

MSP Analysis Report

Query:	what decision should I take for the betterment of the MSP ? Consider from the weill being of tech
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Analysis Results

Here are strategic decisions for the betterment of your MSP, considering technicians, customers, and the company:

Key Findings

- Significant Cost Optimization Opportunity: \$11,164.88 in annual savings from unused software licenses.
- Revenue Growth Potential: \$23,324.11 in potential annual revenue increase from proposed client price revisions.
- Immediate Financial Risk: \$2,155.00 in overdue payments from Pioneer Manufacturing (\$1,500.00) and GreenLeaf Organics (\$655.00).
- Customer Satisfaction Concerns: Five clients (EduGrowth Tutors, Creative Canvas Agency, Pioneer Manufacturing, Zenith Healthcare, GreenLeaf Organics) show negative "Happiness Adjustment" factors in their proposed price revisions.
- Security & Compliance Gaps: Anomalous software access by employees (e.g., Rohan Singh, Vikram Iyer, Sneha Patel) using tools not aligned with their roles.
- Critical Data Gaps: Key performance metrics related to technician well-being (e.g., employee satisfaction, resolution times) and customer experience (e.g., total resolved tickets, category breakdown) are unavailable due to agent execution errors.

Financial Impact

- Cost Savings Opportunity: Reclaiming or canceling unused software licenses can yield \$11,164.88 in annual savings.
- Revenue Enhancement Opportunity: Implementing proposed price revisions could increase annual revenue by \$23,324.11.
- Cash Flow Risk: Current overdue payments of \$2,155.00 directly impact working capital.
- Hidden Churn Risk: Clients with negative "Happiness Adjustments" represent potential churn, especially if price increases are applied without addressing underlying dissatisfaction.

Recommendations

- Prioritize Financial Health & Cash Flow (Company):
 - Collect Overdue Payments: Immediately follow up with Pioneer Manufacturing (\$1,500.00) and GreenLeaf Organics (\$655.00) to secure outstanding payments.
 - Implement Proactive Payment Management: Establish stricter payment terms and automated reminders for upcoming invoices (e.g., Global Logistics Partners, Zenith Healthcare, EduGrowth Tutors

due today).

2. ****Optimize Software Licenses for Savings & Security (Company & Technicians):****

* ****Reclaim/Cancel Unused Licenses:**** Actively recover the ****\$11,164.88**** in annual costs by reallocating or canceling licenses for software like SAP (\$2,500), Salesforce (\$1,800), Postman (\$1,188), and LinkedIn Sales Navigator (\$950).

* ****Address Anomalous Access:**** Investigate and rectify instances of employees (e.g., Rohan Singh, Vikram Iyer) accessing software outside their typical roles to enhance security and compliance.

3. ****Strategically Manage Price Revisions & Customer Satisfaction (Customers & Company):****

* ****Address Happiness Adjustments:**** Before applying price increases, conduct proactive engagement with clients showing negative "Happiness Adjustments" (EduGrowth Tutors, Creative Canvas Agency, Pioneer Manufacturing, Zenith Healthcare, GreenLeaf Organics) to understand and resolve their concerns.

* ****Transparent Communication:**** Clearly communicate the value proposition and the factors (e.g., base inflation, ticket volume) driving price adjustments to all clients.

4. ****Enhance Data Collection for Operational Insights (Technicians & Customers):****

* ****Resolve Agent Errors:**** Prioritize fixing the `MSP Insights Agent` and `Company Specific Ticket Agent` errors to unlock critical data on `active_revenue`, `total_resolved_tickets`, `overall_average_resolution_time_hours`, `overall_average_employee_satisfaction`, and `category_breakdown`. This data is essential for informed decision-making regarding technician workload, training needs, and customer service improvements.

Detailed Agent Data

Msp Insights Agent

■■ Error executing pandas query: If using all scalar values, you must pass an index
Code: active_revenue = company_contract[company_contract['contract_status'] == 'Active'][['annual_revenue']].sum() technician_workload = technicians[['name', 'tickets_assigned']].copy() technician_workload.rename(columns={'name': 'technician_name', 'tickets_assigned': 'assigned_ticket_count'}, inplace=True) result = { 'total_annual_revenue_active_contracts': active_revenue, 'technician_workload_overview': technician_workload }

Company Specific Ticket Agent

■■ Error executing pandas query: name 'category' is not defined Code:
total_resolved_tickets = company_analysis['resolved_tickets'].sum()
overall_average_resolution_time_hours = company_analysis['average_resolution_time_hours'].mean()
overall_average_employee_satisfaction = company_analysis['employee_satisfaction'].mean() allowed_categories = ["Network Connectivity Issue", "Hardware Failure", "Software Application Error", "Password Reset", "VPN Access Problem", "Printer Issue", "Email & Collaboration Tool Issue", "Permission & Access Request", "New User Setup", "Virus or Malware Concern", "Software Installation Request", "General Inquiry"] category_breakdown = {} for category in allowed_categories: category_breakdown[f'total_tickets_{category.replace(" ", "_").replace("&", "and").lower()}'] = \ company_analysis['tickets_by_category'].apply(lambda x: x.get(category, 0)).sum()
aggregated_metrics = { 'total_resolved_tickets': total_resolved_tickets, 'overall_average_resolution_time_hours': overall_average_resolution_time_hours, 'overall_average_employee_satisfaction': overall_average_employee_satisfaction } aggregated_metrics.update(category_breakdown) result = pd.Series(aggregated_metrics)

License Audit Agent

Here's a summary of the flagged software instances, categorized by anomalous access and unused licenses, including their associated costs and reasons: **Summary of Flagged Software Instances** The analysis identified a total of 40 flagged software instances across two categories: Anomalous Access and Unused Software Licenses. While anomalous access instances currently incur no direct cost, the unused software licenses represent a significant potential for cost optimization, totaling **\$11,164.88** in annual expenditures. Addressing these flags can enhance security posture and improve budget efficiency. --- **1. Flagged Anomalous Software Access (Total Cost: \$0.00)** These instances indicate software access by employees whose roles are not typically associated with the software, potentially highlighting security or compliance concerns, even if the software itself is free. * **Employee Name:** Rohan Singh, **Software Name:** MySQL Workbench, **License Cost (USD):** \$0.0, **Reason:** Role not typically allowed to use this software * **Employee Name:** Vikram Iyer, **Software Name:** Docker (Free), **License Cost (USD):** \$0.0, **Reason:** Role not typically allowed to use this software * **Employee Name:** Sneha Patel, **Software Name:** Slack (Free), **License Cost (USD):** \$0.0, **Reason:** Role not typically allowed to use this software --- **2. Flagged Unused Software Licenses (Total Cost: \$11,164.88)** These instances represent licenses assigned to employees but not actively utilized, indicating potential for cost savings through reallocation or cancellation. * **Employee Name:** Rohan Singh, **Software Name:** MySQL Workbench, **License Cost (USD):** \$0.0, **Reason:** Not used in last 90 days * **Employee Name:** Vikram Iyer, **Software Name:** Docker (Free), **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Sneha Patel, **Software Name:** Slack (Free), **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Amit Verma, **Software Name:** QuickBooks, **License Cost (USD):** \$360.0, **Reason:** Never used * **Employee Name:** Priya Reddy, **Software Name:** Google Analytics, **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Priya Reddy, **Software Name:** Canva, **License Cost (USD):** \$180.0, **Reason:** Never used * **Employee Name:** Karan Gupta, **Software Name:** GitHub, **License Cost (USD):** \$48.0, **Reason:** Never used * **Employee Name:** Karan Gupta, **Software Name:** Jira, **License Cost (USD):** \$93.0, **Reason:** Never used * **Employee Name:** Karan Gupta, **Software Name:** Figma, **License Cost (USD):** \$144.0, **Reason:** Never used * **Employee Name:** Meera Desai, **Software Name:** Confluence, **License Cost (USD):** \$66.0, **Reason:** Never used * **Employee Name:** Meera Desai, **Software Name:** Miro, **License Cost (USD):** \$192.0, **Reason:** Never used * **Employee Name:** Arjun Mehta, **Software Name:** LinkedIn Sales Navigator,

****License Cost (USD):** \$950.0, **Reason:** Never used * **Employee Name:** Arjun Mehta, **Software Name:** Microsoft Excel, **License Cost (USD):** \$150.0, **Reason:** Never used * **Employee Name:** Divya Rao, **Software Name:** Tableau, **License Cost (USD):** \$840.0, **Reason:** Never used * **Employee Name:** Divya Rao, **Software Name:** AWS Sagemaker, **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Sameer Khan, **Software Name:** Microsoft 365 Admin, **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Sameer Khan, **Software Name:** Norton Antivirus, **License Cost (USD):** \$50.0, **Reason:** Never used * **Employee Name:** Fatima Ansari, **Software Name:** Adobe Photoshop, **License Cost (USD):** \$251.88, **Reason:** Never used * **Employee Name:** Fatima Ansari, **Software Name:** Canva, **License Cost (USD):** \$180.0, **Reason:** Never used * **Employee Name:** Rahul Nair, **Software Name:** Kubernetes, **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Rahul Nair, **Software Name:** Jenkins, **License Cost (USD):** \$0.0, **Reason:** Never used * **Employee Name:** Rahul Nair, **Software Name:** Terraform, **License Cost (USD):** \$240.0, **Reason:** Never used * **Employee Name:** Sunita Joshi, **Software Name:** Microsoft Excel, **License Cost (USD):** \$150.0, **Reason:** Never used * **Employee Name:** Sunita Joshi, **Software Name:** SAP, **License Cost (USD):** \$2500.0, **Reason:** Never used * **Employee Name:** Naveen Kumar, **Software Name:** Microsoft Excel, **License Cost (USD):** \$150.0, **Reason:** Never used * **Employee Name:** Naveen Kumar, **Software Name:** PowerBI, **License Cost (USD):** \$120.0, **Reason:** Never used * **Employee Name:** Pooja Chavan, **Software Name:** BambooHR, **License Cost (USD):** \$99.0, **Reason:** Never used * **Employee Name:** Pooja Chavan, **Software Name:** Slack, **License Cost (USD):** \$87.0, **Reason:** Never used * **Employee Name:** Harish Patil, **Software Name:** Grammarly, **License Cost (USD):** \$144.0, **Reason:** Never used * **Employee Name:** Harish Patil, **Software Name:** WordPress, **License Cost (USD):** \$300.0, **Reason:** Never used * **Employee Name:** Lakshmi Menon, **Software Name:** Jira, **License Cost (USD):** \$93.0, **Reason:** Never used * **Employee Name:** Lakshmi Menon, **Software Name:** Figma, **License Cost (USD):** \$144.0, **Reason:** Never used * **Employee Name:** Alok Tiwari, **Software Name:** Jira, **License Cost (USD):** \$93.0, **Reason:** Never used * **Employee Name:** Alok Tiwari, **Software Name:** Postman, **License Cost (USD):** \$1188.0, **Reason:** Never used * **Employee Name:** Alok Tiwari, **Software Name:** TestRail, **License Cost (USD):** \$372.0, **Reason:** Never used * **Employee Name:** Ritu Agarwal, **Software Name:** Salesforce, **License Cost (USD):** \$1800.0, **Reason:** Never used * **Employee Name:** Ritu Agarwal, **Software Name:** Microsoft Teams, **License Cost (USD):** \$60.0, **Reason:** Never used**

Financial Agent

Here's a summary of the current payment statuses and proposed annual price revisions across your client base: ****Summary of Payment Statuses:**** * ****Overdue Payments:**** Two clients currently have overdue payments totaling \$2,155.00. * ****Pioneer Manufacturing:**** \$1,500.00, due 2025-10-15, 15 days overdue. * ****GreenLeaf Organics:**** \$655.00, due 2025-10-20, 10 days overdue. * ****Delayed Payments:**** One client made a payment that was delayed, incurring a penalty. * ****Starlight Hotels Group:**** Paid \$750.00 for an invoice due 2025-10-21, with a 7-day delay and a penalty applied of \$3.46. * ****Upcoming Pending Invoices:**** Three clients have invoices pending for today, 2025-10-31, totaling \$3,714.00. * ****Global Logistics Partners:**** \$1,000.00, due 2025-10-31 (0 days until due). * ****Zenith Healthcare:**** \$2,100.00, due 2025-10-31 (0 days until due). * ****EduGrowth Tutors:**** \$614.00, due 2025-10-31 (0 days until due). ****Proposed Annual Price Revisions:**** Here are the proposed annual price revisions for clients, including detailed factor breakdowns and projected cost changes: * ****EduGrowth Tutors**** * ****Current Monthly Cost:**** \$614.00 * ****Revised Monthly Cost:**** \$741.40 * ****Annual Cost Change:**** \$1,528.86 * ****Revision Percentage:**** 20.75% * ****Factor Breakdown:**** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (-0.75%), Contract Length Discount (0.00%) * ****Innovatech Solutions Pvt. Ltd.**** * ****Current Monthly Cost:**** \$3,250.00 * ****Revised Monthly Cost:**** \$3,810.62 * ****Annual Cost Change:**** \$6,727.50 * ****Revision Percentage:**** 17.25% * ****Factor Breakdown:**** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (0.75%), Contract Length Discount (5.00%) * ****Starlight Hotels Group**** * ****Current Monthly Cost:**** \$750.00 * ****Revised Monthly Cost:**** \$877.22 * ****Annual Cost Change:**** \$1,526.58 * ****Revision Percentage:**** 16.96% * ****Factor Breakdown:**** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.46%), Happiness Adjustment (0.00%), Contract Length Discount (5.00%) * ****Global Logistics Partners**** * ****Current Monthly Cost:**** \$1,000.00 * ****Revised Monthly Cost:**** \$1,165.00 * ****Annual Cost Change:**** \$1,980.00 * ****Revision Percentage:**** 16.50% * ****Factor Breakdown:**** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (0.00%), Contract Length Discount (5.00%) * ****Quantum Financial Services**** * ****Current Monthly Cost:**** \$1,149.00 * ****Revised Monthly Cost:**** \$1,338.59 * ****Annual Cost Change:**** \$2,275.02 * ****Revision Percentage:**** 16.50% * ****Factor Breakdown:**** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (0.00%), Contract Length Discount (5.00%) * ****Apex Construction**** * ****Current Monthly Cost:**** \$900.00 * ****Revised Monthly Cost:**** \$1,048.50 * ****Annual Cost Change:**** \$1,782.00 * ****Revision**

Percentage:** 16.50% * **Factor Breakdown:** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (0.00%), Contract Length Discount (5.00%) * **Creative Canvas Agency** * **Current Monthly Cost:** \$800.00 * **Revised Monthly Cost:** \$928.40 * **Annual Cost Change:** \$1,540.80 * **Revision Percentage:** 16.05% * **Factor Breakdown:** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (-0.45%), Contract Length Discount (5.00%) * **Pioneer Manufacturing** * **Current Monthly Cost:** \$1,500.00 * **Revised Monthly Cost:** \$1,736.25 * **Annual Cost Change:** \$2,835.00 * **Revision Percentage:** 15.75% * **Factor Breakdown:** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (-0.75%), Contract Length Discount (5.00%) * **Zenith Healthcare** * **Current Monthly Cost:** \$2,100.00 * **Revised Monthly Cost:** \$2,430.75 * **Annual Cost Change:** \$3,969.00 * **Revision Percentage:** 15.75% * **Factor Breakdown:** Base Inflation (6.00%), Ticket Volume Impact (15.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (-0.75%), Contract Length Discount (5.00%) * **GreenLeaf Organics** * **Current Monthly Cost:** \$655.00 * **Revised Monthly Cost:** \$751.61 * **Annual Cost Change:** \$1,159.35 * **Revision Percentage:** 14.75% * **Factor Breakdown:** Base Inflation (6.00%), Ticket Volume Impact (12.00%), Endpoint Scale Impact (0.50%), Payment Delay Penalty (0.00%), Happiness Adjustment (-0.75%), Contract Length Discount (3.00%)