IT Best Practices & Hardware for CET Designer

Jason Lund

Donald Stratton

ATMOSPHERE
COMMERCIAL INTERIORS

350 users, 10 locations, 35 designers across the enterprise

Technology budget is slightly less than 1% of top line revenues

4th largest Steelcase dealer in the country

We support two laptop models (Design/Marketing, and everyone else)

Laptops are refreshed every 3 years regardless of their condition

In 2018, IT team will begin generating revenue for the dealership

Agenda

- The evolution of IT as a business practice – convergence with design

- Selecting and buying hardware for CET Designer

- Designers – strategies to work with your IT team

The Evolution of IT as a Business Practice

- **Traditional** – reactive support, cost management, "on-prem" data center/server practice, purchased software licenses, laptops replaced on fail.

- "IT Guy/Gal" fixes stuff when it breaks, constantly battling lack of time/resources.

- Tech team equips designers with tools to be productive (laptop, network, file storage, etc..)

The Evolution of IT as a Business Practice

- **Proactive** –maintenance program to avoid failures, IT business value management, cloud & managed services infrastructure, subscription software, laptops replaced on schedule

- IT team blends local and contract resources to deliver services to the dealership.

- Tech team supports design users to maximize productivity.

The Evolution of IT as a Business Practice

- Converged – commodity tech services via subscription, in-house techs focus on integration & high value business projects, tech team develops best practices & experiences with internal and external client value.

- IT team develop intellectual capital, delivers services to internal and external clients, IT vendor partnerships include referral/reseller arrangements.

- Tech & dealer design teams work on client projects together, IT is a profit center providing internal and external services.

Why does hardware matter?

Hardware speed directly impacts design productivity

Current hardware minimizes unpredictable downtime

You don't buy it that often, so buy it right…

What should I buy?

A laptop

… that is also light enough to carry, every day (5 lbs max, 15" screen)

… with an nvidia Geforce graphics adapter (1050ti, 1060, 1070, etc..)

… with an Intel i7 processor, more cores & higher speeds are good

… with an SSD (solid state drive), 500 gig minimum (RPM = fail)

… with 16 gigs of memory, Windows 10, and Intel wireless

4k vs HD (1080p) displays

4k has four times the resolution of HD (1080p), and it looks amazing

But...

It takes more hardware to run (premium price)

Requires more power, reduced battery life (20%-50% less)

CET Designer not optimized for Windows scaling (yet)

Makes interfacing with conference rooms/projectors problematic

Why is right now a really good time to buy hardware?

Small form factor, high performance laptops have become the new normal

Graphics hardware performance = double previous generation, same price

Model	Laptop	Year	Price	Graphics Passmark	CPU Core	RAM (GB)	Storage (GB)
GeForce 760m	Sager 8xxx series	2011	$1,600	1374	2	8	256
GeForce 860m	Sager 9xxx series	2012	$1,600	1601	2	8	256
GeForce 970m	MSI GS60 Ghost	2014	$2,000	3926	4	16	512
GeForce 1060	MSI GS63VR	2017	$2,000	9186	4	16	1024

New visualization options require more hardware performance than ever before

"Early adopter" penalties no longer exist

What do I buy our designers?

EVOC 16S-1060 (MSI GS72vr) ultralight laptop from HIDevolution

- Intel i7 – 7700HQ quad core processor, 2.8-3.8 ghz
- Nvidia Geforce GTX 1060 w/ 6 gigs GDDR5
- 15.6" Full HD (1080p) IPS LED backlit display
- 16 gigs of memory (dual channel)
- 1 TB, m.2 SATA hard drive
- Intel 2x2 wireless adapter (8265) w/ Bluetooth
- Windows 10 Pro, 64-bit
- 2 x power adapters
- 2 year warranty
- $2,150 each

See Donald for a demo of this and other CET Designer optimized laptop models.

VR vs advanced visualization?

VR – tons of hype, client experiences have not been good

Co-design visualization (using the game pad with Virtual Viewer) is effective, works well with clients.

VR headsets – our cilents HATE sharing a headset, and every one of them has gotten motion sickness..

Design time required for a good VR experience is exponentially higher than a photo lab rendering (accessories, finishes, ceiling/lighting, floor details, window exterior views, etc..)

Higher design/selling cost must be paid back with higher success rate or profit margins, no measurable correlation between VR and higher close rates.

Value of a brand name?

Dell, HP, Lenovo = ODM (Original DESIGN Manufacturer)… they don't manufacture their own laptops

Big dealerships don't need OEM buying contracts, I support 350 users across the country and we have been buying laptops from boutique gaming vendors & small resellers for over a decade…

Components within different laptop brands are commodity parts from the same manufactures

How useful are manufacturer direct warranties?

   Does simply shipping replacement hardware to a designer get them back up and running, or does IT need to prepare the laptop (install software/drivers, etc..) thus making an internal hot-swap/depot approach more effective and affordable?

How do I justify the cost for better hardware?

Hardware performance & stability directly impact designer work speed; more bids, more billable hours

Design talent is hard to find, expensive to train…

After hiring, new designers indicated "good tech" was a factor in deciding to work for us (attract & retain)

How do I justify the cost for better hardware?

Most computer hardware is depreciated over 3 years:

$2,100 laptop = $700 per year, or just under $60 per month (1 billable hour?)

Design specific software tools, per designer, averages $200-$300 per month

In the lifespan of a $2,100 laptop, dealers spend $7,200 to $10,800 per designer for software

How do I get my IT folks to help me with this?

Start with the CET Designer support page, TONS of good info for IT

Put them in touch with IT folks at dealerships that have good design/tech synergy

Invite them to this conference!

Involve IT in your business planning & team meetings

How do I get my <u>UNCOOPERATIVE</u> IT folks to help me with this?

If design hardware is charged to design/sales P&L, ask who is accountable performance of the investment?

Track time lost due to hardware failures, slow performance, crashes, and project losses

Quantify the cost of lost hours, project opportunities, retraining/hiring issues, etc..

Make your case to leadership, lost productivity & talent due to tech failures <u>is a serious business problem</u>

How else can IT help designers be more productive?

Be an advocate, and a force multiplier.

Understand how & where they work – see what they are up against by looking at competing bids

Take CET-D basic training?

Provide a fast & stable environment (laptops, storage, network)

Most Common Help Desk Issues (and how to fix them on your own):

Distance Unit is wrong
Go to CET Control Panel->Region tab->Set distance unit

Can't find a symbol
Right click line number of part in Article View and select Locate on Drawing

Unable to import CAD file
Is it 2018 CAD? Not Supported til 8.5, downsave to earlier version and re-import

Unable to open drawing
Clean Start/Make sure up to date on extensions

Most Common Help Desk Issues (and how to fix them on your own):

Nothing in 2d/3d
Large CAD files/Objects placed far apart from each other

3D is black
Real time lighting on

Elevation not accurate size
CET Control Panel->Graphics tab->Switch Create Isometric view for elevation option. (If on, turn off. Or if off, turn on and redo the elevation)

Q&A