



Report for Intel

# Business PCs generate a range of benefits for small businesses

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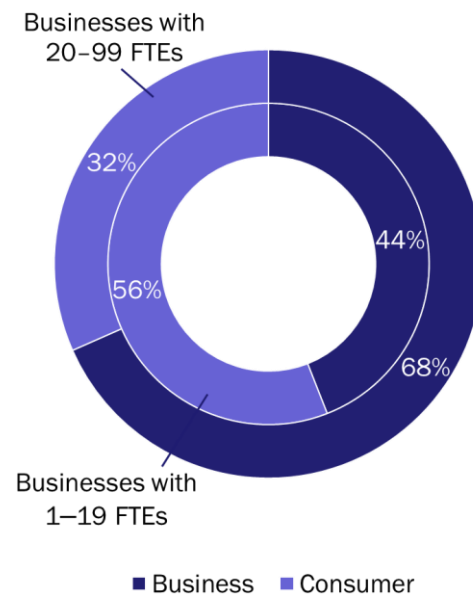
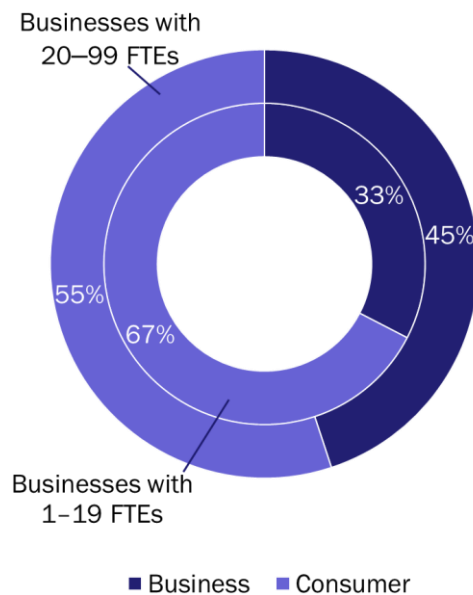
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# 1 Executive summary

Small businesses<sup>1</sup> account for the vast majority of organizations in the US and the UK, and many provide personal computers (PCs) for their employees to perform their day-to-day job duties. As illustrated in Figure 1 and Figure 2 below, a significant proportion of these organizations<sup>2</sup> – typically those with fewer than 20 full-time employees (FTEs) – have traditionally relied on consumer PC models (i.e. designed for light productivity and web browsing), as opposed to business PCs that are specifically designed to meet the requirements of the business environment (e.g. collaboration, heavy workloads, data analysis, security).

Figure 1: Distribution of survey respondents by type of PC, US [Source: Analysys Mason, 2023]

Figure 2: Distribution of survey respondents by type of PC, UK [Source: Analysys Mason, 2023]



In this context, Intel engaged Analysys Mason to conduct a study exploring the differences in cost of ownership, end-user productivity, and satisfaction between organizations that use consumer PCs and organizations that use business PCs. Within the study we considered four main drivers that impact the cost of PC ownership, end-user productivity, and satisfaction: that is, the initial PC purchase cost, its expected resale value, additional costs incurred to carry out repairs throughout the PC's lifetime, and its overall performance. The analysis was based on data collected from a survey

<sup>1</sup> In this report, defined as organizations with fewer than 100 full-time employees (FTEs).

<sup>2</sup> Quotas were applied in the survey to obtain an equal split of organizations using business PCs and consumer PCs, and an equal split of organizations with 1-19 FTEs and with 20-99 FTEs. As a result, the implied distribution of organizations of each size by type of PC does not reflect the actual distribution of organizations with different numbers of FTEs. It does show, however, that although quotas were applied, there is a greater propensity to use consumer PCs across businesses with fewer than 20 FTEs than across businesses with 20-99 FTEs.

of 500 small businesses operating in the US and the UK, with a balanced split between organizations using consumer PCs and those using business PCs (see additional quotas, criteria, and exclusions in Section 2).

The rest of this section summarizes the main findings from the study.

**Business PCs are more cost effective for small organizations.**

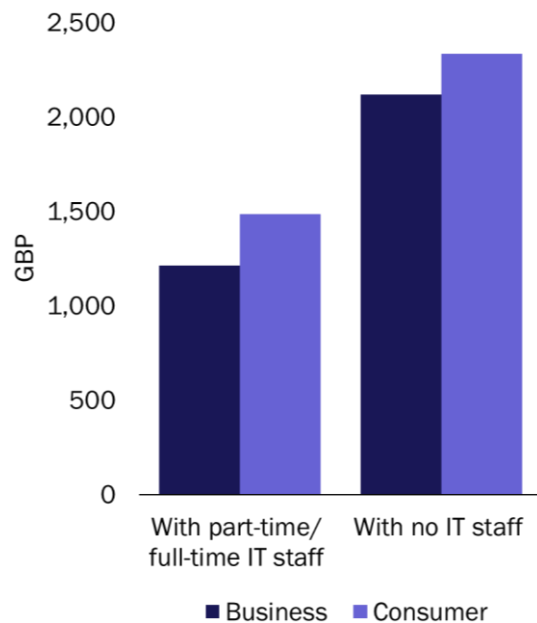
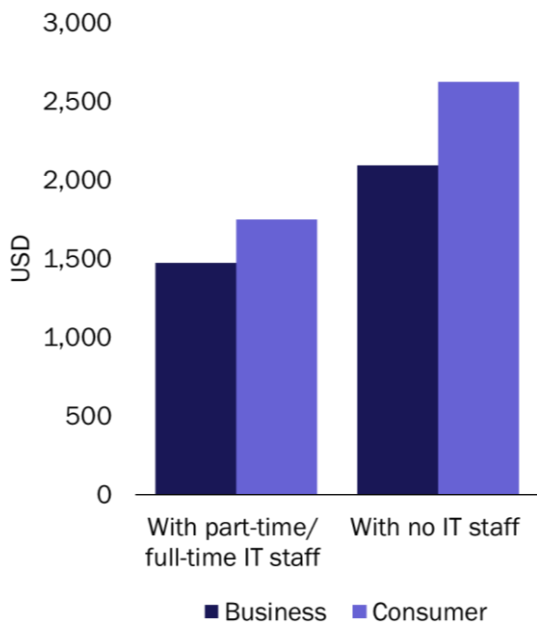
While business PCs have a broadly higher initial purchase cost (22% higher among US-based respondents, 25% higher across UK-based respondents), they typically also benefit from a higher resale value (US: ~13% higher, UK: ~22% higher).

Organizations that use business PCs experience fewer hardware, software, and security-related issues, and those with an informal or formal IT team benefit from faster resolution times to troubleshoot issues. As a result, we estimate that business PCs generate 20% to 45% lower repair costs (depending on the country and type/size of IT team).

Considering all three key drivers – i.e. purchase cost, repair costs, and resale value – we estimate the overall cost of PC ownership to be 10–20% lower (depending on the country and size of IT team) across organizations using business PCs, as illustrated in Figure 3 and Figure 4 below.

Figure 3: Estimated cost of PC ownership per end user over four years, US businesses [Source: Analysys Mason, 2023]

Figure 4: Estimated cost of PC ownership per end user over four years, UK businesses [Source: Analysys Mason, 2023]



**Small businesses using business PCs achieve higher end-user productivity.**

The survey results suggest that end users can save up to ~0.6 hours of downtime per month with business PCs, as a result of fewer unplanned hardware, software, and security issues, and a shorter

idle time when an issue occurs (primarily as a result of faster resolution times to troubleshoot issues). In addition, business PCs have faster boot/start-up times than consumer PCs (~40 seconds on average, compared to ~55 seconds on average), which contributes to higher end-user productivity.

Based on those results, we estimate the implied cost associated with downtime and initial start-up to be 17% to 24% lower (depending on the country considered) across organizations that use business PCs.

**Business PCs generate higher end-user satisfaction and can enable additional organizational benefits.**

Beyond cost-of-ownership and productivity considerations, survey respondents that use business PCs reported higher end-user satisfaction across key aspects of their PC experience, with the most significant differences observed for remote management, battery life, ports and connectors, and storage capacity.

Business PCs are also recognized as being better suited than consumer PCs to achieve certain business objectives, such as meeting strict regulatory requirements, enabling innovation and collaboration, and meeting sustainability objectives. Conversely, however, consumer PCs are perceived as being more suitable for remote working and (marginally) easier to customize.

**In conclusion, small businesses that rely on consumer PCs can benefit from significant upsides by upgrading to business machines.**

Results from our study suggest that using business PCs can help small businesses achieve a lower cost of PC ownership, higher end-user productivity, and enhanced employee satisfaction. Business PCs can also provide further organizational benefits to organizations that have strict data and security requirements, and where innovation and collaboration play a fundamental role in business success. Organizations with some form of IT staff (informal, or a small IT team) are more likely to reap greater benefits from using business PCs than businesses without any IT function, though very small businesses with no IT function can still achieve significant benefits (if only due to the greater reliability and robustness of business PCs, which helps to avoid hardware, software, or security issues from occurring in the first place).

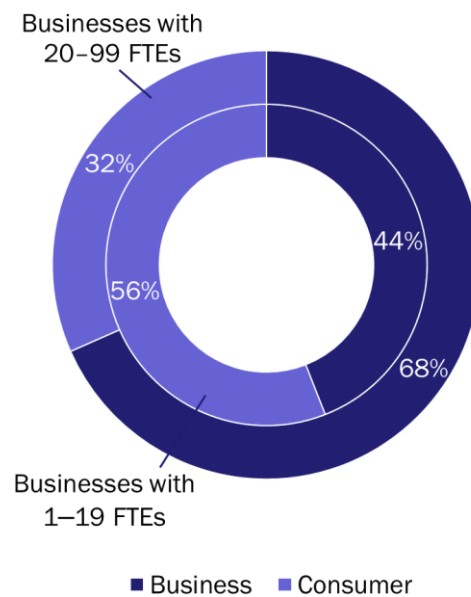
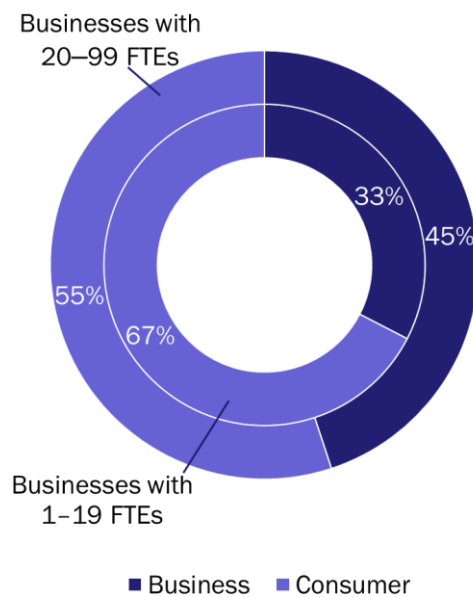
## 2 Introduction

### 2.1 Context to the study and scope

Small businesses<sup>3</sup> account for over 99% of organizations operating in the US and the UK, and many<sup>4</sup> provide personal computers (PCs) for their employees to perform their day-to-day duties. As illustrated in Figure 5 and Figure 6 below, a significant proportion of these organizations<sup>5</sup> – typically those with fewer than 20 full-time employees (FTEs) – have traditionally relied on consumer PCs, i.e. PCs designed for general home and personal use, allowing users to perform everyday computing tasks such as light productivity or web browsing, as opposed to business PCs that are specifically designed to meet the requirements of the business environment (e.g. collaboration, heavy workloads, data analysis, security).

Figure 5: Distribution of survey respondents by type of PC, US [Source: Analysys Mason, 2023]

Figure 6: Distribution of survey respondents by type of PC, UK [Source: Analysys Mason, 2023]



Key factors include the typically lower up-front cost and broader availability of consumer PCs across

<sup>3</sup> In the rest of the report, defined as organizations with fewer than 100 full-time employees (FTEs).

<sup>4</sup> Analysys Mason estimates that over 68% of small businesses in the US and the UK used laptops in 2022, while over 79% used desktop PC in the US and 63% in the UK.

<sup>5</sup> Quotas were applied in the survey to obtain an equal split of organizations using business-grade and consumer-grade PCs, and an equal split of organizations with 1–19 FTEs and with 20–99 FTEs. As a result, the implied distribution of organizations of each size by type of PC does not reflect the actual distribution of organizations with different numbers of FTEs. It does show, however, that although quotas were applied, there is a greater propensity to use consumer-grade PCs across businesses with fewer than 20 FTEs than across businesses with 20–99 FTEs.

retail channels, the likely greater familiarity of small organizations with consumer models, and a potential lack of awareness about the specific differences between business and consumer PCs.

In this context, Intel engaged Analysys Mason to produce a comparison of the cost of PC ownership to small businesses based on the main type of PC used by their FTEs. More specifically, the study was expected to explore differences in cost of ownership, end-user productivity, and satisfaction across organizations using consumer PCs<sup>6</sup> and organizations using business PCs, based on data collected from small businesses operating in the US and the UK.

For each metric, our study considered the following underlying drivers, as illustrated in Figure 7 below:

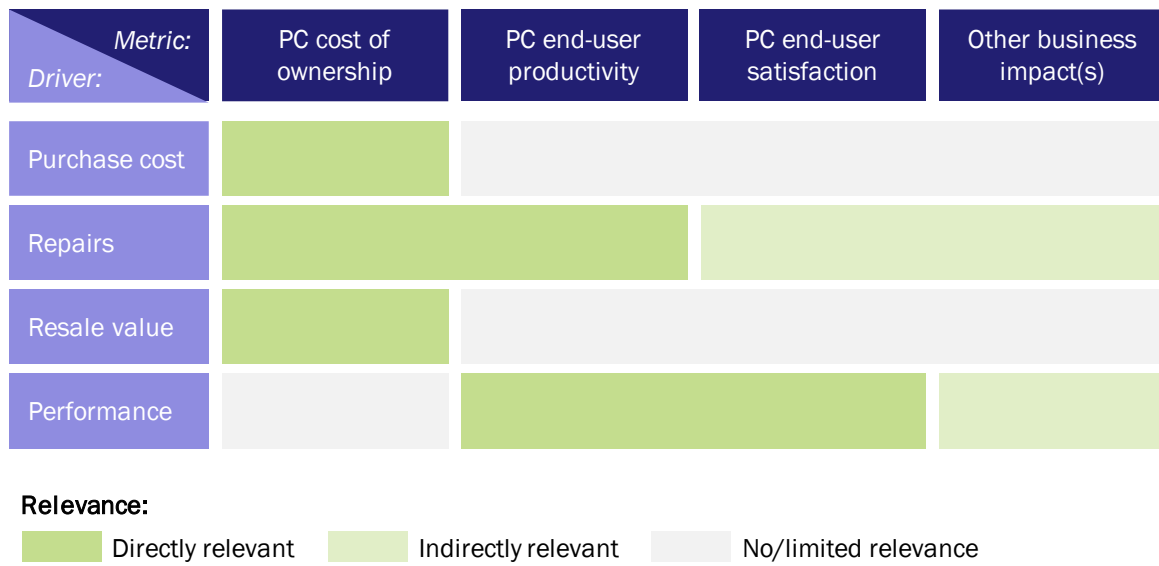
- *the cost of PC ownership* (per end user) was assumed to be primarily driven by the initial purchase cost of a PC, its expected resale value, and the costs associated with repairs throughout the PC's lifetime (e.g. as a result of software incidents, hardware issues, security breaches). Note that our analysis did not consider any other cost drivers (e.g. software licensing and upgrade, hardware maintenance, data back-up solutions), primarily on account of their limited relevance to small organizations and/or clear differentiating factors between consumer and business PCs
- *end-user productivity* was considered to be primarily impacted by downtimes resulting from software, hardware, and security issues, and by the initial time for PC start-up/booting. Note that we did not examine the impact of overall PC performance (e.g. processing speed, graphics card) on employee productivity beyond initial start-up, but considered PC performance as a key driver of employee satisfaction (see below)
- *end-user satisfaction* was measured across key components of the PC experience (e.g. processing speed, ergonomics, battery life, ease of use), and (to a more limited extent) by the occurrence of hardware, software, or security issues
- *other business impacts*, such as the achievement of sustainability objectives, enablement of innovation, compliance with regulatory requirements.

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<sup>6</sup> In the rest of the report, we define 'consumer' PCs as PCs that have been designed for general home and personal use, allowing users to perform everyday computing tasks (e.g. light productivity, multimedia consumption, web browsing). Examples of consumer PC series include Dell Inspiron, HP Pavilion, Acer Aspire, Lenovo IdeaPad, etc. 'Business' PCs are those that have been designed to meet the specific requirements of the business environment (e.g. collaboration, heavy workloads for business applications or data analysis, security, remote/hybrid work). Examples of business PC series include Dell Latitude, HP ProBook, Lenovo ThinkPad, etc.



Figure 7: Overview of the four metrics and underlying drivers considered in the analysis [Source: Analysys Mason, 2023]

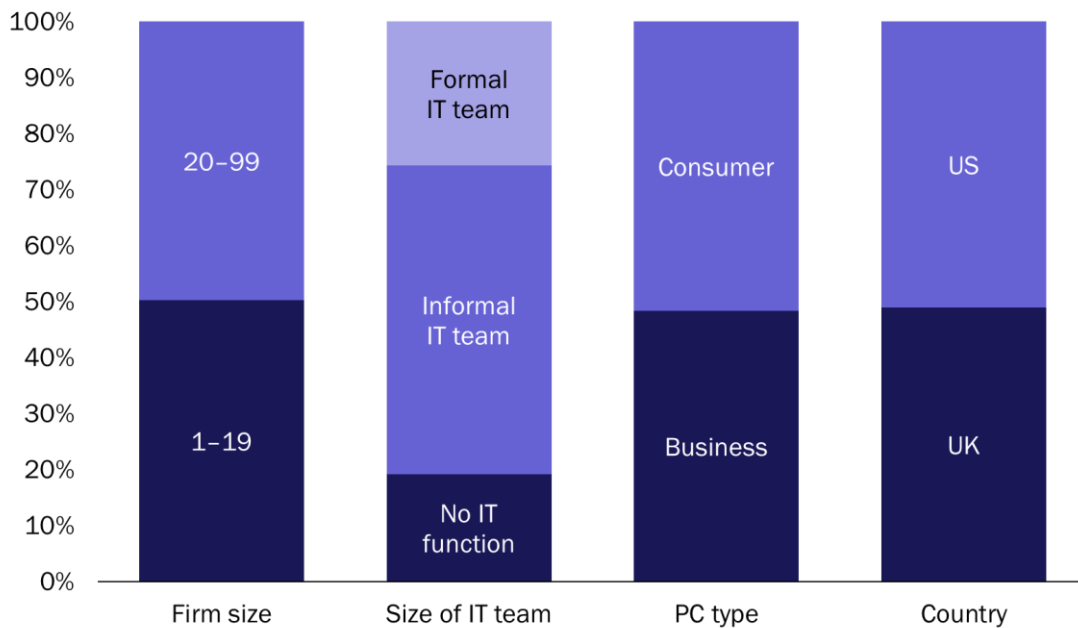


## 2.2 Approach to data collection

Our analysis was based on data collected between October and November 2023 through a large-scale survey of 500 small businesses across the US and the UK (250 organizations in each country), with a balanced split between organizations using consumer PCs and business PCs. Figure 8 below provides additional information about the segmentation of survey respondents, including firm size, size of IT team,<sup>7</sup> and PC type.

<sup>7</sup> The study primarily focused on organizations with no IT function or where the IT function is managed in-house informally (i.e. part-time IT staff, non-technical staff managing IT on a part-time basis). We also considered small businesses with small IT teams (i.e. up to two FTEs dedicated to IT).

Figure 8: Distribution of survey respondents by key segment [Source: Analysys Mason, 2023]



We applied a series of criteria and exclusions to ensure robustness and scale in the sample of survey data, and to allow for a meaningful comparison across different segments of organizations, as follows:

- Survey respondents included key decision makers and/or individuals with a strong influence over the purchase of PCs in their organization
- Survey respondents represented businesses in which a reasonably significant proportion of FTEs use PCs in their day-to-day job (i.e. at least 30% of FTEs)
- Businesses were categorized as primarily using consumer PCs (or as primarily using business PCs), based on the proportion of FTEs using consumer and business PCs in their organization;<sup>8</sup> in turn, this was calculated by eliciting input on the specific PC models that FTEs in the organization use (and to what proportion of FTEs used each of those PC models), and by categorizing each model as either a consumer PC or a business PC. We pursued this approach to ensure that the data provided by each respondent reflected actual PC models in use (rather than being based on end-user perceptions), and thus reduce the potential for error/inaccuracy
- When categorizing each PC model as either a consumer or business PC, as far as possible we based this on publicly available indications provided by PC manufacturers as part of their product descriptions or marketing material; in a few instances where specific PC models were marketed towards both consumer and business segments, we considered the version of the

<sup>8</sup> For an organization to qualify as a business that primarily uses consumer PCs (or business PCs), we required a minimum threshold of 70% of FTEs using consumer PCs (or business PCs).

operating system (e.g. Windows 11 Home or Windows 11 Pro) that is typically pre-installed as an additional criterion for differentiation

- We included PC models with Microsoft Windows typically pre-installed (Windows was estimated to account for nearly 64% of the market for PC operating systems<sup>9</sup> in the US in 2022, and over 69% in the UK). PC models with other operating systems typically pre-installed (e.g. Linux, macOS) were excluded from the analysis, to ensure consistency in the data collected
- We considered laptops and desktop PCs (including full-size, compact, and all-in-one models). We excluded tablets (on the grounds that their primary intended usage is content consumption, rather than productivity), with the exception of Microsoft's Surface, which replicates many features of a traditional computer (including Windows) and comes in two versions (original and Pro)
- Models that PC manufacturers typically market towards gamers (e.g. HP Spectre, Dell Alienware, Lenovo Legion, Acer Predator/Nitro) were excluded from the analysis.

The rest of this report describes the results of the study in more detail.

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<sup>9</sup> See <https://gs.statcounter.com/os-market-share/desktop/worldwide/#yearly-2022-2022-bar>

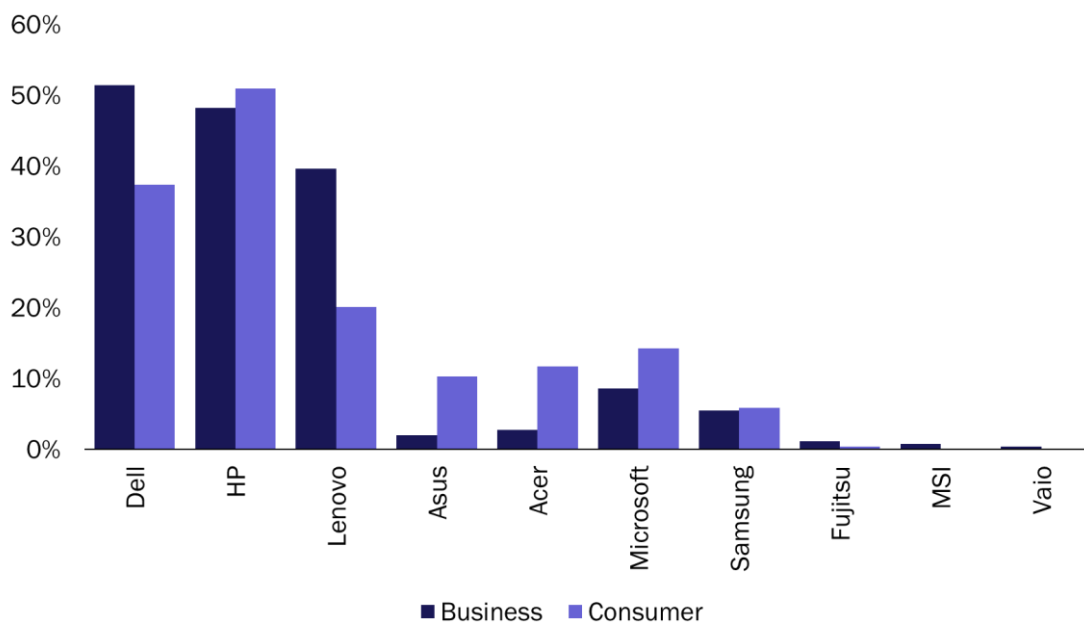
### 3 Business PCs provide a range of benefits to small businesses

This section draws on the survey findings to compare organizations that use consumer and business PCs across several dimensions, namely: the main brands used, the overall cost of PC ownership, end-user productivity, end-user satisfaction and other additional organizational benefits.

#### 3.1 Three main brands account for the majority of the PC market

As outlined in the previous section, organizations surveyed as part of this exercise were categorized as using business or consumer PCs, based on the specific brand(s) and model(s) used by their FTEs. As shown in Figure 9 below, in the sample, Dell accounts for the largest share of organizations using business PCs, followed by HP, Lenovo, and Microsoft; HP is used by the largest proportion of organizations relying on consumer PCs, followed by Dell, Lenovo, and Microsoft.

Figure 9: PC brands in use across organizations, % of total respondents using business/consumer PCs  
[Source: Analysys Mason, 2023]



These results are broadly consistent with the traditional positioning of PC manufacturers. Dell, for example, historically had a strong foothold in the business segment, targeting a broad spectrum of small and medium businesses and large organizations through PC models such as OptiPlex (launched in 1993) and Latitude (launched in 1994). The same applies to Lenovo, whose business-oriented flagship laptop line ThinkPad was originally introduced by IBM in 1992, before being acquired by Lenovo in 2005. HP originally had greater focus on the consumer segment through its Pavilion line of desktop and laptop PCs (launched in 1995), before targeting businesses with a

dedicated range of computers, including EliteBook and ProBook (launched in 2008 and 2009, respectively). More recently, Microsoft introduced a range of touchscreen-based computers in two versions – Surface, primarily targeted at consumers (launched in 2012) and Surface Pro, targeted at professionals (launched in 2013).

### 3.2 Business PCs are more cost effective for small organizations

This section compares organizations that use consumer and business PCs based on key drivers of the cost of ownership, including initial purchase cost, repair costs throughout the PC lifetime, and expected resale value, drawing on inputs collected from the survey.

#### 3.2.1 Consumer PCs have a lower up-front cost than business PCs

The initial purchase cost of a computer is a critical component of the total cost of PC ownership. On average, organizations using business PCs in our sample reported higher purchase costs (22% higher in the US, 25% higher in the UK) than those using consumer PCs, as shown in Figure 10 below.

Figure 10: Average purchase cost<sup>10</sup> per PC (rounded) [Source: Analysys Mason, 2023]

PC type	US (USD)	UK (GBP)
Business	990	1000
Consumer	815	820
<i>Business vs. consumer delta (%)</i>	<b>+22%</b>	<b>+25%</b>

This view is consistent with the differences in pricing for business and consumer PCs as published by manufacturers (see Figure 11 below). This demonstrates the premium placed on computer models targeted at the business segment, reflecting their expected greater performance, reliability, security, and manageability.

<sup>10</sup> The table shows weighted average costs, calculated based on the distribution of respondents across various PC price ranges, and the mid-point value of each price range.

Figure 11: Cheapest listed prices across selected PC series and manufacturers<sup>11</sup> [Source: Dell, HP, Lenovo, Analysys Mason, 2023]

Manufacturer	Series	PC type	US price (USD)	UK price (GBP)
Dell	Latitude	Business	519.00	635.42
Dell	Inspiron	Consumer	299.99	349.00
HP	ProBook	Business	649.00	515.99
HP	Pavilion	Consumer	399.99	457.99
Lenovo	ThinkPad	Business	550.00	559.20
Lenovo	IdeaPad	Consumer	199.99	199.99

### 3.2.2 Business PCs are expected to generate lower repair costs over their lifetime

Beyond the initial purchase cost, other contributors to the total cost of ownership of a PC include the costs associated with any unplanned repairs and support resulting from issues experienced throughout the PC lifetime, such as:

- software issues, including computer freezes or crashes, software errors and glitches, printer issues, lack of storage space, forgotten passwords, accidental deletion of important files, etc.
- hardware problems, including trackpad malfunction, abnormal computer noise, overheating, unresponsive or sticky keys, malfunctioning USB ports, etc.
- security issues, as a result of a virus/malware, data breaches, access rights problems, etc.

Organizations in our sample that use business PCs reported experiencing fewer software-, hardware-, and security-related issues (per PC end user) than those that rely on consumer PCs, as illustrated in Figure 12 below.

Figure 12: Average number of issues per year per PC end user (rounded), by type [Source: Analysys Mason, 2023]

PC type	Hardware	Software	Security
Business	1.3	1.8	1.7
Consumer	1.6	2.4	1.9
<i>Business vs. consumer delta (%)</i>	<b>-15%</b>	<b>-27%</b>	<b>-12%</b>

<sup>11</sup> PC manufacturers included in the comparison (Dell, HP, Lenovo) are the three most popular brands selected by survey respondents. For each manufacturer, the PC series reflect those most commonly selected by survey respondents. For each PC series, price data refers to the listed price (including VAT) of the cheapest PC model available from the official online UK and US shops of Dell, HP and Lenovo (noting that the cheapest PC model available in the US shop may differ from that in the UK shop). Prices include any discount offered at the time of data collection (October 2023), but exclude any additional discounts provided through specific voucher codes. Excludes prices for refurbished models.

Several factors can explain those differences:

- business PCs typically include a wider set of self-service management tools (e.g. VMware's Workspace ONE Unified Endpoint Management, the Dell integrated Remote Access Controller) that help to avoid many support incidents in the first place, such as forgotten password requests, application/driver troubleshooting, etc.
- the high quality of hardware components (e.g. chassis, keyboard, fan) provides greater durability and resistance (e.g. against water, dust, drops, shocks), which in turn helps reduce the likelihood of hardware problems
- business PCs are also likely to include a more extensive set of embedded security features (e.g. encryption tools, fingerprint sensor) that help to avoid security incidents.

Across organizations with (formal or informal) IT staff, the type of PC also has an impact on the time required (and associated cost) to solve those issues, with faster resolution times for issues reported on business PCs than on consumer PCs, as illustrated in Figure 13 below.

Figure 13: Average IT staff resolution time per issue<sup>12</sup> (rounded) [Source: Analysys Mason, 2023]

PC type	Hardware (hours)	Software (hours)	Security (hours)
Business	1.9	1.8	1.9
Consumer	3.1	2.2	2.2
<i>Business vs. consumer delta (%)</i>	<b>-38%</b>	<b>-18%</b>	<b>-13%</b>

Business PCs tend to have more consistency in hardware and software configuration, which can simplify troubleshooting and improve reparability.<sup>13</sup> In addition, the inclusion of some form of remote management tools as standard in business PCs also facilitates issue resolution by IT staff. We estimated that the implied cost associated with PC repairs is between 35% and 45% lower for organizations (from the sample) that use business PCs compared with those that use consumer PCs, as illustrated in Figure 14.

<sup>12</sup> Average resolution time from the moment an issue is reported to IT staff by a PC end user.

<sup>13</sup> For reference, see reparability scores of common laptops at: <https://www.ifixit.com/reparability/laptop-scores>. Business laptops (Dell Latitude, HP EliteBook) typically achieve greater reparability scores than consumer-grade laptops (Dell Inspiron, Dell XPS, Asus ZenBook).

Figure 14: Estimated cost of PC repair per end user (rounded), organizations with part-time or full-time IT staff<sup>14</sup> [Source: Analysys Mason, 2023]

PC type	US (USD)	UK (GBP)
Business	790	530
Consumer	1210	945
Business vs. consumer delta (%)	-35%	-45%

Organizations from the survey sample with no IT staff and requiring most incidents to be resolved by third parties (e.g. repair shop, contractor, PC manufacturer) did not report statistically significant differences in terms of repair costs between consumer and business PCs (in the range of GBP65–100 (consumer) or USD75–110 (business) per issue on average). This is likely because repair shops or contractors typically use standard processes, tools, and components for repairing PCs (regardless of whether they are consumer or business PCs), and offer fixed pricing for common issues. Nonetheless, the lower propensity of business PCs to experience issues in the first place (as shown in Figure 12) means that costs associated with the occurrence and resolution of issues for organizations with no IT staff (and relying on third parties) remain significantly lower (20–30%) in the case of business PCs, as shown in Figure 15 below.

Figure 15: Estimated cost of PC repair per end user (rounded), organizations with no IT staff<sup>15</sup> [Source: Analysys Mason, 2023]

PC type	US (USD)	UK (GBP)
Business	1410	1440
Consumer	2085	1800
Business vs. consumer delta (%)	-30%	-20%

### 3.2.3 Business PCs tend to have a higher resale value than consumer PCs

The resale value of a PC depends on a variety of factors, such as PC age, brand, hardware specifications (e.g. processor speed, RAM, storage), and cosmetic condition. The type of PC considered is also a key driver – in our sample, US-based respondents whose organization relies on business PCs reported a resale value ~13% higher than those using consumer PCs (~22% higher in the UK), as shown in Figure 16 below.

<sup>14</sup> Cumulative cost calculated across four years (the assumed PC lifetime, based on survey data), based on the average number of hardware, software, and security issues per year per end user reported by survey respondents, and an average (fully burdened) hourly salary for IT staff of ~USD23 in the US and ~GBP15 in the UK (source: Indeed). For simplicity, we assumed that the number of (hardware/software/security) issues incurred over the PC lifetime remains constant.

<sup>15</sup> Cumulative cost calculated across four years (assumed PC lifetime based on survey data), based on the average number of issues per year per end user reported by survey respondents, and an average third-party cost per issue of GBP65–100 in the UK and USD75–110 in the US (varying depending on the type of issue considered).



Figure 16: Average resale value<sup>16</sup> per PC (rounded) [Source: Analysys Mason, 2023]

PC type	US (USD)	UK (GBP)
Business	310	340
Consumer	275	280
Business vs. consumer delta (%)	+13%	+22%

Key factors driving the higher resale value of business PCs include their superior build quality, greater performance, enhanced security features, longer warranty, and support (in the survey sample, 2.2 years for business PCs compared with 1.8 years for consumer PCs), which are qualities that appeal to prospective second-hand business buyers.

### 3.2.4 The overall cost of PC ownership is lower for organizations that use business PCs

Considering the three drivers of PC cost of ownership examined in the study – purchase cost, repair costs, and resale value – and depending on the type/size of IT team, we estimate the overall cost of PC ownership to be 16–20% lower in the US (10–20% in the UK) across organizations using business PCs, as illustrated in Figure 17 and Figure 18 below.

Figure 17: Estimated cost of PC ownership per end user over four years, US businesses [Source: Analysys Mason, 2023]

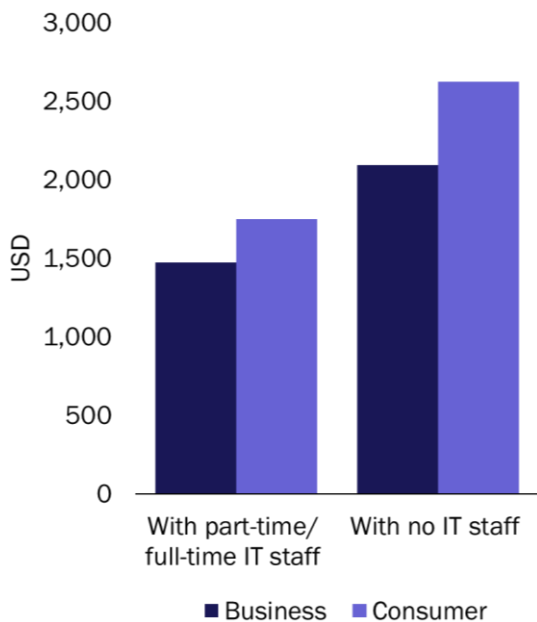
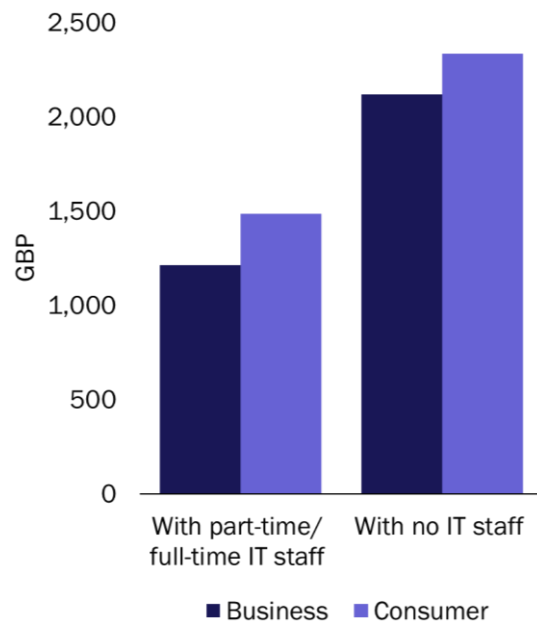


Figure 18: Estimated cost of PC ownership per end user over four years, UK businesses [Source: Analysys Mason, 2023]



<sup>16</sup> Weighted average value calculated based on the distribution of respondents across various PC price ranges, and the mid-point value of each price range.

### 3.3 Small businesses using business PCs report higher end-user productivity

Two main sources of PC end-user productivity were examined in our study, namely employee downtime (as a result of software, hardware, or security issues) and the initial PC start-up/boot time.

As discussed in Section 3.2.2, organizations that use business PCs reported a significantly lower incidence of unplanned hardware, software, and security issues compared to organizations that use consumer PCs. Factoring in the average idle time per PC end user when an issue occurs, survey results suggest that business PC users can save up to 0.6 hours of downtime per month compared to users of consumer PCs.

Further productivity benefits are achieved through faster start-up/boot time across business PCs, with survey respondents using business PCs reporting an average start-up time of ~40 seconds, compared with an average of ~55 seconds reported for consumer PCs.

Based on those results, we estimate that the cost associated with downtime and initial start-up is 17–24% lower for organizations (from the sample) that use business PCs compared with those using consumer PCs, as illustrated in Figure 19 below.

Figure 19: Implied annual cost of downtime per PC end user<sup>17</sup> (rounded) [Source: Analysys Mason, 2023]

PC type	US (USD)	UK (GBP)
Business	1125	750
Consumer	1475	910
Business vs. consumer delta (%)	-24%	-17%

### 3.4 Business PCs generate higher satisfaction among end users

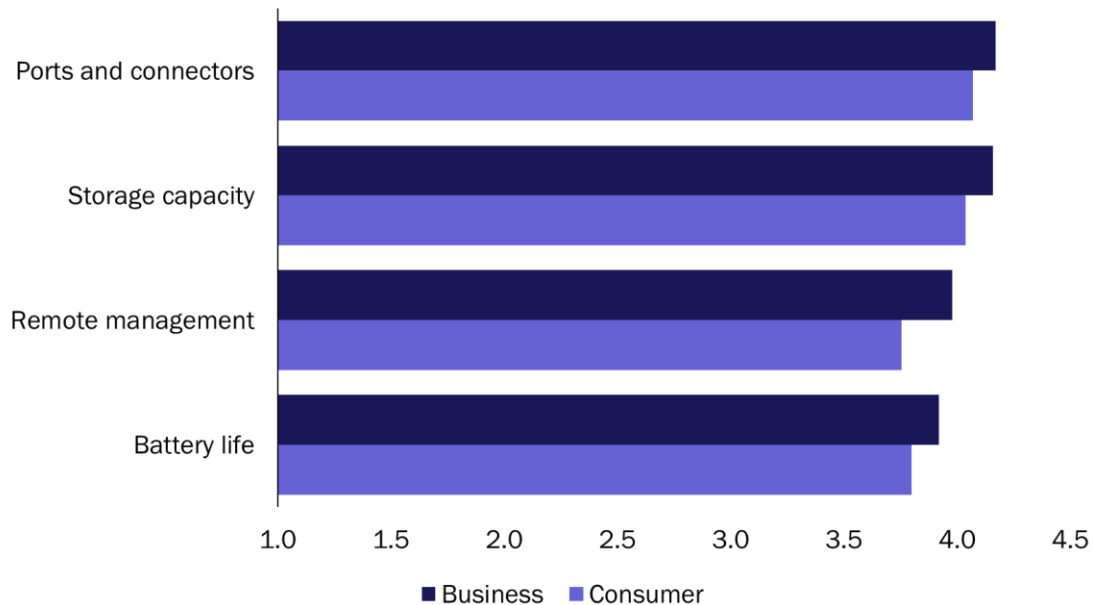
As well as looking at how the cost of PC ownership and end-user productivity are affected by the use of business vs. consumer PCs, we also compared the level of satisfaction of end users across a range of factors that affect their PC experience.

As illustrated in Figure 20, survey respondents reported higher satisfaction with business PCs for remote management, battery life, ports and connectors, and storage capacity. Remote management is the area of PC experience where end-user satisfaction varies the most between business and consumer PCs. Greater end-user satisfaction with remote management capabilities may contribute to a more satisfactory overall experience for decision makers / other individuals with a strong influence over the purchase of PCs, as indicated by the slightly higher satisfaction rating reported by decision makers in organizations that use business PCs (4.0 out of 5.0 on average, compared with 3.8 out of 5.0 in organizations that use consumer PCs).

<sup>17</sup> Cost calculated based on the following assumptions: one start-up/boot per working day, average (fully burdened) hourly salary of PC end user of ~USD34 in the US (July 2023; source: US Bureau of Labor Statistics) and ~GBP20 in the UK (November 2023; source: Office for National Statistics).

Differences were negligible / not statistically significant across other factors that we reviewed, including speed, keyboard ergonomics, peripheral compatibility, connectivity capabilities, and ease of use/stability of operating system. It is worth noting that users of both consumer and business PCs reported the lowest levels of satisfaction with battery life, suggesting that PC manufacturers could make further improvements in this area.

Figure 20: Average end-user satisfaction across selected aspects of PC experience<sup>18</sup> [Source: Analysys Mason, 2023]

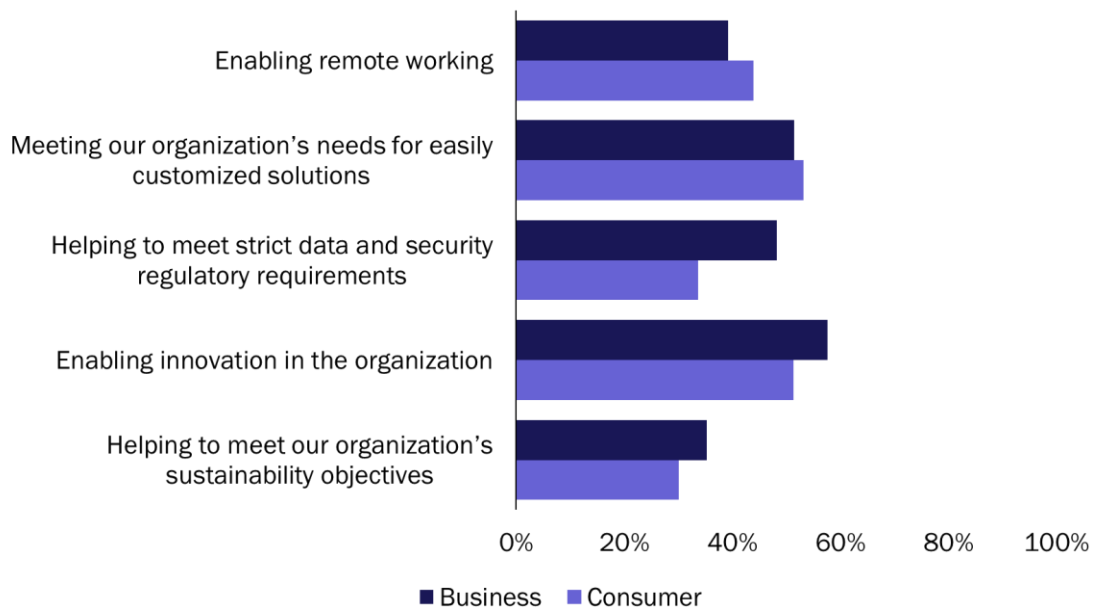


### 3.5 Business PCs can enable additional organizational benefits

Beyond cost of ownership, productivity, and end-user satisfaction, our study also investigated any additional correlation between the type of PC used and selected business objectives, as shown in Figure 21 below. Respondents recognized that business PCs are better suited than consumer PCs to help organizations meet strict regulatory requirements (e.g. healthcare, financial services), enable innovation and collaboration, and meet sustainability objectives. This is due to their more-robust security features, advanced performance (including energy-saving capabilities), and additional connectivity and collaboration features (e.g. ports, connectors). Conversely, consumer PCs were perceived as being (marginally) more relevant to remote working enablement and more easily customized; this likely reflects the greater affordability and ease of personalization of consumer PCs, which are well suited to the needs of individual users and remote working scenarios.

<sup>18</sup> Satisfaction level assessed on a scale from 1 to 5, where 1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, 5 = very satisfied.

Figure 21: Additional roles played by PCs in meeting business objectives, % of total respondents using business/consumer PCs [Source: Analysys Mason, 2023]



## 4 Conclusions

In this study, we compared the differences in terms of cost of PC ownership, PC end-user productivity, PC end-user satisfaction (and other business impacts) between organizations using consumer or business PCs, based on primary data collected from a sample of 500 small businesses operating in the US and the UK.

Our primary research exercise and analysis suggest that small businesses which rely on consumer PCs could benefit from significant upsides by upgrading to business machines – including a lower cost of PC ownership (15–20% in the US, 10–20% in the UK), higher end-user productivity (24% in the US, 17% in the UK), and enhanced employee satisfaction.

While we did not analyze this as part of the survey, businesses that use a mixture of consumer and business PCs are also likely to benefit from migrating, over time, their overall fleet of PCs to a consistent business model to reduce the overall cost of ownership and maximize employee productivity and operational efficiency.

Business PCs can also deliver further benefits to organizations that have strict data and security requirements, and those for which innovation and collaboration play a fundamental role in business success.

Our analysis also suggests that organizations with some form of IT staff (informal, or a small IT team) are more likely to reap greater benefits from using business PCs than those without any IT function, as IT staff have greater familiarity with remote management and troubleshooting tools that are typically embedded in business PCs. Nonetheless, very small businesses with no IT function can still achieve certain benefits from using business PCs (if only as a result of their greater reliability and robustness, which helps to avoid hardware, software, or security issues from occurring in the first place).

More broadly, our study also found that companies may be better off replacing their PC fleets on a regular basis to avoid incurring significant repair costs over long replacement cycles – this is especially applicable to companies with no IT staff, where the cost of PC ownership over the typical lifetime suggested by survey respondents (four years) is between two and three times the initial purchase cost of a PC. We note that this depends on the ability of businesses to incur significant replacement capex frequently, which may not be feasible (especially for very small organizations).