机器人过程自动化软件的魔力象限

2019 年7月8日出版- ID G00 379618 - 阅读时间74分钟

By Analysts Derek Miers, Marc Kerremans, Saikat Ray, Cathy Tornbohm

随着组织寻求提高运营效率并将遗留系统与新企业应用程序和数字业务集成的方法，机器人流程自动化继续扩大其足迹。在这里，我们将研究这些市场力量以及此类软件的领先企业供应商。

市场定义/描述

本文档于2019年7月8日进行了修订。您正在查看的文档是更正后的版本。有关更多信息，请参阅gartner.com上的“ 更正”(http://www.gartner.com/technology/about/policies/current_corrections.jsp) 页面。(http://www.gartner.com/technology/about/policies/current_corrections.jsp)

机器人过程自动化（RPA）是一种数字化支持技术，主要利用用户界面（UI）和表面级功能的组合来创建脚本，自动执行常规，可预测的数据转录工作。

RPA工具将应用程序链接起来，消除了键入错误，加快了流程并降低了成本。作为一个市场，RPA仍然相对较小，2018年的总收入略低于8.5亿美元。但是，RPA是Gartner正式追踪的增长最快的软件子部门，同比增长超过63％在2018年。

RPA有效地绕过了传统的IT买家，直接吸引了商业用户，其重点是减少资源，提高脚本环境的效率和可访问性。多年来，企业已经支付了昂贵的拼凑而成的应用程序和系统。鉴于当前商业环境的快速发展，企业高管发现越来越难以理解为什么他们需要等待IT部门整合他们现有的技术解决方案。最终结果是对流程自动化和数据集成民主化的巨大需求被压抑了。企业高管正准备直接在其职能范围内赞助新的RPA计划。

随之而来的购买龙卷风推高了最大供应商的估值，并导致新玩家涌入市场。这种市场增长与更传统但相关的工作流程和更广泛的流程自动化工具形成鲜明对比，例如智能业务流程管理套件（iBPMS）。这些产品面临的挑战始终是成功集成第三方应用程序所需的技能水平。虽然市场仍然是一个非常大的市场，但iBPMS一直在努力渗透更广泛的商业意识。

几十年前，技术发展轨迹已经从屏幕绘图技术发展而来; 然而，RPA在2010年左右成为一个营销术语。与传统的屏幕抓取不同，RPA工具通常与在UI级别驱动现代应用程序的元数据进行交互。RPA不断发展和发展，因为它可以帮助组织：

- 将数据移入或移出第三方应用程序系统。通常被称为“无人值守”的RPA，这里的重点是直通任务自动化。脚本旨在复制与这些系统或文档交互的人员的操作，这些系统或文档通常没有有效的API。每次迭代需要一两秒钟来处理离散的数据元素，而不是批处理模式中的许多数据项。在相关点，RPA工具替换那些外部系统所需的凭证和工作项目的数据。同样的方法也可以支持大规模数据迁移，使用精心构造的脚本从一组数据源和系统中提取新的目标系统。使用某些工具，可以使用API将这些集成直接嵌入到第三方应用程序中。

- **Augment employees' capabilities**. Referred to as “attended” automation, RPA tools can extract information from systems and related documents, shaping it and preparing it for consumption by the worker at the point of need. For example, when interacting with customers or external stakeholders, employees often require data from many systems. The employee typically accesses multiple systems and may also need to interact with other colleagues, each of whom also has systems to deal with. This can take a long time and affect the customer experience significantly. Ultimately, this sort of functionality can enable customers to interact directly with systems via chatbots.

在这种范围内，RPA工具有很多机会为努力利用现有系统的拼凑被子的企业提供重要价值。它们的核心是帮助组织释放与其历史技术投资相关的数据和价值。

RPA周围的主要误区，挑战和发展

当然，如果组织要最大化他们从RPA获得的价值，就会遇到不同类型的挑战和常见的误解。组织必须认识到：

- 集成功能不是“机器人”或“数字/智能劳动力” .RPA涉及开发集成脚本，以便将信息输入和输出其他系统。这些很容易建立; 然而，它们并不等同于人类，他们可以根据需要进行解释和适应。客户不应该在他们的脑海中混淆员工的成本和一组集成脚本的成本。声称的人数减少很少发生，因为员工通常会重新关注更多的增值工作。

- RPA不容易使长时间运行的进程自动化。术语“长期运行”是指更广泛的工作项目或客户案例。RPA首字母缩略词中的术语“过程”更准确地是离散的“任务”自动化。RPA工具支持的大多数自动化最多只能持续几秒钟。此外，最好的情况是，这些产品的流程支持方面仅限于简化工作流程。对于长时间运行的进程，您需要一个iBPMS。实际上，许多产品与iBPMS环境相结合，以支持更长时间运行的业务流程。

- RPA工具只是集成和DigitalOps自动化工具箱的一个组成部分。RPA工具不是与iBPMS产品竞争，而是补充这些更广泛的目标流程自动化工具。该工具箱的其他元素包括用于快速识别现有流程的流程挖掘，用于更强大，基于API的集成的集成平台即服务（iPaaS）平台，用于光学字符识别的低代码应用程序开发平台和内容提取功能（ OCR）。

- RPA自动化创造了长期的技术债务，而不是克服它。RPA客户在没有意识到的情况下购买技术债务。该组织正在有效地将自己与过去的用户界面联系起来。一些工具具有缓解此功能的机制，允许自动化处理目标应用程序中的简单更改。如果组织想要预测第三方系统更改的影响，则组织必须手动跟踪每个自动化在每个第三方应用程序中触摸的系统，屏幕和字段。大多数产品都非常不满足这种关键需求。

接下来的挑战围绕着将现实与围绕人工智能（AI），机器学习和所谓的认知能力的炒作分开 - 就RPA市场的起源及其持续发展而言。机器学习在RPA中取得重大进展的关键领域是一种计算机视觉，例如用于识别提交按钮。其次，机器学习已经在几个相关的“附加”区域实现了突破，这些区域与RPA的核心相关。这些包括：

- OCR识别文本，智能字符识别（ICR）来解释手写。
- 增强内容分析，使用机器学习来识别客户发票等文档上的字段位置。
- 自然语言处理（NLP）和自然语言生成（NLG），可以帮助支持聊天机器人集成和虚拟个人助理（VPA）。
- 自动化业务流程/任务发现，可帮助组织识别可由RPA或iBPMS自动化的流程和任务模式。

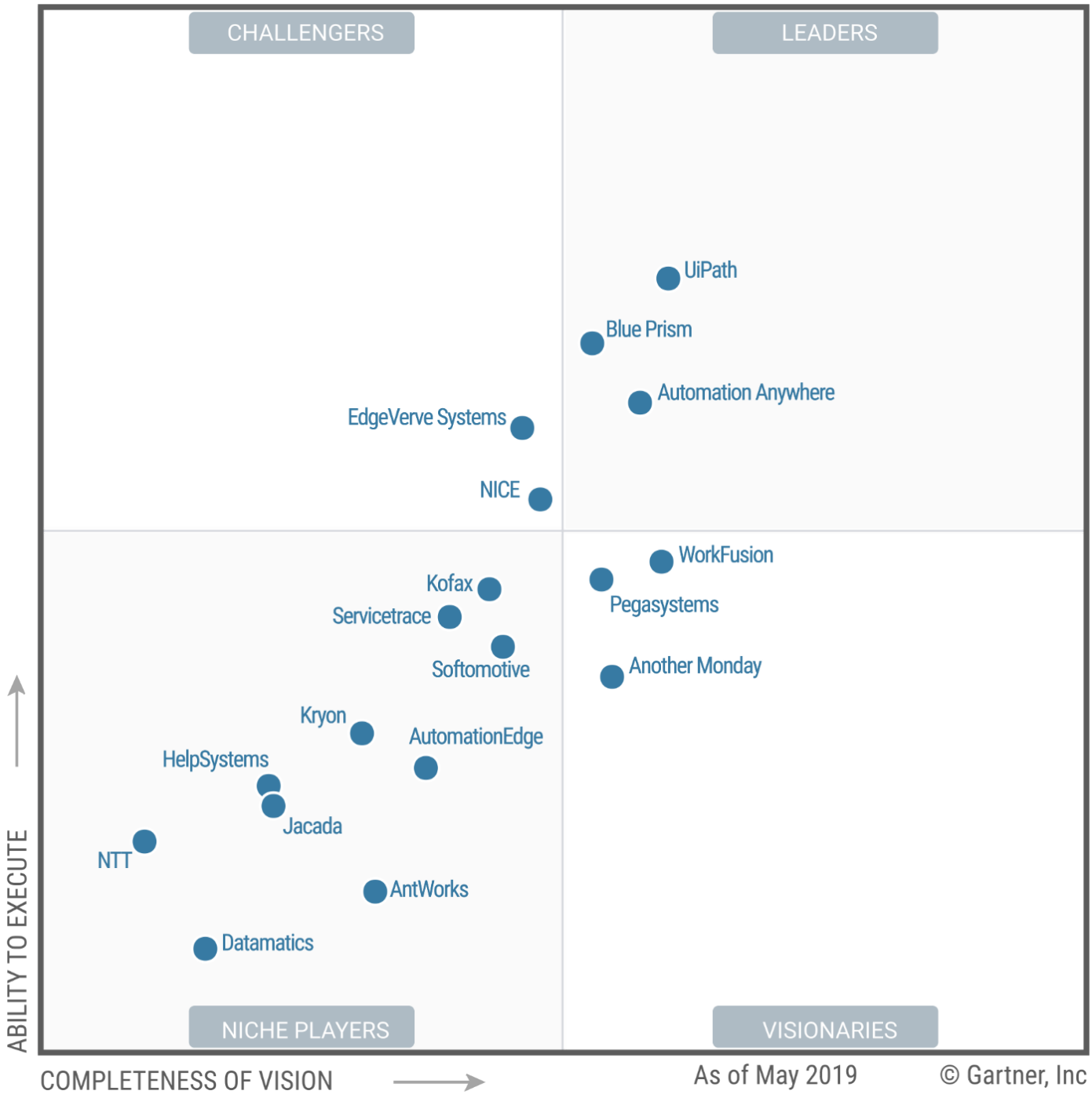
根据他们的重点和历史，RPA供应商已经开发了他们自己的机器学习方法，通常基于开源库，或者他们利用来自大型机构的杠杆功能，如亚马逊，谷歌，IBM和微软。然而，尽管一些RPA供应商声称，RPA本身的核心机会学习机会有限。当然，自动化工具 - 例如来自RPA或iBPMS供应商的工具 - 可以提供一个框架，您可以在其中将机器学习算法应用于您的业务流程问题，但这不是RPA本身的AI。

鉴于市场的快速增长，我们已经看到领先供应商的大量投资活动。在撰写本文时，领导者象限中的三家供应商的市场估值总额略高于110亿美元。我们还预计会看到进一步的收购，许多大型收购者购买小型RPA玩家。随着供应商格局的这种波动性，买家应该警惕承诺长期销售合同。与主要的企业应用系统相比，RPA软件的实际转换成本相对较低。

此Magic Quadrant专注于RPA产品的提供商，而不是利用其他供应商许可的RPA功能的服务提供商。虽然供应商可能提供基于云的服务，但所包含的供应商必须可在本地部署。

魔力象限

图1. 机器人过程自动化软件的魔力象限



供应商优势和注意事项

另一个周一

另一个星期一出现在Visionaries象限中，其产品已从其自动化咨询业务发展而来。另一个星期一的产品基于软件代理生态系统，提供长期稳定性和可扩展性的重要特征。另一个周一报道了一支由125名员工组成的员工，总部设在德国科隆。此分析适用于AM Ensemble版本1.2.21，包含AM Conductor，AM Composer，AM Recorder和AM Monitor。

优势

- 治理：另一个周一的有远见的产品认为RPA是一个专注于可持续价值和机器人治理的企业级平台。这一愿景反映在另一个星期一的路线图中，其中包括对第三方机器人的监控。
- 创新/架构：另一个星期一的平台引入了一个以客户为中心的轻量级架构，该架构具有分散的执行模型，其中不需要中央应用程序来运行，管理和部署机器人。结合加密功能和单独的消息传递

层，这些架构原则与RPA市场中大多数竞争对手的相对战术任务自动化焦点形成鲜明对比。

- 定价：另一个星期一的RPA生态系统方法的核心是关注已完成的交易，这些交易延续到一个简单的定价模型。另一个星期一应用“按使用付费”或“无法治愈，无薪”定价模式，每次成功交易都有小额支付。

注意事项

- 地理战略：尽管另一个星期一最近在美国设立了办事处，但它仍然是一个小型企业，主要销往欧洲德语区（德国，奥地利和瑞士[DACH]）和邻国。它在该地区之外几乎没有市场认可。考虑另一个周一的公司应该调查实施合作伙伴的可用性

- 总体生存能力：虽然其产品具有创新性，但另一个周一的上市模式受到其有机增长选择的制约。另一个星期一最近采取了一些外部投资，应该允许它扩大其市场占有率并加速其计划的创新。然而，这应该与其他更大的竞争对手最近的资金回合相提并论。鉴于RPA市场的爆炸性增长以及其较大竞争对手的更广泛的资源基础，另一个星期一可能仍在努力有效地扩展其业务运营。

- 产品供应策略：鉴于相对不寻常的分布式架构和Another Monday产品的分散执行，潜在客户在与其他RPA产品进行直接比较时应该小心谨慎。此外，客户需要仔细考虑与使用中的现有架构模式的一致性。如果您正在寻找一种独立的个人RPA工具，那么另一个星期一不太可能成为您的RPA选择，该工具可以在很大程度上自动化由常用生产力工具（例如，电子邮件和电子表格）支持的任务。

AntWorks

AntWorks出现在Niche Players象限中。该公司强调其在人工智能，机器学习和相关技术方面的背景，以创造差异化。AntWorks总部位于新加坡，报告员工人数为266人，其中一半以上来自产品开发人员。该分析涉及ANTstein版本“Triangle”3.1。

优势

- 营销策略：AntWorks主张机器学习引擎，自然语言建模和数据捕获引擎的专有方法，以支持其RPA愿景。其核心是AntWorks所谓的“分形科学”，它用于支持图像识别和模式识别，而不是神经网络。它的主张是它的识别技术需要更少的数据来检测模式，为OCR等特性提供更快，更准确的结果。

- 产品提供策略：AntWorks平台围绕可重用服务的概念构建。客户可以选择ANTstein集成企业自动化平台中的任何或所有模块。AntWorks为垂直行业提供加速器模板，如银行和资本市场，保险，CPG和零售，医疗保健和生命科学，高科技和电信，媒体和娱乐，运输和物流。它还为人力资源和财务职能提供类似的功能加速器。

- 营销策略：AntWorks正积极建立一个营销组织，专注于其声称的认知能力以及更广泛的自动化需求。该公司强调，企业范围内的流程自动化协调需要干净的数据，而不仅仅是在市场上激增的基于任务的战术RPA产品。

注意事项

- 产品：与我们评估中的其他供应商相比，AntWorks是一个新的参与者，并且有一个开发路线图，旨在填补其RPA产品中的一些空白。例如，该产品具有有限的内省功能和一组受限的底层集成功能。客户应验证产品是否满足其全部需求。

- 营销执行：鉴于供应商关于认知，人工智能和机器学习的叙述，人们会期望AntWorks能够有效地展示这些声称的功能。它的叙述迅速扩展到使自动化本身变得"智能"超越"计算机上的脚本"。然而，演示仅限于简单的脚本构建。此外，供应商未能对我们的三个RPA用例中的至少两个显示有效支持。

- 销售执行：对于一家规模相对较小的公司，AntWorks有一个雄心勃勃的市场战略。基于相对有限数量的客户，Antworks试图涵盖八个不同的垂直行业。我们建议客户首先验证所提供的加速器和模板的有效性和适用性，检查是否符合内部要求。

Automation Anywhere

Automation Anywhere出现在领导者象限中，专注于RPA市场，拥有相对完善的合作伙伴生态系统和强大的投资者支持。Automation Anywhere也是RPA领域最引人注目的参与者之一，通过广泛的营销和客户参与努力确定基调。Automation Anywhere总部位于加利福尼亚州圣何塞，截至2018年12月，员工人数超过1,200人，产品开发约占四分之一。此评估基于Automation Anywhere Enterprise（AAE）版本11.3，IQ Bot 6和Bot Store。

优势

- 创新：Automation Anywhere具有强大的创新能力，并通过其合作伙伴生态系统的发展展示了创新。Automation Anywhere使用该生态系统为其客户填写更广泛的功能，为通过其Bot Store提供的合作伙伴和客户带来更多好处。此外还有内部资助的创新，例如IQ Bot。

- 产品：在产品级别，AAE包含各种集成组件，用户可以将这些组件串联在一起以创建自动化脚本。还有预先集成的组件，使Automation Anywhere能够通过产品内部的有效功能为其产品提供扩展。例如，客户可以链接到IBM的业务流程管理（BPM）工具，或者他们可以利用他们与Celonis的关系进行流程挖掘。还提供了可扩展的体系结构，使客户能够根据需要动态调整其他资源。

- 客户体验：客户参考提供易用性，客户支持和灵活性。Automation Anywhere有许多企业客户端（大约1,600个）。其市场成就受到致力于确保大客户成功实施的资源的推动。

注意事项

- 产品：Automation Anywhere的营销信息强调其产品可供商务人士使用。与涵盖如此广泛的其他平台一样，脚本开发人员需要使用大量组件 - 每个组件都需要专门的配置。因此，为了生成复杂的自动化，开发人员通常需要对产品有广泛的了解。虽然Automation Anywhere最近宣布了一个适应用户角色和能力的开发环境，但它是在此评估的截止日期之后发布的。

- 客户体验：出现错误时，某些客户参考引用了限制性产品许可条款，不良产品仪表板以及对故障排除的不充分支持。此外，与本评估中的一些供应商相比，客户引用了源代码管理和屏幕录像机复杂性等方面的限制。其他参考文献也要求更强大的在线培训材料。

- 营销执行：Gartner客户将Automation Anywhere作为RPA选项进行探索，往往表明定价信息缺乏透明度，而且产品方向和底层产品功能缺乏明确性。虽然AI是营销信息的基石，但它的使用仅限于屏幕上的计算机视觉，并通过其IQ Bot功能从非结构化来源（例如电子邮件，文档和聊天机器人对话）中提取数据。

AutomationEdge

AutomationEdge出现在Niche Players象限中。除了更一般的用例外，它还专注于IT流程自动化，例如提取，转换和加载（ETL）组件。它提供基于云的RPA即服务产品，以及内部部署的RPA模型。该公司总部位于印度浦那，截至评估时，该公司拥有75名员工。此分析基于AutomationEdge第5版。

优势

- 营销策略：AutomationEdge专注于财务，IT服务管理（ITSM）和数据运营。对于小型供应商，AutomationEdge建立了强大的合作伙伴和客户生态系统，为领先的大型机，ERP和CRM平台提供开箱即用的连接器，并与领先的ITSM提供商合作，如BMC，ServiceNow和Cherwell 。
- 销售执行/定价：AutomationEdge通过基于订阅的模型提供RPA即服务。其不同的年度订阅计划具有多个价格层，为喜欢RPA软件即服务（SaaS）的价格敏感型客户提供了可行的选择，但他们希望避免复杂的基于使用的模型。
- 垂直/行业战略：AutomationEdge提供了一个由客户和合作伙伴开发的400多个预制机器人的市场。这些机器人的目标是横跨垂直行业的常见业务功能，如银行，金融，保险，政府和IT。除了这些现成的机器人解决方案之外，AutomationEdge还利用机器学习模型提供智能支持台操作，管理客户保留和案例管理方案。

注意事项

- 整体可行性：虽然AutomationEdge的客户遍及更广泛的行业，但其主要关注点是银行，金融，保险和IT。它是我们评估中较小的供应商之一，并且在多个方面面临挑战，以有效竞争和扩展运营。
- 产品：在相对较小的供应商中很常见，一些参考客户在系统设置，管理和控制室等领域引用了核心功能的可用性问题。
- 产品：参考客户还指出，AutomationEdge缺乏与其他AI供应商的合作伙伴关系，除了拥有自己的嵌入式机器学习功能外，还能带来更多功能。他们指出了改善可用于解决不同AI用例的选项范围的机会，例如欺诈检测，情感分析和非结构化数据的处理。

蓝色棱镜

Blue Prism出现在我们的领导象限中，总部位于英国沃灵顿，在分析时员工人数略少于500人，其中大约一半专注于业务开发和销售。它是最早将RPA描述为“市场”的供应商之一，他们已经在UI级别上实现了任务自动化的广泛潜力。从一开始，它就专注于支持企业范围的部署，平衡自动化开发的民主化与长期成功所需的治理工具。此分析适用于Blue Prism版本6.4。

优势

- 产品供应策略：Blue Prism专注于支持IT扩展RPA计划的需求。这反映在管理交互的“对象”配置和外部应用程序的接口中，这些应用程序可帮助客户推动重用并更轻松地支持这些系统中的更改。这些对象成为单个进程自动化中的组件，工作项在共享队列之间移动。所有这些都是使用Blue Prism的基于Visio的图形化开发环境开发的，并辅以更好地支持IT组织管理整体环境的工具。

- 营销执行：Blue Prism开发了强大的实施，技术和咨询合作伙伴生态系统。Blue Prism邀请合作伙伴创建应用程序，通过决策管理，高级分析，非结构化数据支持和流程挖掘等功能扩展和扩充核心平台。

- 垂直/行业战略：Blue Prism拥有强大的垂直化战略，以行业为中心的专家，活动，网站导航和合作伙伴。这导致了42个行业解决方案，代表了这些行业中至少10个客户。

注意事项

- 产品供应策略：Blue Prism专注于无人值守（即不间断）自动化的集中控制，而不是自动化。为了解决这个问题，Blue Prism内置了与Appian，Bizagi和TrustPortal等合作伙伴的互补BPM产品的集成。对于需要在流程自动化工作中包含人员交互的组织而言，这是一项挑战，因为他们需要许可第三方产品。Blue Prism将“人工辅助自动化”功能描述为其路线图的一部分。Blue Prism也拒绝建立自动化“记录器”的概念。但是，其他供应商已成功展示了屏幕录像机如何捕获初始流程大纲。

- 销售执行：虽然Blue Prism拥有业务开发，销售和咨询/保证的内部资源，但供应商在很大程度上依赖合作伙伴来提供销售支持和实施。参考客户和其他Gartner的询问引发了对公司对信息请求的响应的担忧。这表明，与在这些领域投入巨资的竞争对手相比，蓝色棱镜在服务和支持流程方面一直处于困境。

- 客户体验：我们的参考调查中的几位客户提到Blue Prism需要改进诸如中央监控功能（控制室），调度，报告和大规模部署中的运营效率等方面。这些领域缺乏Blue Prism平台中其他组件的易用性和企业级功能。

Datamatics

Datamatics出现在Niche Players象限中。它位于印度孟买，只有不到250人致力于RPA。Datamatics TruBot产品是一个开发和运行C＃脚本的RPA工具。它最初是为支持Datamatics客户服务而开发的，现在作为独立的RPA工具出售。该分析涵盖了Datamatics TruBot 3.0.0版。

优势

- 垂直/行业战略：Datamatics的上市模式利用现有的客户服务 - 特别是在银行，金融服务和保险领域 - 特别是在它还部署了其专有的TruOCR工具和机器学习功能的情况下。重点是交叉销售这些业务，而Datamatics则加强其合作伙伴参与活动。

- 产品供应策略：Datamatics集成了自己的RPA和OCR功能，为与客户的对话提供了相对良好的起点。这与大多数其他供应商形成对比，后者要求客户许可单独的OCR产品。Datamatics单独授权其TruOCR工具，以及与TruBot捆绑在一起。

- 产品：控制面板 - TruBot Cockpit - 模块具有相对现代的基于Web的UI。Windows记录器元素 - TruBot Designer - 包含创建与Web，桌面，大型机和Citrix系统交互的脚本的功能。该产品使用这些记录器捕获与第三方应用程序的交互，然后将其修改为更通用的用户并转换为C＃脚本。习惯于手动开发自己的自动化脚本的客户会发现这更容易使用。

注意事项

- 营销执行：Datamatics在RPA市场中并不广为人知，并且在全球范围内的分销和销售支持有限。从历史上看，大多数客户是通过其业务的系统集成方式获得的，并且在亚太地区（APAC）地区拥有本地业务。Datamatics也未能有效地证明对本研究中确定的一个关键用例的支持。尽管其系统集成商（SI）和业务流程外包（BPO）业务取得了成功，但问题仍然是Datamatics是否可以专注于RPA市场并扩展其产品运营。鉴于其起点较小且竞争对手可获得的资源，如果没有重大投资，它将会陷入困境。

- 客户体验：在相对较小的供应商中很常见，一些参考客户引用了仪表板的可用性问题，有限的控制机制和广泛的集成功能，以及可配置性和变更管理方面的挑战。没有参考客户表示他们使用的是当前版本的产品。

- 产品：与市场上的其他产品相比，该工具相对简单。每个集成中都会手动创建变量。桌面工具打包项目中的脚本和相关元素，但随后依赖文件系统在部署期间控制这些工件。在开发人员认为需要的地方，他们可以使用C＃编码，这可能会使他们更容易，但会破坏开发环境的模型驱动特性。

EdgeVerve系统

EdgeVerve Systems出现在Challengers象限中。作为Infosys的全资子公司，EdgeVerve可以与50多个国家的RPA的许多主要买家建立主要客户关系。除了RPA产品AssistEdge机器人过程自动化之外，该公司还提供Infosys Nia--一系列专注于机器学习和AI的组件。EdgeVerve总部位于印度班加罗尔，在此项研究期间拥有约700名员工，其中大部分为专业服务人员。此分析基于AssistEdge RPA版本17和AssistEdge智能用户环境（SE）版本17.所有组件均单独许可和定价。

优势

- 产品：EdgeVerve拥有现代化的图形用户界面（GUI）和领先的功能，可以在主要企业中维护广泛部署的机器人库。客户在产品层面引用易用性，并认为它具有安全性，可扩展性和弹性 - 具有强大的管理信息和控制仪表板。

- 产品供应策略：EdgeVerve对人工智能和机器学习有着相对强烈的愿景。它展示了对RPA市场机会的成熟和细致入微的理解; 然而，它需要通过与相关Infosys Nia产品的集成来阐明如何实现这种叙述。

- 销售策略：根据母公司瞄准大公司需求的理念，EdgeVerve的参与模式旨在利用Infosys现有的SI和外包关系。这提供了一个快速的优势，并使EdgeVerve能够以牺牲现有市场领导者为代价来发展业务。

注意事项

- 市场策略：尽管Infosys的所有权和联系人对于直接客户参与是一个福音，但它们也抑制了EdgeVerve在达成有效合作交易方面的能力。许多可能成为合作伙伴的人也是Infosys的直接竞争对手。迟早，使组织初始扩展的因素将成为一种约束。

- 营销执行：过分强调内部采购的咨询资源对客户的供应商评级产生了负面影响。这表现在诸如“在InfistEdge中对Infosys资源的依赖程度过高”和“EdgeVerve之外的开发人员的学习曲线太高”这样的评论中。

- 产品供应策略：虽然AssistEdge产品应该由Infosys Nia机器学习功能补充，但没有一个参考使用过任何机器学习，NLP或其他AI功能。虽然营销材料包含引人注目的叙述，但产品之间的界限并不明确。EdgeVerve还需要演示这些功能如何成功协同工作。

HelpSystems

HelpSystems出现在Niche Players象限中。HelpSystems 总部位于明尼苏达州明尼阿波利斯市，提供各种IT管理产品以及RPA产品。它建立了一个重要的客户群，拥有约750名员工，其中不到40名专注于RPA。随着RPA在银行，金融和医疗保健领域的巨大吸引力，HelpSystems开始向企业和中型市场客户提供价格合理的RPA产品。此评论基于HelpSystems的Automate Enterprise版本11.1.10。

优势

- 客户体验：在Gartner的客户参考调查中，HelpSystems获得了高于平均水平的整体客户体验评级，其中大部分都是为了便于安装和初始配置。客户还指出，该产品始终支持RPA的基本功能，例如任务自动化，UI交互和管理。

- 销售执行/定价：对于那些无法证明对更昂贵的企业级RPA解决方案进行投资的客户来说，HelpSystems的定价模式是经济实惠的。许可以传统的软件许可模式为导向（而不是以某种方式替代名义上的全职等效人工）。这使得客户能够在其RPA产品中找到比更大，更成熟的RPA竞争对手更高的价值。

- 产品可用性：HelpSystems的参考客户引用了该产品的“易于集成”功能，该功能配备了预定义操作和连接器库。他们还赞扬了业务用户友好的编辑器和良好的性能概述仪表板。

注意事项

- 产品：我们评估的HelpSystems RPA产品版本未能利用机器学习和NLP，它只提供最小的OCR功能。虽然这是2019年的路线图，但许多RPA竞争对手正积极投资这些领域。HelpSystems需要加快这些领域的发展，以保持竞争力。

- 产品：参考客户引用了RPA产品围绕一些常见RPA功能的可用性问题，例如与密码保险库的轻松集成，开发个人任务模板和监控的能力。

- 地理战略：HelpSystems需要在美国和欧洲地区内外扩大其运营和市场占有率。虽然它在系统管理领域的客户关系为未来提供了一个良好的起点，但如果没有大量投资，HelpSystems将在扩大其RPA产品以支持全球企业的竞争中面临重大挑战。

Jacada

Jacada出现在Niche Players象限中。它位于以色列，拥有120名员工，其中只有不到50名专注于RPA。Jacada对自动化自动化的关注源于其30年的客户服务运营历史。Jacada指出，与大多数RPA供应商所针对的一般后台流程相比，前台运营的客户交易量更高。本评论基于Jacada Integration and Automation（JIA）3.0版，Repository Builder v.3.0和Interact v.10。

优势

- 营销策略：Jacada通过其客户服务RPA产品专注于联络中心自动化。Jacada帮助客户利用有人参与的自动化来帮助没有API的用户在桌面上集成不同的系统或提供自助客户交互。
- 定价：Jacada专注于将RPA作为一种服务销售，其具有明确定义的基于使用的定价模型，为客户提供实施RPA的选项，而无需承担长期承诺。
- 客户体验：一些参考客户引用了Jacada项目团队主动解决客户问题的平均服务。他们提到了Jacada提供RPA项目资源的强大项目执行支持，包括多个集成。

注意事项

- 商业模式：与大多数其他RPA供应商不同，Jacada不依赖于更广泛的SI合作伙伴生态系统。该公司提供专业服务，协助客户进行自动化的初始设置，开发和部署。虽然Gartner调查的一些参考客户认为这是一种优势，但其他人认为缺乏技术专业知识和项目管理技能，导致他们的项目延迟。
- 地理战略：Jacada的支持范围也被许多参考客户列为挑战。除非供应商扩大其地理覆盖范围并加快其运营，否则这将继续。
- 产品：一些参考客户列举了Jacada RPA平台基本功能的挑战，例如开发环境，易于设置，流程编排，产品可用性和仪表板。该魔力象限的截止日期刚刚发布，该产品的新版本已经发布。潜在客户应验证开发环境的整体可用性和功能是否满足其需求。

的Kofax

Kofax出现在Niche Players象限中。基于其庞大的客户关系基础和广泛的合作伙伴生态系统，Kofax Capture产品具有很大的发展机会。此外，凭借其他资产，如Kofax TotalAgility（KTA）BPM平台，以及机器学习和分析工具，Kofax可以很好地实现端到端自动化的承诺。Kofax总部位于加利福尼亚州欧文市，在此研究期间约有650名员工致力于RPA。我们的分析主要基于Kofax RPA（以前的Kofax Kapow）版本10.3，尽管我们还考虑了KTA和文档捕获OCR产品的功能。

优势

- 产品：Kofax RPA与虚拟桌面集成有着根本不同的方法。RoboServers将UI摄取到集中管理的容器中，该容器模拟应用程序而无需在代理桌面上运行远程桌面。这降低了相关基础设施的成本。Kofax RPA还利用文档和图像捕获方面的丰富遗产，以及提供本机OCR功能。对于许多客户而言，购买捆绑式Kofax RPA和OCR解决方案的成本要低于另外需要单独OCR许可的替代RPA产品。

- 产品：Kofax RPA可以通过Representational State Transfer / Simple Object Access Protocol（REST / SOAP）接口直接消费任何自动化。这意味着客户可以将其自动化功能嵌入到第三方应用程序中，而无需担心通过控制面板进行“调度”，这在其他产品中很常见。除了可重用现有“片段”的可靠图形化流程建模环境外，Kofax RPA还支持跨多个自动化的结构化数据类型和数据对象。每个自动化可以具有一组数据类型（具有嵌入变量）和/或一组私有数据变量。这些功能为客户提供了轻松重用自动化的坚实基础，并与其他领先产品相媲美。

- 营销策略：其图像捕获产品的大量客户为引入Kofax RPA提供了重要的市场机会。Kofax还开发了强大的内部功能，帮助客户建立RPA卓越中心（COE），以实施Kofax RPA工具。这一立足点为增长和扩张提供了坚实的基础。

注意事项

- 客户体验：Kofax在我们的客户参考调查中得分低于平均水平。根据客户的反馈，增强产品支持是Kofax的明确机会。客户强调需要改善客户和合作伙伴的沟通，以及跨Kofax运营的内部沟通。Kofax还需要将注意力集中在其基本的运营支持流程和实践上。一些客户评论说他们在产品推出几个月之前就不知道新产品发布。

- 营销执行：Kofax专注于交叉销售现有Kofax客户以使用Kofax RPA技术; 但是，在某种程度上，这是以增加其合作伙伴生态系统的能力为代价的。Kofax需要在数字上增加其合作伙伴生态系统，并帮助所有合作伙伴发展自己的实施和咨询技能。

- 产品：客户参考引用了有限的创新和松散集成产品的不同组合。事实上，所有参考文献都清楚表明他们对产品的使用并未涉及我们所询问的几个领域。除了文档捕获之外，机器学习和NLP的使用也是有限的。客户应验证供应商是否可以有效地支持其业务需求。

克里昂

Kryon出现在Niche Players象限中。它位于以色列特拉维夫，在评估时员工人数不足100人。Kryon支持有人参与和无人值守的RPA，在流程中自动发现任务工作模式方面存在很大差异。此分析适用于Kryon RPA Platform v.5.25.1和Kryon Process Discovery。

优势

- 产品：除了核心Kryon RPA平台外，该供应商还具有强大的流程/任务发现能力。在这种情况下，它使用机器学习基于捕获的击键，鼠标点击，业务用户的数据输入和输出来导出复杂的任务描述。这种面向发现的工具提供了对任务完成方式的可见性和洞察力，其结果随后用于配置这些任务的自动化。

- 销售执行：Kryon已经成功地与行业内的一系列大客户建立了关系，以支持员工的日常工作（主要是自动化），异常处理至关重要。该公司还部署了其技术，以解决航运和物流行业等领域的一些不寻常问题。

- 整体可行性：Kryon最近进行了一轮投资，这将使其能够扩大其市场占有率并加速其计划的创新。这应该与最近其他较大竞争对手的资金回合相提并论。Kryon的强大愿景包括创建机器人交换市场，更好的员工生产力分析，预测和预防分析以及产品内部沟通，以简化协作并协调RPA实施。

注意事项

- 客户体验：位于其他时区的一些参考客户表示客户支持不佳。Kryon通过最近推出的全天候支持在一定程度上改善了这个问题，该支持于2019年开始实施。
- 营销执行：Kryon围绕“流程发现”使用的语言可能会使寻找“流程挖掘”的潜在客户感到困惑.Kryon Process Discovery的目的是找到使RPA自动化的流程和任务。另一方面，流程挖掘解决了一个不同的问题 - 通常使用iBPMS（可能需要RPA集成来支持离散任务或活动）自动识别长期运行的业务流程。这些是微妙的不同，但互为补充的概念。传达这种细微差别需要措辞谨慎的语言。
- 产品：Kryon在一些产品领域落后于市场，例如缺乏基于Web的建模工具--Kryon Studio是Windows原生产品。虽然运行时部署可以在基于云的环境中运行，但在研究时，没有公共云产品。除了基于HTML表面级集成的内省功能之外，它还具有有限的内省功能。

NICE

NICE位于挑战者象限。NICE是面向客户服务应用，案例管理和员工敬业度的劳动力参与管理（WEM）解决方案的软件技术提供商。它位于新泽西州霍博肯，约有350名员工致力于RPA（不包括第1级和第2级支持，这些支持分为产品）。其RPA产品增强了其WEM功能，重点是参加RPA。此分析基于NICE Advanced Process Automation v.7套件，其中包括NICE机器人自动化，NICE桌面自动化和NICE桌面分析。

优势

- 客户体验：一些参考客户引用了高于平均水平的客户支持和良好的关系管理。NICE还提供简单，灵活，全包的定价模式，可选择永久许可或订阅模式。大多数客户对NICE的定价模式和合同谈判的轻松性进行了高度评价。此外，NICE高级过程自动化是在本地提供的，也可以是SaaS，以及公共和私有云选项。这为客户提供了很大的灵活性和选择。
- 营销策略：NICE的市场战略针对大型企业客户 - 员工人数超过1,000人，收入超过10亿美元的组织。这充分利用了其强大的全球影响力，并在25个国家提供直接支持 NICE先进过程自动化还包括专门的人力资源机器人，以增强其在一系列垂直行业（包括金融，银行，电信和制造业）的劳动力管理功能。
- 产品：NICE Advanced Process Automation包括一个嵌入式会话代理，称为NICE Employee Virtual Attendant（NEVA）。NEVA提供流程/任务发现和预测分析。从AI的角度来看，NICE具有多种内置功能，包括实时语音指导，基于NLP的文本分析和无监督机器学习。

注意事项

- 运营：尽管一些参考文献给出了良好的客户体验评分，但其他人称其没有提供有凝聚力的客户服务体验，而是“断开连接”的运营单位。例如，许多人认为前线客户支持和技术服务团队之间存在明显脱节。
- 产品：尽管NICE专注于构建AI和任务/流程发现功能，但一些参考客户抱怨基本产品功能无法满足他们在简单初始配置，安全性和弹性等方面的需求。客户将开发的整体复杂性视为推动专业服务需求的关键因素，并导致总体拥有成本（TCO）的增加。几乎所有参考客户都抱怨调试和错误处理方面的困难。

- 营销执行：NICE需要超越其核心重点，参加RPA和前台运营。这一多方面的挑战要求公司建立一个合作伙伴和客户的生态系统，使NICE能够与更大的RPA提供商进行有效竞争。为了取得长期成功，NICE必须加强其在线搜索业务并提升品牌知名度，并加强其在建立有效用户社区方面的努力。

NTT

NTT位于Niche Players象限。NTT的RPA产品由NTT集团（通过控股公司的实验室），NTT先进技术（NTT-AT）和NTT DATA开发。NTT-AT和NTT DATA现在负责持续开发并进入市场。NTT集团总部位于日本东京，拥有280,000多名员工。它没有突破专注于RPA的员工数量。此分析涉及WinActor v.5.2，一个基于个人客户端的RPA工具; WinActor Manager v.1.0，一个基于Web的管理工具; 和WinDirector v.1.5，一个基于Windows的管理工具。

优势

- 产品：NTT将其WinActor产品区分为市场上最简单的RPA工具之一。一个简单的拖放式图形建模工具使用户能够记录他们的动作，为这些自动化创建基础，然后可以通过分组和循环结构来增强这些自动化。虽然该工具可以包含企业应用程序和与网站的交互，但它最适合于独立的基于PC的工具的自动化。
- 总体可行性：NTT-AT得到其母公司NTT的强力支持，使其能够在日本市场上为这类个人知识工作者RPA工具开拓无处不在的市场。虽然范围有限，但这是一个极其快速增长的市场。此外，NTT还为产品本身，手册和支持服务提供日语，中文和英语语言支持。
- 销售执行/定价：NTT以相对低成本的年度许可费提供其技术。批量购买选项适用于企业。基于消费的定价模型在产品路线图上。

注意事项

- 提供策略：NTT针对企业RPA市场，其工具主要集中在使用常见的办公生产力工具（如电子邮件和电子表格）自动执行重复性任务。重点是支持个人及其桌面任务，而不是集中治理和企业应用程序和长期运行流程所需的可扩展服务器体系结构。寻求企业级RPA解决方案的客户应确保NTT产品满足他们的需求。
- 产品：与本研究中的其他供应商相比，NTT在其产品中仍存在相当大的差距。与其他产品相比，可扩展性差，主数据功能有限，非常基本的集成和有限的AI。虽然WinDirector工具使用数据库来存储然后用于控制/协调WinActor资源的信息，但部署仍主要基于文件。NTT最近开始支持云，并且在此评估期间，它发布了一个基于云的管理员工具。但是，没有公开的云服务。
- 地理战略：几乎所有NTT的客户都在亚太地区。亚太地区以外的潜在客户应调查当地产品支持和当地实施合作伙伴。

Pegasystems公司

Pegasystems出现在Visionaries象限中。它提供RPA作为独立产品，以及其企业iBPMS产品的功能。它们通过Pegasystems Infinity产品在本地和云端交付。Pegasystems没有将RPA视为独立的产

品，而是从其将RPA与其BPM套件和相关CRM应用程序紧密集成的长期愿景中获益。Pegasystems拥有超过4300名员工，但没有突破RPA专用的数量。该分析基于Pega机器人自动化v.8.0.1086。

优势

- 营销策略：Pegasystems将RPA作为更广泛的BPM战略子集的长期观点与具有数字转型思维的客户产生共鸣，而不是优化。Pegasystems为任务自动化提供独立的RPA选项，并为其iBPMS产品--Pega Infinity提供补充，以实现更长时间的流程编排和业务规则功能。作为iBPMS市场的老牌企业和不断增长的CRM市场，Pegasystems拥有相对庞大的客户群，可加速其RPA产品的采用。

- 产品：Pegasystems机器人平台的优势在于它能够增强传统的集成机制，为Pega Infinity iBPMS平台的核心对象模型提供源数据。然后，该数据可以利用其较长时间运行的流程和决策管理功能，同时利用其本机机器学习和AI功能。

- 地理战略：Pegasystems拥有全球业务，遍布全球的办事处和结构良好的生态系统，以传播其品牌，技术和实践。这些生态系统计划包括广泛的实施合作伙伴，具有强大的业务和垂直行业能力。

注意事项

- 商业模式：Pegasystems对RPA的产品重点是参加RPA，而不是无人值守RPA产品的全自动化重点。尽管Pegasystems通过将代码直接插入第三方应用程序来支持无人值守的自动化，但Pegasystems的核心iBPMS产品可以更好地提供长期运行的流程支持。因此，单独关注Pegasystems RPA工具可能与您组织对更广泛的过程自动化的需求不一致。这可能需要在核心iBPMS平台上进行更大的投资。

- 客户体验：根据客户参考评论和Gartner查询，许多客户在RPA实施方面遇到了挑战，并且对RPA功能的客户支持不足。Pegasystems声称拥有“统一”的BPM和机器人平台，但我们调查的客户指出了诸如独立版本等问题，其中最新版本的RPA工具与最新版本的iBPMS平台的工作效果不佳。这些参考文献还认为，支持是100％独立的，并且获得增强的行动计划是无法实现的。

- 销售执行/定价：Pegasystems的定价和合同模型很复杂。虽然RPA产品可单独使用，但该产品通常与其核心Pega Infinity平台捆绑在一起，相对较小的标记，基于该iBPMS平台的成本。新兴的基于消费的定价模型 - 其Pega Infinity平台 - 已经引起了对长期TCO通常不清楚的潜在客户的困惑。接受调查的客户还引用了RPA软件许可的昂贵限制。

Servicetrace

Servicetrace出现在Niche Players象限中。它致力于提供安全的端到端环境，其中无人值守和有人参与的自动化可以大规模运行。Servicetrace总部位于德国达姆施塔特，在此分析时约有75名员工。此评估基于Servicetrace XceleratorOne（X1）RPA平台v.5.0.1。

优势

- 产品：Servicetrace产品提供了一个安全的环境，可以在其中运行自动化。X1服务器动态配置作为Windows服务运行的任意数量的并行X1机器人。这些服务在用户桌面上执行或完全隐藏在后

台。整个环境 - 从集群服务器一直到目标机器上目标自动化的执行 - 都通过强加密得到保护。对于专注于运营高度安全，可扩展环境的客户而言，这是一个关键的差异化因素。

- 产品：Servicetrace捆绑了嵌入式BPM引擎（基于Camunda），可以灵活地处理运行时间较长的业务流程，而不是将范围限制为短期任务。该引擎还导入标准业务流程模型和符号（BPMN）2.0 XML流程定义。虽然这听起来无害，但BPM环境使Servicetrace能够有效地管理整个协作和部署生命周期; 它还有助于生态系统中其他供应商提供的直接过程挖掘功能。
- 客户体验：Servicetrace客户非常支持该供应商。一些参考客户也选择了这个产品，而不是更大，更成熟的RPA竞争对手。

注意事项

- 地理战略：Servicetrace在欧洲德语（DACH）地区已经建立。除此之外，该组织与合作伙伴合作，但没有其他直接的办公室存在。与规模较大且较为成熟的竞争对手相比，Servicetrace与客户和合作伙伴直接互动并提供支持的能力有限。为了长期竞争，扩展以满足更广泛市场的需求，Servicetrace可能需要外部资金; 否则，它将难以跟上更大的竞争对手。
- 客户体验：与其他类似规模的供应商一样，总体客户体验方面也需要改进。在我们的参考调查中，客户要求使用某种形式的论坛来分享最佳实践和提示。似乎Servicetrace正在倾听，因为它已经创建了合适的参与计划。本地技术支持也被认为对客户很重要。在DACH地区之外，这是通过合作伙伴提供的。因此，该地区以外的客户需要满足当地合作伙伴的能力。
- 产品：虽然在回应中对人工智能和机器学习进行了一些讨论，但对于该技术如何应用于产品或其为客户提供的价值尚无明确的叙述。Servicetrace不是通过Camunda BPM引擎开发自己的AI /机器学习组件，而是明智地选择与主要云供应商的第三方AI /机器学习平台集成。

Softomotive

软体动物出现在Niche Players象限中。它位于英国伦敦，在本研究期间约有160名员工。Softomotive RPA平台由两个不同的工具组成，即ProcessRobot和WinAutomation。ProcessRobot是企业级环境，支持RPA实现的分布式体系结构和集中管理。WinAutomation是一个独立的，独立的RPA工具，专为快速部署而设计。此评估适用于ProcessRobot v.2018.1.2和WinAutomation v.8.0。

优势

- 产品：Softomotive的产品从地面到纵向和横向设计。开发环境使用支持拖放，在线记录，全面测试和异常处理的现代UI，以及数据级别的有效重用机制。ProcessRobot Control Desk应用程序还包括用于控制部署，测试无错执行和管理并发策略的本机功能。
- 市场理解：在2018年后期进行的全面RPA市场调查支持，市场对市场的理解和市场参与策略相对完善。这有助于它向关键的RPA用户类型/角色提供差异化的消息传递，现在进一步提供信息其产品战略和总体方向。
- 总体生存能力：最近一轮融资，斯托克将其总部从希腊迁至英国，并且其国际业务显着增长。该组织现在处于相对良好的位置，可以在国际上进一步发展，拥有可靠的产品和有能力的组件。当

然，这应该与其他较大的竞争对手最近的资金回合相提并论。

注意事项

- 商业模式：从历史上看，Softomotive专注于中小型企业（SMB）部门。该组织现在采用“People1st”策略，使该组织成为服务欠缺中端市场的市场领导者，并帮助大型企业加速RPA的部署。虽然最近的一轮融资将使大型企业更容易参与，但是，在这个层面上，赛马的直接客户互动资源的能力可能会限制其增长。
- 客户体验：Softomotive最近搬迁了总部，并且仍在建立一些影响客户的方面。在我们的客户参考调查中，客户指出需要改进培训和服务提供商网络，并建立社区/论坛以分享最佳实践。其他人则表示需要提高实施支持的效率。虽然这些东西都在手中，但它们并不像一些较大的，更成熟的竞争对手那样发达。
- 产品：Softomotive的UI支持拖放，使其吸引市民开发人员进行简单的自动化。然而，正如大多数RPA工具所常见的那样，复杂的自动化和规模需要严格且高度结构化的设计方法，这需要更多的专业开发人员。客户还指出需要在产品中提供更好的OCR功能。

UiPath

UiPath位于领导者象限。它拥有强大的合作伙伴生态系统，积极的投资者支持，专注的品牌建设和忠诚的客户群。该公司总部位于纽约市，在全球拥有约1,900名员工。此评估基于UiPath v2018.3.1和UiPath Go！

优势

- 营销策略：UiPath结构良好的合作伙伴生态系统包括100多家提供互补技术和工具的技术合作伙伴。这使它能够支持与主要产品和应用程序的集成，涵盖BPM，流程挖掘和AI。该公司已渗透到各个行业，并在19个国家/地区设有代表处。在我们的客户参考调查中，几乎所有客户都将UiPath的产品性能，财务可行性和强大的产品路线图列为影响其采购决策的首要因素。
- 产品：UiPath的RPA平台为各种RPA角色提供直观的用户体验，包括商业用户，公民开发人员和经验丰富的IT开发人员。它具有相对强大的安全性，弹性和集成选项。
- 客户体验：在我们的客户参考调查中，用户在几乎所有客户满意度维度上给予UiPath大致高于平均水平的分数。客户参考引用了强大的集成功能，安全性和弹性功能。UiPath还鼓励用户通过其UiPath RPA学院，社区论坛和Slack社区渠道进行协作和解决问题，从而推动客户取得成功。在这些参与机制中，超过30,000个活跃用户开发了200多个可重用组件。

注意事项

- 产品：虽然UiPath的目标是为业务和精通技术的开发人员创建一个用户友好的工具，但Gartner的一些参考客户在其协调器和仪表板体验方面遇到了挑战。客户表示，仪表板功能并非纯粹的低代码/无代码。在许多情况下，即使产品收集了数据，客户也必须开发自己的信息表示。
- 产品供应策略：UiPath落后于其云战略。截至2018.3发布，UiPath的云企业RPA产品尚未推出，尽管UiPath为其社区用户和进行POC和试点的企业运营托管云。UiPath计划在2019年推出其RPA

云版本，并且在本研究期间部署了现有客户。与已建立云产品的其他供应商相比，它仍未得到证实。

- 客户体验：尽管UiPath关于人工智能/机器学习，NLP和聊天机器人集成的叙述，但客户认为该产品在人工智能领域缺乏成熟度。在许多情况下，客户期望一种易于使用，即插即用的机器学习功能。然而，他们发现他们必须建立/增强他们的机器学习模型比他们预期的更多。许多客户在与主要ERP和CRM平台集成时都指出缺少直接的API连接器。

WorkFusion

WorkFusion出现在Visionaries象限中。这反映了它在机器学习和人工智能研究中的根源。它位于纽约市，在本研究期间只有不到300名员工。利用其获得专利的Process AutoML技术，WorkFusion旨在通过消除与清理数据，培训模型和验证自动化工作相关的耗时且昂贵的数据科学工作，为商业人士实现机器学习的民主化。该评论涉及WorkFusion Intelligent Automation 2018（“Lumen”发布），其中包含RPA Express和以企业为中心的智能过程自动化（SPA）。

优势

- 产品：WorkFusion采用先进的机器学习功能，支持RPA目标。与我们审查的其他产品相比，WorkFusion在如何在RPA环境中使用AI和机器学习方面表现出了卓越的能力和愿景。
- 产品：集成的BPM画布允许开发人员协调RPA，具有清晰的循环和机器学习元素。分析非常强大，能够深入了解各个案例并确定影响机器学习和流程执行的错误原因。
- 提供策略：供应商提供清晰简单的定价信息，具有不同的工具费率，包括集成的机器学习与简单的RPA。在证明了其商业模式和市场战略之后，该供应商可以积极地扩展其业务。

注意事项

- 营销执行：WorkFusion面临的挑战是如何赢得规模竞争。虽然供应商拥有强大的产品，但与其较大的竞争对手相比，其有限的销售和营销资源将影响其为全球客户提供服务的能力。它必须投入巨资在这里竞争并开展有意义的国际业务，包括在美国以外提供更好的本地化支持
- 产品：默认情况下，循环中需要人工的自动化还必须使用WorkFusion门户环境来跟踪和执行任务。供应商应更加重视与更广泛的BPM环境相连的预集成组件，而不是假设客户希望使用WorkFusion来支持其整个流程自动化需求。
- 地理战略：北美和欧洲以外的客户，例如拉丁美洲和亚太地区的客户，需要检查有效的本地指导和支持情况。WorkFusion需要关注其合作伙伴开发活动，以克服自身的资源限制。

供应商添加和删除

这是这个魔力象限的第一年，所以这是不相关的。

纳入和排除标准

纳入标准代表了分析师认为包含在本研究中所必需的特定属性。供应商需要满足以下纳入标准：

- 提供商必须拥有2017年度审计/报告的年度工具许可收入，每年超过800万美元。或者在2018年上半年获得超过500万美元的审计/报告工具许可收入。或者在该市场中至少有10%的Gartner Peer Insight评论出现在供应商考虑的部分。
- Independent software vendors (ISVs) must have tools positioned to address the market for RPA tools (using Gartner's definition of RPA). Such tools must address all three common use cases, as well as possess all the core capabilities and most of the critical capabilities (see the Market Definition/Description section of this research).
- Vendors must have active customers buying RPA tools during the past 12 months in at least two major global regions, which are defined as Europe, the Middle East and Africa (EMEA); the APAC region; North America; and South America.
- Vendors must permit Gartner to acquire survey data from 10 customers. These customers should represent production deployments of the product version shown in the vendor briefings and in customer production for at least three months. Similarly, the product version on which the questionnaire response and the use case demos are based must have been generally available to all customers for purchase since 1 December 2018.

Honorable Mentions

The following vendors are not included in this research, because they do not meet one or more of the inclusion criteria. Some of them were, however, included in the reference survey, are appropriate for certain situations and, sometimes, compete against the vendors covered in this Magic Quadrant:

- Cognizant HPA
- Contextor — recently acquired by SAP (November 2018)
- EnableSoft — recently acquired by Nintex (March 2019)
- Epiance
- Jidoka
- LEAPWORK
- Makeitright
- OpenConnect
- Option3
- Qruize
- Thoughtonomy

- Verint

Evaluation Criteria

Vendors in Magic Quadrants are evaluated on two axes: Ability to Execute and Completeness of Vision. These relate to their performance in 2018 and their vision for the following years. Vendors are scored according to the Gartner methodology for Magic Quadrants, and these scores define each vendor's position. Vendors are invited to provide the data for the evaluation criteria via questionnaires and briefings; however, evaluations also include the results of Gartner customer surveys and analyst information from client inquiries.

We evaluated the capabilities of the vendors' products separately with an exhaustive analysis of their functionality. Subcriteria used were based on the Critical Capabilities of the tools. They include:

- **Automation development:** How users would go about developing automations.
- **Integration features:** The scope and features of the product's out-of-the-box integration.
- **Control panel/dashboard:** How the environment is monitored and controlled.
- **Component/script library:** Mechanisms for reuse and management over time.
- **Impact of changes made to integrated applications:** Features provided to handle changes in the environment.
- **Resilience and error recovery:** Overall integrity of the environment and how it handled errors.
- **Security:** The features that helped secure the environment, including credentials, data security and access control.

In assessing the capabilities of the product, we also asked vendors to describe separately their support for areas that are often associated with, but are not central to, our definition of RPA, including:

- **AI, machine learning and NLP:** How the tools leveraged AI technologies, covering how they were implemented, and the value that was delivered to organizations as a result.
- **Business rules and process automation:** Any support for wider business process automation and/or business rules.
- **OCR:** How documents are assessed and the technologies that support this need.

Ability to Execute

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods or procedures that enable performance that is competitive, efficient and

effective, positively affecting revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision. Table 1 shows the ability to execute criteria.

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	High
Market Responsiveness/Record	Medium
Marketing Execution	Low
Customer Experience	Medium
Operations	High

Source: Gartner (July 2019)

Several factors contribute to the vendors' positions on the Ability to Execute axis:

- Because this market includes several small or midsize vendors with highly variable functionality and uncertain futures, financial viability was an important factor. In support of that, a key factor was whether the vendor had sufficient investment capital to allow it to scale effectively. Organic growth is valued more highly than growth by other means, including growth by acquisition or by securing additional funding.
- We evaluated the vendors' ability to attract and grow new business, and the way that their marketing narrative translated into features that mattered to customers. This includes responsiveness in sales engagement, deal management, pricing and negotiation, presales support and the overall effectiveness of the sales channel.
- We judged the customer experience by assessing rollout and adoption programs, reviewing the extent to which the vendors support their largest enterprise customers and by surveying users identified as reference customers by the vendors. Given the large volume of customer inquiries, we also incorporated the views we derived from these interactions. Vendors earned higher marks for an excellent track record of successful implementations. We looked for relationships, products and services/programs, including RPA process consulting services that support client success with the products.

- From an operations point of view, we assessed how the organization to meet its goals and commitments. Factors included the quality of the resources, the organizational structure, skills, experiences, programs, systems, underlying infrastructure and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to the Gartner position. Ultimately, technology providers are rated on their understanding of how to exploit market forces to create opportunities for the provider.

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Low

Source: Gartner (July 2019)

We evaluated the vendors' Completeness of Vision by examining customers' requirements for RPA usage and purchasing, and by assessing how the products aligned with these requirements:

- To evaluate vendors' marketing and product strategies, we looked at the narrative that they use to position their products and whether their products adequately address the chosen positioning. We assessed their understanding of the emerging use cases of RPA and their tactics for dealing with the constraints of RPA. We also considered the way in which the vendor engaged with common personas associated with use of RPA products.

- From a product-offering perspective, we evaluated the critical capabilities of the RPA tool alongside the integration and bundling of other adjacent third-party aspects, such as OCR and machine learning. We evaluated vendors' product innovation and ability to address the trends we expect to see in the RPA market (with their associated weightings and content).
- We also explored the customers' geographic and vertical market strategies and their plans to support the global market. We also examined the ability of the vendor to support a global installed base.

Quadrant Descriptions

Leaders

Leaders in a market combine an insightful understanding of the realities of the market, a reliable record, the ability to influence the market's direction, and the capability to attract and keep a following. In the RPA market, leadership implies an understanding of the demands of the enterprise and the opportunities of adding additional functionality, products and services to the core RPA offerings. Leaders must have demonstrated market-leading vision and the ability to deliver on that vision.

At this point in the development of the RPA market, only three vendors have sustained excellence in both execution and vision long enough to demonstrate effective leadership. With continued growth from vendors in the Challengers and Visionaries quadrants, we expect additional vendors to advance in this direction during the next two years.

Customers should note that a Leader is not always the best choice. A focused, smaller vendor can provide excellent support and commitment to suit individual needs. Other vendors may provide a certain capability — such as enhanced security, and a commitment to specific features or functions — that is important to your organization. These market segments include call center or individual desktop use cases today. This also applied to scenarios when deployed by a service partner in your specific industry market or geography. This more focused type of vendor would not appear as a Leader in the overall RPA market, but, within a specific segment, it may well be treated as such.

Challengers

Challengers in a market excel in their ability to attract a large user following, but this ability is limited to a subset or a segment of the market. For that target audience, Challengers are effectively Leaders, but that specificity presents a barrier to adoption for those outside that subsegment. For example, in the RPA market, a Challenger may have a strong proven presence or following in attended RPA, but lack traction, commitment or sophistication in the broader unattended RPA market. A Challenger must demonstrate a sustained excellence in execution and must have amassed a significant following, which is hard to achieve in this new and still-evolving market.

Two vendors are rated as Challengers in the RPA market this year, which indicates the relatively early stage of the RPA market itself. These players were not as aggressive in targeting clients as

the Leaders were during the past five years, when the RPA market evolved into the mainstream force it has become.

A Challenger can evolve into a Leader if it adopts aggressive, innovative strategies to expand to the full breadth of the target market. It needs to demonstrate exceptional insight in understanding the market direction and retain the capability to deliver on this vision. It may also evolve into a Visionary by sacrificing growth for new features and capabilities that are ahead of the market.

Visionaries

Visionaries in a market are innovators that drive the market forward by responding to emerging, leading-edge customer demands and by offering new opportunities to excel. Typically, these vendors appeal to leading-edge customers and may even have minimal mainstream presence or name recognition. Their ability to deliver sustained and dependable execution in the mainstream enterprise market is not sufficiently tested. The vision of a vendor is not expressed solely in its technological innovation. The vendor must also show insightful understanding of market trends, as well as visionary marketing, sales, along with related product and business management strategies.

In the RPA market, there are three Visionary vendors, including a classic BPM vendor, a machine learning vendor with an RPA offering and a former professional services business. Generally, Visionaries are investing in leading-edge RPA offerings that are not yet readily adopted by mainstream enterprise customers. They support capabilities in their other related tools, such as AI and chatbot capabilities, as well as process management. Visionaries excel in understanding the demands of enterprises that are looking for fully inclusive automation support.

Visionaries should eventually grow to become Leaders. Alternatively, they may decide to limit their target markets to focus on their core competencies, core technologies or existing customers and become Niche Players. They could also develop their specialties to advance in execution and become Challengers.

Niche Players

Niche Players in a market typically specialize in a vertical or functional area. Alternatively, they might have a strong product that is limited to a specific area or subset of the market. The 10 Niche Players in this market either:

- Have focused their attention on related tools — such as process discovery or machine learning — rather than RPA capabilities per se.
- Lack the execution capabilities needed or have limited geographic reach.
- Exhibit a vision that is not market-leading, or focus on a subset of use cases.
- Represent startups making initial forays into the market that have yet to demonstrate success.

Several of these vendors are in transition from other markets. Generally, to progress in this market, they need to focus fully on RPA.

Because of their relatively smaller size, Niche Players can often represent the best choice for a specific category of buyer, or for a particular use case. They typically offer specialized expertise, focused support practices, flexible terms and conditions, lower costs, and greater dedication to a particular market segment and its customers.

Some Niche Players are poised to improve their Ability to Execute and enterprise features allowing them to evolve into Challengers. Others will discover innovative solutions that attract interest beyond their niche segments, emerging as Visionaries. Some will look to strengthen and broaden their businesses to challenge the Leaders. In this fast-evolving and consolidating market, opportunities exist for all comers.

Context

RPA tools enable the enterprise to use a full range of developer personas — citizen developers (most commonly business analysts, as well as business end users); departmental developers; and enterprise IT professionals — and to develop integrations that range from tactical to strategic. Three RPA use cases follow.

Use Case No. 1: Integration Using an Application's UI

Organizations have a plethora of existing systems. Citizen developers and business analysts can quickly extract related data from System 1 and make it available in System 2:

- Data transfer and/or matching between systems. Systems can be legacy systems, enterprise applications or personal productivity tools (e.g., Excel).
- Integration where no back-end integration or API is available — i.e., it is only possible via the application's UI.
- May also apply to scenarios in which automation is later embedded in third-party applications.

Use Case No. 2: Large-Scale Data Migration

An automation extracts data automatically from several systems, using carefully structured scripts to access existing systems and other data sources for a new target system. This involves:

- System migration and (re)configuration involving multiple data sources.
- New systems development involving third-party applications and long-running processes.
- Pruning data from applications to ensure that only the relevant information is used (e.g., only relevant emails, relevant cases, relevant news from news or other evolving websites).

Use Case No. 3: Augment Knowledge Workers

Automations extract information from related documents and systems, shaping it and preparing it for consumption by knowledge workers at the point of need. While interacting with a customer or external stakeholder, data and information from many systems might be required. A knowledge worker typically accesses multiple systems to assemble this material. That worker may also need to interact with many colleagues, each of whom have systems to deal with, which can take a long time and affect the customer's experience significantly. This involves:

- Prechecking and structuring data for easy consumption.
- Provision of contextual information to support the customer case, which may include advice on the best next action, or related scenarios.
- Delivering output to relevant applications depending on the data, or steering actions on a website/chatbot.

  Ultimately, this could lead to a situation in which a chatbot is interacting with the customer directly, only handing off to a human knowledge worker when things occur outside its ability to handle directly.

As these different usage scenarios become more complicated, they may need more of the tangential capabilities that are outside of our core definition of the RPA market. These include NLP, machine learning, longer-running processes and OCR integrations/features.

Market Overview

The RPA tool market itself consists of a diverse range of vendors, each with different histories and approaches. This creates confusion in the market — especially in purchasing departments — because each vendor uses seemingly contradictory language to describe its version of:

- The scope of the RPA market.
- Unattended versus attended deployment.
- Crafting of "instructions" for the automation script to run.
- The sorts of integration it supports.
- Any use of AI and/or machine learning capabilities.
- Appropriate price points and supporting licensing agreements and related restrictions.
- The definition of what a "bot" is — some use the term to represent the script itself, others for the software elements that run the script.

The RPA Magic Quadrant displays a diagonal bias from Niche Players to Leaders, representing two market factors:

- **Three dominant vendors in the Leaders quadrant with a relatively large number of new entrants.** These bigger players outspend the rest of the market; the smaller vendors have yet to achieve a strong market presence. Therefore, they have weaker sales volumes. These smaller vendors have to find a route to market. They have a difficult balancing act — developing an effective narrative and making sales, investing in new product and features demanded by their customers, and scaling their operations across geographies. These vendors become the targets of acquisitive vendors looking to enter the RPA market.
- **The main use cases for RPA solutions are based on integration of data.** As a result, the range of the Depth of Vision dimension across vendors is more restricted, when compared with many other Magic Quadrants. This lack of differentiation has caused hype surrounding RPA and the use of AI. As we've already noted, there are limited opportunities for AI in RPA as it now stands.

  However, we feel that investors are perceiving RPA as a key gateway mechanism for organizations to easily consume AI from the major cloud vendors. Whether this will prove to be realistic remains unclear. AI makes more sense within the context of the wider business process and an iBPMS, rather than the confines of a short-running integration with a legacy system.

Market Adoption Trends

Market adoption for RPA is highest in:

- **Organizations with many unconnected applications or a lot of manual rekeying of data.** An organization's propensity to use RPA is directly related to the number of existing applications and the automation tools already in use.
- **Banking and insurance industries.** The finance sector has led the way in RPA for operational processes, with wide adoption across the world's major banks. Insurance, utilities, retail, manufacturing and government industries have rapidly followed.
- **Finance and accounting departments.** This is especially true for finance shared service centers and BPOs that focus on finance and accounting services.
- **The U.K. and the U.S. are the lead geographical regions.** These are closely followed by Japan, Europe, Asia and Australia.

RPA market growth is fueled by the large number of organizations struggling to automate mundane work. There are several contributing factors:

- **For 40 to 50 years, businesses have funded an expensive patchwork quilt of applications.** Few of these systems were ever set up to share data. Those in the business side of the organization have become increasingly frustrated by the slow pace of IT in automating connections among these systems. They find the long wait times posted by IT departments for the attention of expensive IT resources to respond to their needs incredible.

- **Digital transformation and modernization efforts often stall.** The plans of the business are often held up by an inability to link the transactions and experiences of their customers to the data locked in those legacy applications. That has meant employing more and more humans to handle the work and has inhibited the ability to scale the business.
- **RPA tools appeal due to the apparent speed to value.** This is especially the case when compared with other, slower options, such as developing effective APIs or replacing those legacy applications. Business people now believe that they can develop their own automations without having to rely on IT developers. And given the marketing narrative around "robots" replacing expensive human resources, they also believe that ROI is easy to attain from RPA.

The net result is a tremendous pent-up demand within businesses to move data among applications. RPA has now provided the opportunity to democratize automation and integration. However, without proper governance, this will drive a wave of shadow IT, probably creating as many problems as it solves.

RPA Market Developments

RPA is still relatively small market with a total revenue of slightly less than $850 million in 2018. However, RPA is the fastest-growing software subsegment officially tracked by Gartner, with year-on-year growth of over 63% in 2018.

The buying frenzy of RPA software is driving sky-high valuations of the biggest vendors — our Leaders are valued at more than $11 billion between them. UiPath raised its Series A round in April 2017 at a valuation of $140 million and, most recently, raised its Series D round at a valuation of around $7 billion. That's a growth of approximately 50 times in slightly more than two years. And just before we started the research for this Magic Quadrant (in November 2018), its Series C round valued the company at more than $3 billion. It is not alone: Automation Anywhere was valued at $2.6 billion in November 2018. Blue Prism, the only publicly quoted RPA company, has a market cap at the time of writing of slightly more than $1.4 billion.

In November 2018, we saw SAP buy a small French RPA player, Contextor, for an undisclosed sum. And at the beginning of March 2019, Nintex acquired EnableSoft for an undisclosed sum. Although we don't know the details of these acquisitions, they are likely to represent just a small fraction of the massive valuations applied to the Leaders.

We expect to see:

- **Other mega software vendors establish a position in this rapidly expanding market.** They will do this through acquisition (as SAP did), by adapting the positioning of some of their existing products or by attempting to ring-fence the market with complementary offerings (as IBM has done).
- **More vendors enter the market from adjacent product sectors.** These may include software-testing vendors rebranding, as well as iBPMS and low-code application platforms establishing complementary offerings. For example, Pegasystems did this three years ago with its

acquisition of OpenSpan. Other BPM vendors have mostly partnered with RPA vendors, preintegrating them into their broad process automation platforms. Oracle, Bizagi and Appian have all developed offerings that integrate RPA tools into their wider iBPMS coverage.

- **BPO vendors carve out products from their existing operations.** This is effectively what Infosys have done, creating EdgeVerve as a go-to-market vehicle. Datamatics has done the same, with its TruBot offering. Other BPOs and SIs are creating comprehensive offerings that embed the products of one or more RPA technology tools.
- **Further startups attempt to rush in and claim market domination and world-beating product approaches.** The claims of some of these vendors really do need careful examination before jumping on their bandwagon.
- **More major end users develop their own RPA tools with open-source components.** The costs of licensed RPA tools is so high that some large organizations have developed their own RPA approaches. Some of those organizations are now productizing their capabilities and selling the service to their enterprise customers. Although this is not a large proportion of the market, it highlights the relatively high cost of commercial RPA tools.
- **More emphasis on RPA delivered as a service.** RPA is already offered by several of the vendors. And, as is the case with any cloud service, when offered with fair subscription pricing, it becomes attractive to both SMBs and enterprise IT organizations. This enables smaller businesses to gain the same benefits (e.g., better security and scalability) as larger enterprises, together with greater productivity, agility, efficiency and access to continuous innovation.

RPA Market Constraints

This all sounds great for RPA vendors; however, several related factors are affecting the trajectory of the market and its growth. For example:

- **Organizations must manage a relatively high-maintenance burden.** The easy development of integration scripts at the UI level is offset, to some extent, by a constant stream of changes driven by small changes in those third-party applications and systems. This constraint highlights one of the key challenges with RPA deployments — most automations, especially those created by citizen developers, operate at the surface level, rather than the deeper, more sustainable API level. (See “Use iPaaS to Unify Data and Application Integration” and “Navigate Optimal Routes for Process Automation With RPA, iBPMS and iPaaS.”)
- **Organizations must track the individual integrations.** With this democratization of automation comes widespread use in an organization. The problem quickly becomes identifying those parts of the business that will stop working when the UI of a system of record changes. Rather than just reacting to the changes quickly, organizations need a way to predict the implications of a third-party application change, and then synchronize its roll out with changes to affected RPA integrations. Without this sort of functionality built into the tools themselves, the level of technical debt associated with RPA implementation will continue to increase.

- **Comprehensive governance of RPA initiatives is critical.** Governance covers many dimensions — around how decisions are made and how the enterprise coordinates its resources. Most importantly for RPA, organizations need to manage the scope and deployment of RPA. Without effective control over where and how RPA is used, unfettered change will create a bigger mess than any short-term benefit gained from task automation. (See "Develop 3 Levels of Service for Your Center of Expertise to Scale DigitalOps and Robotic Process Automation.")

- **Many executives interpret efficiency as an opportunity for head count reduction.** However, the reality is that those human resources are usually redirected by their managers toward more-value-adding work. Given the costs associated with most RPA tools, executives can struggle to see the value in the initiative. The beginnings of a customer backlash are starting to appear. In the words of an executive at a global NGO, "We were sold a bag of goods!" The head count reduction never happened, which is what the business case was founded on.

- **Clients struggle to build business cases that do not focus on labor reduction.** With the head count reduction failing to materialize, it becomes difficult to justify the premium prices and long-term commitments demanded by the leading vendors. To overcome this challenge, it's better to direct the business case toward achieving better regulatory compliance, or switching employees to more value-adding work to build capacity and drive larger financial returns over the long term. For example, the requirement to better know your customer (KYC) in the finance industry or ensure employee onboarding incorporates key training requirements for a given role. This is similar to the requirement to pass data more effectively among systems to onboard suppliers. In the end, the organization can achieve more with the resources it already has.

- **Many organizations do not understand the processes they follow.** They mix up their need for processes with the organization chart and the systems that support existing departments. Moreover, it's hard for them to articulate the tasks within that process, because they are seldom designed or documented. This describes the challenge handled by a related market category — namely, process mining, which translates transaction data into long-running process descriptions (see the "Market Guide for Process Mining"). It's also a source of confusion in the RPA market, where vendors use that language to describe "task mining" — i.e., gathering mouse clicks and keyboard presses to discovering how work gets done within a step.

- **The hype associated with AI and machine learning is mostly unfounded.** Major RPA vendors are busy overpromising and underdelivering on the AI and cognitive narrative. Most products have little in the form of "plug-and-play" machine learning, and computer vision has limited value. None of the RPA vendors come anywhere near the scope of training data available to hyperscale cloud vendors, such as Google, Amazon and Microsoft. Rather than attempting to take them on head on, most vendors are providing better ways to consume megavendors' offerings.

- **The related data is not in a format the RPA tool can easily handle.** This causes problems in scaling the initiative. For example, RPA tools find it difficult to handle images of documents without tools such as OCR, which is then combined with machine learning and/or NLP to

extract the correct data. Right now, RPA players are partnering with OCR players, such as ABBYY, ESKER, etc., or they are white labeling or building their own OCR tools around existing technologies. Chat bots are also increasingly being incorporated into solutions, as are AI solutions for interpreting and extracting data.

- **RPA tools deliver more sustainable solutions when combined with an iBPMS.** Given the task-oriented scope of RPA-based automations, RPA handles the integration with legacy applications, whereas the iBPMS manages the long-running business process and related artifacts. Think of it as the iBPMS providing the conveyor belt, coordinating the work of the automations (robots) at points along the production line. Indeed, some of the vendors have already integrated their own iBPMSs with their core RPA tooling — for example, Servicetrace. Others have started with the iBPMS and added RPA functionality (e.g., Pegasystems). Most iBPMS vendors have established partnerships with one or more of the vendors in our Leaders quadrant. (See “Magic Quadrant for Intelligent Business Process Management Suites.”)

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive

technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

地理战略：供应商的战略，指导资源，技能和产品，以满足“家庭”或本地地理以外的地理位置的特定需求，直接或通过合作伙伴，渠道和子公司，适合该地理和市场。

of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by Gartner's Usage Policy. Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "Guiding Principles on Independence and Objectivity."