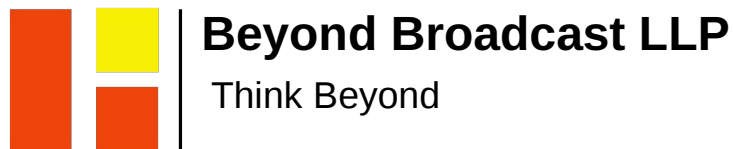


# Real-World Challenges of Going Digital

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A *really*  
obvious statement ...

Broadcasting has gone digital

Video Servers, **Archive Systems,**  
Metadata Management, **File-Based**  
**Workflows,** H.264, **DVB-S/C/T**

It is *really* simple to ...

- A. Get started
- B. Obtain high-quality results
- C. Have the system work reliably
- D. Fall into a trap
- E. All of the above

Not to worry you will not be graded on your answer!

# Some FMCs (Frequently Made Comments) ...

I just *had* to make up my own TLA.

The System worked perfectly ...  
... during Acceptance Testing.

Why do we *still* have these many  
VTRs (Video Tape Recorders)  
running around?

Why is it taking *longer* than before?

And the *least* welcome comment ...

Why have we gone off the air !@#\$?

Digital is simple to ...  
mis-understand.

The **fix** is equally simple ...  
understand it better.

**File-based workflows** require understanding of:

File Wrappers (MXF, MOV)

Codecs (MPEG-2, DV, H.264)

**otherwise...**

files cannot be played or processed

**Embedded Audio** requires  
understanding of digital timing

**otherwise ...**

clicks, pops and mutes result

Digital Video Broadcasting (DVB)  
requires at least some  
understanding of critical tables (NIT)

otherwise ...

thousands of set-top boxes are lost

Digital Video Broadcasting is  
perhaps the *least* well understood  
area ? ...

# For Good Reason ...

PAT: Programme Association Table

PMT: Programme Map Table

NIT: Network Information Table

PID: Packet Identifier

PCR: Programme Clock Reference

EIT, TDT, BAT, TOT, POT

Question: Which *one* of the above TLA's is bogus?

# Clearly a need for better understanding in the area of Digital Video Broadcasting ...

Umm .. here comes the commercial pitch ...

Well, no. Suffice to say there are training programmes available right here in Asia, right now and in an easily accessible medium. Which medium .... ?

Training in which form ... ?

SKILLsets4LIFE

Digital Video Broadcasting Courses



# DVB Fundamentals Online



**Master DVB Fundamentals  
at your own pace & in your own place**

Based on a proven course ...  
... conducted F2F (face-to-face)  
at Digiworkz, Singapore

Coverage includes ...

# MPEG and ...

file:/// - DVB - Mozilla Firefox

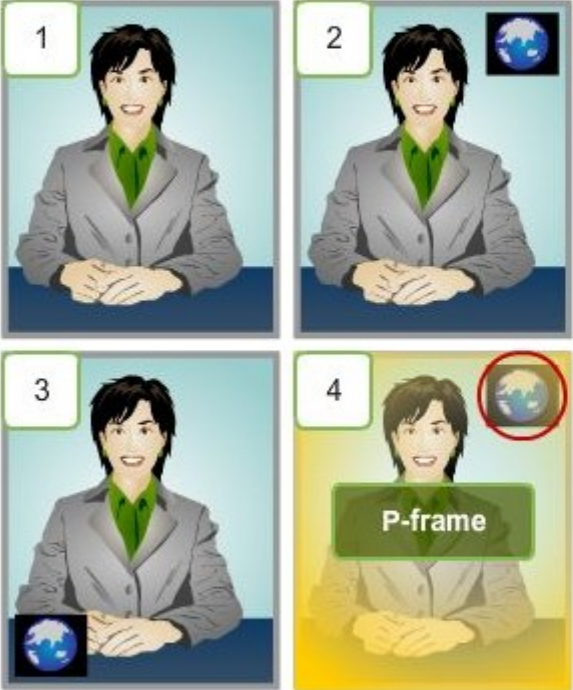
## DIGITAL VIDEO BROADCASTING | FUNDAMENTALS

### 8.2 P-frames 2

The differences that are recorded are called predictions. This is because the encoder refers to the I-frame and the last frame in the sequence to reconstruct how the last frame will look.

The last frame in the sequence is compressed using only the differences (or prediction data). This results in a P-frame.

Now take a look at the image. Notice that the only difference between frame 1 and frame 4 is a small picture.



MAIN MENU

FORUM

Done

module1\_module\_8\_... Skill Sets 4 Life - Lau... file:/// - DVB - Mozilla ...

EN 10:50

# DVB tables ...

file:/// - DVB - Mozilla Firefox

DIGITAL VIDEO BROADCASTING | FUNDAMENTALS

## 9.8 PAT Example

In this example, the PAT shows us that there are three programmes – 1, 2, and 3 – in our transport stream, each with individual PIDs.

If you look at the PID numbers you will notice that there is only one PID number for each programme.

PAT	
PID: 0000	
Programme	PID
1	0020
2	0030
3	0057

This means that each programme must contain additional information. This is obviously not the PID for the video or audio elementary streams as there would have to be more than one PID.

The PID in this example is referring to the programme map table (PMT).

PMT Reference

MAIN MENU AVATAR FORUM

Done module\_8\_and\_module\_9/star...

module1\_module\_8\_... Skill Sets 4 Life - Lau... file:/// - DVB - Mozilla ... EN 10:53

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