

Govern or Grind: Sharing with Office

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Govern or Grind: Balancing Usability and Security in Microsoft's Compliance Ecosystem

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Abstract—Organisations increasingly rely on cloud services like Microsoft Azure and Office 365 to enable seamless data sharing and collaboration. However, they must simultaneously enforce strict information governance and Data Loss Prevention (DLP) measures to protect sensitive information and comply with regulations such as the EU General Data Protection Regulation (GDPR) and the UK Data Protection Act 2018. This report examines the tension between usability and security in this context. We analyse how Microsoft's suite of tools-including Microsoft Purview (encompassing compliance and governance solutions), Microsoft 365 DLP policies, Information Protection labelling, and Azure Active Directory Conditional Access-facilitate data governance and regulatory compliance. We highlight the trade-offs these measures introduce, noting how they enhance security and compliance at the potential cost of user convenience. Using peer-reviewed research and official Microsoft documentation, we discuss strategies to balance user productivity with robust security, ensuring that data governance is effective without unduly hindering organisational workflows.

Keywords—Data Loss Prevention (DLP); Information Governance; Microsoft Purview; Microsoft 365 Compliance; Azure Conditional Access; GDPR Compliance; UK Data Protection; Sensitivity Labelling; Data Classification; Cloud Security; Usability versus Security Trade-off; Enterprise Collaboration; Subject Access Request (SAR); Data Protection Impact Assessment (DPIA)

1. Introduction

Modern enterprises thrive on the ability to share and use data between distributed teams and with external partners. Cloud-based productivity platforms such as Microsoft Office 365 (now part of Microsoft 365) and Azure cloud services have become fundamental to enabling collaboration and data accessibility. With this increased ease of data sharing, organisations face increasing risks to data security and privacy. Information governance frameworks and Data Loss Prevention (DLP) strategies are implemented to ensure that sensitive data is handled in compliance with laws and protected against leakage.

A fundamental challenge lies in balancing security controls with 12 usability. Overly restrictive policies can frustrate users, impede work-13 flows, or drive employees to seek ungoverned workarounds, whereas 14 lax controls may lead to data breaches or regulatory violations. This 15 tension between usability and security has been recognised in both 16 industry and academic discourse. Users tend to prioritise accomplish-17 ing their tasks efficiently, often perceiving security mechanisms as 18 obstacles when those mechanisms are intrusive or slow down their 19 work. A recent survey of employees at multiple companies found 20 that security controls such as strict access restrictions and DLP mea-21 sures were viewed as "intrusive" and "blocking" to get work done [2]. 22 On the other hand, regulators and data protection officers demand 23 rigorous safeguards, guided by the principle that security should be 24 'privacy by design and default', as mandated by GDPR. The situation 25 is further complicated by the fact that modern data environments 26 are sprawling and heterogeneous, spanning on-premise systems and 27 multiple cloud services. Governance solutions must therefore be 28 comprehensive and user-friendly. 29

This report provides a technical examination of data sharing, infor-30 mation governance, and DLP within Microsoft Azure and Office 365 31 infrastructures. We focus on Microsoft's tool set (under the Microsoft 32 Purview umbrella, among others) and how these tools enforce data 33 governance policies or, in some cases, hinder user experience. We dis-34 cuss key capabilities such as data classification, sensitivity labelling, 35 encryption, DLP policy enforcement, and access control, highlight-36 ing how each contributes to security and compliance goals. We also 37 address how these measures align with legal requirements in the EU 38 and the UK, notably GDPR and the UK Data Protection Act 2018, 39 which impose obligations such as protecting personal data, respect-40

ing data subjects' rights, and ensuring accountability. Throughout, we identify trade-offs and best practices to strike an optimal balance between keeping data secure and allowing the business to operate effectively.

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2. Microsoft Purview and Unified Data Governance

Microsoft Purview is a comprehensive suite of data governance, pro-46 tection, and compliance solutions aimed at helping organisations 47 manage their data estate centrally. Reflects Microsoft's unified ap-48 proach to information governance in both Azure and Microsoft 365. 49 At its core, Microsoft Purview provides a "single central pane of glass" 50 for data governance throughout the entire data landscape of an or-51 ganisation, which increasingly spans on-premise databases, cloud 52 services, file shares, and Office 365 content [3]. According to an in-53 dustry paper by the Purview engineering team, the service consists 54 of three primary components: (1) a data map (metadata catalogue) 55 populated by automated scanning of data sources, (2) a system to 56 store and manage data sensitivity classifications, and (3) a policy man-57 agement system that allows administrators to define and enforce data 58 policies uniformly across the organisation [3]. In essence, Purview is 59 designed to break down the silos of disparate data systems, so that 60 a governance policy (for example, "mark all customer data as con-61 fidential and restrict its access") can be authored once and applied 62 everywhere in a consistent manner. 63



Figure 1. Purview and Priva Ecosystem

A key part of Purview's offering is *data discovery and classification.* Through automated scanning and built-in pattern recognition (such as identifying credit card numbers, national identification numbers, or other personally identifiable information), Purview's data map builds an inventory of where sensitive information resides. Administrators can define or use predefined *sensitive information types* (regular expressions, keywords, or even trainable classifiers) to have the system intelligently tag data [7]. This automated discovery is crucial for compliance: organisations cannot protect or regulate data if they do not know that it exists. By "discovering" and cataloguing data, Purview enables compliance officers to identify stores of personal data subject to GDPR or customer records subject to industry regulations.

The Purview classification engine integrates with *Microsoft Purview Information Protection* (formerly Microsoft Information Protection, MIP). This integration means that once sensitive content is found, it can be labelled and protected. Sensitivity labels (e.g. Public, Confidential, Highly Confidential) are a form of metadata that travels with documents and emails, indicating their classification and optionally

enforcing encryption or access restrictions. Microsoft's documenta-83 tion emphasises that Purview's information protection provides the 84 capabilities to "discover, classify and protect sensitive information 85 wherever it lives or travels" [7]. When a file or email is labelled con-86 fidential, protection can be applied, such as encryption and rights 87 management (preventing unauthorised viewing, printing, or forward-88 ing). These labels can be applied manually by users (prompting them to consider data sensitivity at creation) or automatically based on content detection rules. Automating label application can significantly 91 reduce the usability burden on employees while maintaining gover-92 nance: for example, if a document contains what looks like customer 93 personal data, a rule might automatically label it as sensitive and 94 encrypt it, without the user having to take any action. 95

The ability to centrally write and implement data governance policies is another powerful feature of the unified approach of Purview. 97 In a traditional environment, each system (database, SharePoint 98 site, mailbox, etc.) might have its own access rules and gover-99 nance settings, leading to inconsistency and administrative over-100 head. The Microsoft Purview policy system allows administrators to 101 craft organisation-wide policies that are then translated and enforced 102 across multiple services. For example, a policy could stipulate that 103 "data classified as Highly Confidential must not be shared outside the 104 company." Purview will ensure that this policy is evaluated whether 105 those data are in an SQL database in Azure or a Word document 106 in SharePoint Online. This cross-platform policy engine is a major 107 step forward in balancing security and usability: it attempts to make 108 security seamless and ubiquitous in the background, so users have 109 a consistent experience (e.g., they simply find that certain actions 110 like external sharing are blocked for certain data, regardless of where the data resides). According to the Purview system description, this 112 113 unified governance; covering structured and unstructured data, cloud and on-premises, is a distinguishing feature, made possible by deep 114 integration with Office 365 and other services [3]. 115

116 2.1. Usability Considerations in Unified Governance

While Microsoft Purview greatly assists administrators in achieving 117 compliance and security objectives, it can introduce complexity that 118 affects end users. For example, automatic classification might occa-119 sionally mislabel a document, leading to unnecessary restrictions on 120 a file that a user is trying to share. If a false positive marks a benign 121 document as sensitive and encrypts it, the intended recipients might 122 be unable to access it, causing delays and frustration. Administrators 123 must therefore fine-tune sensitive information types and trainable 124 classifiers to balance catching most sensitive data without overclas-125 sifying normal business documents. Microsoft provides a "policy 126 simulation" and a tuning period for DLP and auto-labelling rules to 127 mitigate this risk, which is a recommended best practice to maintain 128 usability. 129

Another challenge is that even when classification is accurate, the 130 enforcement of policies such as 'no external sharing of confidential 131 data' can impede legitimate business needs. An organisation might 132 classify a project document as confidential (perhaps automatically 133 due to certain keywords), but later find a need to share it with an 134 outside consultant. The governance system could block sharing, re-135 quiring a security override or reclassification that takes time. Users 136 might perceive governance tools as inflexible in such scenarios. Ef-137 fective governance, therefore, requires not just technology but also 138 well-considered processes: e.g. clear procedures for users to request 139 exceptions or reclassification when business needs evolve. In terms of tooling, Microsoft's approach to soften this friction includes provid-141 ing user feedback prompts. For example, if a user attempts an action 142 that violates a policy, Office 365 can display a policy tip explaining 143 the restriction (such as 'This document is labelled confidential and 144 cannot be shared outside of the organisation') rather than simply 145 failing silently. This at least informs the user about the reason and 146 educates them on data handling policies. 147



Figure 2. Microsoft Purview Information Protection (formerly Microsoft Information Protection) in the functions of discovering, classifying, and protecting information assets

The centralised Microsoft Purviewew model also means that any 148 outages or misconfigurations can have a wide impact. If the Purview 149 scanning service malfunctions, it could delay the appearance of newly 150 created sensitive data in the catalogue, potentially leaving it unpro-151 tected for a window of time. Or, a mistaken policy configuration 152 could inadvertently lock down information broadly. Thus, there is 153 a dependency on the reliability of Purview and the diligence of ad-154 ministrators in testing policies. In summary, Purview significantly 155 improves an organisation's ability to govern data (thereby supporting 156 security and compliance) by unifying policy enforcement across the 157 data estate and automating classification. However, to avoid hinder-158 ing productivity, its use must be coupled with careful policy design, 159 user engagement and training, and ongoing adjustments to ensure 160 that security measures remain proportionate and context-sensitive. 161

3. Data Loss Prevention in Microsoft 365

Data Loss Prevention (DLP) in the Microsoft 365 context refers to a 163 set of technologies and policies aimed at preventing sensitive infor-164 mation from leaving the organisation inappropriately. Microsoft 365 165 DLP is now integrated under the Purview branding as well, which 166 emphasises its role in the broader information protection strategy. 167 DLP policies target the problem of oversharing: they are designed to 168 detect when a user is attempting to share or transmit sensitive data 169 (such as personal information, financial records or confidential busi-170 ness data) to unauthorised recipients, and then block the action or 171 alert the user/administrator. Microsoft's documentation defines DLP 172 as a practice to 'prevent users from inappropriately sharing sensitive 173 data with people who shouldn't have it' [8]. In practical terms, a DLP 174 policy is a set of rules that monitor data at various locations (e-mail, 175 files, chat messages, etc.) and look for specific types of content (such 176 as credit card numbers or keywords such as "Privileged") that should 177 be protected. 178

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Before implementing DLP policies, organisations must first understand what data they hold, where they reside, and their sensitivity. This necessitates the creation and maintenance of an Information Asset Register (IAR), a foundational inventory of the organisation's critical information assets. An IAR catalogues data types, ownership, storage locations, and classification levels. It is the prerequisite for any meaningful data protection strategy, including DLP. Without an IAR, DLP policies can be misaligned, targeting irrelevant assets while ignoring critical ones. Therefore, completing the IAR should precede the implementation of DLP, ensuring that protection policies are appropriately scoped and prioritised based on actual data risks.

One of the strengths of Microsoft's DLP solution is its broad coverage throughout the productivity suite and beyond. A single DLP policy can be applied to content in Exchange Online (emails and attachments), SharePoint Online sites, OneDrive for Business folders, Microsoft Teams chats/files, and even local devices (Windows 10/11 endpoints) and certain cloud apps via integration with Defender for Cloud Apps. Using the same types of sensitive information

and classification definitions as Purview's data map, DLP policies 197 can consistently identify sensitive content no matter where it is lo-198 cated. For example, an organisation can establish a DLP rule: "If 199 an email or document contains 10 or more customer National Insur-200 ance numbers, prevent it from being shared externally and notify the 201 compliance officer." The DLP engine performs deep content analysis 202 using pattern matching, keyword proximity, and machine learning to 203 detect these conditions [8]. Importantly, it is not just a simple text scan; it uses built-in intelligence (such as Luhn checksum validation 205 for credit card numbers, or context to distinguish a nine-digit number 206 as a Social Security number versus a random number) to improve 207 accuracy [8]. 208

When the conditions of a DLP policy are met, the system can take 209 a variety of actions. Common actions include: blocking the content 210 from being shared or sent (for instance, not delivering an outbound 211 email, or stopping a file from being accessed by external users), dis-212 playing a warning or policy tip to the end-user, and logging the event 213 for audit. In some cases, DLP can also automatically encrypt the con-214 tent or quarantine it. These enforcement actions directly contribute 215 to preventing data leakage. From a compliance standpoint, DLP is a 216 technical measure that supports obligations under laws like GDPR 217 Article 32 (security of processing) by mitigating the risk of acciden-218 tal or unauthorised disclosure of personal data. Indeed, Microsoft 219 provides prebuilt DLP policy templates for common regulations (e.g., 220 GDPR, HIPAA, PCI-DSS) to help organisations quickly implement 221 relevant rules. 222

However, the flip side is that DLP can be one of the most visible se-223 curity controls to end-users, and thus a source of the usability-security 224 friction. Unlike back-end processes (such as quietly encrypting a file 225 in storage), DLP often directly interacts with a user's attempt to do 226 something. For example, if a user tries to email a spreadsheet exter-227 nally and it contains something that triggers a DLP rule, the email 228 might be blocked, and the user will receive a notification. If this oc-229 curs frequently or with false positives, users can become frustrated. In 230 the employee survey mentioned earlier, many respondents reported 231 that these transmission controls (which include DLP and related 232 mechanisms) were obstructive [2]. From an organisation's perspec-233 tive, there is a delicate balance: they want to prevent truly risky data 234 exfiltration (such as an employee unintentionally emailing a client 235 list to the wrong person or a malicious insider trying to steal data), 236 but they do not want to interfere with everyday communications. 237

Microsoft's DLP solution attempts to address usability by allowing 238 policy tuning and user override. Administrators can configure thresh-239 olds and exceptions, for instance, perhaps only trigger the rule if a 240 significant amount of sensitive data is detected, to avoid stopping an 241 email just because of one incidental ID number. They can also enable 242 override: a policy tip might say 'This message contains sensitive info. 243 Are you sure you want to send?', allowing the user to justify or report 244 why it is necessary. The event would still be logged, but the user is 245 not completely blocked if they have a valid business reason. This approach recognises that users sometimes need flexibility, and forcing them to seek cumbersome approval every time can impede produc-248 tivity. Another strategy is phased deployment: initially running DLP 249 policies in "audit mode" where they do not actually block content, 250 but only log incidents and maybe alert users. This helps calibrate the 251 policies by seeing how often they would trigger and whether those 252 triggers are genuine risks or false alarms. 253

Moreover, DLP in Microsoft 365 is closely tied to the classification labels discussed earlier. A sensitivity label can itself be used as a condition in a DLP policy. For example, if a document is la-256 belled 'highly confidential', a DLP policy can automatically prevent 257 it from being shared externally, regardless of content. This is a pow-258 erful combination of user-driven (or auto-driven) classification and 259 machine-enforced handling. It also helps usability: if users diligently 260 label documents, the DLP engine does not have to rely on guessing 261 from content, which could be error-prone; it will simply respect the 262

intended handling of the label. Of course, that shifts some responsibility to users or auto-labelling algorithms to get the label right in the first place.

In summary, Microsoft 365 DLP provides robust tools to curtail in-266 appropriate data sharing. It significantly improves an organisation's 267 control over data outflows by monitoring a wide range of channels. 268 This undoubtedly strengthens security postures and helps demon-269 strate compliance (showing regulators that preventative controls are 270 in place). The trade-off is that if DLP policies are too rigid or noisy, 271 they can disrupt workflows. Effective DLP deployment therefore 272 involves stakeholder training (so people understand why certain ac-273 tions are blocked), iterative tuning of rules, and possibly an incident 274 response process to handle cases where business needs conflict with 275 policy (e.g., a manager can quickly grant an exception for a particular 276 case). Crucially, these controls should be based on a solid understand-277 ing of the organisation's information assets, as defined in the IAR. By 278 identifying and classifying sensitive data early, organisations lay the 279 groundwork for precise, impactful, and low-friction DLP controls. 280

4. Access Control and Conditional Access

Beyond data classification and content-based policies, controlling 282 access to data is a fundamental aspect of information governance. 283 Microsoft Azure Active Directory (Azure AD, now part of Microsoft 284 Entra ID) provides Conditional Access policies that help organisations 285 ensure that only the right people under the right conditions can access 286 sensitive resources. Conditional access is described as operating 287 on an "if-then" basis: If certain signals or conditions are met (user 288 identity, location, device compliance status, etc.), then allow or deny 289 access, or require additional proof of identity [6]. These policies are a 290 cornerstone of a Zero Trust security model and directly contribute 291 to preventing unauthorised data access or transfer. For example, a 292 Conditional Access policy might require multifactor authentication 293 (MFA) for any user accessing Office 365 from outside the corporate 294 network, or block access entirely if coming from a high-risk sign-in 295 (detected by anomaly detection in Azure AD).



Figure 3. Microsoft's Zero Trust architecture places Conditional Access at the centre of your organisations security policy enforcement. Continuous risk assessment and automation feed into this control layer, integrating with security tools across identities (e.g. Entra ID, Defender for Identity), endpoints (e.g. Microsoft Defender, Endpoint Manager), applications, data (e.g. Microsoft Information Protection), infrastructure, and networks. This model enables dynamic, context-aware access control based on real-time threat intelligence and telemetry.

In the context of data sharing and DLP, Conditional Access adds 297 a layer of contextual security. While DLP looks at what data being 298 sent and to whom, Conditional Access looks at who is accessing data 299 and how. Consider a scenario: an employee is trying to download a 300 set of customer records (which are sensitive) from a SharePoint site. 301 Even if those data are labelled and protected, Conditional Access can 302 ensure that this download only occurs under safe conditions (say, 303 on a company-managed device that has up-to-date security patches 304 and is not a personal device). If the employee tries the same on an 305

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untrusted device or from an unusual location, the policy could block 306 the download or ask for additional authentication. This significantly 307 reduces the risk of data leakage, because even valid users cannot 308 access certain data in potentially risky circumstances. Microsoft pro-309 vides fine-grained controls; for instance, integration with Microsoft 310 Defender for Cloud Apps (formerly Cloud App Security) can impose 311 session-based restrictions, like disabling the ability to download or 312 copy content when accessed via a web session on an unmanaged 313 device, rather than outright blocking access to view the content.

From a GDPR and data protection point of view, Conditional Ac-315 cess helps enforce the principle of least privilege and adequate security. 316 It ensures that personal data are accessed only by authorised persons 317 and in a secure manner, thereby reducing the chance of compro-318 mised accounts leading to breaches. For example, if an attacker steals 319 a user's password, they would still be thwarted by MFA requirements 320 and device checks in many cases. In terms of compliance, these con-321 trols can be part of a Data Protection Impact Assessment mitigation 322 strategy, demonstrating that the organisation has technical measures 323 to prevent unauthorised access to personal data. 324

However, Conditional Access, like other security measures, can affect the user experience. Users may find themselves prompted for MFA frequently if policies are not tuned, and this can cause frustration, especially if the prompts occur during travel or off-hours access when the system flags the sign-in as atypical. In a British English 329 context, one might say that users could be 'put off' from using the 330 correct channels if it becomes too much hassle. Indeed, if someone 331 is repeatedly blocked from accessing a needed document on their 332 personal phone due to strict device policies, they might resort to 333 sending that document to a personal email or some other insecure 334 workaround (the classic shadow IT issue). Therefore, while Condi-335 tional Access greatly strengthens security, it must be designed with 336 an understanding of user work patterns. Microsoft recommends a 337 balanced approach: for example, using conditions like 'trusted loca-338 tions' or managed device compliance to reduce unnecessary MFA 339 requests for low-risk scenarios and only enforce the strictest controls 340 when truly needed (such as accessing highly sensitive data from an 341 unknown network) [6]. 342

One feature to note is that these access policies can also incorpo-343 rate sensitivity labels and the context of the content in certain ways. 344 Through integration of Purview Information Protection with Azure 345 AD, organisations can use label-driven access policies. As a hypothet-346 ical example, a highly confidential document stored in SharePoint 347 could be configured such that only users in a specific Azure AD group 348 (say, top management) can access it, and only from compliant devices. This marries content classification with identity-based security. Although not trivial to set up, it is possible through a combination of Microsoft 365 E5 Compliance features and Azure AD dynamic groups or SharePoint site sensitivity-based access rules. The result is 353 a very tight control over sensitive information. 354

In terms of user impact, a well-implemented Conditional Access 355 policy is often not noticeable until it needs to be. That is, under nor-356 mal conditions (employee in office on a company laptop), everything works seamlessly; but the moment something is outside the norm (login from abroad, or an unmanaged device), the user encounters 359 a security hurdle. Communicating the rationale for these hurdles is 360 important. IT departments often roll out these policies accompanied 361 by guidance, e.g. "To protect company and client data, we require 362 MFA when you're signing in from outside the UK" or "Access to 363 certain applications will be limited on personal devices". This trans-364 parency helps users understand that these are protective measures, 365 not arbitrary barriers.

In summary, Conditional Access in Azure/Office 365 adds a crucial
layer of defence by ensuring that data access itself is governed based
on risk conditions. It complements content-centric controls (like
DLP) by guarding the front door, so to speak. By enforcing conditions
such as MFA, device compliance, and location-based restrictions, it

significantly reduces the likelihood of unauthorised data sharing or 372 theft. However, as with other measures, finding the sweet spot is 373 necessary: too lenient and it will not stop threats; too strict and it 374 may hinder legitimate access, potentially leading users to circumvent 375 policies. The evolving best practice in industry is to employ adaptive 376 risk-based policies using Microsoft's tools to assess session risk in real 377 time and only challenge the user when the risk is above a threshold. 378 This minimises friction while maintaining strong security postures. 379

5. Compliance with GDPR and UK Data Protection Regulations

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Ensuring compliance with data protection regulations is one of the main drivers behind the adoption of robust information governance 383 and DLP controls. The GDPR of the European Union, which came 384 into effect in 2018, and the UK's Data Protection Act 2018 (which 385 implements similar requirements post-Brexit), impose legal obliga-386 tions on organisations with respect to personal data. Key principles 387 include data minimisation, purpose limitation, storage limitation, 388 integrity and confidentiality of personal data, and accountability. 389 Failure to comply can result in heavy fines and reputational damage. 390 Microsoft's cloud services, including Azure and Office 365, have been 391 developed with these regulations in mind, offering features that help 392 organisations meet their compliance duties. 393

One fundamental requirement under GDPR is to know what per-394 sonal data you have and where it resides (this aligns with the princi-395 ple of accountability and facilitating data subject rights). Microsoft 396 Purview's data discovery and classification capabilities directly sup-397 port this need. By automatically identifying and tagging personal data 398 across an organisation's files and databases, Purview helps create the 399 inventory needed for compliance. For example, if a data subject issues 400 a Subject Access Request (SAR/DSR) asking for all their personal 401 data, the organisation can leverage Purview's catalog and eDiscovery 402 tools to locate that information across Exchange emails, SharePoint 403 documents, Teams messages, and so on. Microsoft provides specific 404 guidance and tools for Data Subject Requests in Office 365, enabling 405 administrators to search through user mailboxes and OneDrive, and 406 to collect data for review [9]. These capabilities mean that what could 407 be an overwhelming manual task is partly automated, thus improving 408 compliance while controlling the administrative burden.

Another core principle is storage limitation - i.e. not keeping per-410 sonal data longer than necessary. Office 365 addresses this through 411 retention policies and labels. Organisations can configure Microsoft 412 365 retention policies to automatically delete or archive content after 413 a defined period, according to legal requirements or business needs. 414 For instance, an organisation might set a policy to delete emails after 415 7 years unless they are flagged for legal hold. Microsoft's documenta-416 tion highlights that retention labels can 'help you keep personal data 417 for a certain time and delete them when they are no longer needed' 418 [4]. This directly supports GDPR's requirement to dispose of data 419 that is no longer required for the purpose it was collected. The UK 420 ICO similarly expects organisations to have data retention schedules. 421 Using these Office 365 features, companies can demonstrate that they 422 have technical controls to enforce their data retention policies. A 423 practical example is using an 'Employee record - Delete after 6 years' 424 label applied to HR documents, which the system will then remove 425 once that time elapses, automatically handling the lifecycle. 426

Security of processing (Article 32 GDPR) is clearly addressed by 427 the combination of encryption, DLP, and access controls discussed in 428 previous sections. Encryption (both at rest and in transit) is enabled 429 by default in Office 365 and Azure for data in the cloud, which protects 430 against certain types of breach (e.g., if someone somehow got physical 431 access to the storage, the data is encrypted). More granularly, the sen-432 sitivity labels can apply encryption so that only certain identities can 433 open a document (for example, a file labelled 'Confidential Finance' 434 can be encrypted to allow only members of the Finance team to open 435 it, even if it was leaked outside). This is a strong security measure 436

that ensures confidentiality. DLP policies, by preventing accidental 437 leaks, also uphold the integrity and confidentiality of personal data. 438 These tools exemplify the 'appropriate technical and organisational 439 measures' required by GDPR to protect personal data. It should be 440 noted that GDPR does not mandate specific technologies, but expects 441 measures proportional to risk. Implementing Microsoft's advanced se-442 curity features can be seen as meeting or exceeding industry standard 443 protections, which would typically be considered sufficient unless 444 special categories of data require even more stringent controls. 445

The accountability principle in GDPR (and mirrored in UK law) 446 requires that organisations not only comply but are able to demon-447 strate compliance. Microsoft's Compliance Centre (part of Purview) 448 provides dashboards and audit logs that help in this regard. The 449 Microsoft 365 Compliance Centre offers a unified interface to man-450 age compliance-related tasks and view the status of various controls. 451 It even includes a Compliance Score / Manager tool that maps the 452 controls implemented in the organisation to regulatory requirements 453 and gives a score that indicates progress [5]. For example, it might 454 show how many recommended GDPR controls (out of the Microsoft-455 provided control set) the organisation has adopted. Features such as 456 audit logs are invaluable in forensic investigations and in showing 457 regulators that you monitor data access. If a potential incident occurs, 458 detailed logs of who accessed or attempted to share personal data can 459 demonstrate that the organisation tracks activities and can identify 460 the scope of a breach, as required by GDPR's breach notification rules. 461

It is important to note that while Microsoft provides the tools, the responsibility ultimately lies with the organisation (the data con-463 troller) to configure and use them properly. Microsoft acts as a data 464 processor for many services, and they have contractual commitments 465 to GDPR themselves (for example, offering data processing agree-466 ments, terms for international transfers, etc.). But if an organisation 467 does not turn on DLP or does not classify any data, simply using 468 Office 365 does not automatically make them compliant. Technology 469 must be used properly according to an internal governance strategy. 470 Fortunately, Microsoft's official guidance and templates make it eas-471 ier to get started. There are built-in policy templates for GDPR that 472 can be imported: these include, for example, detection of European 473 national IDs, health information, and other personal data categories 474 defined by GDPR as sensitive. An administrator could use the DLP 475 template 'GDPR Data' to quickly create rules that trigger when EU 476 personal data is shared externally [4]. Such features reduce the bar-477 rier to compliance implementation and reduce the need for deep 479 expertise, which is especially helpful for smaller organisations (as indicated in the "GDPR simplified guide" for small businesses provided 480 by Microsoft). 481

Concerning the UK Data Protection Act 2018 and the UK GDPR, 482 after Brexit, the UK retained the core GDPR framework. All the above 483 measures relevant to GDPR apply equally to UK law, with perhaps 484 additional attention to UK-specific codes of practice or guidance from 485 the UK Information Commissioner's Office (ICO). One consideration is data residency and sovereignty: Some UK organisations prefer or are required to keep data within UK datacenters. Microsoft has 488 responded by offering region-specific data residency (for instance, 489 Office 365 tenants can be anchored to UK data centres). Although this 490 is more of an infrastructure aspect than a Purview feature, it is worth 491 noting as part of compliance. Data residency helps address legal 492 concerns about cross-border data transfers, which is a hot topic under 493 GDPR (e.g., data going to the US). Microsoft's cloud has options like 494 495 Multi-Geo to keep certain mailboxes or sites in a chosen geography. 496 Ensuring these settings align with organisational policy is another piece of the governance puzzle. 497

In practice, companies often undertake a *Data Protection Impact Assessment (DPIA)* when deploying cloud services such as Office 365
 to process personal data, especially if it is a new or high-risk use.
 Microsoft provides detailed documentation to assist controllers in
 this process, explaining how Office 365 handles data, what security

features are available, and how to configure them to mitigate risks [1].503A DPIA might conclude, for example, that enabling DLP and encryption for certain sensitive data categories is necessary to reduce risk504to an acceptable level, thus recommending the use of those Purview506features. It might also highlight any residual risks: perhaps the risk507of user error if not all data can be automatically classified, and hence508administrative or training controls would be added.509

Microsoft Azure and Office 365 are well aligned with GDPR and 510 UK data protection requirements. They offer a broad toolkit that, if 511 properly used, can greatly ease the burden of compliance: from dis-512 covering and cataloguing personal data, protecting it with appropriate 513 technical measures (encryption, access control, DLP), to facilitating 514 the handling of data subject rights, and demonstrating compliance 515 via audits and reports. The trade-off is that these protections must be 516 thoughtfully integrated into business operations. Compliance must 517 not be achieved at the expense of completely hampering day-to-day 518 work. Regulators themselves recognise the need for balanced ap-519 proaches: GDPR talks about appropriate measures, implicitly under-520 standing that there is a point where controls can become impractical. 521 Using Microsoft's tools, organisations have the flexibility to adjust the 522 dials (security versus usability) to meet legal obligations while still 523 empowering users. The best results often come when organisations 524 foster a culture of compliance: employees understand the importance 525 of these controls and cooperate with them, rather than view them as 526 an adversary. Achieving this culture is easier when controls are not 527 overly onerous, which is why fine-tuning and user-centric design of 528 policies, as discussed earlier, is critical. 529

6. Conclusion

Data sharing and collaboration in the cloud era introduce significant 531 governance challenges, but with the right tools and policies, organisa-532 tions can strike a viable balance between usability and security. In the 533 Microsoft Azure and Office 365 environment, the suite of Purview-534 driven governance solutions, DLP policies, information protection 535 labels, and Conditional Access controls provide a comprehensive 536 framework to protect sensitive data and adhere to regulations such 537 as GDPR. These tools enable centralised governance - discovering 538 where data lives, classifying their sensitivity, and enforcing rules and 539 protections consistently across the ecosystem - which is invaluable 540 for maintaining control in large, complex data estates. They also 541 embody privacy-by-design principles, giving organisations out-of-the-542 box capabilities to encrypt data, prevent leaks, and tightly manage 543 access. 544

However, as we have emphasised, every security measure comes 545 with a usability impact. The effectiveness of an information gover-546 nance programme is not measured only by how strict the controls 547 are but by how well they are adopted and respected in practice. If 548 employees find ways to circumvent policies due to frustration, the 549 organisation could end up less secure than if a slightly more permis-550 sive, but respected, policy were in place. Therefore, implementing 551 Microsoft's data governance tools must be accompanied by an empa-552 thetic understanding of business workflows. Administrators should 553 leverage features such as policy tips, user override with justification, 554 and adaptive access policies to involve users in the security process 555 rather than unilaterally blocking them. Training and awareness cam-556 paigns are also key: When users understand why that a certain file 557 cannot be shared externally, they are more likely to comply or seek 558 appropriate approvals, rather than finding shadow IT solutions. 559

The tension between usability and security is not a zero-sum game 560 where one must entirely trump the other. With careful design, organ-561 isations can achieve strong security with minimal disruption. The 562 "myth" that usability must be sacrificed for security can be dispelled 563 through intelligent, context-aware controls [2]. Microsoft's platform, 564 especially as it continues to evolve with AI and smarter analytics, is 565 moving toward this ideal by offering tools that can take a lot of the 566 compliance burden off users (through automation) while keeping 567

530

them in the loop when needed. For instance, auto-classification of
content can silently protect most files, and only in edge cases will a
user be asked to make a decision or perform an extra step.

From a compliance perspective, the use of these modern tools is an effective way to meet regulatory requirements and demonstrate due diligence. Regulators often look for evidence that an organisation has thought about risks and implemented appropriate controls; a wellimplemented suite of Microsoft 365 compliance solutions can serve as tangible evidence of that. Furthermore, audit trails and dashboards help in reporting and accountability, which are crucial under laws such as GDPR.

Microsoft Azure and Office 365 provide a rich set of capabilities 579 to enable data sharing in a secure, governed manner. The trade-580 offs between security and usability can be managed by using these 581 capabilities to their fullest extent and customising them to the needs 582 of the organisation. By doing so in combination with the promotion 583 of a security-conscious culture, organisations can ensure that data 584 are available to fuel productivity and collaboration and are protected 585 to meet legal and ethical obligations. The result is an enterprise that 586 can confidently leverage its data for innovation and service, without 587 constantly fearing the next data breach or compliance audit, a goal 588 that lies at the heart of effective information governance in the cloud 589 age. 590

591 7. Contact Novalytics for More Information

 Novalytics provides strategic advisory services in information governance, digital transformation, and data strategy for small businesses
 in the regulated and high-risk sectors. We support organisations in
 modernising their operations through secure and privacy-preserving
 technologies - ensuring innovation is aligned with regulatory compli ance, ethical standards, and long-term resilience.

For expert guidance on digital strategy, transformation planning,
 or information governance frameworks, please contact us at:

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 - Email: contact@novalytics.com

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