

# Tech Management for Producers

**TIVA 2010** 



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# My How Things Have Changed...

### What Happened?

- The Non-linear/Computer Revolution
- Dedicated facilities to SOHO
- Increasing Complexity and Choices
- Loss of old Training Process

# Are YOU a Facility Owner?

# What is Required to Get Things Done

- Creative Mission
  - Workflow
    - Equipment
      - Environment
        - Personnel

#### Used to be...

- One U.S. video format: 525 lines, 30 frames
- One kind of display: CRT
- Analog video had few variants
- Even digital video was still 525/30





#### Today's Workflow Questions

- SD vs. HD (and aspect ratio)
- Tape vs. file-based
- Storage Media (and archiving)
- Deliverables (what is a Master?)
- Equipment Choices

#### What About Quality?

- Camera specs imager, lenses, compression
- Compression codecs, transcoding
- Monitoring what does it really look like?
- Did I mention compression?
- Delivering to... Whom?

# **Equipment Selection Guidelines**

- Accurately define what needs to get done
- Define workflow input to output process
- Determine users experience, staff/freelance
- How will it be maintained?
- Complexity / Flexibility / Cost / Quality

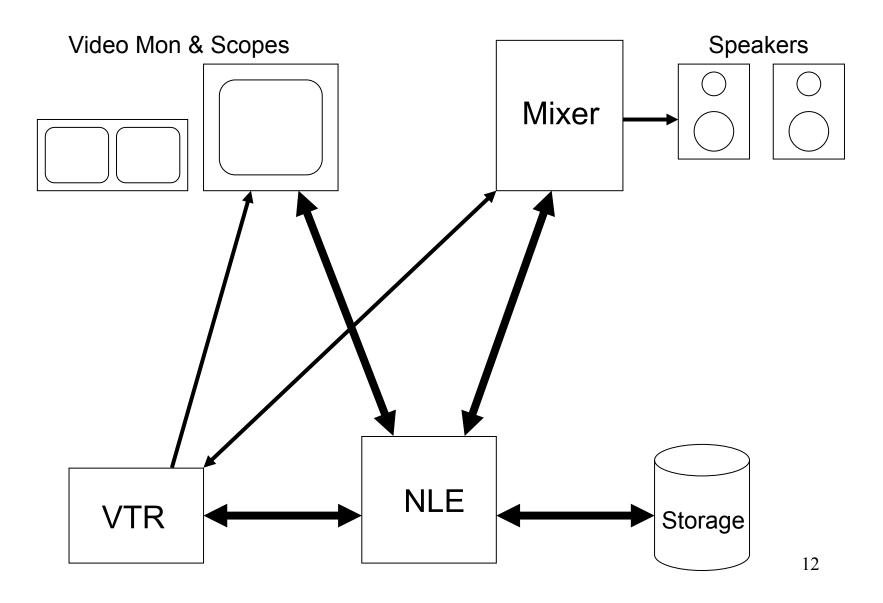
# Working with **Equipment Vendors**

- Mail order "box" houses
- Local sales companies
- Local sales with "value added" services
- Systems Integrators

# Working with **Equipment Vendors**

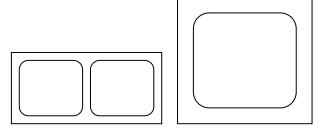
- Do not shop price only!
- Consider local for long-term relationship
- Beware of sales advice
- Do not expect "integration" with basic sales

#### **Typical NLE System**



#### Typical NLE System

Video Mon & Scopes

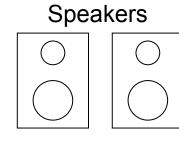


Monitoring quality Viewing artifacts Finishing?

Source/Record Devices?

VTR

Mixer



Analog I/O? Finishing?

Applications?
Computer?
I/O Device?

NLE

Single Drives?
RAID?
Backup?



#### **Sources of Information**

- Equipment vendors
- Magazines
- Seminars, trade shows
- Colleagues
- Online forums

#### Environment/Infrastructure

Is your edit room...



Unpleasant?

#### Environment/Infrastructure

- Layout for comfort and viewing ability
- Electrical Power
- Cooling for equipment and people
- Acoustical Considerations
- Allowance for expansion

#### Personnel

This stuff is complicated!

Operators must have knowledge, experience and initiative to learn.

Engineering Management is important for any size facility!

# The Tech Manager

- Keeps track of manuals, discs, serial
   numbers, service needs, phone contacts
- Central contact for service requests,
   changes, freelancer questions

## The Chief Engineer/ Engineering Lead

- For large and complex projects
- Has overall picture, knowledge of many disciplines, coordinates contractors and interdependent decisions

### **Using Freelancers**



Do you have one of these?

How many know how to work a HDCam deck?



How about one of these?

#### **Using Freelancers**

- All systems are not the same
- Lots of app knowledge, not technical
- Allow for training and familiarization
- Rules of behavior
- Critical contacts

### Which leads to...

#### The Tech Procedures Book!

### Simple Troubleshooting

#### Use good observation techniques:

- Note all conditions during problem
- Note conditions leading up to problem
- When was the last good operation? What changed?
- Be clear about meaning of words!

### **Troubleshooting Strategies**

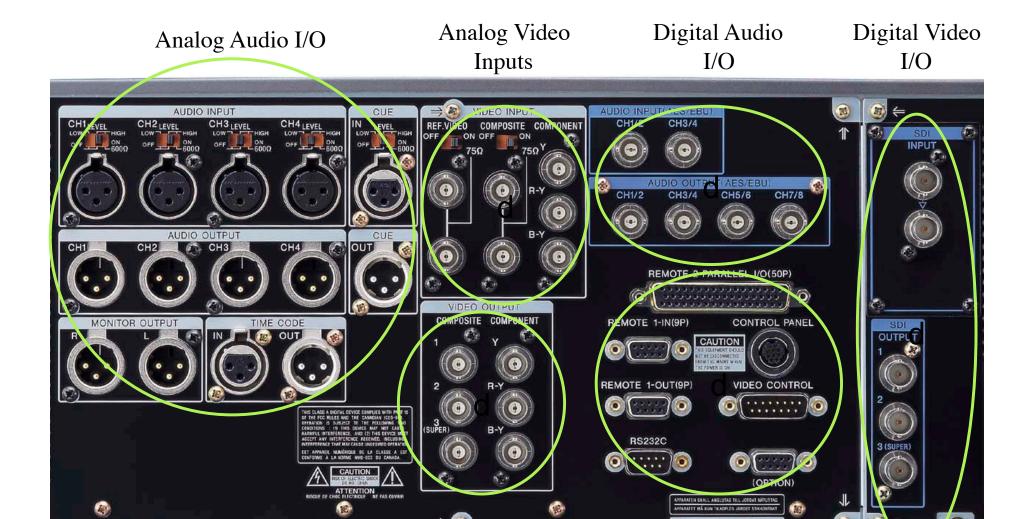
- It pays to know how things are SUPPOSED to work.
- Start with known good signals (bars and tone), good path and monitoring.
- Change one thing and observe...
- Swap things: cables, equipment, software
- Cut problem in half

### **Troubleshooting Strategies**

#### Manuals are like GOLD!

#### **And Now**

Some scary things...



Analog Video Ouputs

Remote Control And Misc.

#### Uh oh...

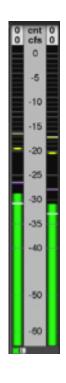








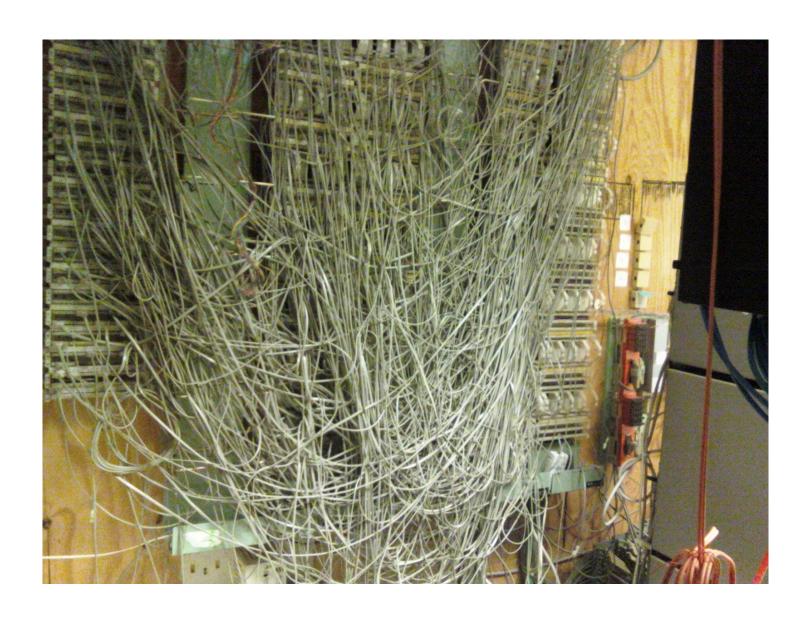












### **Television Engineering**

- Systems Integrators
- Systems Engineers/Consultants
- Software/Application Experts
- Bench (repair) Techs
- IT Consultants
- Broadcast Engineers

### System Engineering Perspective

- Maintain Signal Quality
- Accurate Monitoring
  - What is the signal really like?
  - How will it look/sound elsewhere?
- Flexibility

### **Engineering Value**

- Broad knowledge of industry practices and available technology
- Understanding of how equipment and processes are supposed to work

#### **Engineering Services**

 Build system for reliability and ease of service

 Integrating "legacy" equipment with new technologies

#### Thank You!

# Please send me feedback on this presentation

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