

Business Continuity Management

Business Continuity

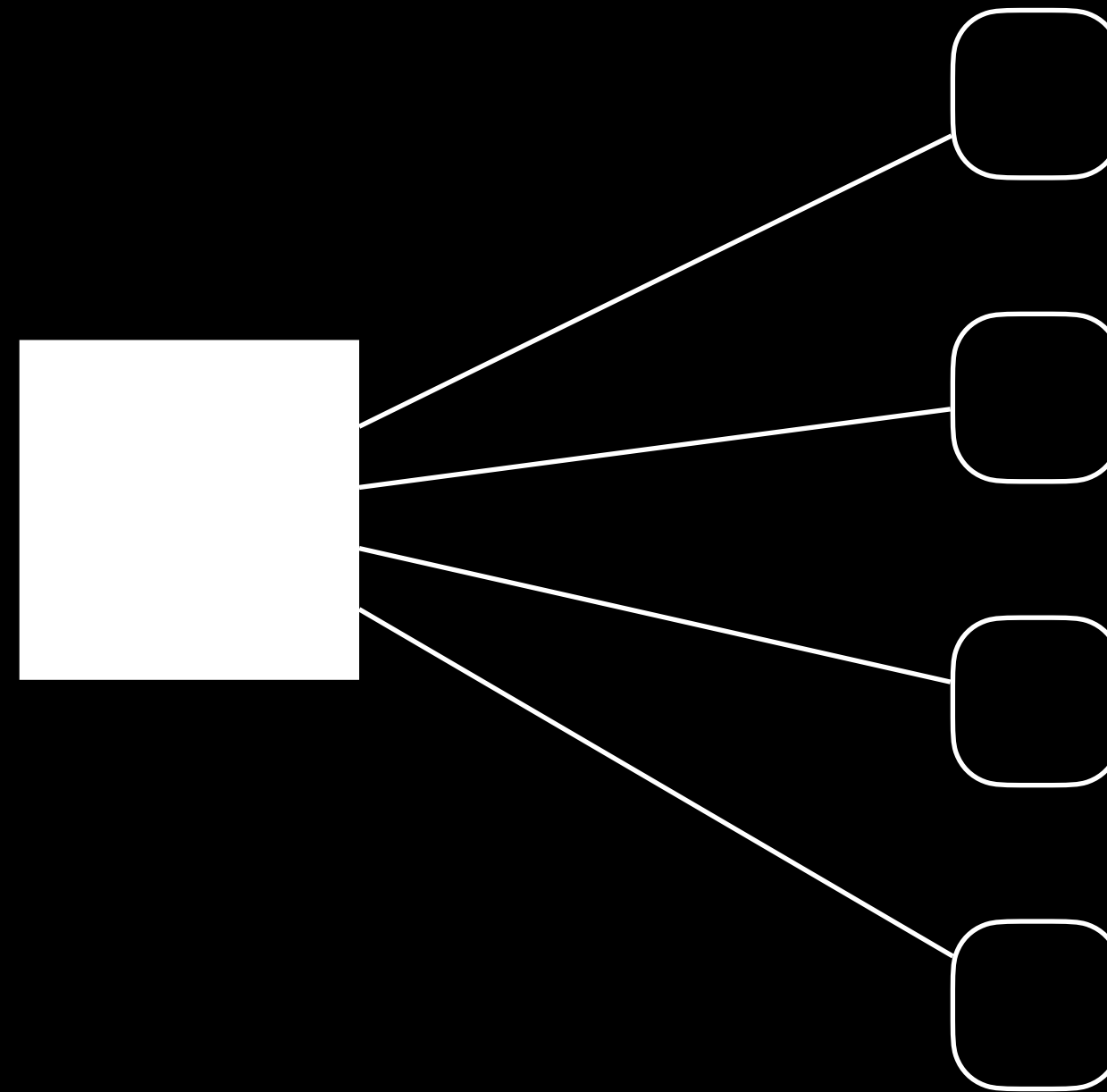
What is Business Continuity Management?

Business Continuity Management

- Enterprises have local and global presence due to the power of cyber space and systems.
- Natural disasters whenever they happen can now have an impact on cyber space.
- Failure in another part of the world can impact on the system right here.

Mainframe Era (1950s-70s)

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Pre-history

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- Reality is that business continuity and management became of interest in the **mainframe era**.
- Central system that could become unavailable for numerous reasons.
- **Periodic copies and back-up** needed to ensure continued access and integrity of data, for example tape vault.
- **Dedicated technical team**, unaware of business objectives, focused on a single room and the perceiving potential problems.

Pre-history

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- Notion of **disaster recovery** came from the logic of bringing system back online.
- Recall though such elements are part of a **larger system** that is working towards some goal.
- Recovery and continuity could be managed by **technical teams**, but it is debatable if this is optimal.

Recovery Requirements

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- Business impact analysis will have informed **critical processes** and the **window of recovery**.
- Need to consider other recovery requirements that an enterprise will need consider.

Recovery Requirements

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Time

Utilisation

Geography

Facilities

Assets

Time

Recovery Requirements

- **Time** requirements essentially came out of the Business Impact Analysis.



Time

Utilisation

Recovery Requirements

- **Utilisation** or occupancy of redundant resources that are required to continue processes.



Utilisation

Geography

Recovery Requirements

- **Geography** in terms of how stakeholders access resources and any additional requirements.



Geography

Facilities

Recovery Requirements

- **Facilities** required to complete and conduct critical business processes.

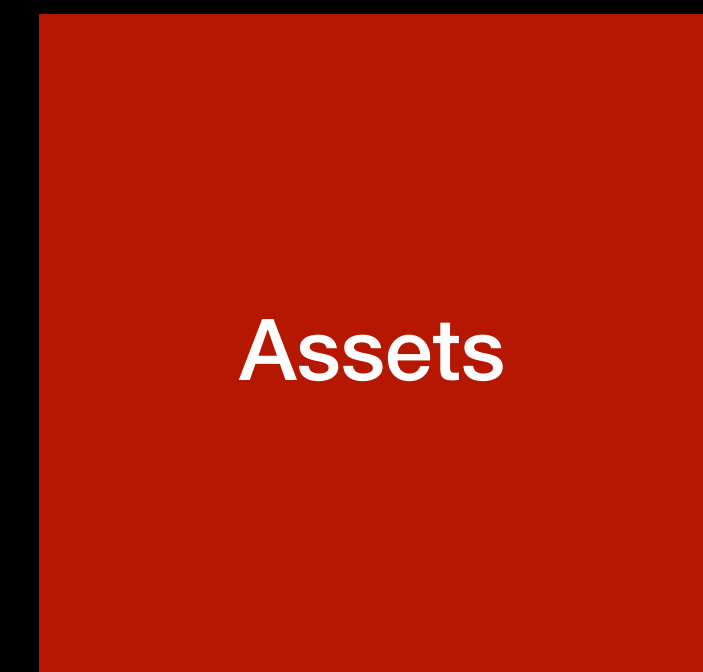
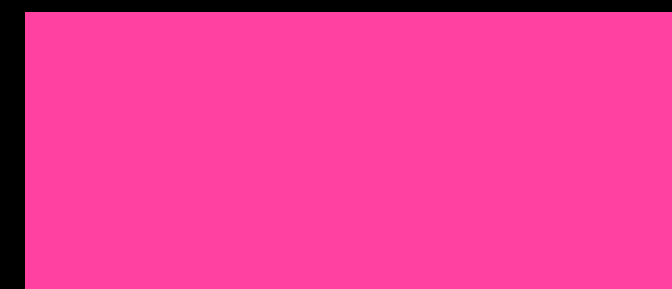
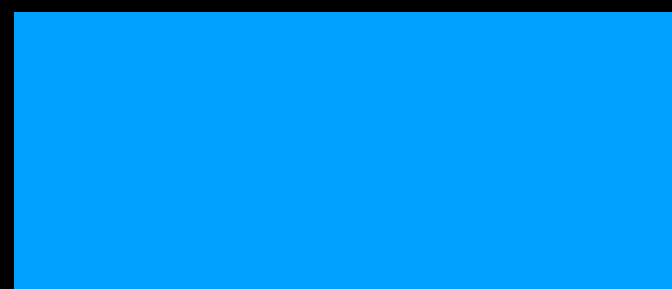


Facilities

Assets

Recovery Requirements

- **Assets** that critical business processes require access.



Recovery Requirements

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Time

Utilisation

Geography

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Contingencies

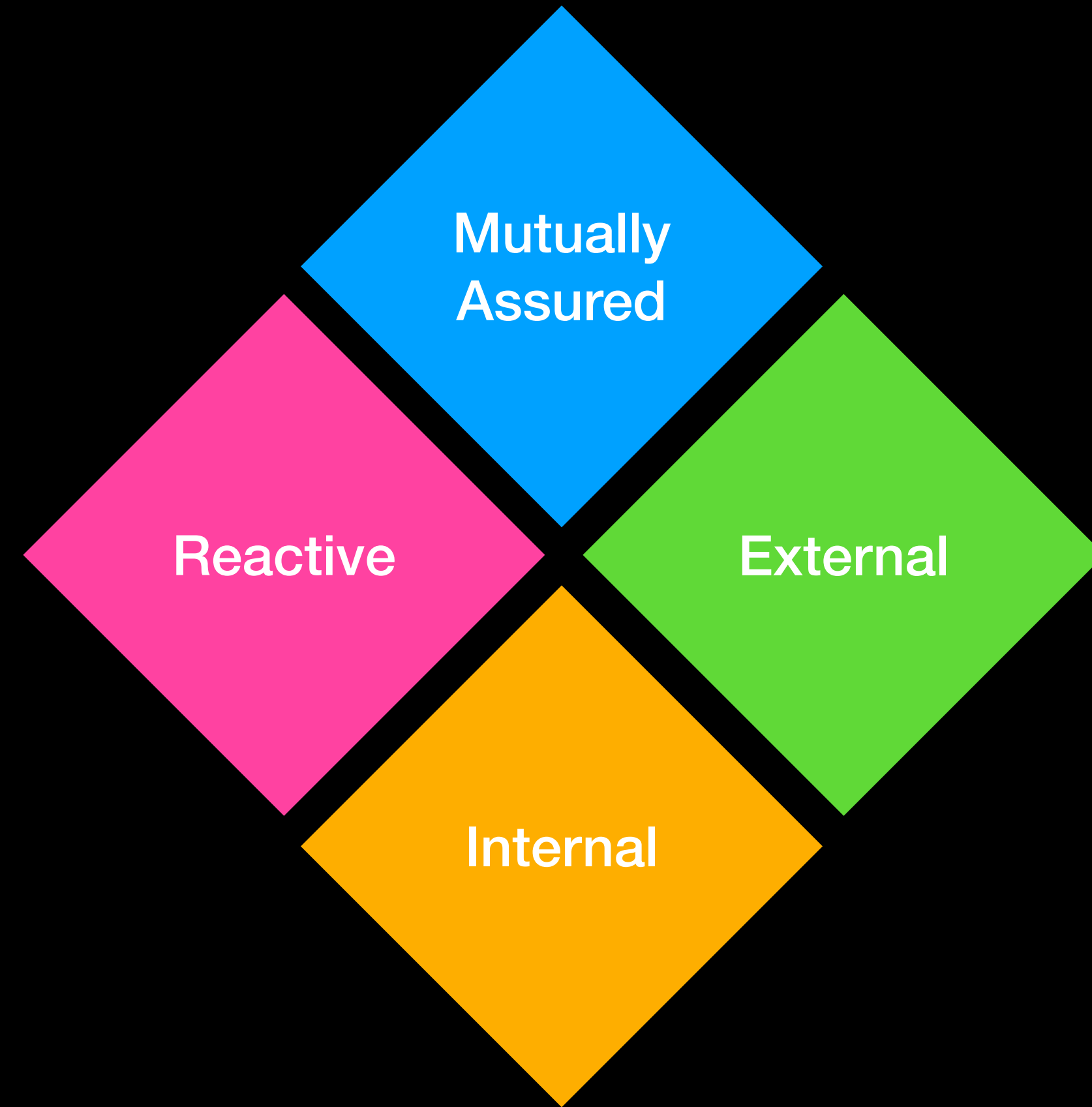
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- **Balance** between the expense and risk appetite of the enterprise.
- Can guarantee access to cyber systems such as **mainframe** applications if they are under control.
- **External** parties becomes challenges, Service Level Agreements (SLAs) can be used as guarantees.
- Consider the balance of the system and the needs of continuation.

Contingencies

Contingencies


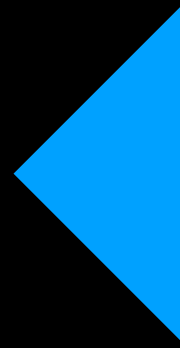
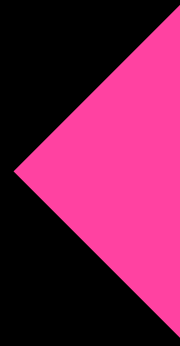
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Internal Contingencies



Internal

- In-house provision of redundancy is traditionally the most expensive, but the least risk option.
 - Unfettered access to redundant resources and can conduct tests.
 - Consider the expense of provisioning redundant infrastructure and hardware within an enterprise.
 - Expense of maintaining and securing such elements is non-trivial and could create problems.
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External Contingencies

- Redundant resources and **sold several times over**, consider cloud computing.
- **Minimises costs** and potentially reduces specific security concerns from some perspectives.
- **Warm vs cold** start recovery redundant options for large enterprises.
- **Unforeseen costs** associated with time and resource allowances associated with contracts.



External

Mutually Assured Contingencies

- Enterprises can enter into agreements to support one another during crisis moments.
- Complexities ensure that such agreements should be formalised by parties.
- Reduces costs associated with maintaining redundant resources in terms of equipment and staff.
- Displaced activity could impact on the supporting enterprise, compromising their critical processes.



Mutually Assured

Reactive Contingencies

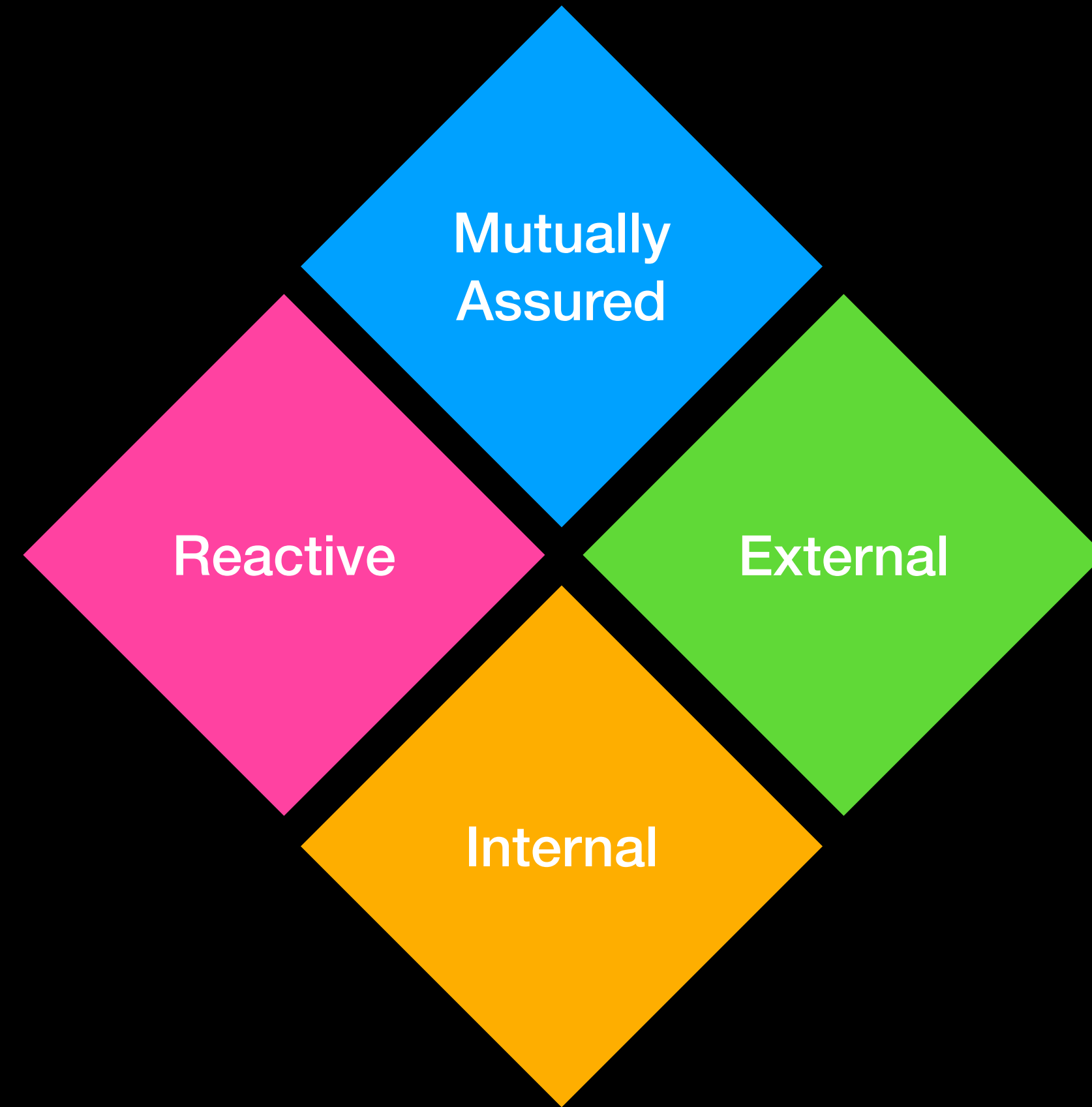
- Alternative is to react to issues when they occur, this may be possible for some situations.
- Purchase of the off-the-shelf components and resources.
- Consider the complexity and expense in purchase off-the-shelf resources and how useful.



Reactive

Contingencies

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Alternative responses

Restoration

Alternative responses

- Areas of restoration can often only be determined once incidents occur.
- Planning in advance can reduce the impact an incident could have on an enterprise.
- Considering the critical processes and what may need to be deployed elsewhere.

Salvage

Alternative responses

- Coupled with restoration, salvage of existing elements may be the most efficient method to continue critical processes.
- Involve process of segregating and quarantining hardware rapidly.
- Terminating communications or shutting authentication procedures or specific transactions.

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