



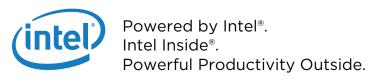


Today's workforce is on the move. And as an organization embracing the digital wave, you need to ramp up your mobility game to ensure that your workforce is productive. But enabling mobility can become a nightmare for your IT team. They need to ensure flexibility and interconnectivity for the mobile workforce, while keeping your data and devices secure.

Your move to mobility also increases cost and risk. So the dilemma you're probably faced with right now is: how to maximize the benefits of mobility while minimizing the costs and security risks?

In this whitepaper, we are going to elaborate on the technological nuances Lenovo incorporates in its devices that help the mobile workforce be at their productive best.









Before getting started, it's important to look at the total cost of ownership of moving to a mobile workforce:



Direct IT costs pertaining to device lifecycle management, including purchase, delivery, infrastructure, security, user support, repair, and replacement.



End user time costs such as time spent troubleshooting, fixing older devices and learning how to use a new device.



Productivity gains from higher-performance devices and devices that increase employee mobility.

If you are contemplating not enabling mobility for your organization, think again!

### Benefits of a mobile workforce:

- Increased productivity
- Improved efficiency
- Streamlined business workflow

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It's clear that we're in a state of transition. While many of us are making the move to digital transformation, we're being urged by pundits to consider adopting new technologies: IoT, augmented reality (A/R), virtual reality (V/R), AI, robotics and many more.

At Lenovo, we believe that it doesn't make sense to adopt new technologies until you have a future-ready infrastructure. Once you have such an infrastructure, the doors will be wide open for you to choose whatever tools you determine are right for your organization.

How do you get a future-ready infrastructure? You start with the right devices. The devices you choose to give to your employees will have a direct impact on their productivity, efficiency,

and ability to retain the right skills. The right devices can unlock massive potential for your employees where they can work nonstop, focusing only on their work.

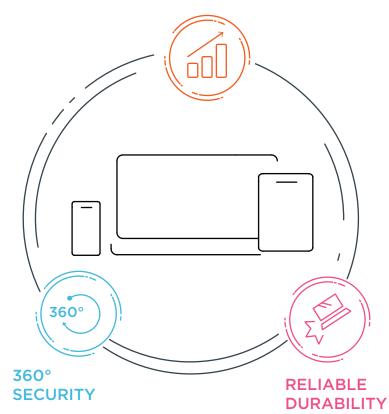
The devices you choose will also have a huge impact on end-point security, which is of utmost importance with a mobile workforce.

Last but not least, it's critical that the devices you choose have the necessary features to fully support any high-end software that employees need to run on their devices.





### **UNCOMPROMISED PRODUCTIVITY**



Lenovo takes specific measures to make sure our devices are an extension of the new-age mobile workforce, giving employees the flexibility to work anywhere, anytime and any way they want while ensuring the IT department still has an upper hand when it comes to security and manageability.

On the next few pages, we will explore how the Lenovo ThinkPad X1 Series. ThinkPad T Series. ThinkPad P series and Lenovo V Series address each of these elements.



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## UNCOMPROMISED PRODUCTIVITY

When you think about productivity in a mobile world, you need to think about:



### **PERFORMANCE**

The key elements for optimum mobile device performance are:







Immersive graphics



Adequate RAM



Large displays



Long battery life

Lenovo devices score high on all these aspects, so you never have to compromise on device performance again.

The ThinkPad X1 series gives you the horsepower to handle heavy tasks and battery life to last all day. The ThinkPad X1 Carbon and X1 Yoga can last up to 15 hours and can charge up to 80% in less than an hour.

Apart from the heavy duty performance features, the X1 devices also take care of the finer details to ensure maximum productivity, like:

### **Latest Processors**

Up to 8<sup>th</sup> Gen Intel<sup>®</sup> Core<sup>™</sup> i7 processors



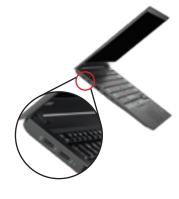


**Display** 

Wide Quad High Definition (WQHD) OLED Display

### **Ports**

2 Intel® Thunderbolt™ **3**, 2 USB 3.0, HDMI, RJ45, MicroSD, MicroSIM





### **Better Connectivity**

New antenna design with gold-plated shielding ensures strong signal strength

### **Low Blue Light**

Reduces the amount of blue light that is emitted from the display and helps reduce eye fatigue





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## UNCOMPROMISED PRODUCTIVITY



### **FLEXIBILITY**

Our devices ensure flexibility to keep up with modern collaboration options. Workforce mobility can be facilitated through:

### **Self-service Support Options**

Boost the value of your mobile devices with Lenovo's accessories ecosystem. Connect ultrabooks and laptops to multiple monitors for better visualization and multitasking. Or attach a wave keyboard for more comfortable and accurate typing experience.



### **Docking Options**

Experience easy portability for the ThinkPad X1 series, ThinkPad T series, ThinkPad P series and Lenovo V series devices as they include the **ThinkPad Thunderbolt**™ **3**. Connect a cable from your USB-C port to a **Thunderbolt 3-enabled device**, and get four times the data and twice the video bandwidth of any other port type, while also supplying power. So you get **Thunderbolt**, USB-C, and DisplayPort. Plus, you can even output to two 4K displays with the **Thunderbolt Dock**.



### **High-quality User Experiences**

Enjoy multiple modes for a comfortable working experience on convertibles.



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### CONNECTIVITY

Connectivity is the heart of productivity. Our devices keep you up and running even if you are out of WiFi range. Fast mobile broadband ensures users are always connected to all their data and apps in the cloud:

### LTE-A (4G)

Even when WiFi is out of range, the optional Qualcomm® Snapdragon™ X7 LTE-A means users always have connectivity and access to all their data and apps in the cloud.



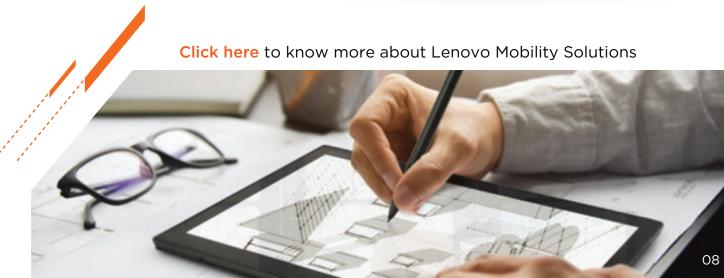
### **Tri-Band Wireless**

The Intel® Tri-Band Wireless delivers high-speed wireless docking connectivity for mobile devices like 2-in-1s, tablets, and laptops. This means users can have WiFi-like connectivity anywhere, anytime, without any hassles.

### **Near Field Communication (NFC)**

Bluetooth-like feature to facilitate data transfers to nearby devices. To break in through an NFC signal, a user needs to be physically close to the company's PC and have the right NFC tag.









360° SECURITY

Business PCs need several layers of security, including data encryption, theft and loss prevention, and protection from unauthorized use. All of these layers need to work together and be easy to manage.

Lenovo has a 360° approach to security which is a cohesive mesh of features and technologies that deliver maximum protection in a business PC.



**Smart Card Access** 





### **USER ACCESS CONTROL**

Ensures PC access for authorized personnel only

#### Multi factor authentication

Lenovo's biometric fingerprint recognition ensures simplified access management and robust security. Leading in multifactor authentication, Lenovo also offers the following features in its devices:

- Match on chip (MOC) fingerprint reader: the most secure fingerprint technology on a PC because the biometric credentials are stored on a separate chip, making it almost impossible to hack into.
- Further streghen authentication with Intel® Authenticate which gives
  flexibility to create and deploy customized hardened multifactor
  authentication policies to enforce user identity protection for access
  to the corporate domain, network, and VPN; protecting identity and
  securing data. Intel® Authenticate solution provides a simple
  self-service enrollment tool for end users to quickly get started,
  eliminating calls to IT.

### **Smart Card Access**

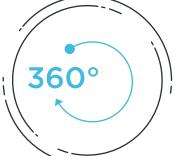
A highly secure way of storing login information in tamper-proof cards that can also be used to manage access to multiple devices without using passwords. Smart cards directly implement a two-factor authentication policy, ensuring that devices are averse to threats.

### **Near Field Communication (NFC)**

NFC is a type of radio communication standard, much like Bluetooth, WiFi and other networking technologies. To snag the NFC signal to log in, the user needs to be physically close to the company's PC, with the right NFC tag or secondary device.







360° SECURITY



### PORT AND PHYSICAL PROTECTION

Prevent data theft from USBs or other access ports on company PCs

### **Smart USB Protection**

Blocks the data transfer capability of the USB port. But keeps the ports functional for input devices like mouse and keyboard.

### **Camera Shutter**

Camera hacking risks can be avoided by physically covering the camera. With the shutter built into the camera, protecting privacy just requires closing the camera cover.

### **Chassis Lock**

A lock and key mechanism prevents theft of components like hard drives and graphics cards.



**Camera Shutter** 



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### DATA PROTECTION

Prevent data theft and loss

### Full Drive Encryption (FDE)

Hard drive encryption to prevent unauthorized access to data and sophisticated attacks.

The dTPM 2.0 chip encrypts user data on the PC.

### **Online Data Backup**

Compared to tape archives, backing up your business data online automatically offers better speed and ease of use. Also, experience Pro SSD integration with Intel® Remote Secure Erase from Intel® Active Management Technology (AMT).

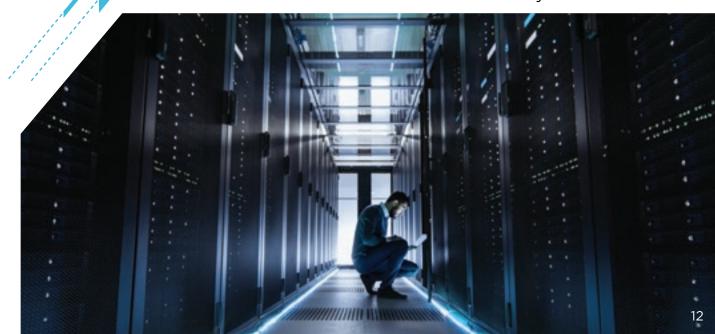
### **Hard Drive Retention**

When a hard drive is replaced under warranty, this add-on service allows the company to retain the original drive.

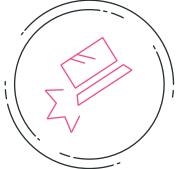


dTPM 2.0 chip

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### RELIABLE DURABILITY

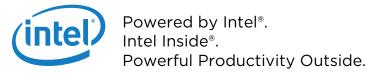
Durability doesn't mean bulky looking devices. Neither does it mean that sleek, good looking devices cannot withstand daily bumps and knocks they may be subjected to when employees are on the move. Want to know what durability truly means? Explore Lenovo ThinkPad devices.



### **FINEST MATERIALS**

The lightness, rigidity, strength and feel of a laptop are highly influenced by the type and mix of materials used. Lenovo prides itself on using superior materials:

- The carbon fiber used in ThinkPads offers superior strength and rigidity
- The grade of carbon fiber used is the same as that used on satellites with 1/3 the weight of Aluminum and 50% more strength than Magnesium at almost 1/2 the weight
- For parts like the palm rest area, which are subjected to extra stress, we use Magnesium, which provides maximum strength



### The benefits:

- Optimal balance of strength and lightness
- Superior performance of all wireless features
- Premium finish, feel, and paint durability
- Extended resistance to physical wear and tear
- Lighter, stronger and more durable than other products in the market

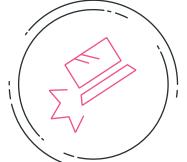


**MIL-SPEC Tested** 

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## RELIABLE DURABILITY



### **INNOVATIVE TECHNOLOGY**

Innovative technology is about using proven techniques in new and creative ways to solve genuine user problems, address electronic and mechanical design challenges, and enhance features and functions of the operating system.

Innovative technology in PCs should influence features like design and user input systems, performance, reliability and durability, thinness, lightness, cooling and heat dissipation, wireless performance and overall user safety.

Here are Lenovo's latest innovations that will have a big impact on business users:

### User Input

Precision touchpad and Wave keyboard on convertibles and 2-in-1s for easy usability in various modes.

### Security

ThinkPad Glance (using IR camera) and Match on Chip Fingerprint Reader (MoC FPR) to ensure PC access for authorized personnel only.



### **Performance**

New antenna location and narrow bezel design that enhance wireless performance and durability.

### Durability

New carbon fiber top cover to protect ThinkPads from everyday bumps and knocks.

### Reliability

Diagnostic SmartBeep and Diagnostic App to identify the nature of any problem with a simple smartphone app for faster resolutions.

### **Cooling and Heat Management**

Intelligent sensing and cooling to reduce heat and ensure user comfort while working with the ThinkPad placed on the lap.

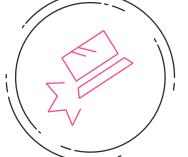
### **Safety and Device Protection**

Anti-fry protection on USB-C protects the ThinkPad from accidental exposure to higher voltage.









## RELIABLE DURABILITY



### **RELIABILITY**

For users who work on the go, it's important to have PCs that can perform consistently in all conditions and can withstand anything from accidental drops to extreme temperatures.

ThinkPads go through a battery of tests and comprise some trademark features that make them more reliable.



### **MIL-SPEC Tested**

With four layers of carbon-fiber reinforced chassis and a magnesium alloy roll cage for added strength, we've engineered our devices to handle whatever comes your way. From spilled drinks, to drops and knocks, these devices are tested against 12 military-grade requirements and pass more than 200 durability tests.



### **Intelligent Sensing and Cooling**

Lenovo's inbuilt intelligent sensing and cooling system helps to reduce heat and ensure user comfort while working with the ThinkPad placed on the lap. It uses the on-board accelerometer to detect the mode of usage and vary power consumption to deliver effective cooling levels which allows ThinkPads to be up to 15% cooler and 10% guieter.



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### Owl Wing Fan

ThinkPads have the new 8<sup>th</sup> generation, patented owl wing inspired fans which churn out 38% more airflow and 15% better thermal performance over previous generations to ensure it is dustless for enhanced reliability.



### **SmartBeep Technology**

Lenovo's SmartBeep technology allows you to quickly identify the nature of any problem with a simple smartphone app for faster resolutions. A series of musical tones are produced by ThinkPad Intelligent Diagnostics which are interpreted by the smartphone app to show precisely the origin and nature of issue for faster resolution.



### **Discrete TPM Security**

All models of the ThinkPad now have a Discrete TPM 2.0 hardware security chip with TCG certification.

The dTPM 2.0 chip encrypts user data on the PC.

### CONCLUSION

As the workforce is on the move, there are several factors of end-user computing that need to be considered. Apart from performance features, Lenovo looks into the finer details to ensure maximum productivity of the mobile workforce. Lenovo's solutions with respect to the three essentials for mobility – Uncompromised Productivity, 360° Security and Reliable Durability – showcases its prowess in the IT solutions space and why Lenovo is an obvious choice when it comes to workforce mobility solutions.



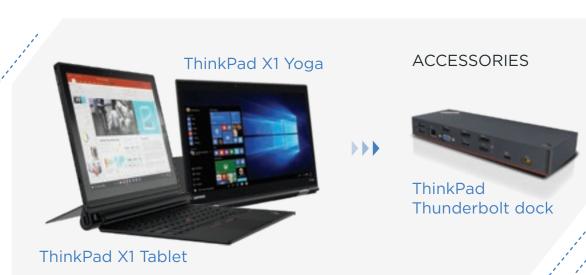
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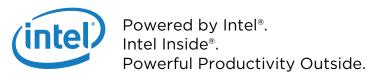


# THINK MOBILITY THINK LENOVO

When you're thinking about an end-to-end partner for all your workforce mobility requirements, think Lenovo.

### **THINKPAD X1 SERIES**





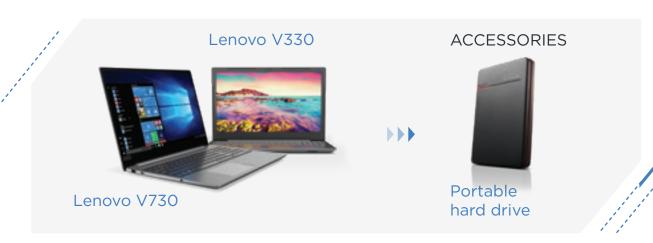
### THINKPAD T SERIES



### **THINKPAD P SERIES**

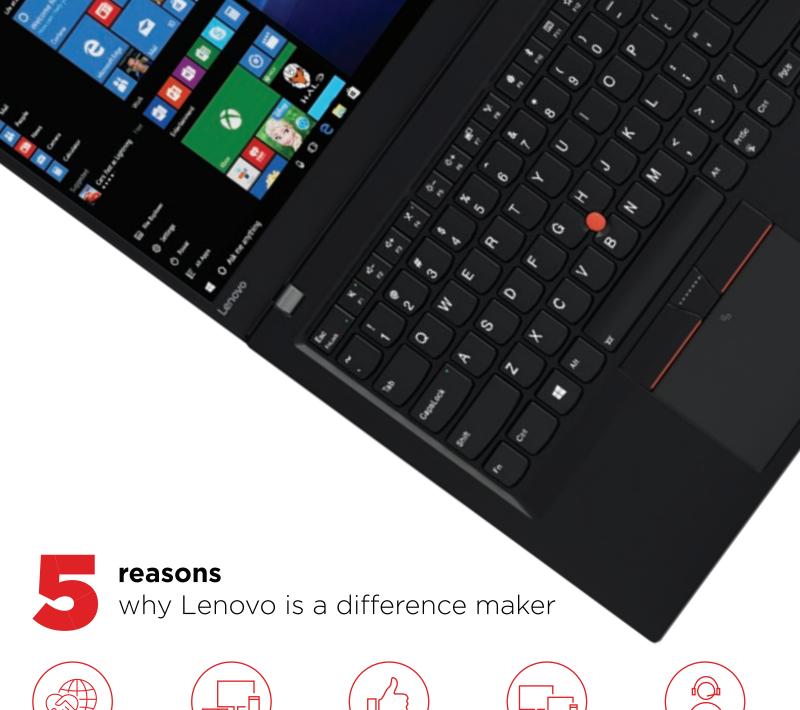


### LENOVO V SERIES



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Trusted around the world



Expertise across categories



Choose Lenovo with confidence



**Business-boosting** technology



Flexible support network



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