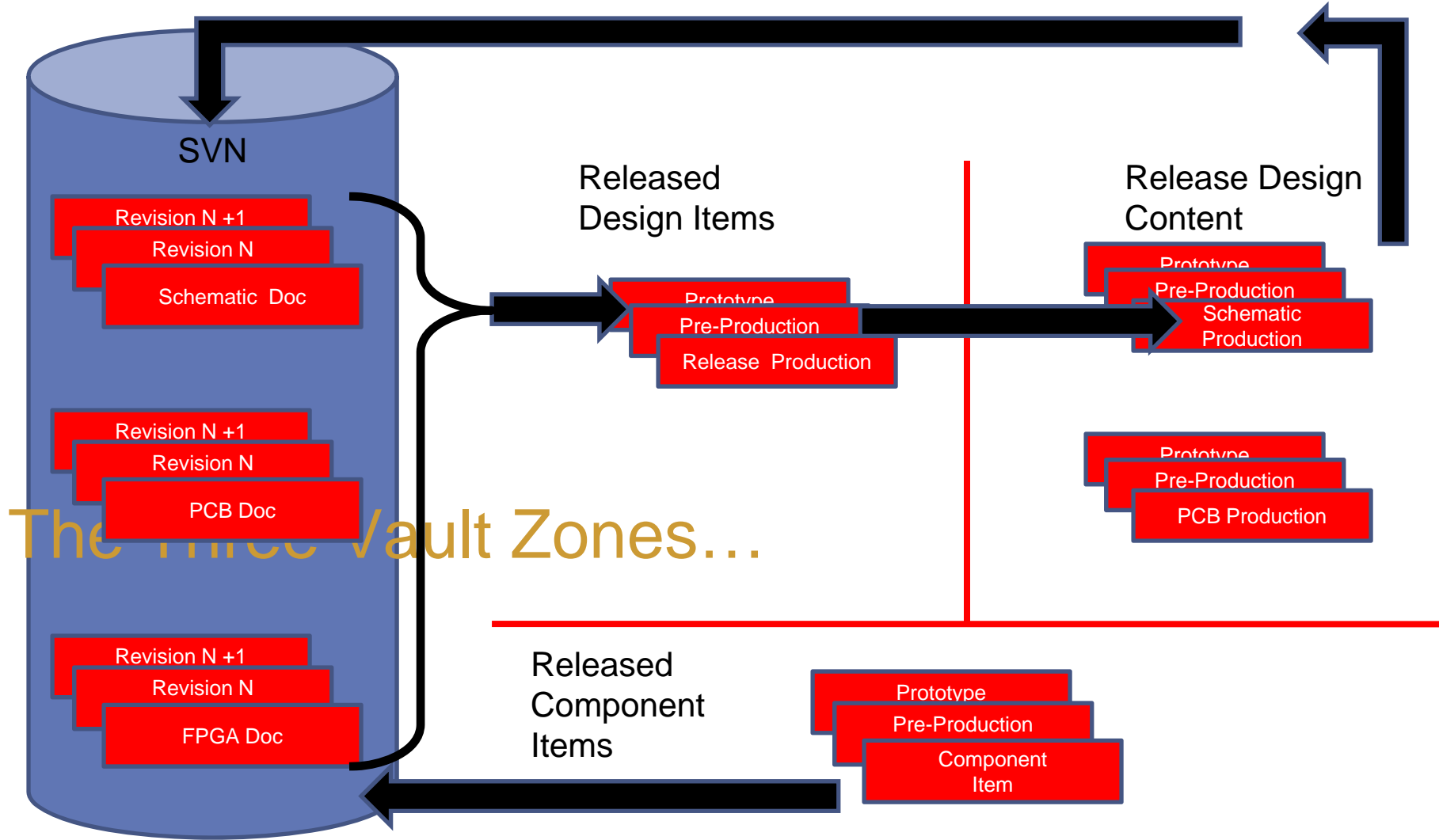
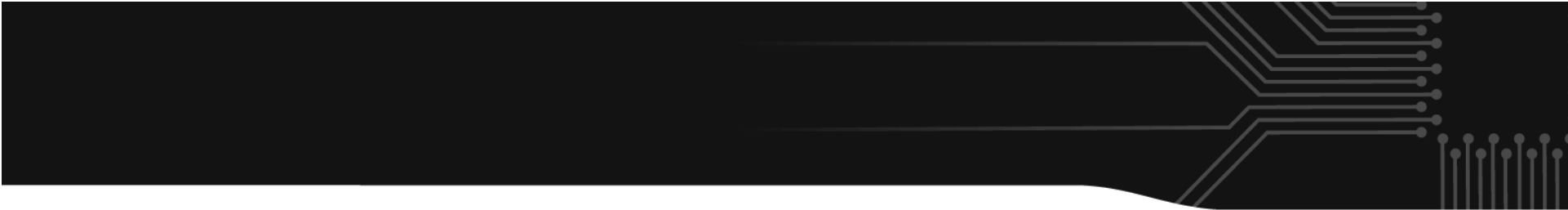


Selecting Part Choices at Design Time...



The Big Picture...





The three vault Zones...

What's all this mean???

- Versioned/lifecycled Releases - which contain
 - Versioned/lifecycled Design Content - which contain
 - Versioned/lifecycled Component Items - which contain
 - Versioned/lifecycled Component choices and
 - Versioned/lifecycled Part choices – Which are
 - linked to Suppliers

Which allows us to:

Determine “where-used” forever!

In Summary...

- Lifecycle mismatches require engineers to be cognizant of Component Lifecycle at DESIGN time.
- Because of this, component management **MUST** exist in the engineering domain.
- Moore's Law continues, which means that obsolescence continues (Lifecycles of components are often much shorter than that of the products they're in)
- Component Management **MUST NOT** be a burden to engineers, rather it should complement engineering and enhance the creation process!

Demonstration

TECHNICAL WEBCAST:

Unify Your Design Team –
Workgroup Data Management

