

Industry White Paper

Microsoft Autopilot: Call to Action



Closed Loop Lifecycle Planning[©]

In collaboration with HP[®], Microsoft[®], and Intel[®]

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Managing the Microsoft and HP relationship for several years, Jeff is an expert in go to market plans and customer adoption strategies.

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Bruce Michelson is an HP Distinguished Technologist (Emeritus) and the Manager of Close Loop LLC. Bruce has over 36+ years in delivering industry white paper and customer engagements. Bruce has delivered over 1,000+ white papers and over 350+ engagements.

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Bruce is sponsored by the HP, Microsoft, and Intel Alliance for this engagement.

1.0 Management Summary

In lifecycle everything begins with an operational definition, so let's begin this White Paper with a definition of Microsoft Autopilot. The best source of that operational definition is from the Microsoft website.

The learn.microsoft.com website provides the following definition of Autopilot:

“Windows Autopilot is a collection of technologies used to set up and pre-configure new devices, getting them ready for productive use. Windows Autopilot can be used to deploy Windows PCs.”

Microsoft Autopilot is an entitlement for those businesses meeting the following set of prerequisites (also cited from the Microsoft.com website:

Microsoft Autopilot has the following prerequisites and requirements:

A currently supported version of Windows (Windows 10 or Windows 11 Pro, Education, or Enterprise)

- *Azure AD Premium P1 or P2 licenses*
- *Configure Intune to allow Windows enrollments*
- *Network connectivity*
- *An enrollment status page (ESP) profile must be targeted to the device*
- *When using a VM for Autopilot testing, assign at least 2 processors and 4GB of memory*
- *The Windows Autopilot device should be preinstalled with only a Windows base image plus drivers*
- *Licensed versions of Office, such as Microsoft 365 Apps for enterprise, can be preinstalled*

Autopilot is an integral part of the modern management migration that many organizations are adopting or are planning to adopt.

Closed Loop Lifecycle Planning defines modern management as “the cloud-first, highly automated, highly secure IT infrastructure architected based upon end user requirements.”

Regardless of the vertical industry, all organizations are impacted by the migration and adoption of modern management whether it is a “software as a service” approach, cloud-based IT infrastructure (or hybrid with both cloud and on-premises), or subscription-based services.

1.1 Objectives of This White Paper

This White Paper is to provide insight into the business case surrounding the adoption of Autopilot and to better understand rationales why organizations might be deferring adoption.

1.2 Continuous Process Improvement

At its core, Autopilot is a part of IT continuous process improvement. Taking existing manual driven activities such as deployment and provisioning and automating those lifecycle operations has been a long-standing desire by IT. In the past, such terms as “touch-less” deployments or “automated deployments” were considered more visionary than reality.

Now that the reality is that this capability is mature, it is quite surprising to view that legacy continues. The transition for manual efforts to automated efforts are more than compelling. There are several White Papers which deal with this topic specifically, and there is even an Autopilot calculator to assist in the identification of the benefits.

The observation that this White Paper will address is beyond the economic and seeks other rationales.

2.0 Legacy or Tech Debt?

Legacy practices are often seen as best practices due to their efficiency in cost reduction through manual efforts of provisioning and deployment. Organizations find comfort in these processes because they have years of experience. However, being proficient in outdated practices may not be optimal if the cost model is unsustainable.

Tech Debt usually refers to hardware and software but also applies to services. Closed Loop Lifecycle Planning defines Tech Debt as “aging hardware, software, policy, process, procedure, and governance that no longer optimize costs and represent higher risks.”

Autopilot aims to modernize and optimize legacy manual processes now considered Tech Debt, implying a future point where such legacy methods will become operationally and financially ineffective.

3.0 Rationales for Delaying - 2025

With this as background, let's focus on 2025. Organizations are in various states regarding Autopilot. The listing below summarizes the potential status of an organization:

- The organization has completed the migration and adoption
- The organization is assessing the potential
- The organization is in process or developing pilots and proofs of concept
- The organization has reviewed and will not be adopting
- The organization has other third part tools that will be leveraged
- The organization has not assessed at this moment in time

With the exponential scenarios, let's focus on the ones that are in essence deferring.

So, here we are in 2025, Microsoft released Autopilot in 2017. To say that the offered has matured is an understatement. The solution is considered a best-in-class alternative.

With that what are the potential rationales for deferring. Below in bulleted format are some of the rationales that have been identified through research, engagement, and experience. Please note that these rationales are not in any order of priority.

- “We have been too busy implementing other high priority projects”
- “We have not had the resources to assess the potential”
- “We are doing quite well in this area and do not see a need for change”
- “We are a smaller organization and do not see how it can assist us”
- “We do not want to lock ourselves into a single supplier”
- “There would be too many relationships to consider”
- “This changes too many of our workflows”
- “No one has asked IT to do this”
- “We do not have resources to define a business case”
- “This will have an impact on the IT budget and headcount”

3.1 “We have been too busy implementing other high priority projects”

IT always has a continuous pipeline of projects and day-to-day tasks that each have an existing priority. In the post-pandemic era marked by new technologies and innovations, organizations must review how new projects are considered. Project intake is increasingly important as technology such as AI, modern management, NPU's, and others may have IT projects associated with merging technologies. Autopilot falls under the category of new project intake.

The consideration for new projects and their prioritization should be revisited annually in the context of potential impacts across economic, operational, and end-user experience. It should be noted that even if a project is ongoing, it should not prevent a review of other projects that might compete for the same resources. Criteria should be established to address these types of situations, which will occur more frequently.

3.2 “We have not had the resources to assess the potential”

IT is often required to achieve more with fewer resources, and currently, IT faces the challenge of doing more with significantly fewer resources. When evaluating new projects, such as Autopilot, which may substantially influence future architecture, it is important to establish a clear escalation path to gain leadership support for addressing these issues. It is advisable to adopt a mindset that focuses on integrating new innovations within the business as usual (BAU) model.

3.3 “We are doing quite well in this area and do not see a need for change”

Closed Loop Lifecycle Planning has concluded that “change by its very nature is unsettling.”

Given this background, if an organization is in the best practice for manual lifecycle elements, there may be a hesitation to change which is outside of the legacy. The need for change needs to have identified quantification both from an economic perspective as well as operational. The DEX is the outcome of these investments.

This is not a question of whether or not the current practice is optimized, it is a question whether automating those processes result in a compelling return on investment.

3.4 “We are a smaller organization and do not see how it can assist us”

The size of the organization does not determine whether or not automation will result in an optimized outcome. What is important for businesses of all sizes and structure to consider is what is the continuous process improvement plan going forward.

It seems logical that elements of modern management and increased automation regardless of industry and size of the organization could favorably impact lifecycle practices.

Due diligence is required to validate the impact and outcomes of adoption. Assuming the impact and avoiding the detailed assessment is an unconscious decision to remain in the current business as usual environment.

Closed Loop Lifecycle Planning has concluded that “there are no right or wrong answers, only conscious and unconscious decisions.”

3.5 “We do not want to lock ourselves into a single supplier”

Autopilot is no different in terms of the relationship than other incumbent or third party relationship. One could argue that embracing any supplier for any length of time is a commitment over some period of time.

Autopilot does not “lock” in any relationship, rather Autopilot will be leveraged where it does add value and is an integral part of modern management.

In every organization there will always be a limited number of strategic partners and suppliers that are unique in their ability and core competencies. A strategic supplier status does not “lock” in any supplier that is always earned by performance and meeting and exceeding expectations.

3.6 “There would be too many relationships to consider”

One of the concerns expressed is that existing business as usual relationships may change with adoption of Autopilot.

Relationships will change in terms of setting up Autopilot and how an organization determines to move forward. Those decisions, however, are those of the organization to make.

At a minimal the set up requires decisions to be made, and it is likely that the work to be performed may change, and some of the service level agreements. However, this is in the normal course of business and the organization is in complete determination of the outcome and suppliers to be engaged.

3.7 “This changes too many of our workflows”

Autopilot will introduce change to the existing workflows. An organization cannot automate without impacting the existing workflows and work to be performed.

During the due diligence process, there should be an assessment to identify, as a project plan, the work outcomes and which workflows are impacted. There needs to be a new workflow, just as governance, over the new policies, processes, and procedures.

3.8 “No one has asked IT to do this”

The objection is, “no one in the organization has asked IT to implement Autopilot.”

The main issue that is often missed in this discussion is the origin of countermeasures when leadership assigns budgets and requests for optimization, which frequently implies cost reductions.

Although leadership may not specifically request Autopilot, it is evident that they expect IT to have a plan for addressing optimization. The specific mention of Autopilot is irrelevant because leaders might not be familiar with technologies, automation, or modern management, necessitating their reliance on IT.

Autopilot should be considered by IT as one of the initiatives capable of providing significant cost countermeasures.

3.9 “We do not have resources to define a business case”

In the development of new innovations, it is essential to have a documented plan that is fully adopted. Specific resources and skill sets are required from both technology and business perspectives.

The plan needs to be created, communicated, and continuously refined. If an organization lacks updated skills or available resources, third parties can play a role. Deferring the creation of the business case and plan leads to delayed adoption.

Consequently, this postponement also delays the significant benefits and results in increased costs and missed opportunities for cost reductions.

3.10 “This will have an impact on the IT budget and headcount”

This question really has two distinct parts. The first question is the impact of the IT budget. Leadership is focused on direct financial impact (balance sheet, income statement, and budgets). These elements are considered direct costs. Autopilot specifically impacts and highlights the cost optimization (reductions) that can and should be traced back into the IT budgets.

Headcount may be impacted depending on what the work to be performed ultimately is defined and who performs the work. Much of the activities that are automated in Autopilot are in the Closed Loop Lifecycle Planning Commodity Suite.

IT and the organization has always wanted to develop talent to move from the Commodity Suite to the Value Suite where there can be greater impact and benefits to the employees and the end users.

4.0 Observations and Conclusions

For 2025 the observations are that more organizations are now assessing Autopilot and there seems to be an increasing number of pilots and proofs of concept underway or being considered. Driven perhaps by Windows 11 adoption, there seems to be a parallel process occurring.

Another observation is that the IT budget for 2025 is more constrained than its previous year counterparts. Leadership has an expectation that all of the innovations namely AI, NPUs, modern management, Windows 11, new chip technologies, and entitlements are creating an environment

that should be able to deliver continuous process improvements that are measurable and significant.

Some of the objections raised in 2025 are not new, and somewhat consistent from earlier White Papers regarding the topic. The difference is today that the planning process and the potential financial impact (quantifications) might have not been a focus.

For 2025, Autopilot should be considered as a cost counter measure for the organization. There are few entities that can deliver the order of magnitude of cost optimization that this level of automation can deliver. The solution can improve the time to solution getting the latest technologies and all of the related benefits to the organization out to the end user more rapidly.

The call to action for this White Paper is actually very direct. Organizations should assess and potentially re-prioritize initiatives to determine if the cost and operational impact and outcomes associated with Autopilot should be a 2025 deliverable.

Appendix

1. Closed Loop Lifecycle Planning - A Complete Guide to Managing Your PC Fleet, Bruce Michelson, published by Addison-Wesley Division of Pearson Education, ISBN 978-0-321-47714-9.
2. Appropriate Incumbent Behavior©, copyright Bruce Michelson.

Other Books by Bruce Michelson

1. Closed Loop Lifecycle Planning©, Client Computing in the Health Care Industry, by Bruce Michelson, Published by IDG, ISBN 978-1-61623-045-6.
2. Closed Loop Lifecycle Planning© - What It Is and Why It Is Important to You, by Bruce Michelson, Published by Bookmasters, ISBN 0-9667607-0-0.
3. We Are All Retail, The Race to Improve the Retail Experience in a Post Covid World, by Bruce Michelson and Leif Olson, Published by Archway Publishing, ISBN 978-1-6657-3394-6.
4. IT Strategies in the Post-Pandemic Era, Part of the Closed Loop Lifecycle Planning© Series, published by Archway Publishing, March 2023, ISBN 978-1-6647-3856-9.
5. Zero Trust, by Bruce Michelson and Cody Gerhardt, published by Archway Publishing, May 2023, ISBN 978-1-6657-4191-0.