



**VECTORING**

Smart. Sustainable. Secure

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The **Vectoring** suite of products and the strategic partnerships that it has forged have been created for four clear areas of focus:

- To leverage historical investment and save money.
- To increase the effectiveness of service to the end-customer.
- To improve security and accessibility for operatives.
- To assist in achieving more sustainable IT solutions.

Delivering more IT capability for less has been the pan-industry mantra for many years. The investment required to consume new technology opportunities has been prohibitive.

**Vectoring** was formed to close the gap between new technology and the freeing up of financial resource so organisations can invest their way out of legacy technical debt.

The direction and leadership of Vectoring comes from a blend of subject-matter expertise, commercial acumen, a thorough understanding of the inhibitors to change, and a drive to improve service within the public and commercial sectors.



# Context

The processing power and storage of today's premium smartphones is immense. Yet despite this mobile capability, employees are not completely digitally enabled to effortlessly serve their customers with just a single device.

Today's mobile workers need to be:

## Connected

Digitally enabled to work anywhere

## Fast Thinking

Requiring real-time intelligence

## Secure

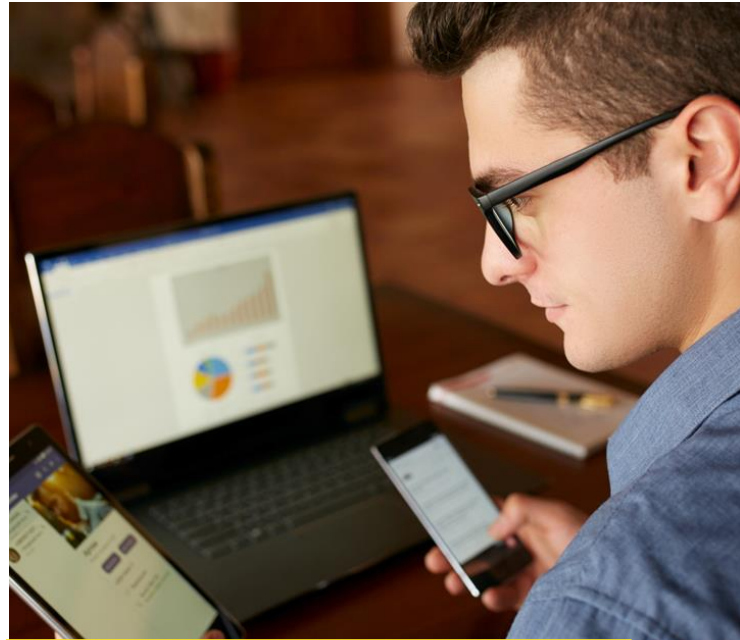
To create and consume encrypted data

## Operational

Equipped with multiple expensive devices

These needs have encouraged device manufacturers to develop smarter, more powerful mobile phones that can help you to work from anywhere at any time. However, the challenges with mobile phones are that they have relatively small screens to capture data effectively and they are limited by their battery life. Subsequently, employees often have to also carry a separate laptop or return to physical bases to complete activities on a desktop computer.

Issuing all mobile or home working staff with a laptop is prohibitively expensive in addition to creating additional licensing and security challenges.

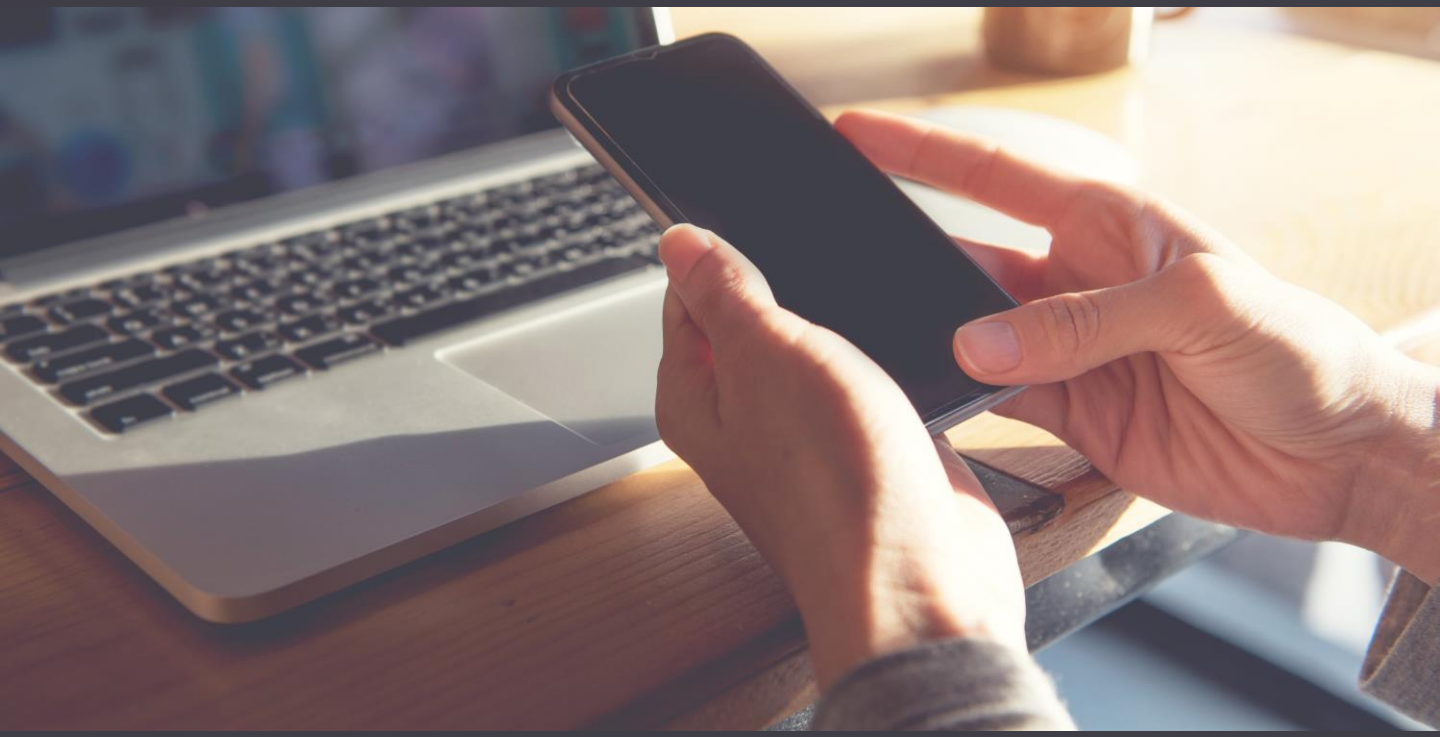
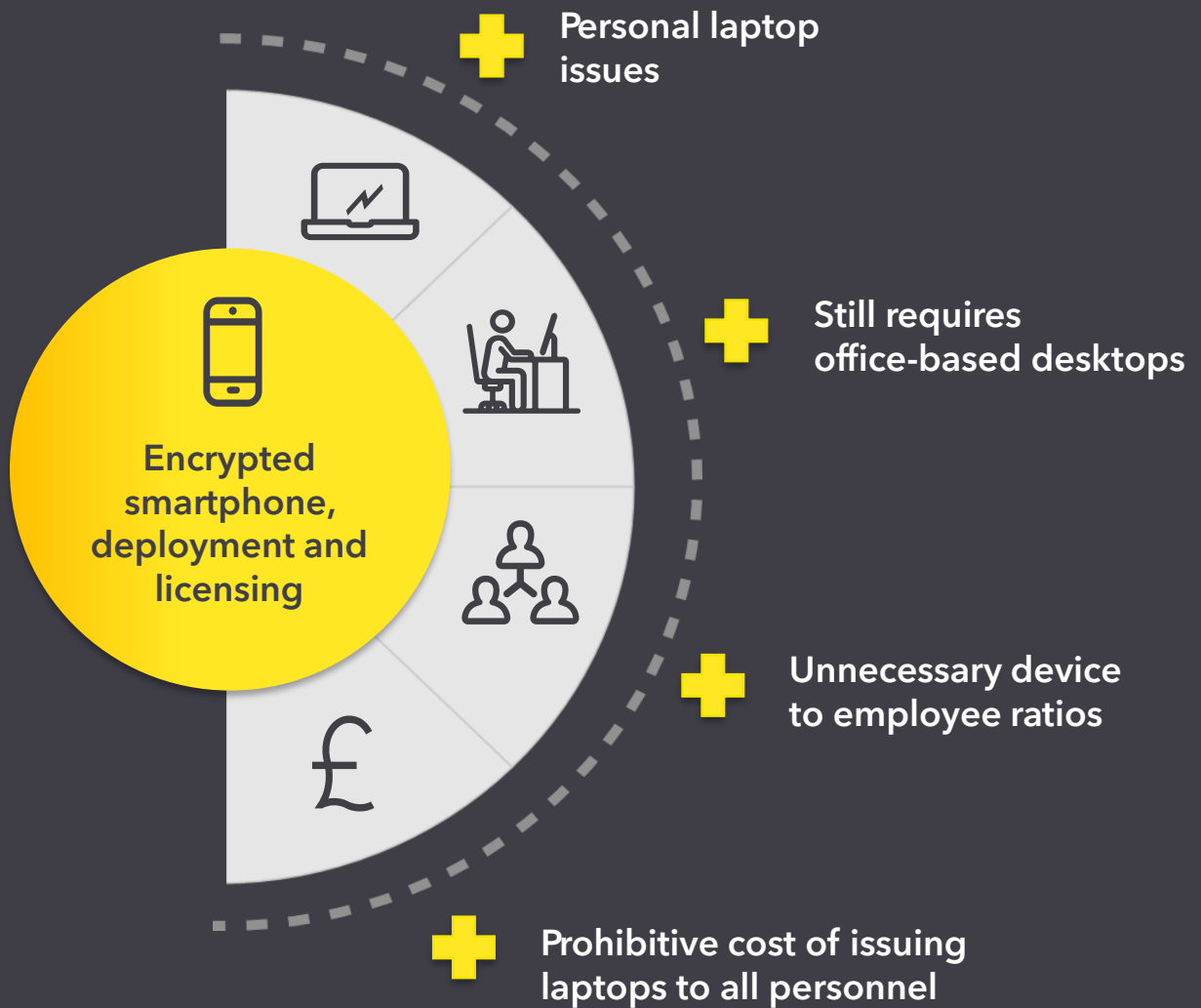


**More than a third of the UK's office-based workforce is still working from home.**

With so many of the UK's workforce still working from home, hotdesking is the most economic approach for office managers to employ.

This, plus the natural need to share devices through a hotdesking estate has become a preferred strategy for IT teams countrywide. However, that means that security and monitoring usage (authorised apps and access) also become a greater concern.

# The issues with traditional mobile enablement





Approved  
**SAMSUNG**  
partner

## Maximising efficiency

Why have multiple devices when you can just have one? One hard drive, one set of licenses and complete control.

Both the VectorBook and the VectorDock transform any applicable smartphone or tablet into a powerful PC instantly.

This is done by harnessing the Power of Samsung DeX™ (other Android phones do offer similar capability) giving workers the technology they need at a fraction of the cost of the only real alternative: using “full-blown” laptops in the field or office-based desktops.

The VectorBook and VectorDock allow IT teams to completely transform their organisation’s working practices, both mobile and desktop, introducing efficiencies, enhanced security and productivity in addition to significant savings on both IT asset and management costs.



# VectorBook

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**40%** Greener

**90%** Cheaper

**100%** Secure

# VectorBook

The VectorBook is a Laptop shell, giving users a fully operational computing experience. A VectorBook is a totally benign device with no Central Processing Unit (CPU), memory, hard-drive, or Operating System (OS) - which, when it is connected to an applicable Android Smartphone, becomes a powerful laptop device.

- The phone/VectorBook combination provides a completely secure laptop experience which leverages the identity management, security and log-in credentials on the phone - enabling the encrypted apps already installed on the phone to be presented in full screen mode on the VectorBook
- Using native desktop access capability on the phone (such as VMWare, MS Azure VDI, CitrixDaaS), mobile employees can now work on desktop (including legacy) applications "on the go" rather than having to go back to an office to get access
- VectorBooks do not need to be "personal issue" - a further benefit is that they can be a shareable, 'plug, play and walk-away' device.

## Benefits

- **Greater Mobility and Productivity**
  - Optimises employee operational capacity
  - Reduces the dependency on physical location
  - Charges the Smartphone in the field
  - Improves data input accuracy
  - Improves quality and speed of data capture
  - No data synchronisations issues

- **Enhanced Security**
  - No processing or storage capability
  - No pass-through device security vulnerability
  - A lost device creates no security risk or cost
  - Single, biometric sign-on
- **Improved Deployment**
  - Leverages the smartphone investment
  - No additional training costs
  - No set-up or support costs
  - No application packaging required
  - No encryption required
  - No duplication in licensing
  - Easy to hot-swap, share, charge and transport
  - No software failures
- **Increased Sustainability**
  - Longer lifespan than a standard laptop
  - 60% fewer environmentally harmful electronic components
  - Reduces the Force's carbon footprint
  - No encryption, imaging or support
  - Can share devices
  - Decreases travel time, cost and estate footprint







- Case - Aluminium, Yoga style
- HDMI -In/out
- DeX Wired
- SD & TF Card Reader
- UK QWERTY keyboard
- Backlit keyboard function
- Touchpad
- 5000mAH battery
- 13.3" Touch screen
- Screen Resolution 1080P
- Mobile phone/PD Charger



# VectorDock

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**Enhanced** asset utilisation

**Improved** accessibility

**Increased** productivity

**Single** sign on

# VectorDock

Like the VectorBook, the VectorDock allows for an encrypted, mobile phone powered desktop solution. The dock enables the use of existing - often un-used - assets of monitor, keyboard and mouse. Once an applicable Android Smartphone is docked (or connected via the integrated USBC cable - useful for connecting phones with bulky cases) the VectorDock effectively turns the Smartphone into a powerful desktop device.

- It provides a completely secure desktop experience using the ID management, security and log-on credentials on the phone to enable the encrypted apps already installed on the phone to be visible in full screen mode and driven via the keyboard and mouse
- Increases the life of desktop infrastructure
- Reduces the hardware support overhead
- Single sign on

- Enhanced Security
  - Biometric credentials rather than multi-sign-on
  - Smartphone powered for:
    - memory
    - processing
    - encryption
    - local data storage
- Improved Management
  - Leverages the force's smartphone investment
  - No set-up or support costs
  - No duplication in licensing
  - Easy to hot-swap, share, charge and transport
  - No software failures
- Increased Sustainability
  - Longer lifespan than any desktop
  - Far fewer environmentally harmful components
  - Refresh of desktop infrastructure massively reduced

## Benefits

- Greater Performance
  - Increases capability
  - Runs desktop from smartphone
  - Improves speed of login and access
  - Reduces the training costs of employees
  - Ethernet enabled device
  - Allows for docking into existing PC based infrastructure



- Phone Dock
- DeX Wired
- USB C- Ability to charge mobile phone/PD
- 2 x USB C Data - for DEX / Ready For
- 2 x USB A - Accessory input (keyboard/mouse)
- HDMI - Out 4k 30HZ
- VGA - Out 1080p 60HZ
- Audio jack
- RJ45 Ethernet 100Mbps
- CE, FC and RoHS Certification



# Strategic Benefits



## IT rationalisation

An IT estate of desktop PCs, laptops, tablets and smartphones places strain on budget and resources. The deployment of VectorBooks and VectorDocks offers the potential to move to a single mobile-only device strategy, which delivers significant cost savings and rationalisation of hardware.

## Estates rationalisation

The VectorBook removes the need for an employee to have a fixed location where they can access traditional desktop services. This reduction for the requirement of desktop computers means greater potential for an organisation to further rationalise its IT estate, receive capital receipts and reinvest further.

## Internal IT Focus

Maintaining legacy technology is costly and resource hungry for IT departments. An encrypted mobile phone driven

strategy supported by the VectorBook and VectorDock would help by streamlining device management, enabling more time to be focussed on innovation, end user service provision or even allow for headcount rationalisation. Legacy applications that cannot be fully supported on mobile devices can still be fully accessed via the utilisation of a cost-effective concurrent-use Virtual Desktop solution e.g., VMWare Workspace One.

## Market Innovation & Service Provider Support

Software and service providers are focusing investment on mobile platforms. They have embraced mobile apps and are reducing their focus on supporting legacy technology. Not prioritising a mobile solution risks the potential of having to maintain legacy systems based on aging technology with decreasing support from providers. This carries inherent risk to sustainable service provision - and additional cost.

# Seamless Secure Applications

Secure, reliable and consistent access to all apps and resources, including:



National ANPR Service



Police National Computer (PNC)





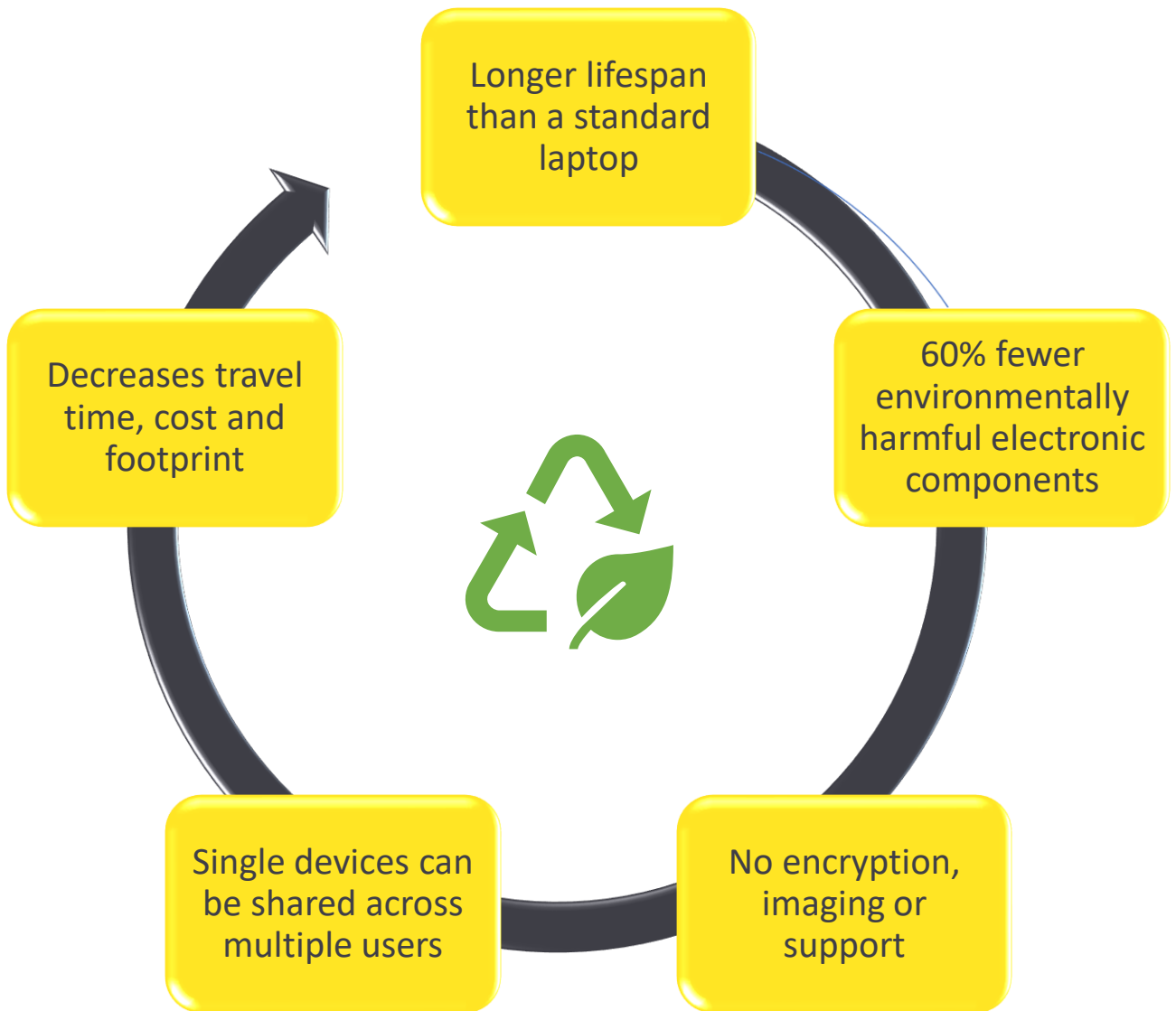
## Legacy Applications

For Android mobile applications, the user experience is seamless - including Microsoft Office 365, Microsoft Teams, virtually all mass market applications including modern web-based applications and most job related systems such as Pronto, Nice, etc.

Some historic Windows-native and/or Enterprise applications may not be fully compatible. A simple solution for this is to leverage Virtual Desktop Infrastructure (VDI) environments, such as VMWare Workspace One, Microsoft Azure VDI, Citrix DaaS etc.

Utilising a VDI infrastructure allows the user to access any historic windows-native and or enterprise applications via their Smartphone and VectorBook or VectorDock in a familiar Windows 10 or 11 desktop environment.

# Sustainability Benefits





# Cost Benefits

Adopting An encrypted mobile phone driven strategy enabled by the VectorBook and VectorDock creates significant costs savings, these include (but are not limited to):

<b>No set up costs</b>	<b>No duplicate licencing</b>	<b>No running costs or ongoing support</b>
<b>Enhanced productivity &amp; data capture</b>	<b>Improved security</b>	<b>Reduces refresh costs.</b>
<b>No secure disposal costs</b>	<b>Device to user ratio (hot swap)</b>	<b>Increased sustainability</b>
<b>Significant reduction in management time &amp; resources</b>	<b>Enhanced deployment and not addition training</b>	<b>Allows for headcount and estate rationalisation</b>



# Cost of Ownership

## Total Cost of Ownership Comparison - VectorBook

Below is a headline illustration of the potential cost savings represented by VectorBook verses a laptop over a typical 3-year lifespan. As can be seen in the illustration, the savings are in excess of 85% (i.e. >£2,300) per user. This illustration does not consider the increased productivity gains, potential headcount rationalisation or infrastructure rationalisation all of which would provide for incremental savings.

	<b>Laptop</b>	<b>VectorBook</b>
Purchase Costs	£ 960	£ 399
Setup & Deployment	£ 150	
Licenses	£ 300	
Support and Management	£1,300	
<b>Total</b>	<b>£2,710</b>	<b>£ 399</b>
<b>Saving per User</b>		<b>£2,311 / 85%</b>

## Total Cost of Ownership Comparison - VectorDock

Below is a headline illustration of the potential cost savings represented by VectorDock verses a desktop/hot desk over a typical 3-year lifespan. As can be seen in the illustration, the savings are in excess of 96% (i.e. >£2,400) per desk. This illustration does not consider the increased productivity gains, potential resource optimisation or infrastructure rationalisation all of which would provide additional savings.

	<b>Desktop</b>	<b>VectorDock</b>
Purchase Costs	£ 750	£ 79
Setup & Deployment	£ 150	
Licenses	£ 300	
Support and Management	£1,300	
<b>Total</b>	<b>£2,500</b>	<b>£ 79</b>
<b>Saving per Hot Desk</b>		<b>£2,421 / 96.5%</b>



# Purchase and Supply

Vectoring PLC can support with the writing of businesses cases, evaluation loan stock and orders from a minimum of 50 units.

To find out more please contact us on:

**Email:** [info@vectoring.com](mailto:info@vectoring.com)

**Telephone:** 0203 640 1300

**Website:** [www.vectoring.com](http://www.vectoring.com)

