**Instructions: Use this Worksheet to document your findings.**

**Task 2:** List at least three advantages of leveraging a Generative AI solution.

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| **Generative AI Solution Advantages** |
| * Reduce R&D cycle time by generating and simulating low-toxicity chemical combinations before lab testing |
| * Decrease material costs by predicting ineffective formulations and avoiding waste |
| * Accelerate competitive analysis through automated market scanning and trend detection |
| * Improve product-market fit by generating personalized product concepts tailored to environmental and consumer demands |
| * Enhance product documentation by auto-generating technical summaries and marketing drafts |

**Task 3:** Review the Current 6 Step Process. How will each process step be enhanced?

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| **Process Step** | **Generative AI Solution Measurable Advantages** |
| Step 1Product research | * AI can summarize thousands of chemical studies and identify eco-friendly, effective compounds in seconds. |
| Step 2 Marketing analysis | * AI can rapidly analyze competitor positioning, customer reviews, and lifecycle trends to generate actionable insights. |
| Step 3 Chemical experimentation | * AI models can simulate ingredient interactions, reducing physical testing time by up to 40%. |
| Step 4 Testing & refinement | * AI can detect anomalies in lab test data and recommend improvements, increasing pass rates and reducing retest cycles. |
| Step 5 Business case evaluation | * AI can assist in forecasting ROI, estimating market demand, and auto-generating feasibility reports. |
| Step 6 Mass production & distribution | * AI can optimize production planning and simulate supply chain risks to reduce delays and overstock. |

**Task 4:** Balanced Scorecard Analysis

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| **Perspective** | **Generative AI Solution Measurable Advantages** |
| Finance | * Reduce formulation costs and R&D time, leading to faster time-to-market and improved profitability. |
| Process | * Streamline research, testing, and go-to-market workflows, resulting in improved operational efficiency. |
| Employees | * Free up scientists and marketers from repetitive tasks, allowing focus on strategic innovation and creative work. |
| Customers | * Deliver safer, more eco-friendly, and effective cleaning products faster, increasing customer satisfaction and loyalty. |