

Virtualization:

Shi(f)t Happens!

Where did we come from?

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- Lots of loosely decoupled systems
- IT domain: Islands of glory and shame
- Business domain: Visible disconnect from the IT domain
- Lot of spending, under performing applications, over utilization

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- Types: Emulation or Host based?
- Emulation: Full, Para or Hardware assist?

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“similar” state vs “exact” state, mixed
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- Para: Faster, modifies kernel, TLB (Translation Lookaside Buffer) memory management issue
- HW assist: Best performance, true 64bit virtualization, secure (no blue pilling!)

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- Deploy test, development environments on VI
- Hobbyist: Are your mission critical applications tasting it?
- Storage: Local, DAS, SAN (black box)
- No Security, VMLM, Provisioning, Backup or ITIL compliance (Change-, Release- or Service management etc)

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- Freedom: Hypervisor makes OS “floatable”
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- Savings: Reduced TCO, TCA and enhanced ROI

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- Romancing with the hypervisor begins

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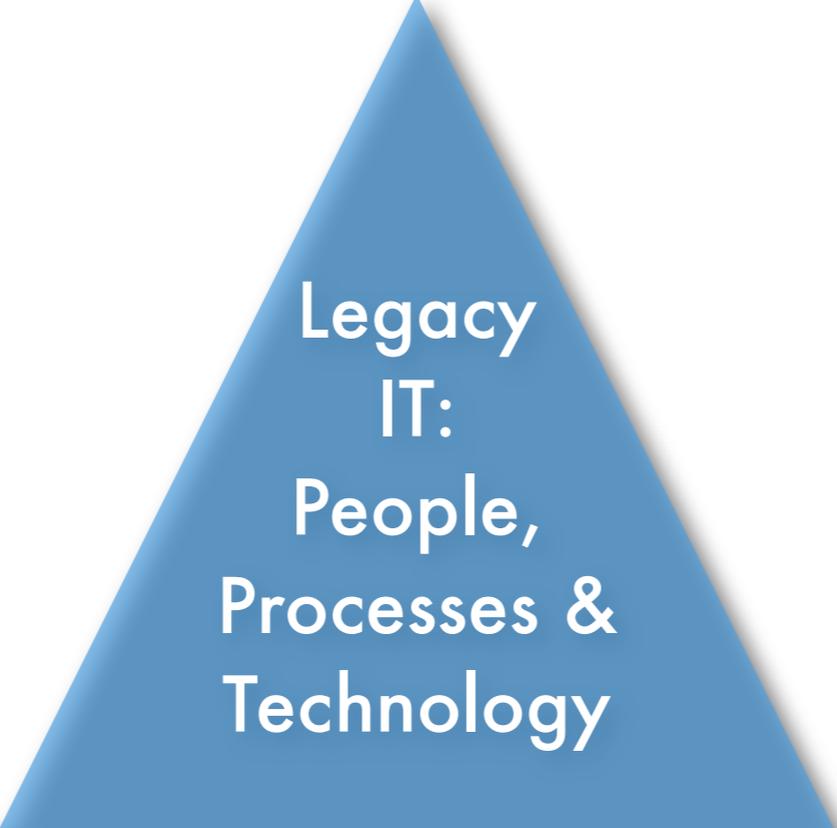
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- Which virtualization vendors to choose?
- Which servers to deploy?
- Where to deploy: Test, development or Production?
- Grey areas: Security, Backup, (I/O) performance, Training, Staff recruitment and retention

CxOs are anxious

Infrastructure

CxOs are anxious



Legacy
IT:
People,
Processes &
Technology

Infrastructure

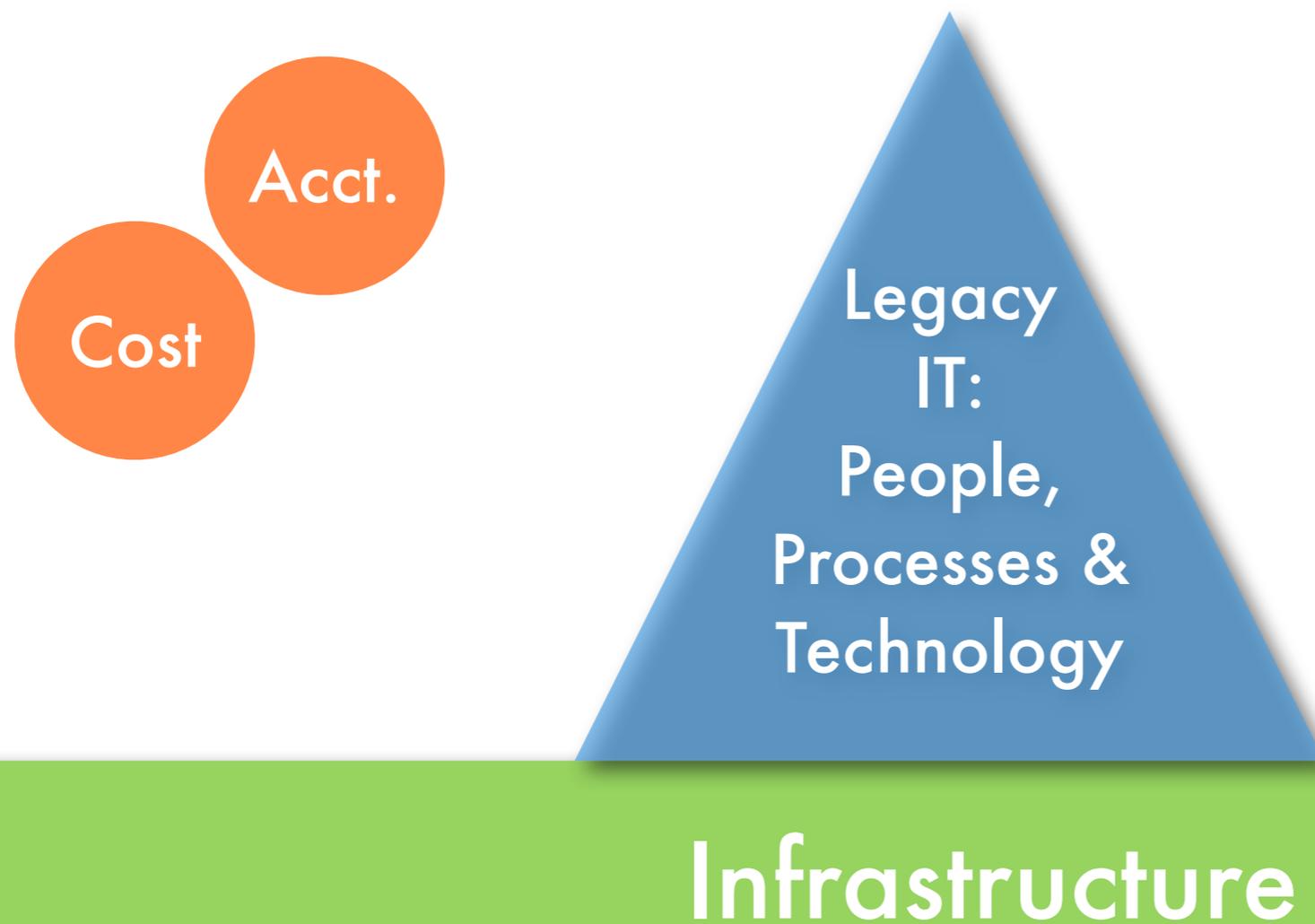
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Cost

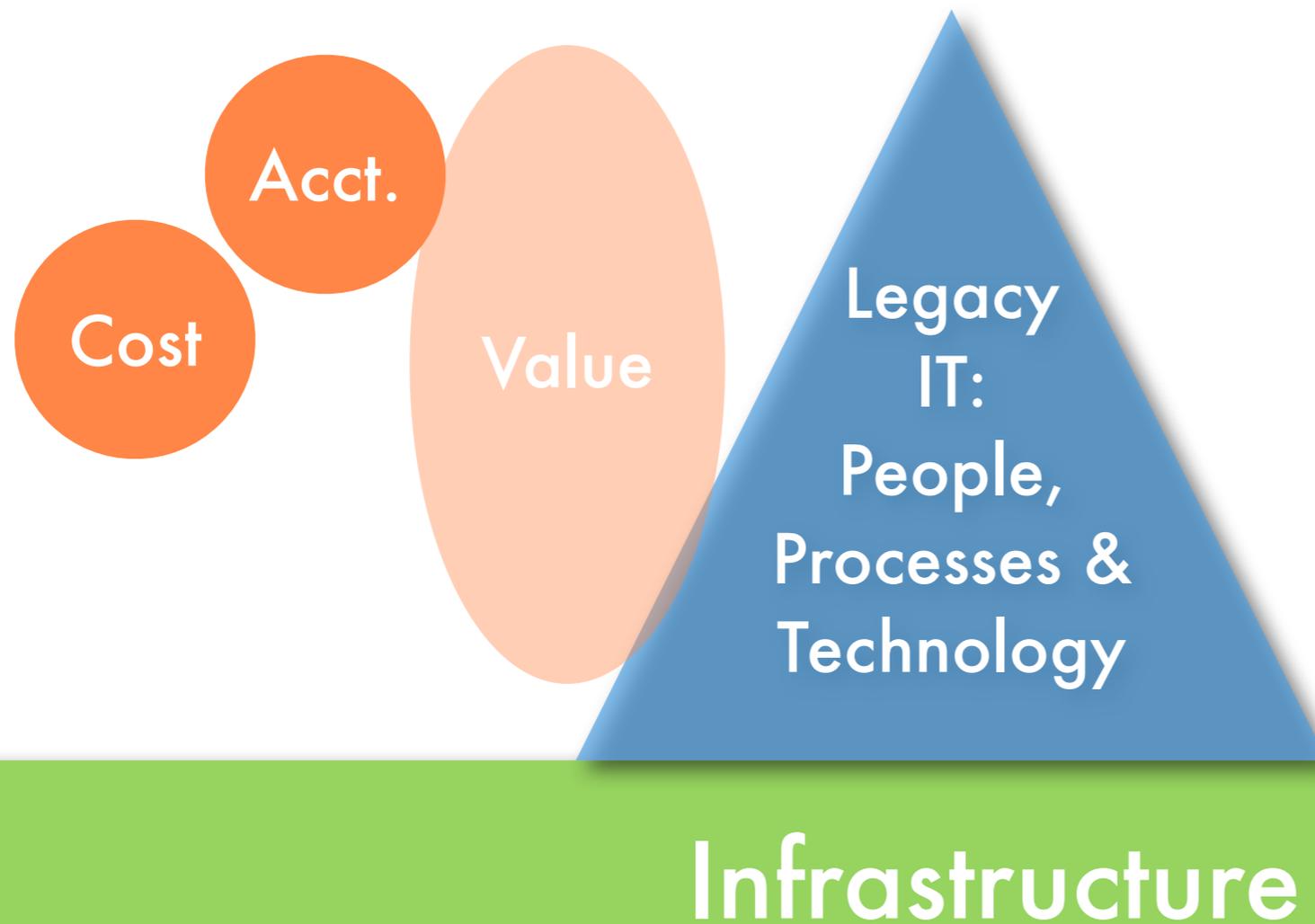
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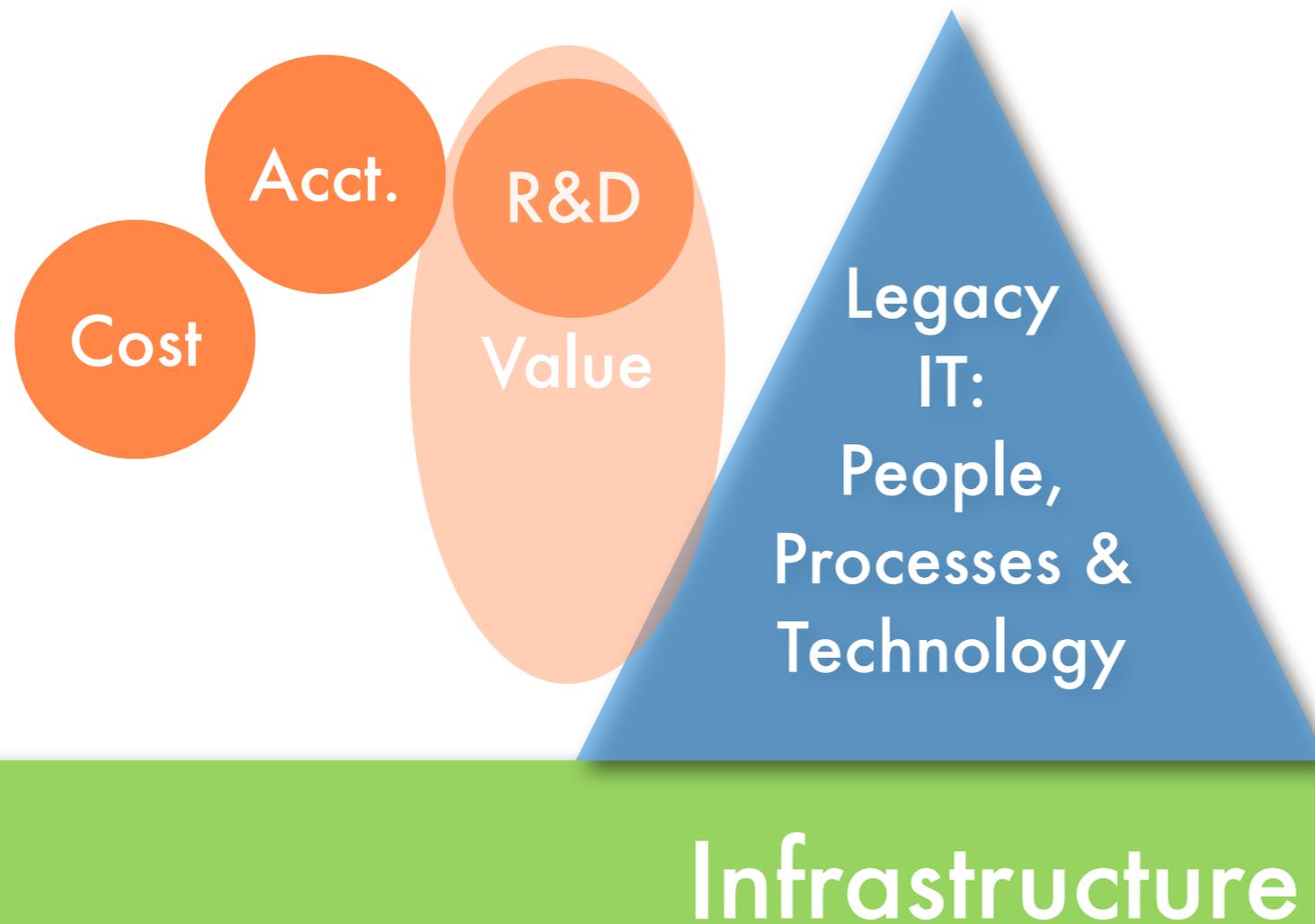
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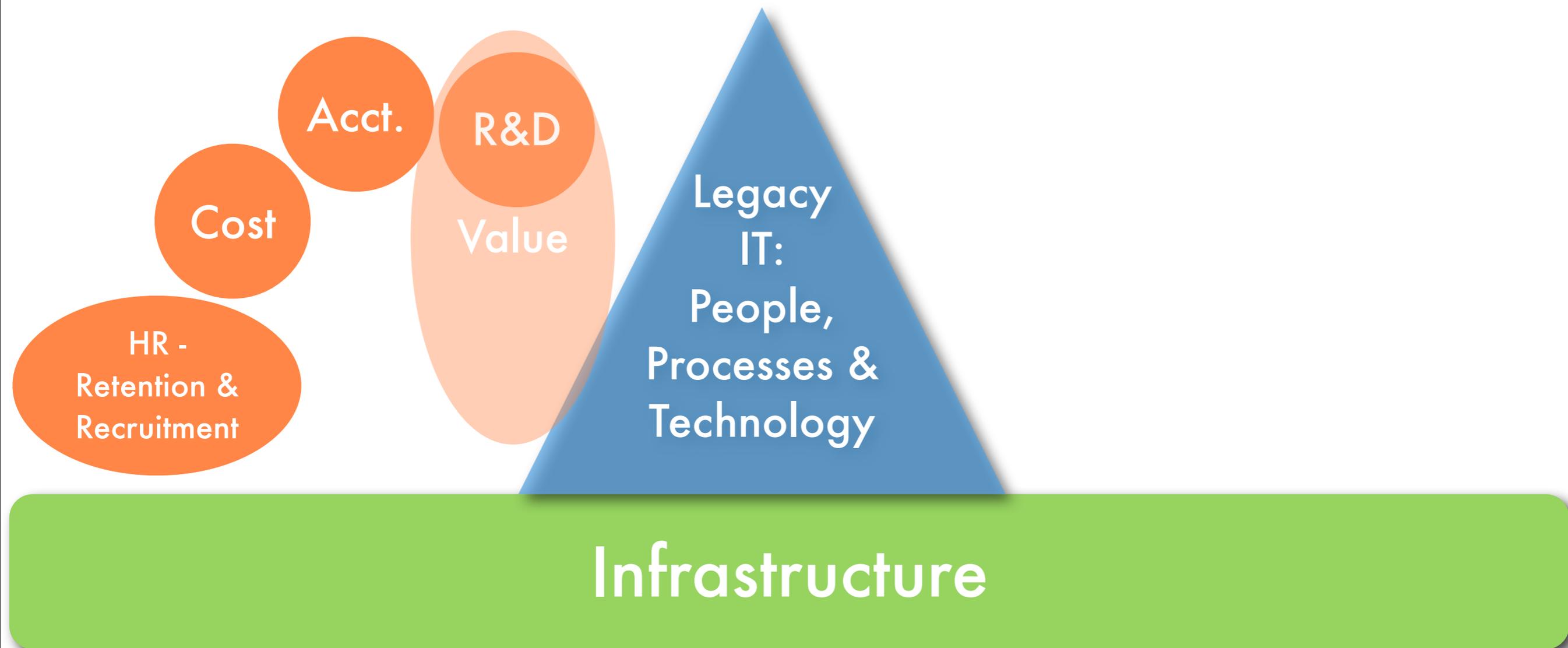
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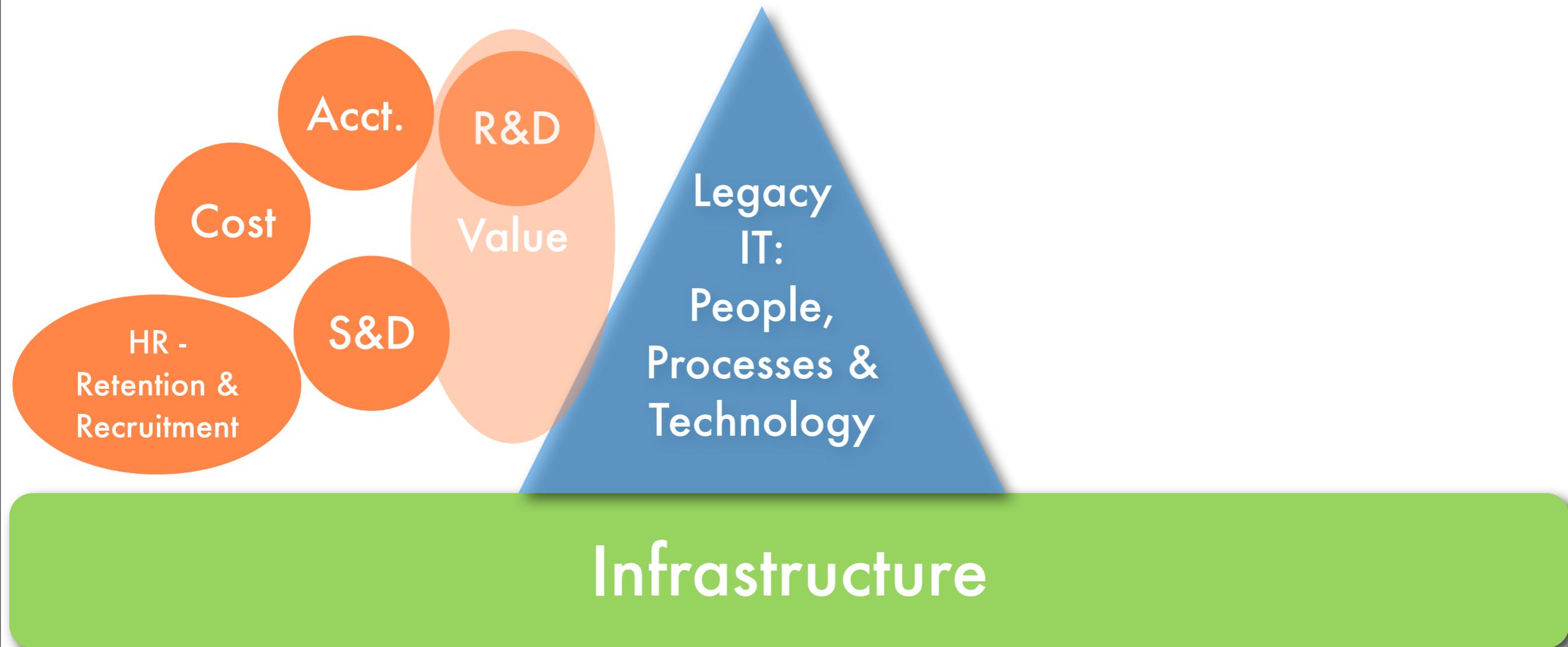
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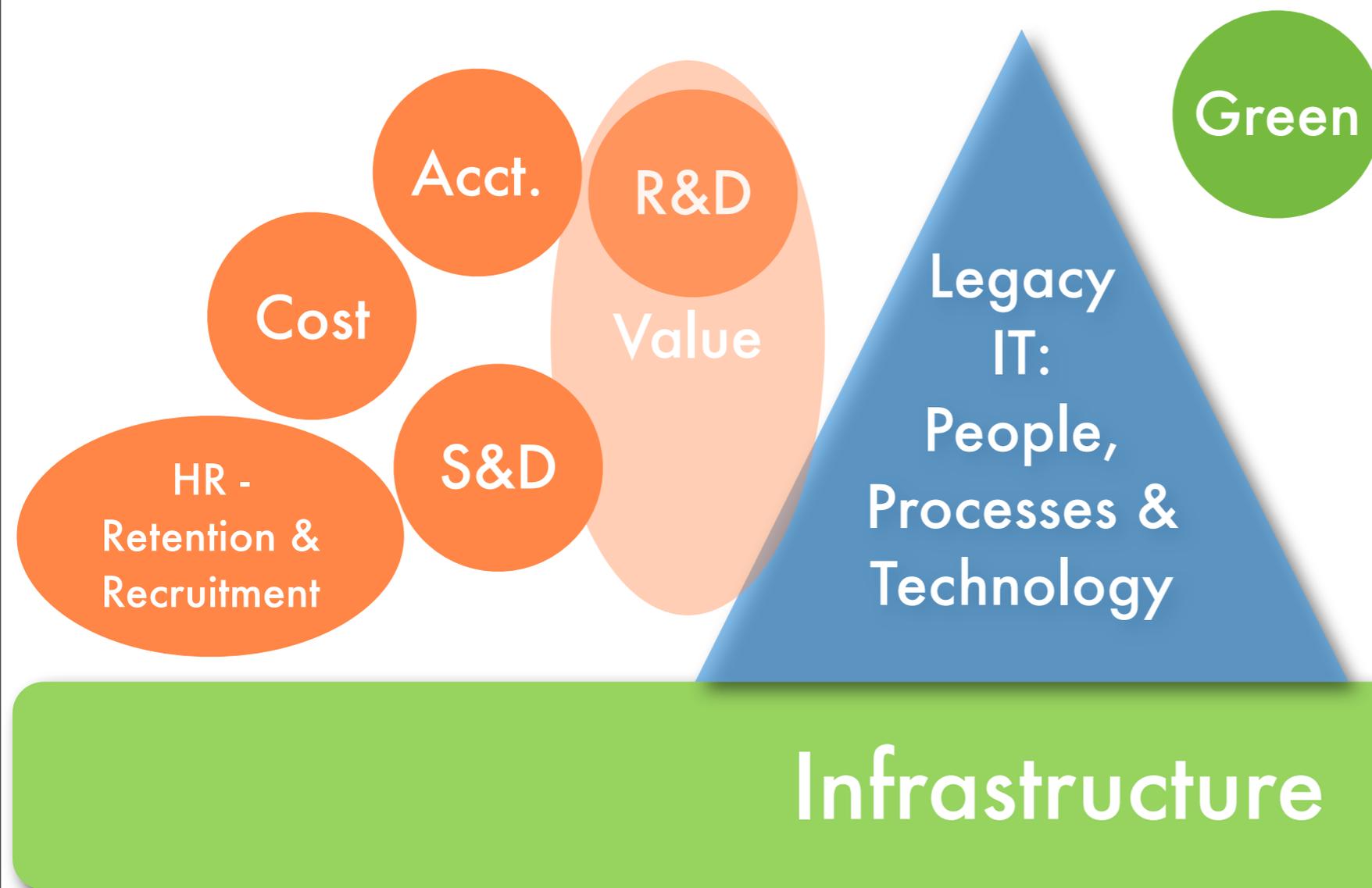
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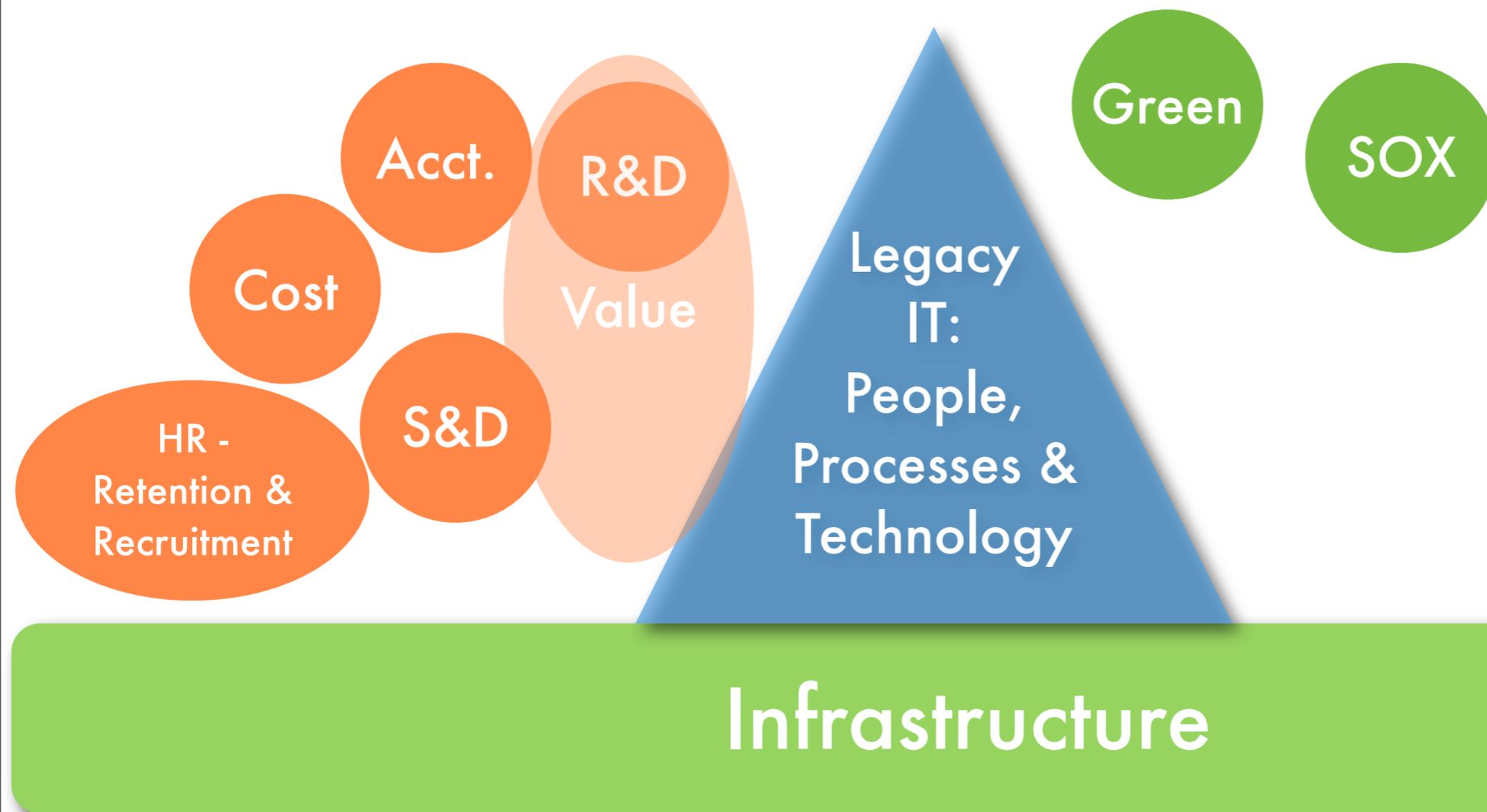
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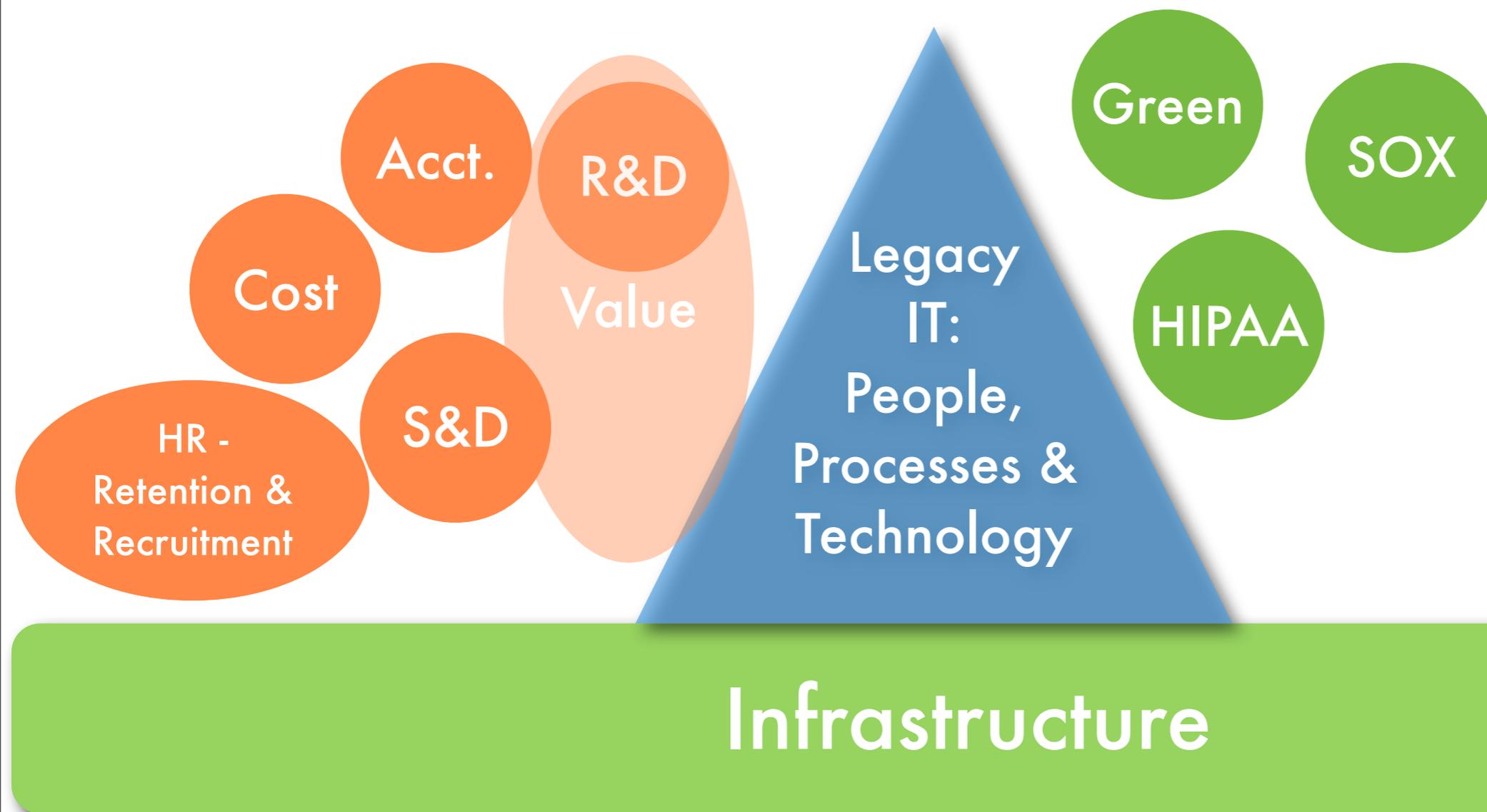
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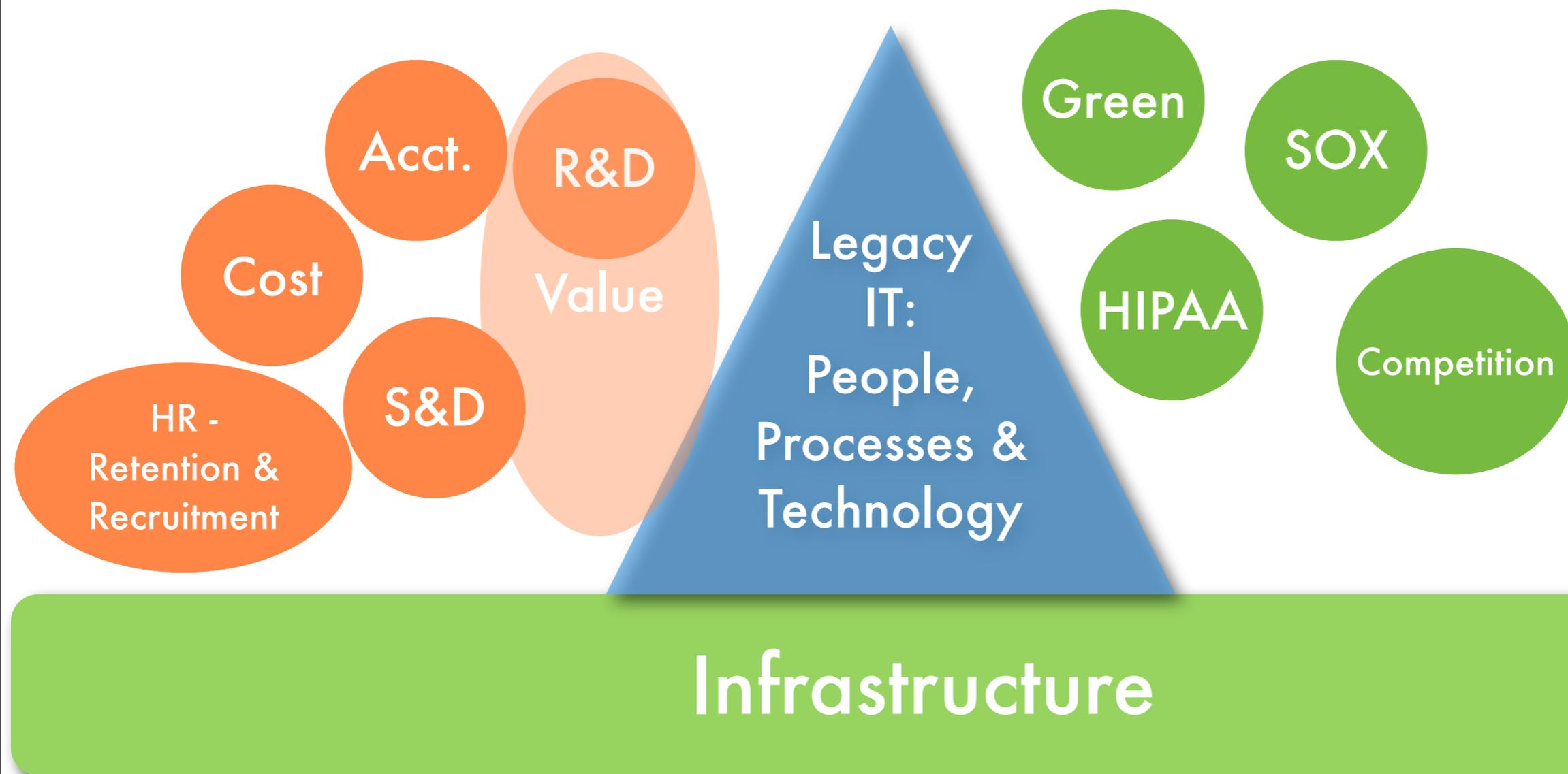
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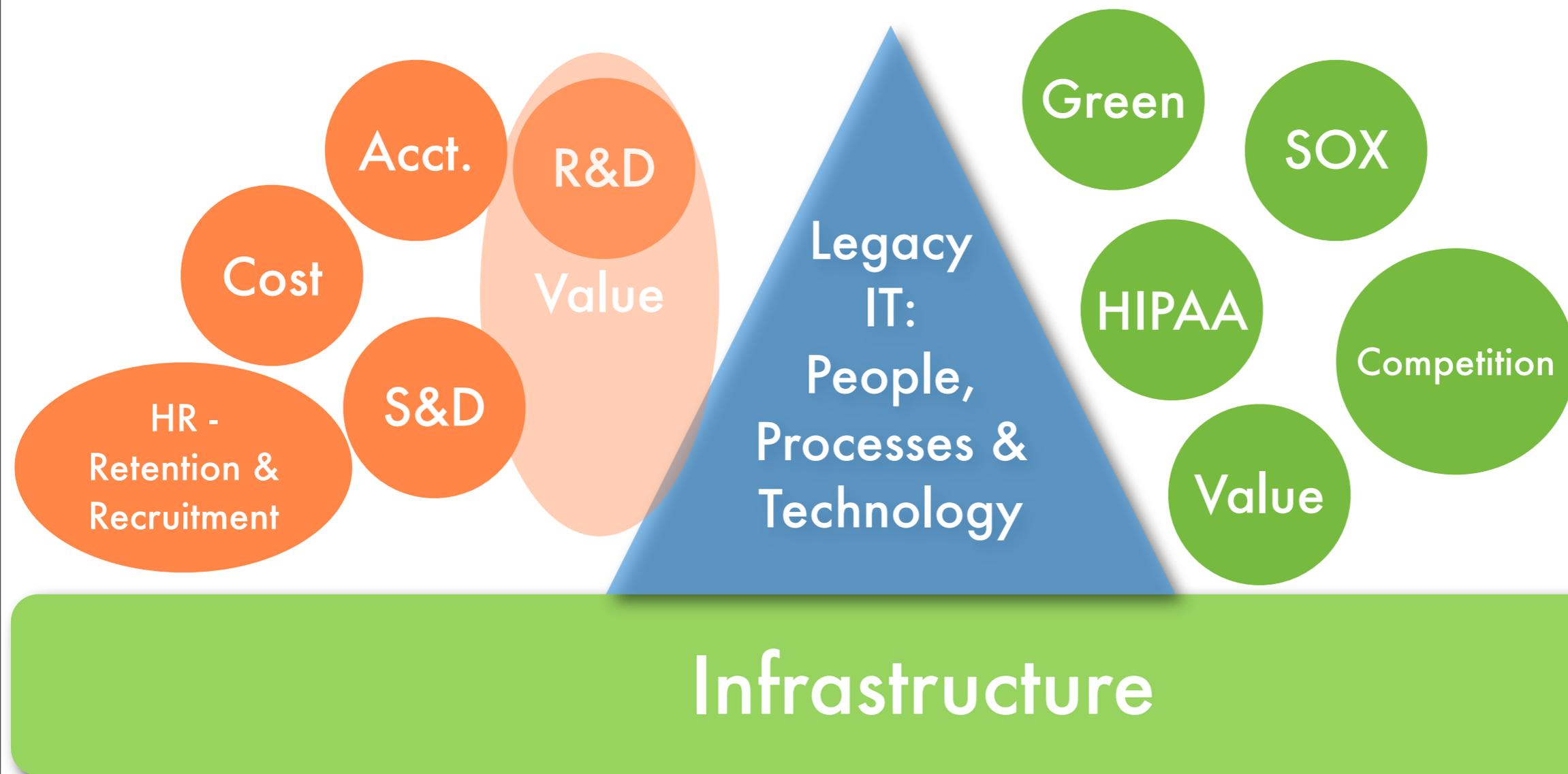
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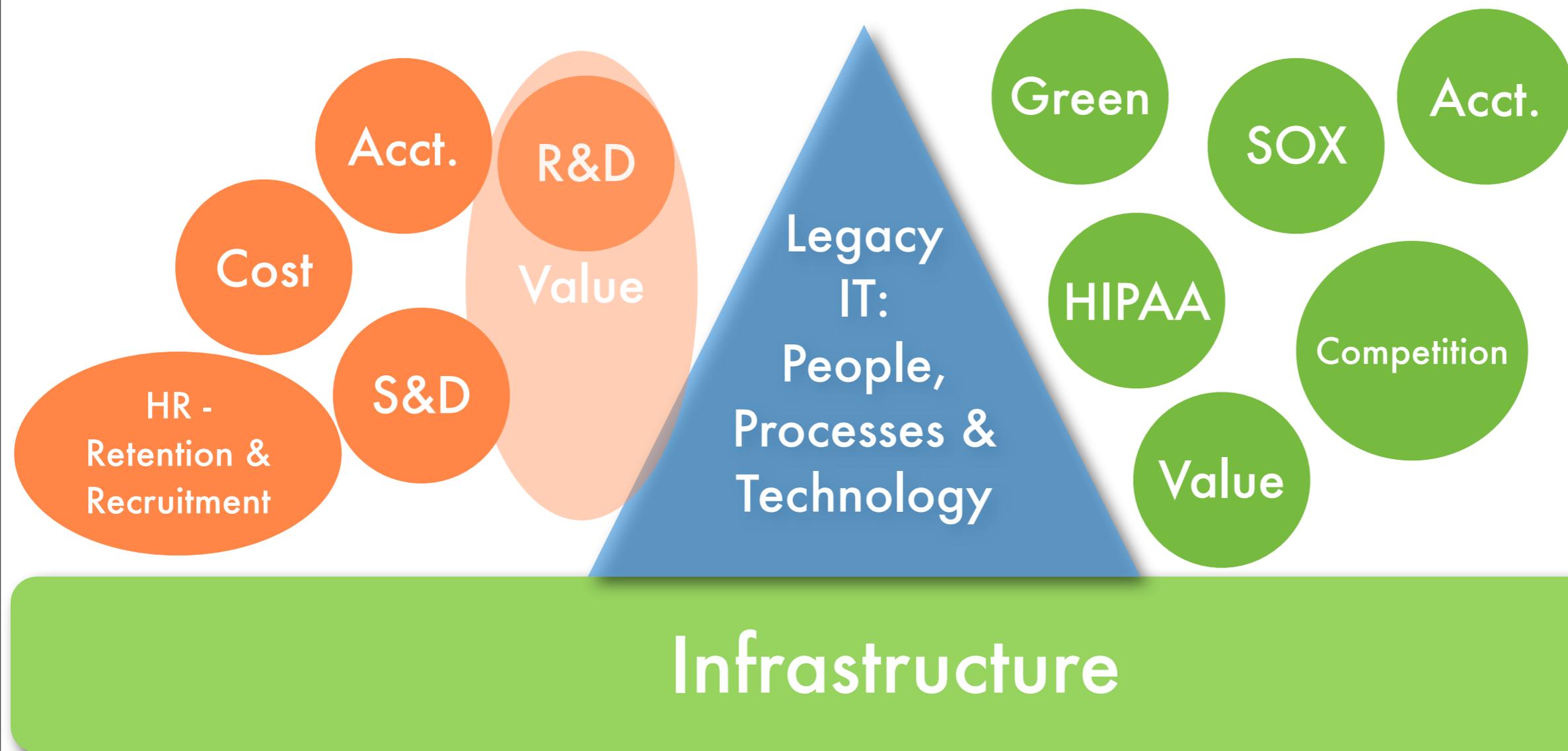
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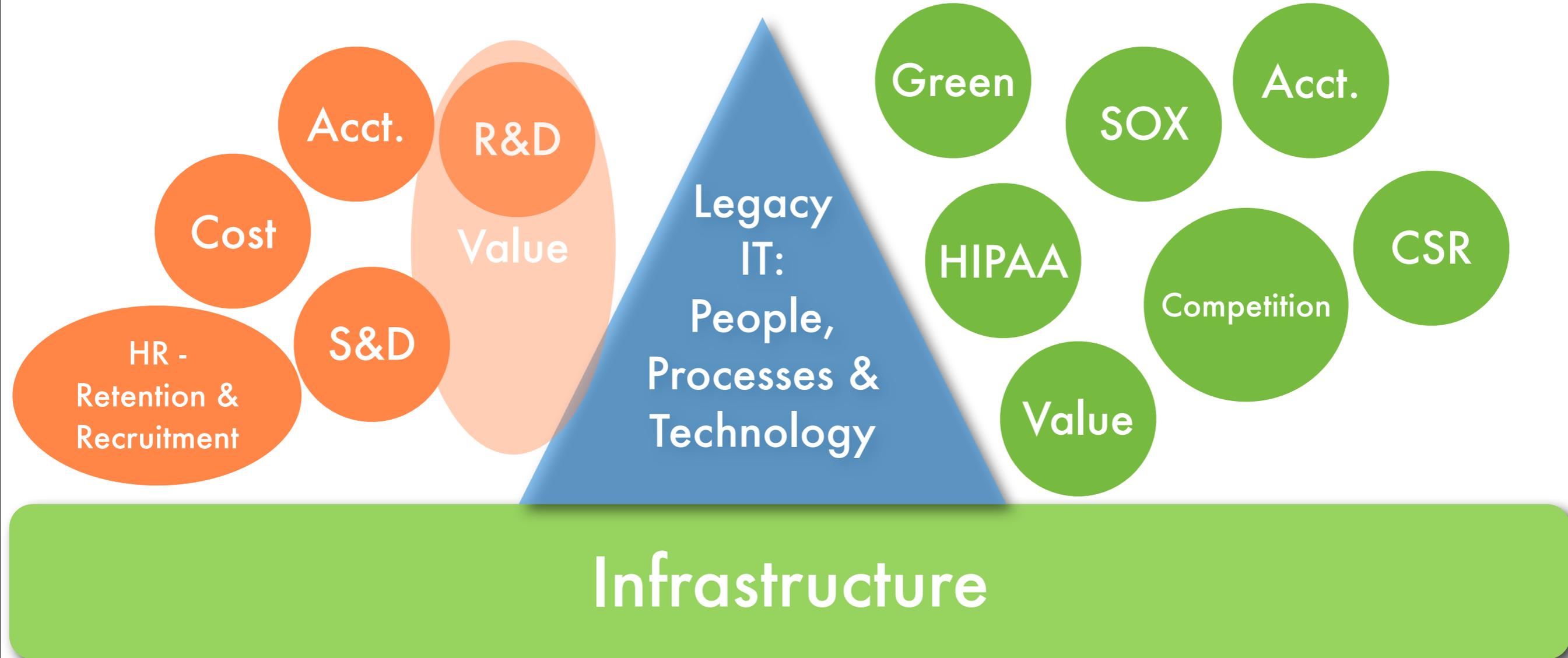
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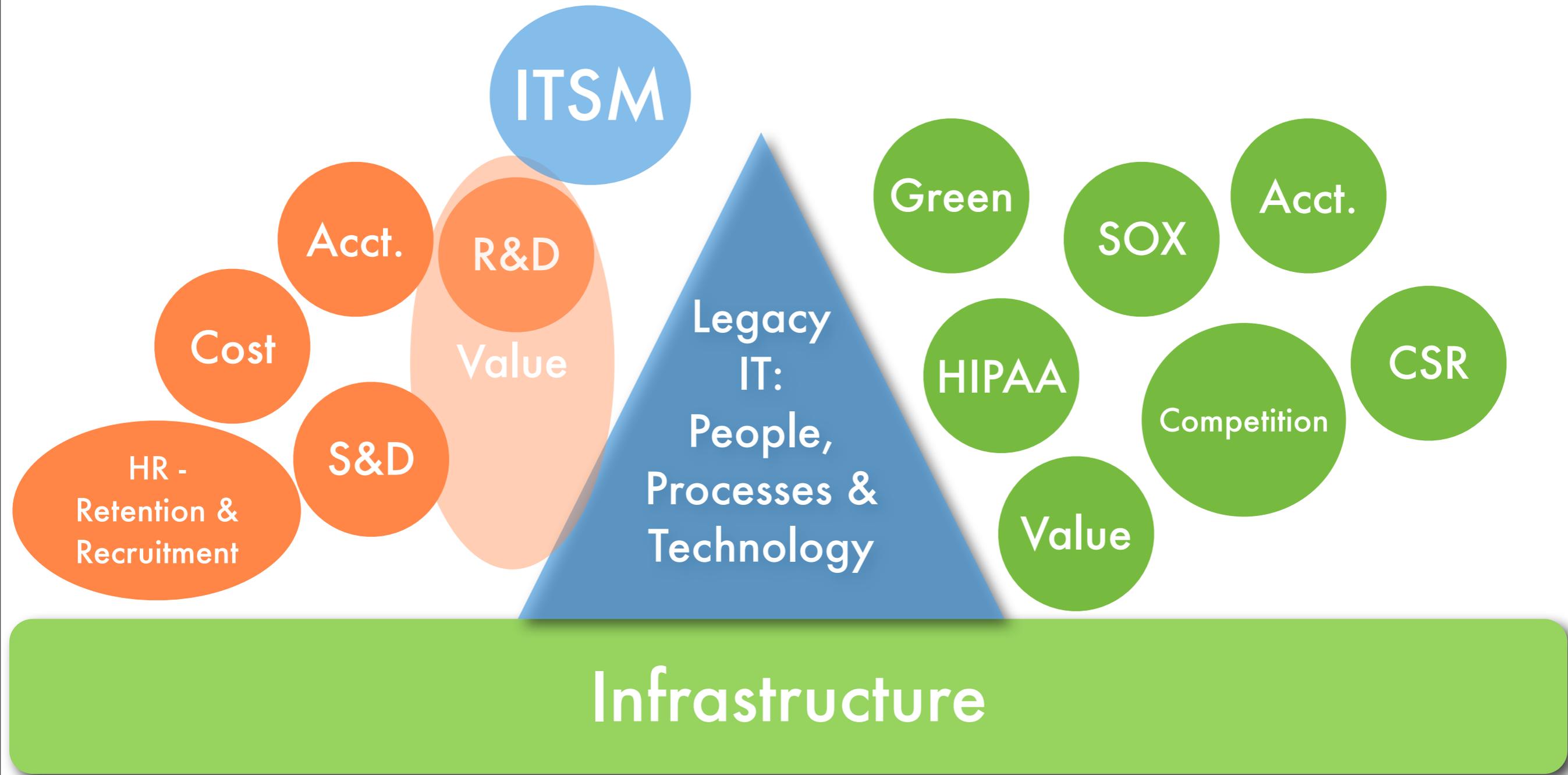
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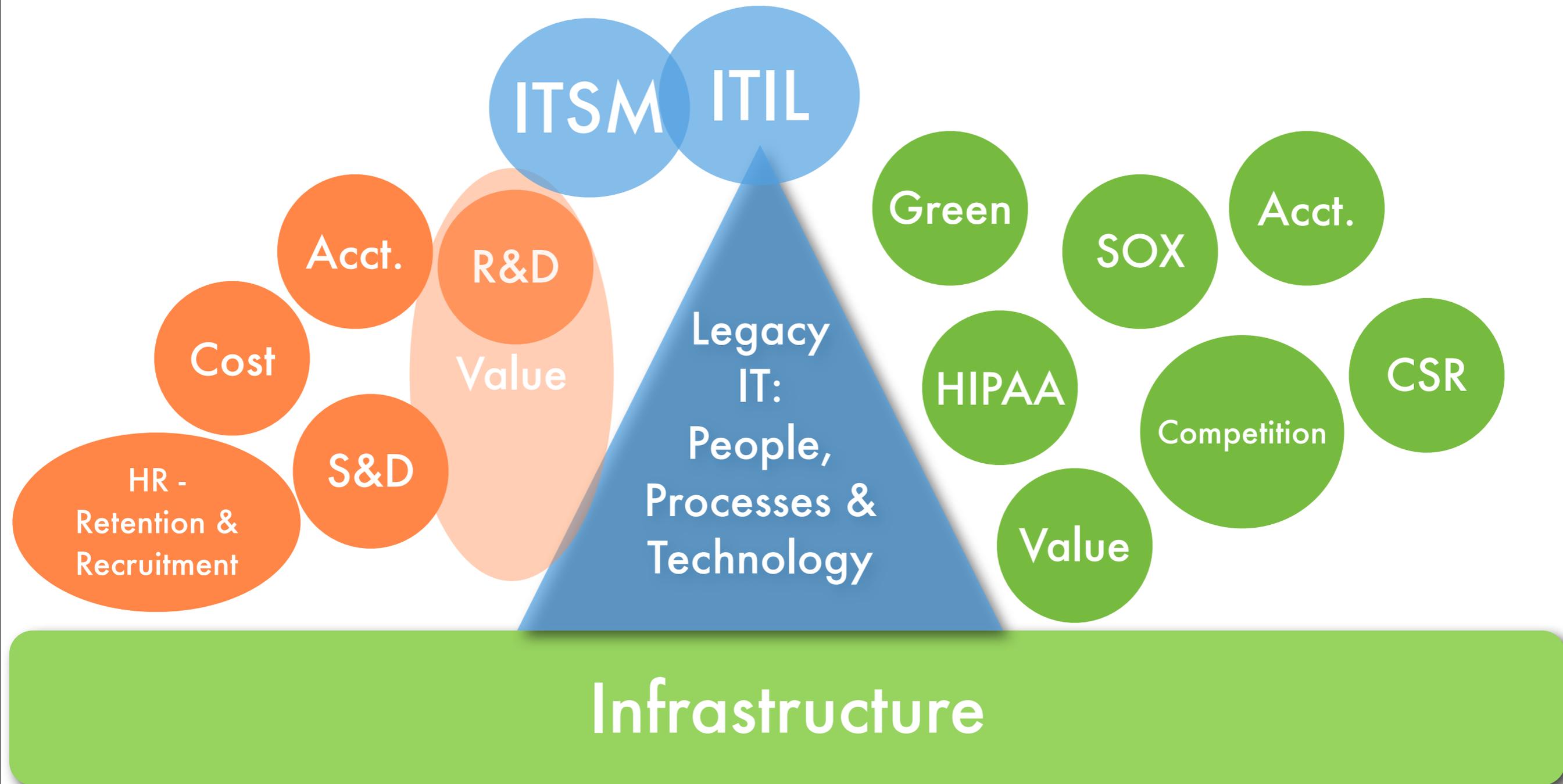
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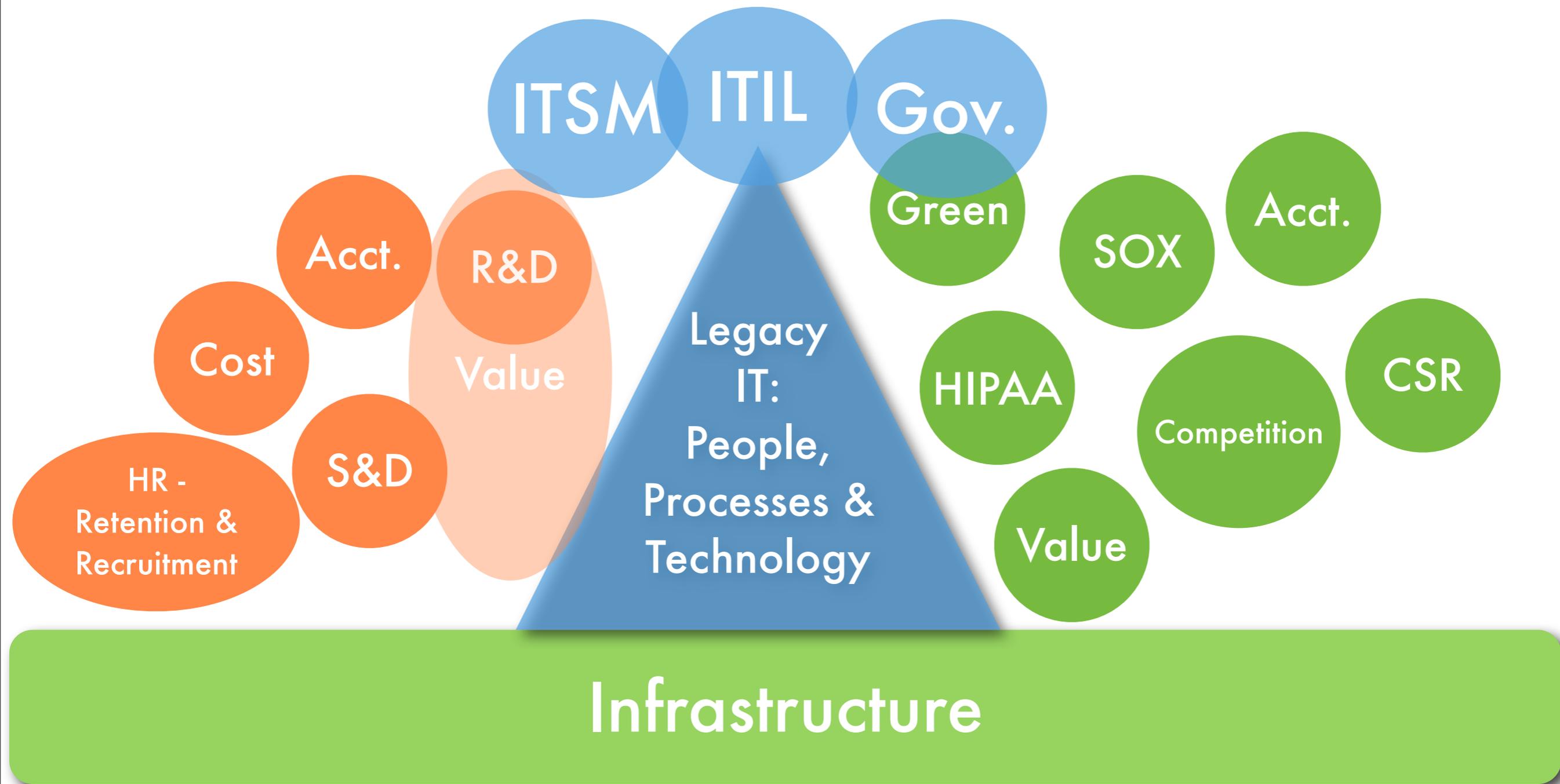
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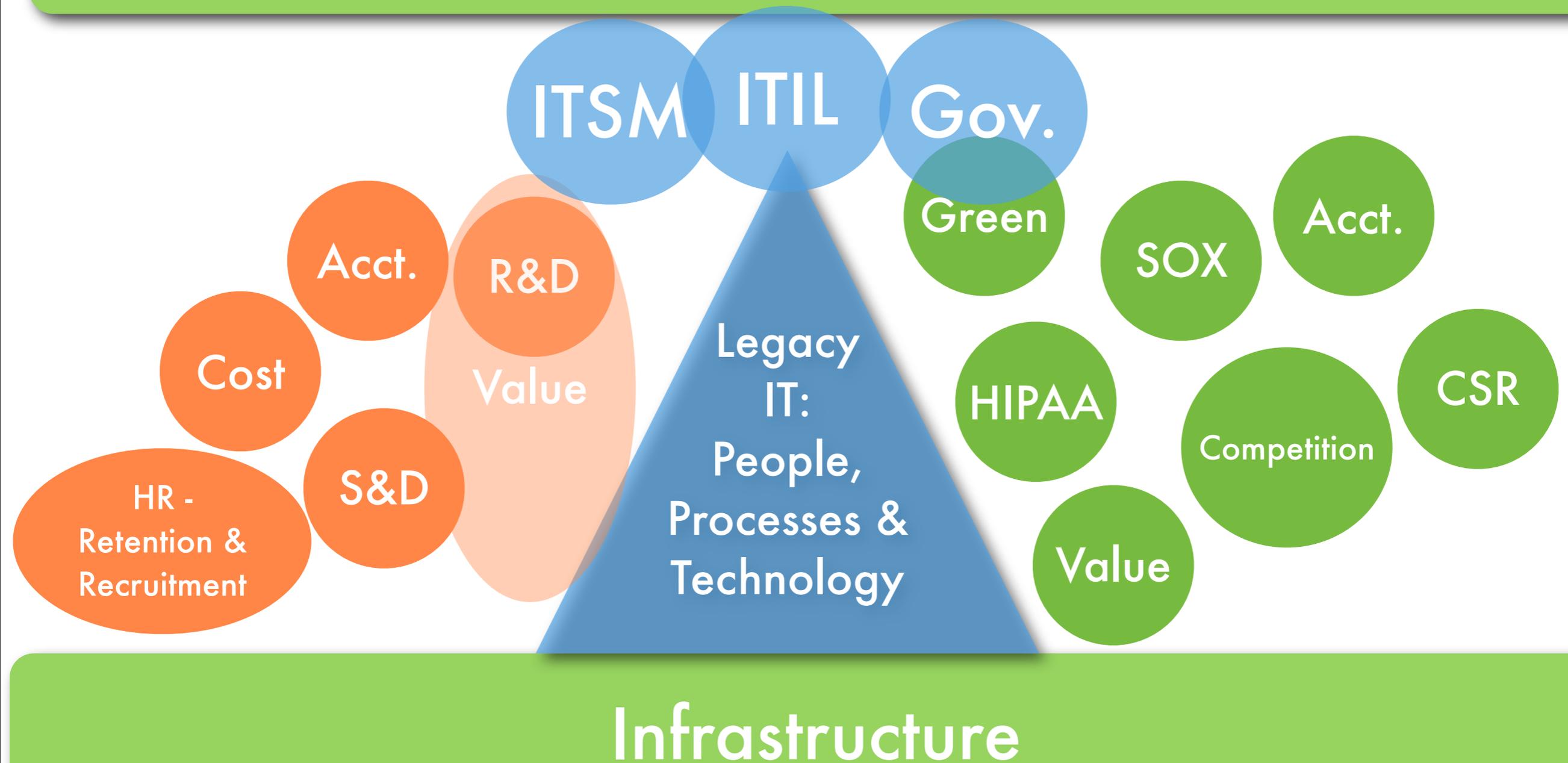


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“Do more and more with less”



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- Convergence still in its infancy
- Sourcing models get adaptive
- NTI (Near Time Infrastructure): Audits and Alerts
- Beginning of “Business Bulk” framework: SAN, WLAN, VPN, VMLM, Security, NearZero Clients

Security & Backup:
Data Center on ebay!?!?

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- VM torrents: Corporate data in the wild?
- Backup: Have restore drills in place?
- File Virtualization: Secure the unstructured IP!

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- Heterogeneous Mgmt Tools: openQRM, MS SC(VMM), VMware VC4, Oracle EM (VM), Sun's Ops Center etc
- Mixed Source: Both open and closed within enterprise

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- Globalization ready

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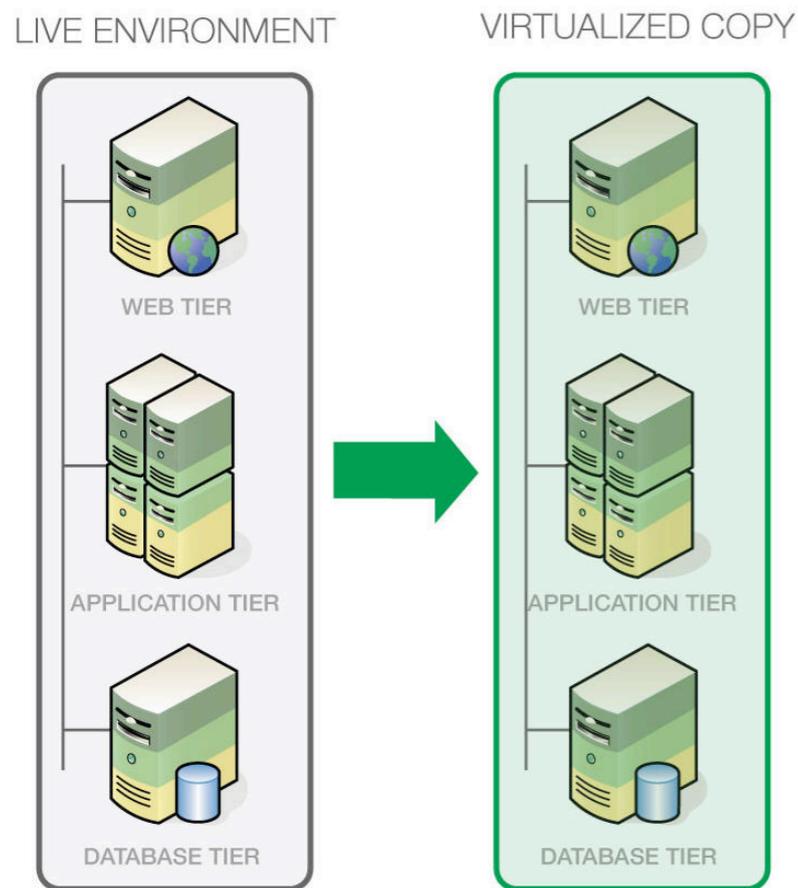
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- Virtualization scene gets less hazier
- Security, Backup, DRP, ILM, CMDDB, ITSM issues are addressable
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- Reactive mode but working hard!

Smarter Change Management

Source : StackSafe

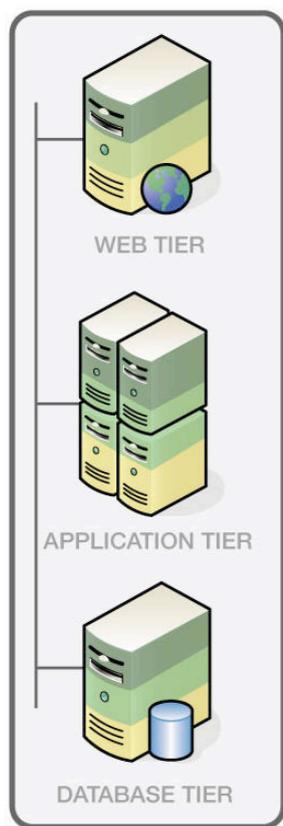
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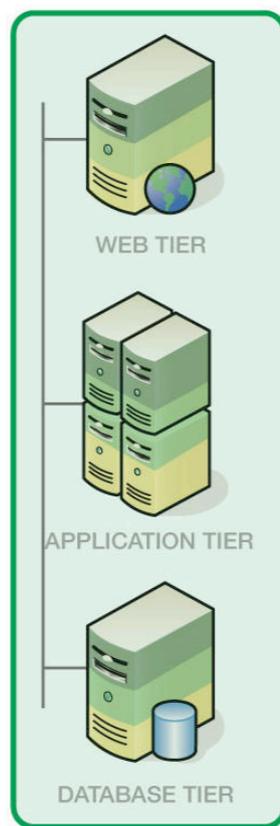
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Smarter Change Management

LIVE ENVIRONMENT



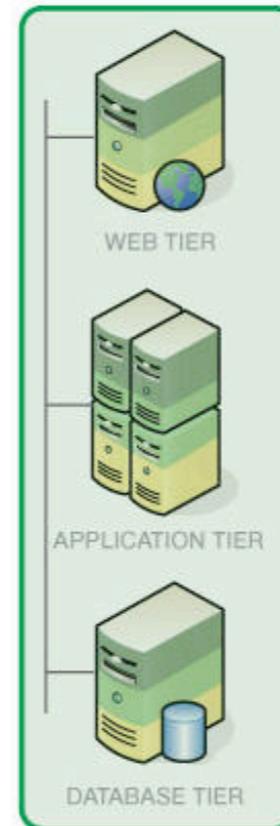
VIRTUALIZED COPY



Configuration Changes

Patches and Fixes

New Applications



CHANGE IMPACT

Test Category	Results
Readiness	Up and Running
Configuration	4 changes
Functionality	Passed
Security	3 new open ports

Source : StackSafe

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- Use Web 2.0, Direct2Employee (Intrapreneurship), Direct2Customer(Extrapreneurship)

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- Hosting and SaaS: Google, Amazon, You???

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- Dearth of professionals: Special grooming at grad level required
- HR Dilemma: Retention the biggest challenges, hoards of “A” players in one room

CxO: Cynefin dilemma



Source: Cognitive-Egde & HBR Nov 2007

Virtualization 4.0:

Where do you wanna go?

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- Age of aspirational computing: Chip driven PC Virtualization, remote HPC

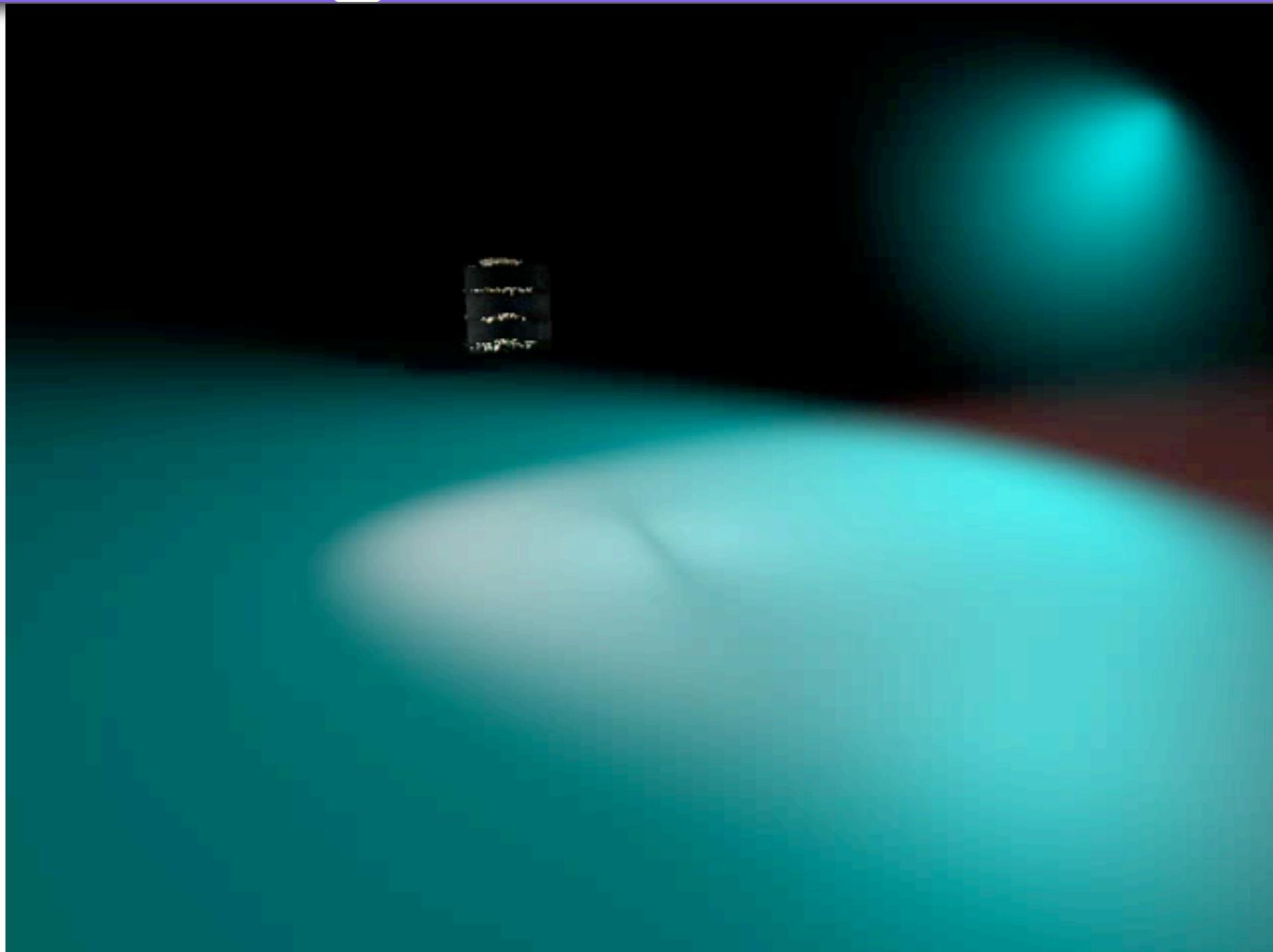
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- Age of aspirational computing: Chip driven PC Virtualization, remote HPC
- Smaller LOB (Line Of Business) Life Cycles, In-the-clouds, Adaptive BAT frameworks
- Virtualization Mobility: Deskless worknets (2nd or Multiple Lives), Hubnets

CxOs: See-through, Do-right model!



VIMM: Demystified Dimensionality & Interactive Visualization



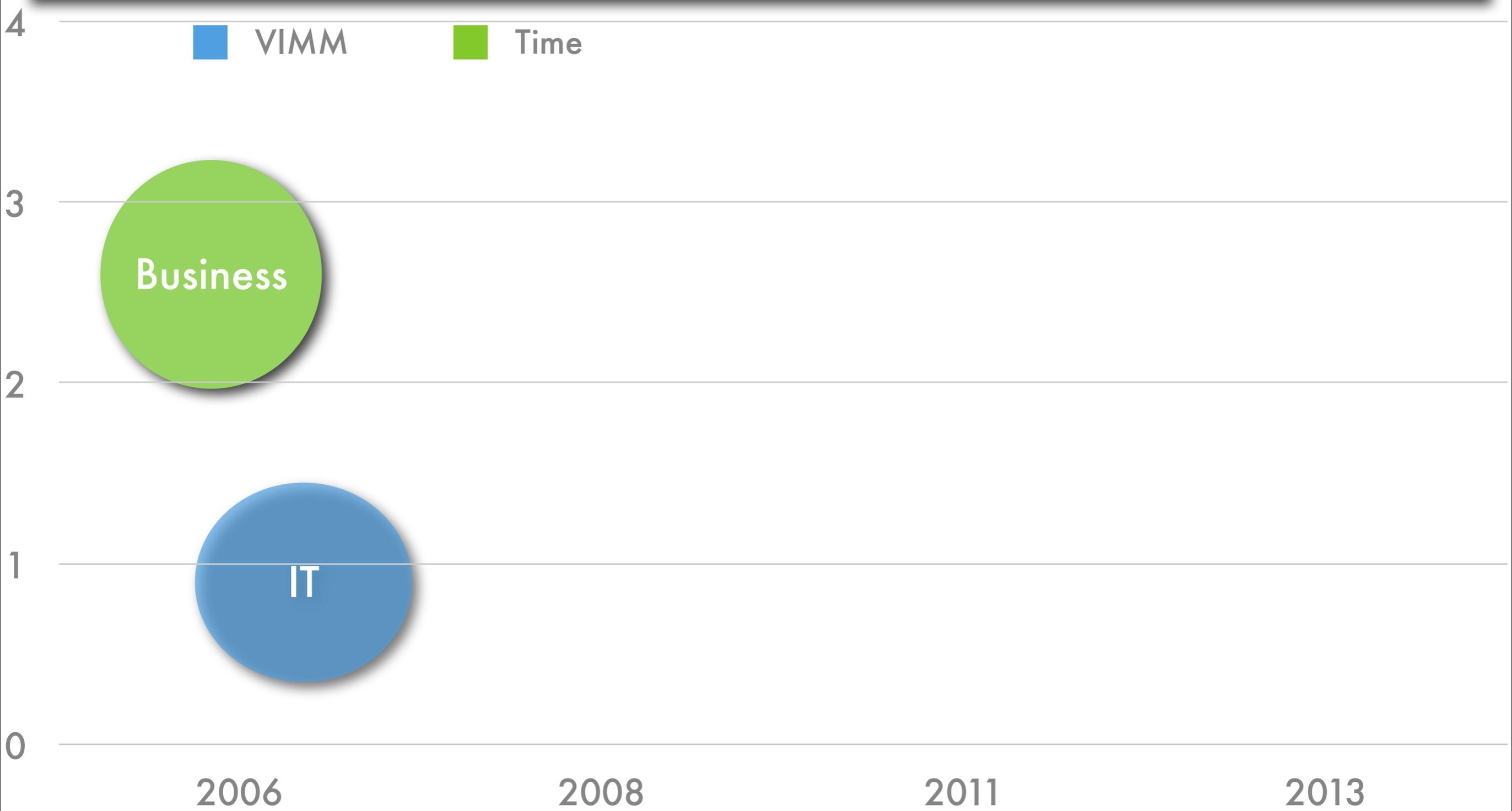
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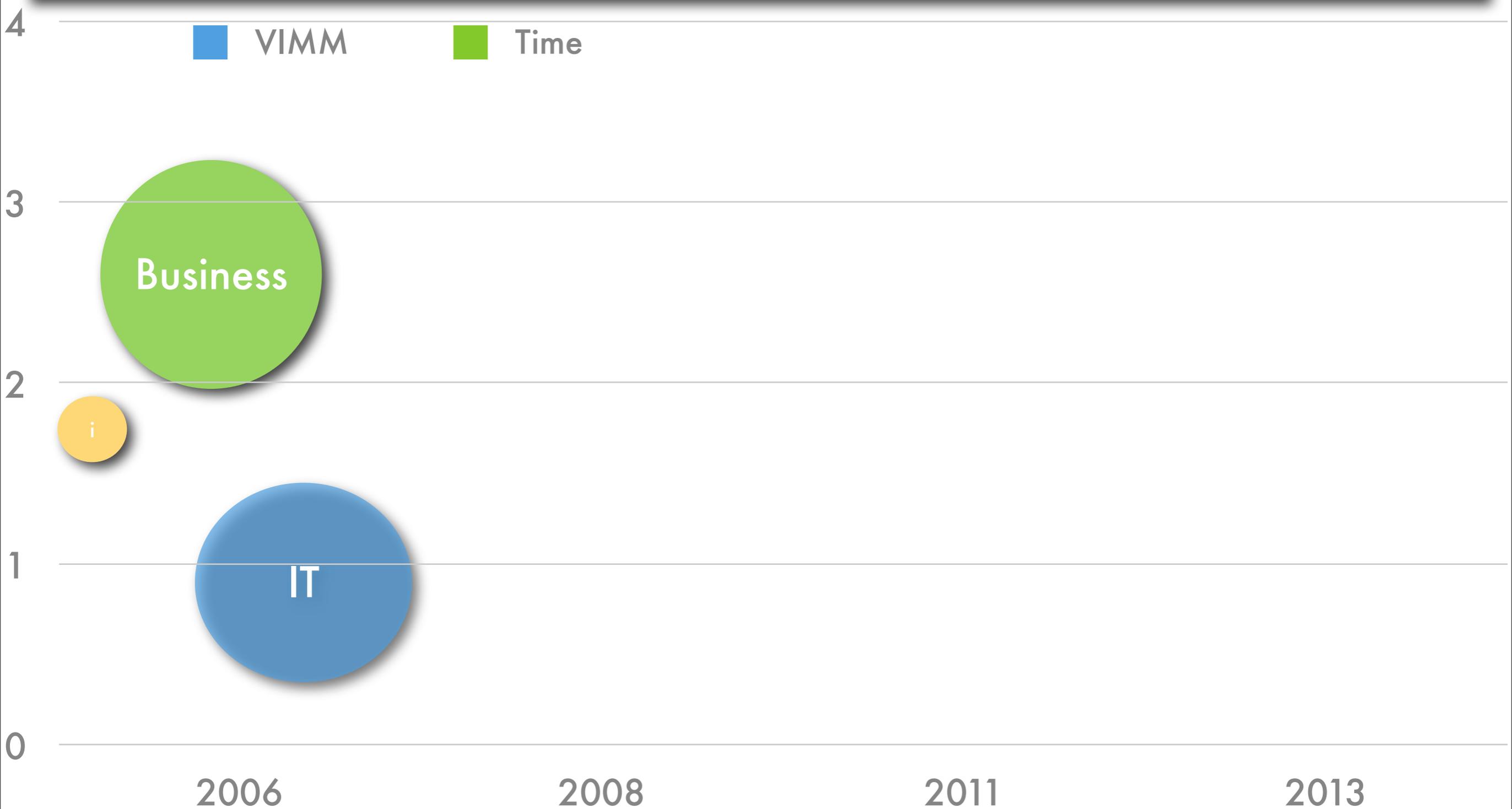
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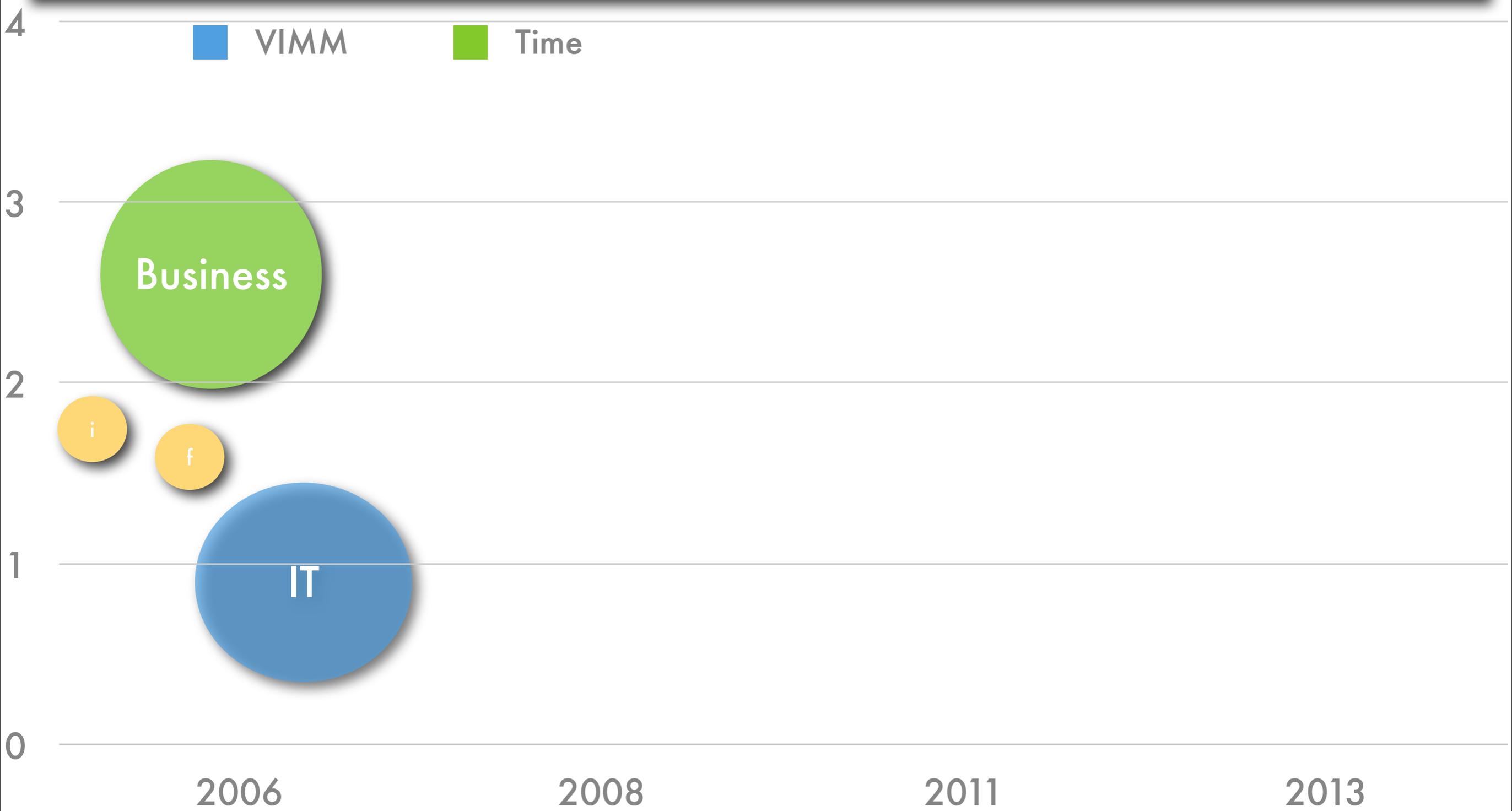
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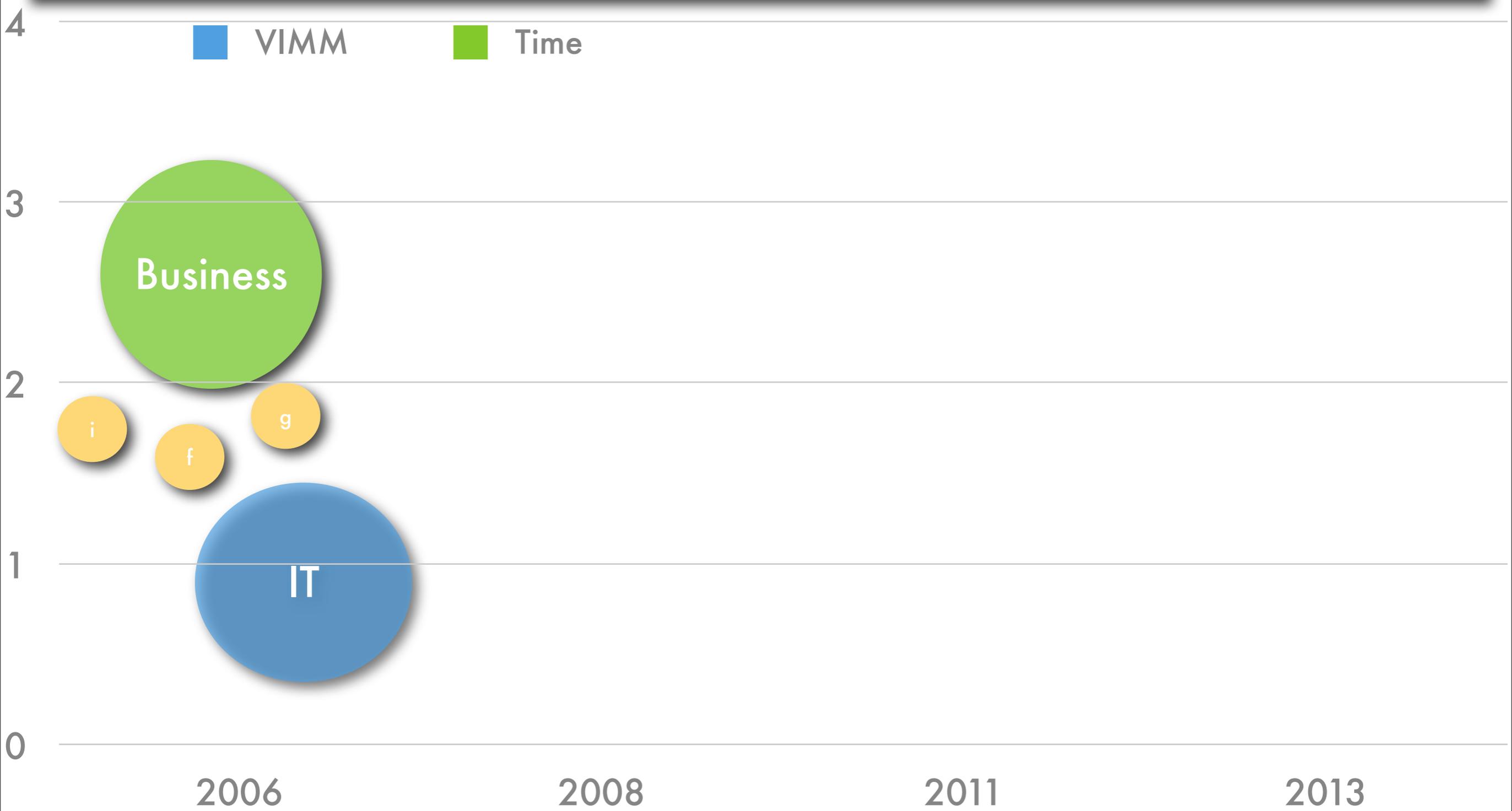
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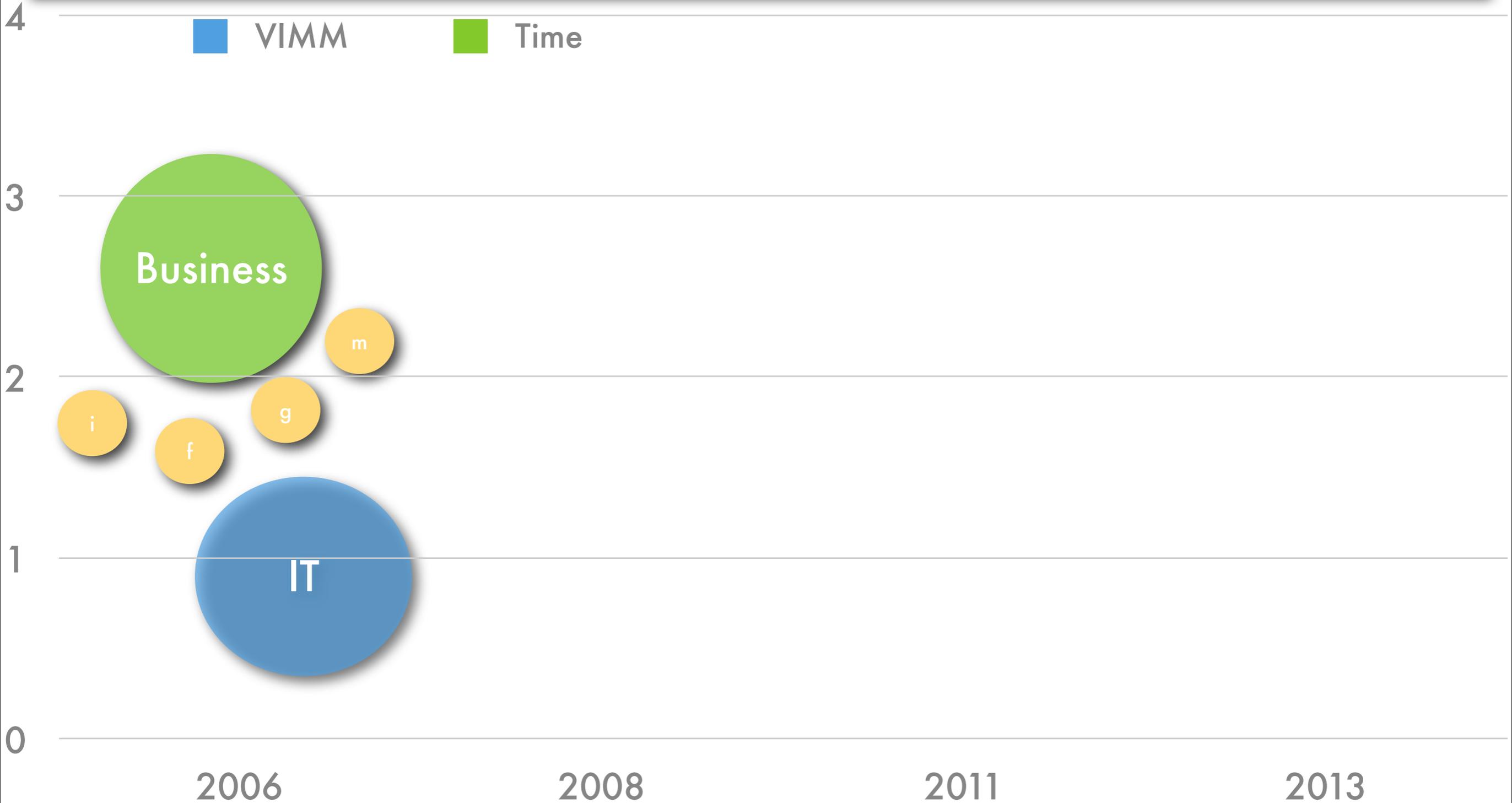
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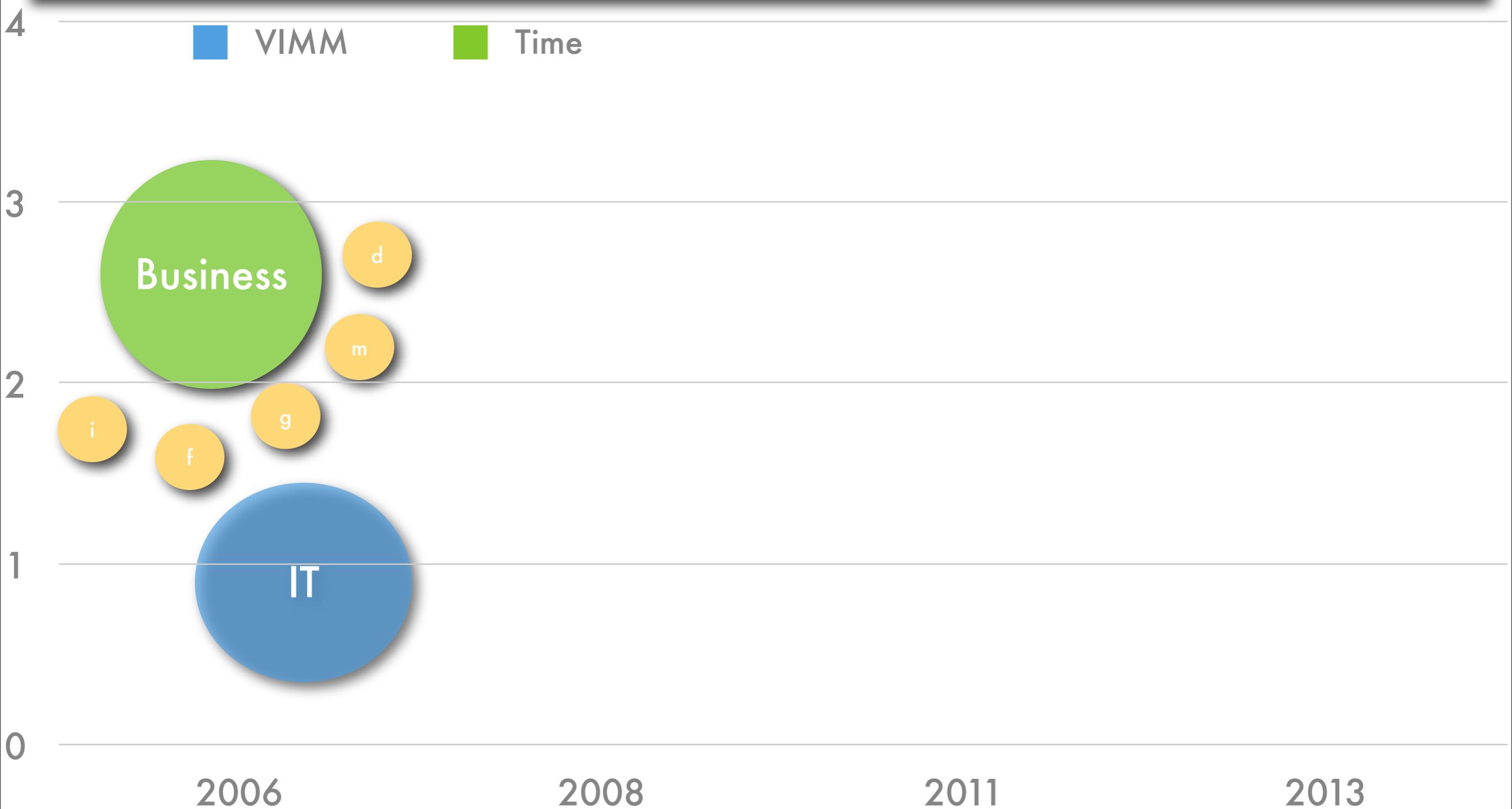
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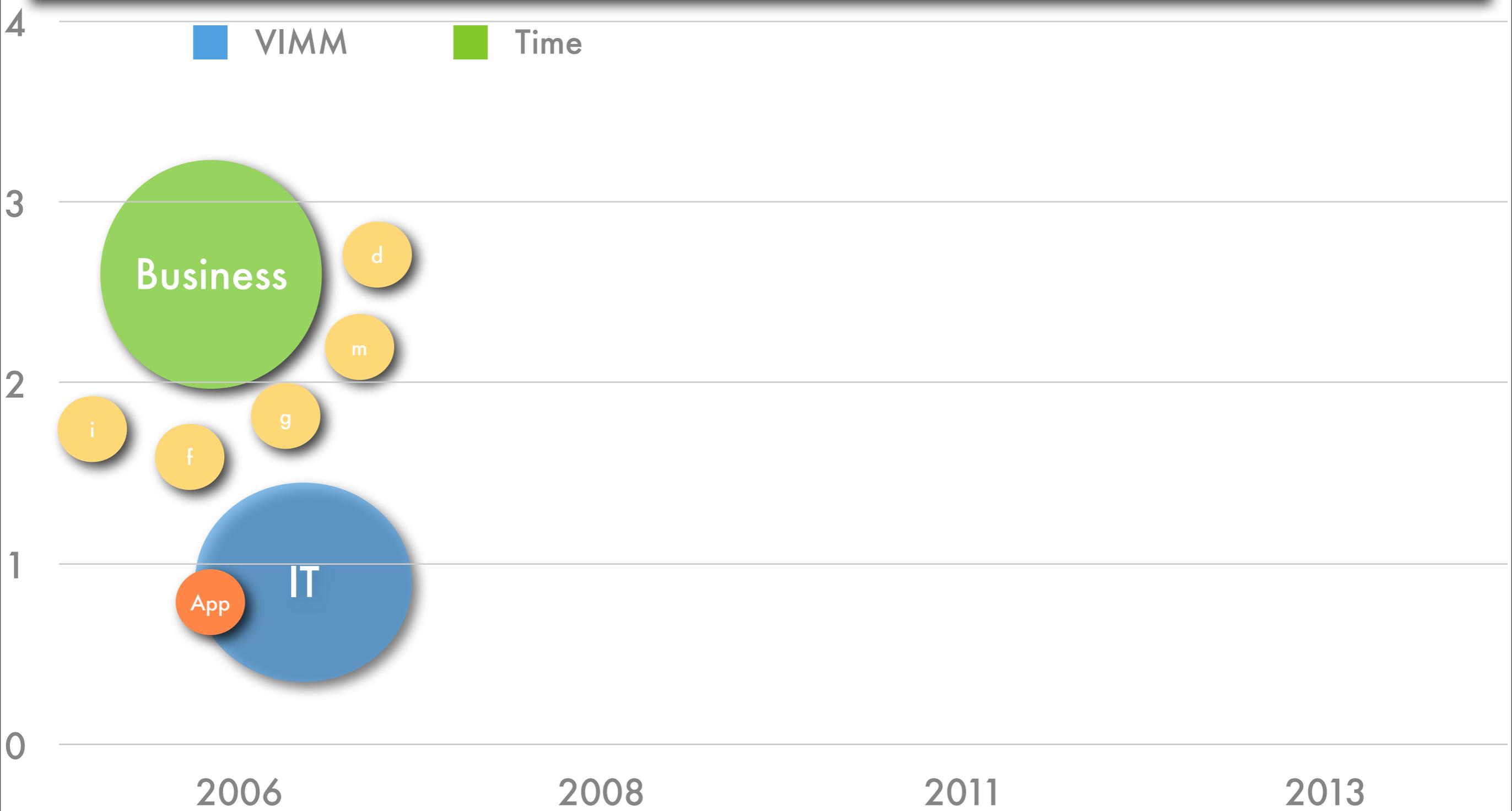
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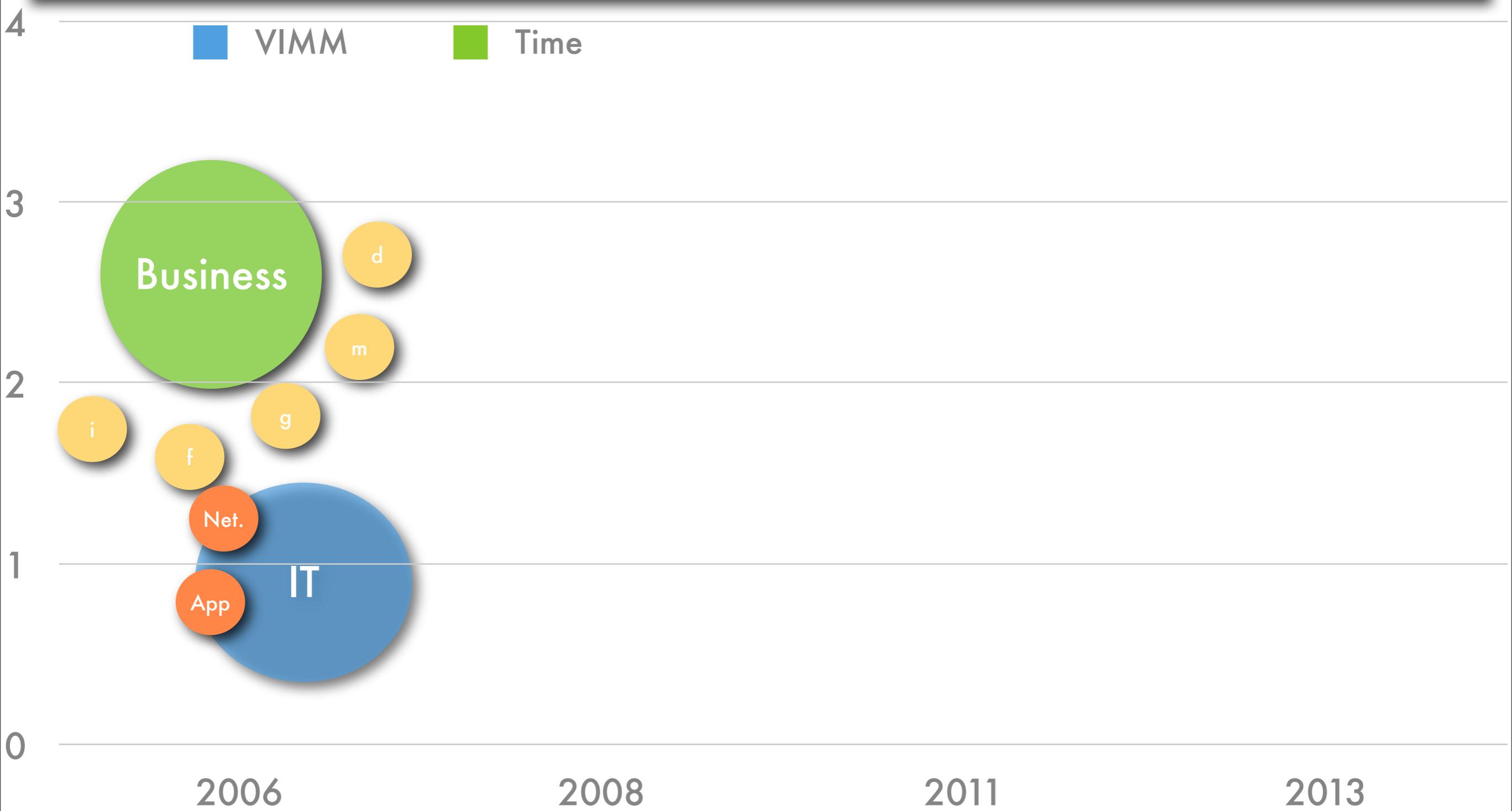
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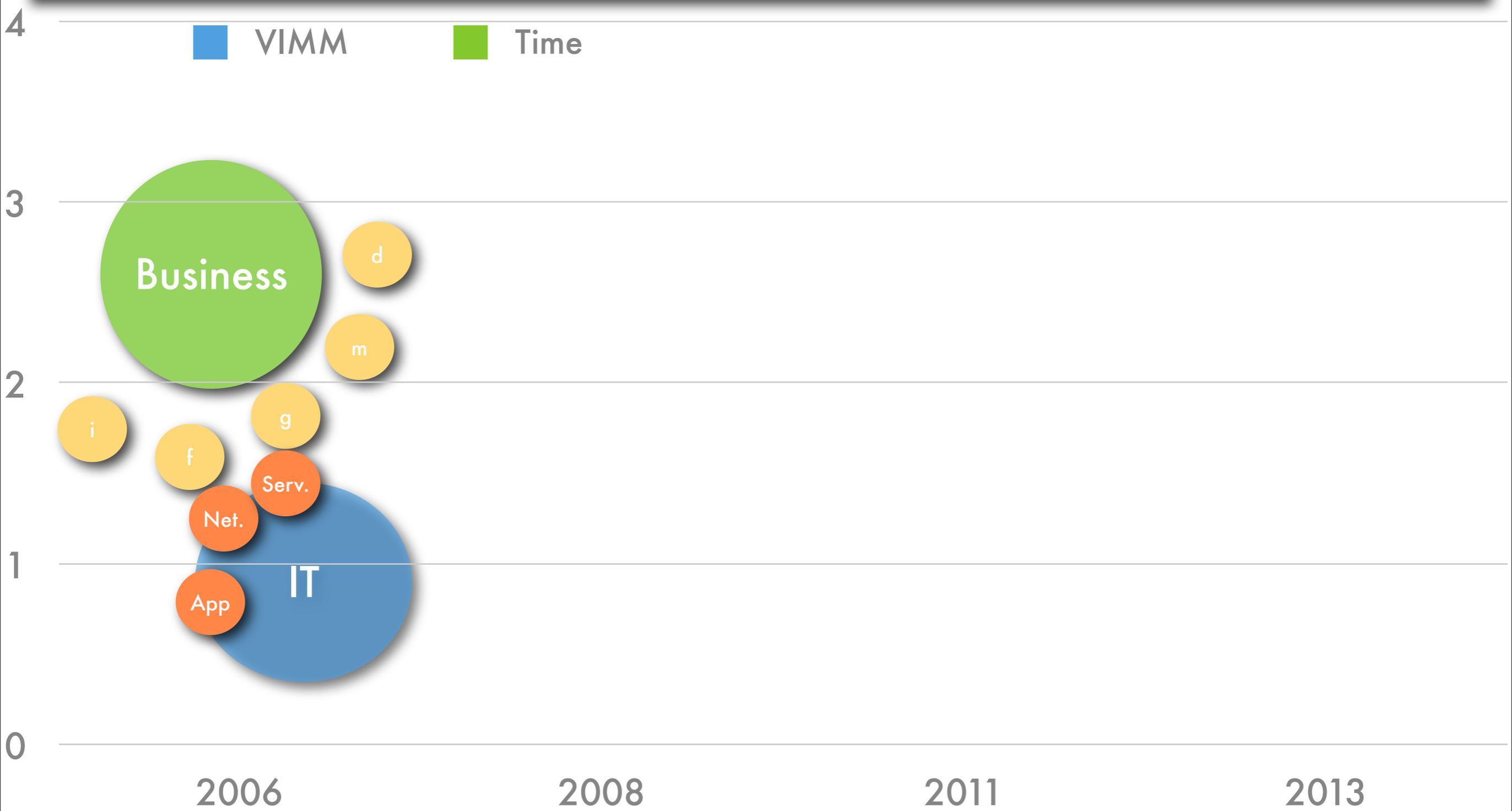
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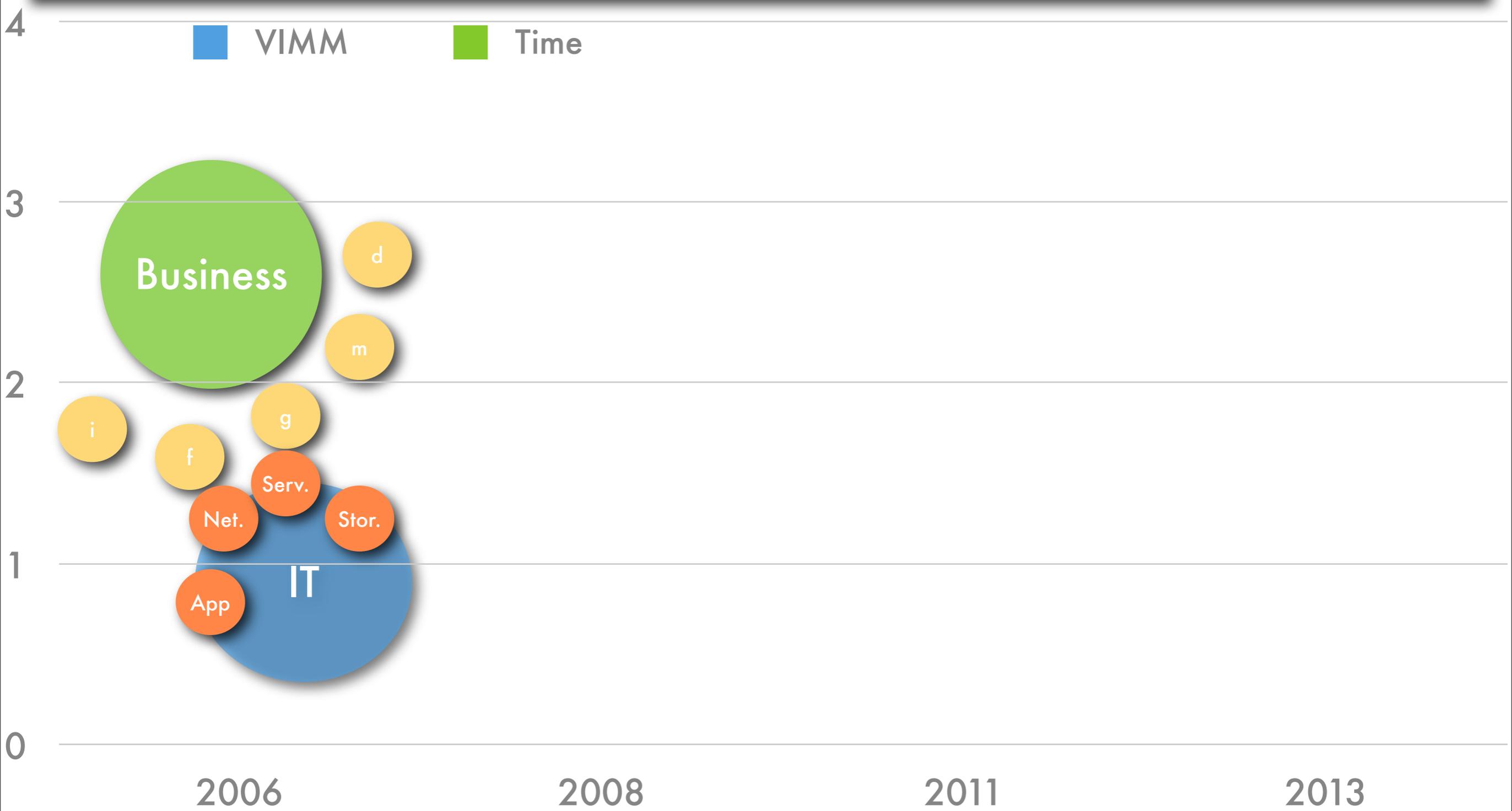
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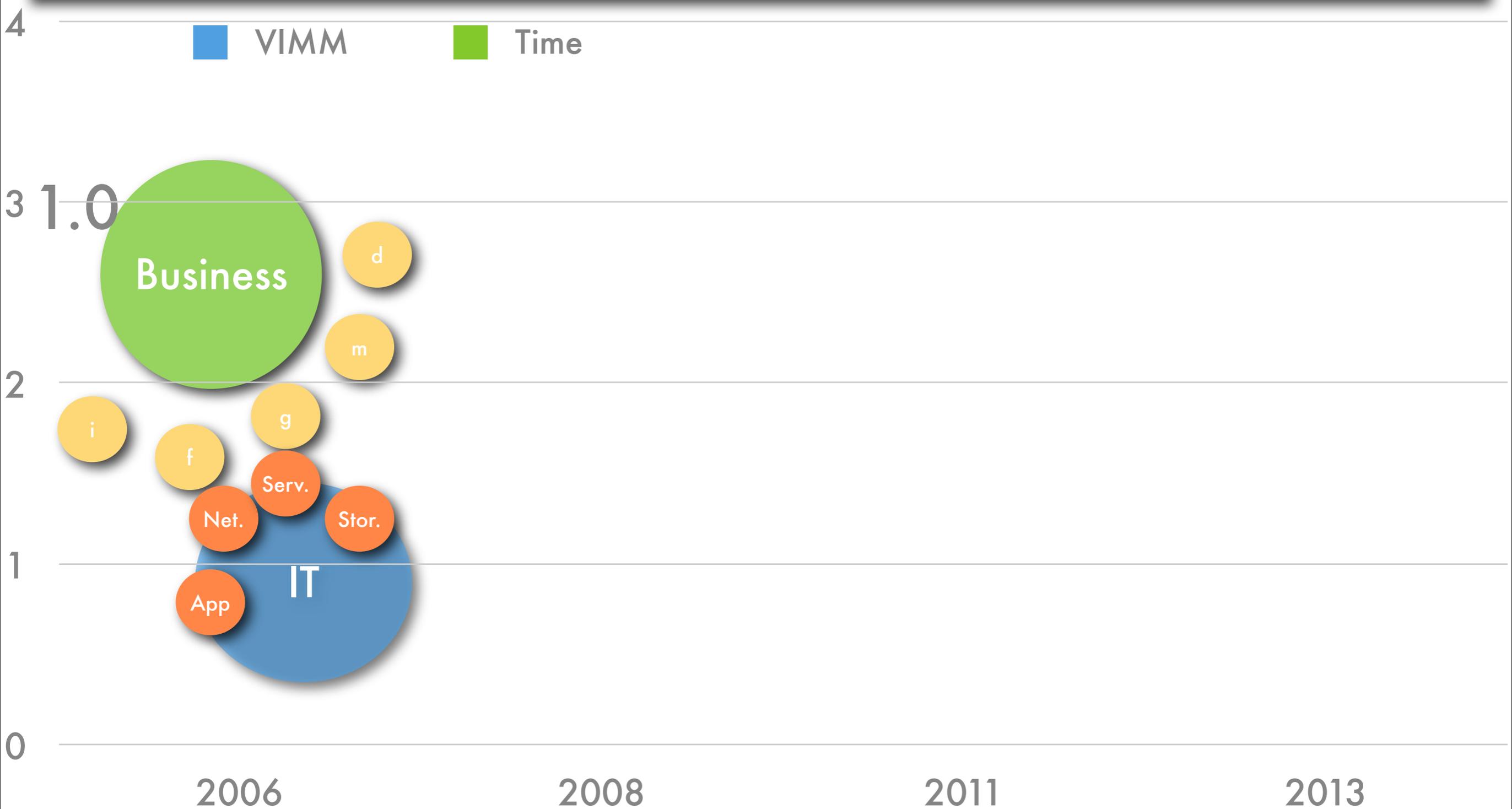
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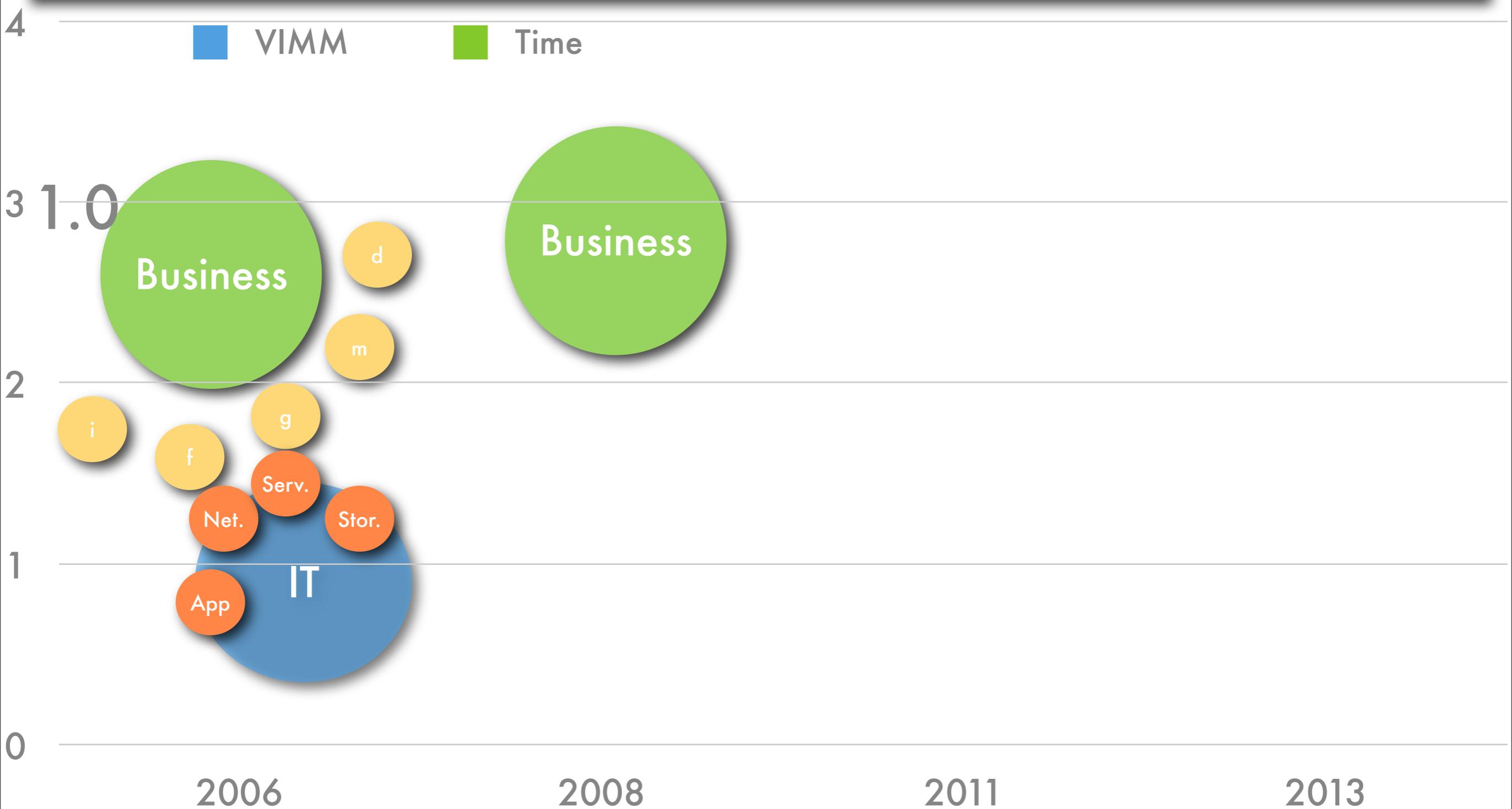
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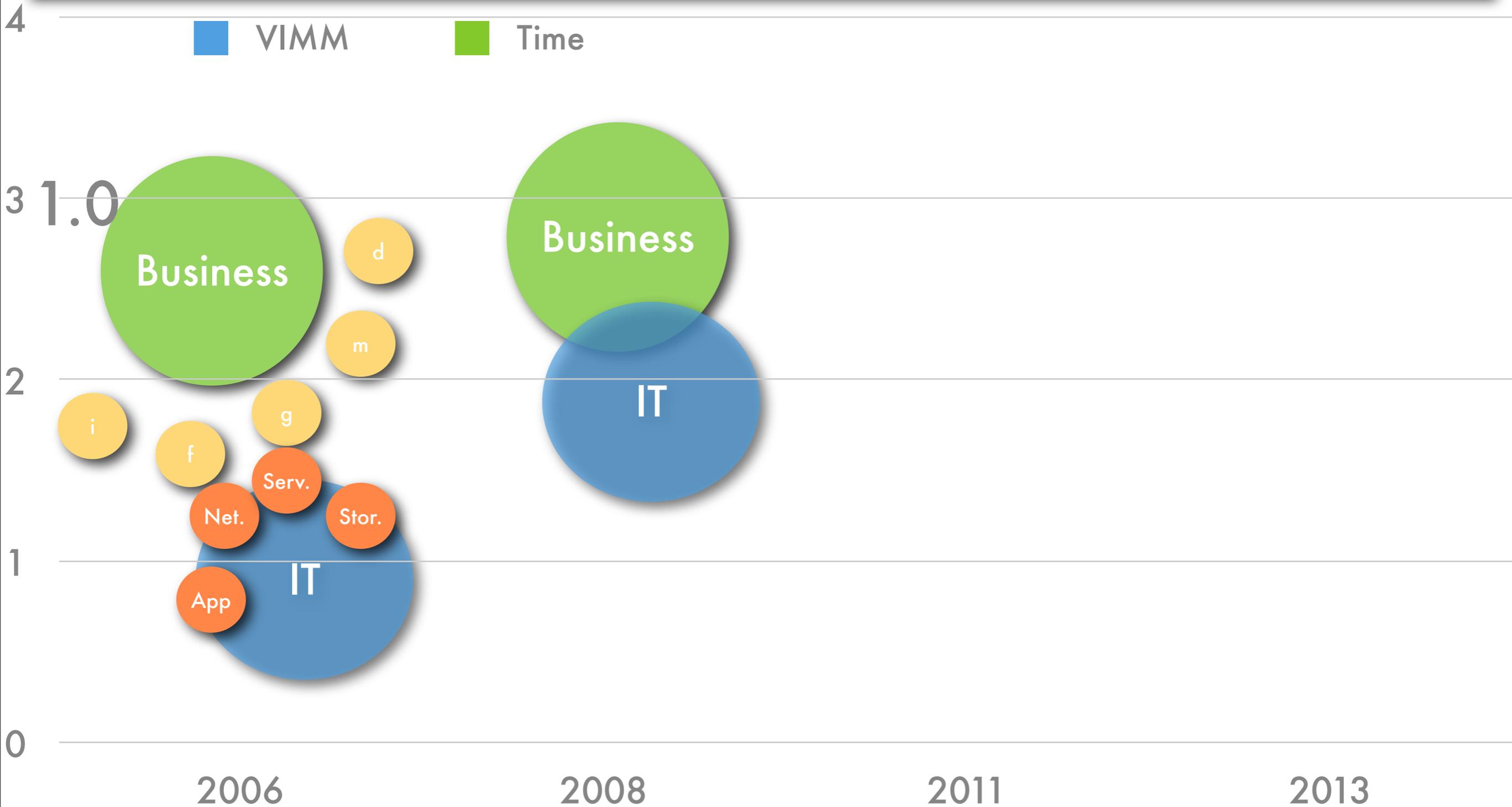
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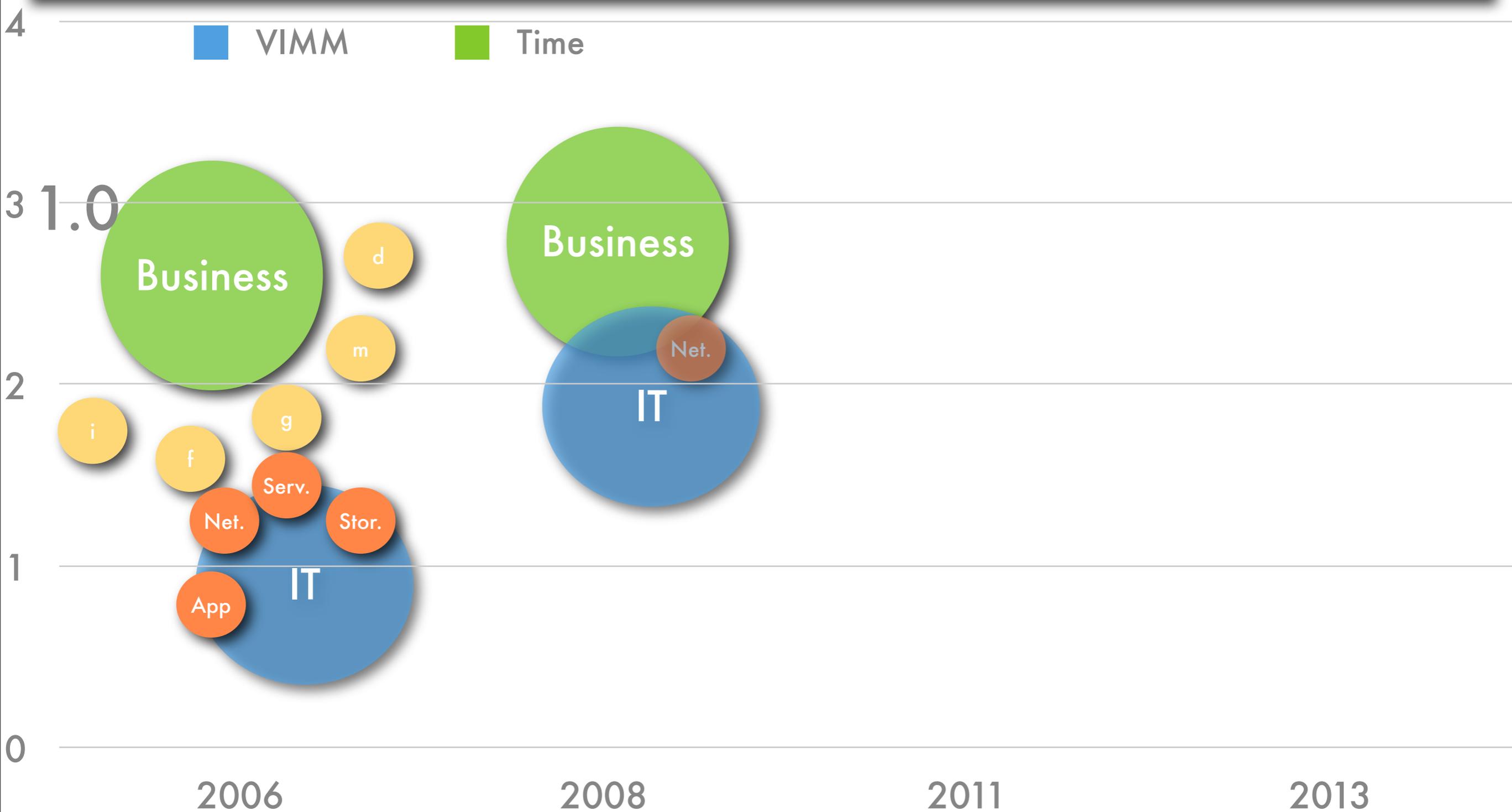
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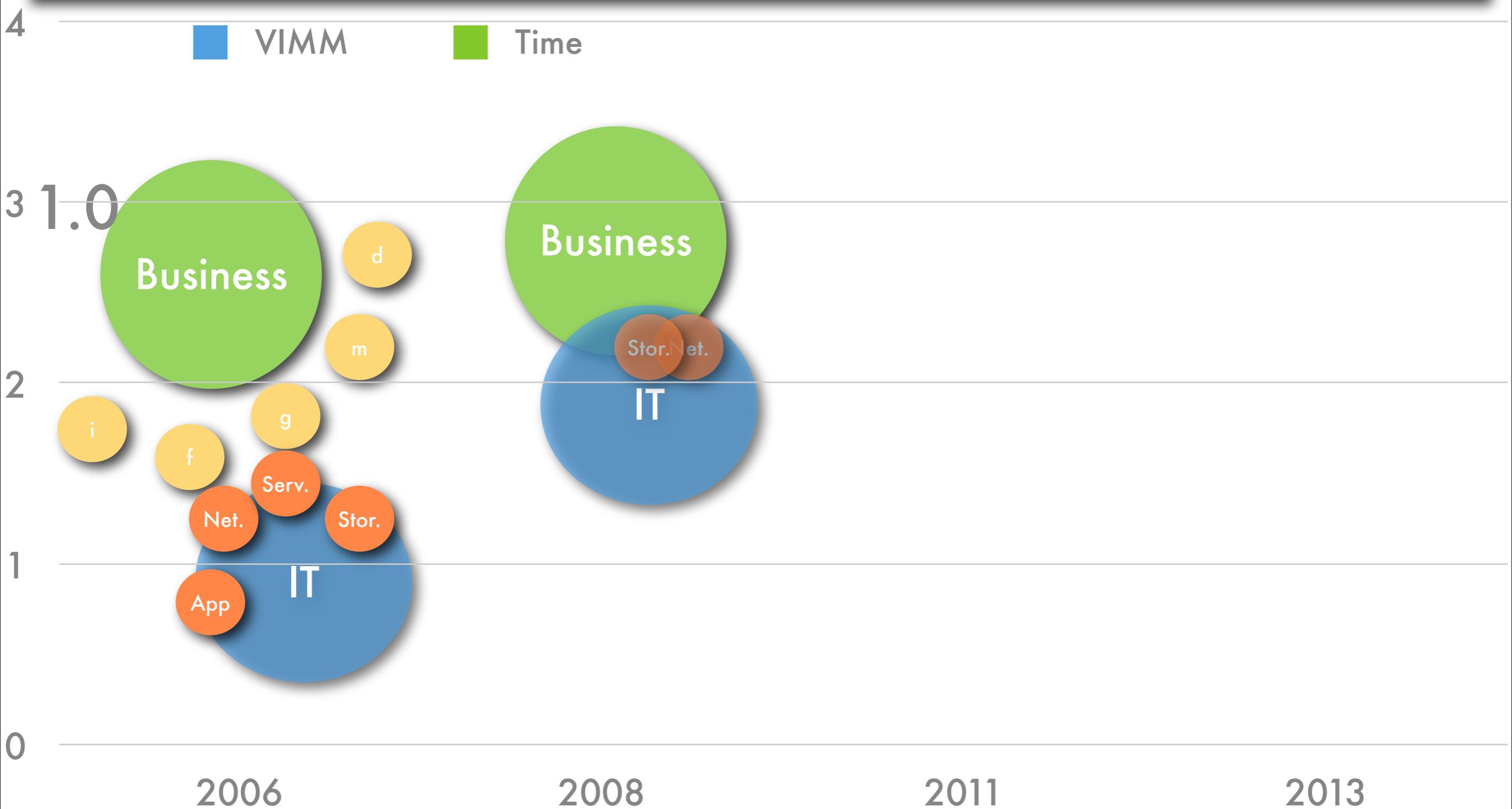
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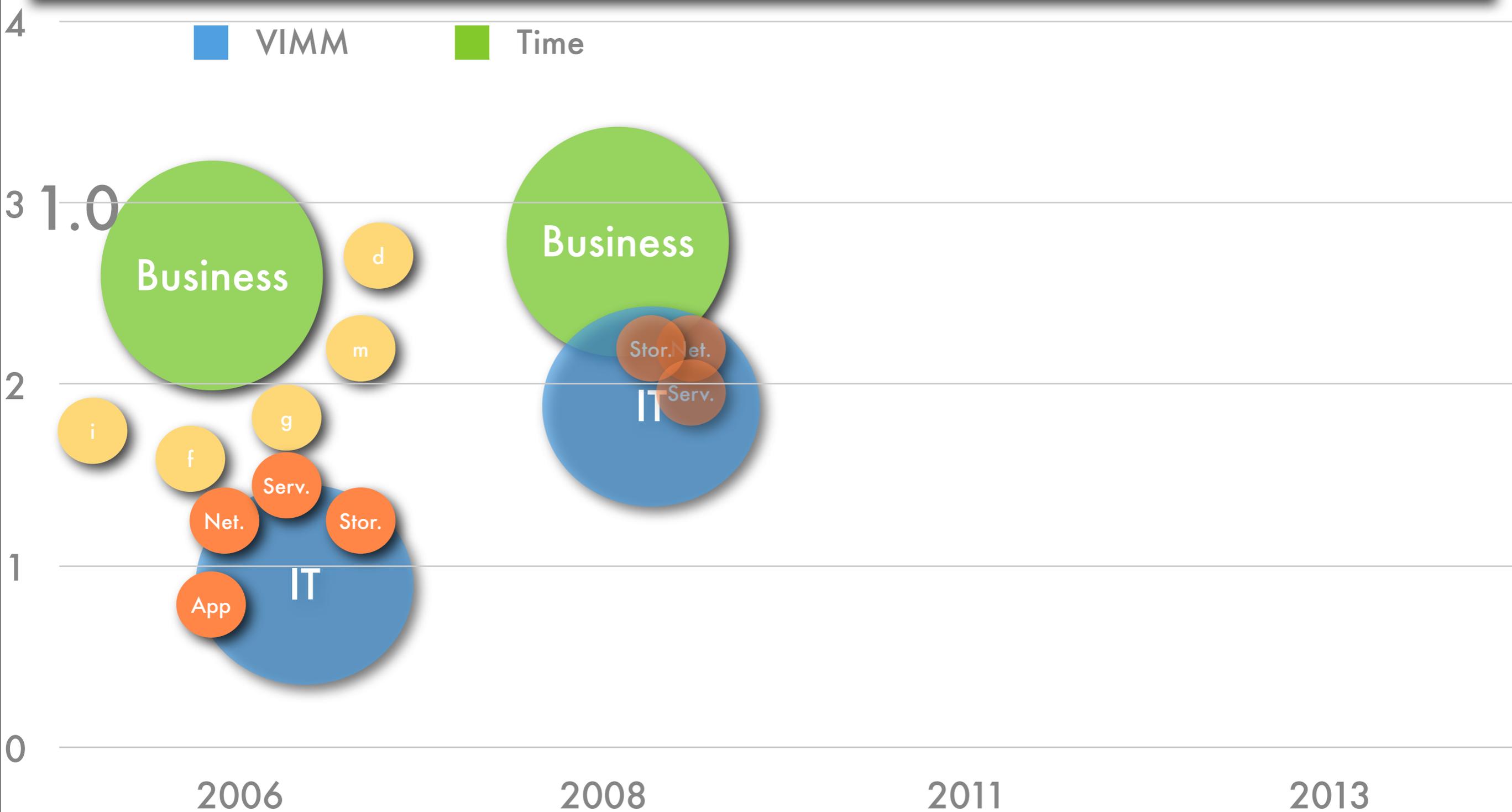
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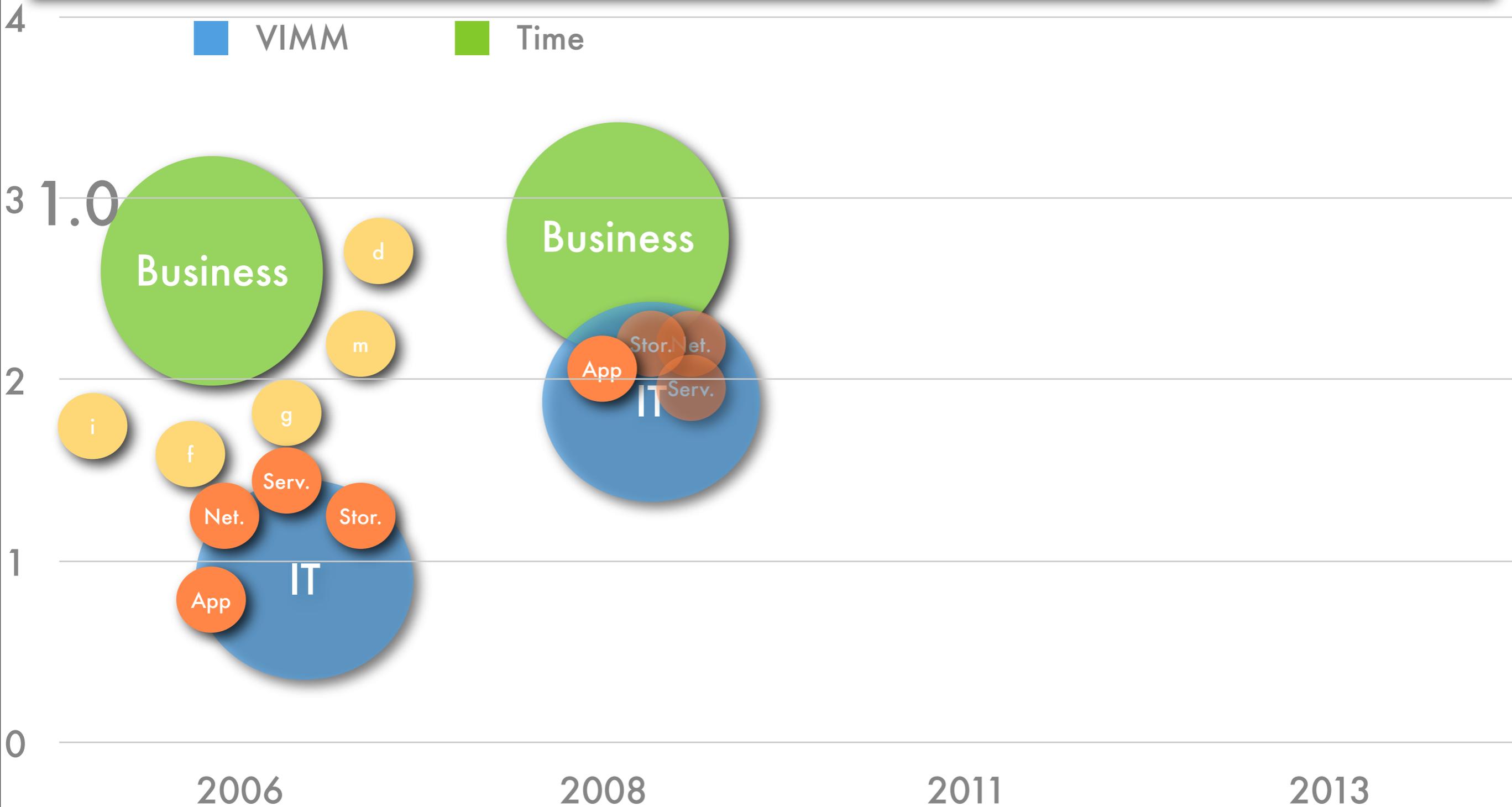
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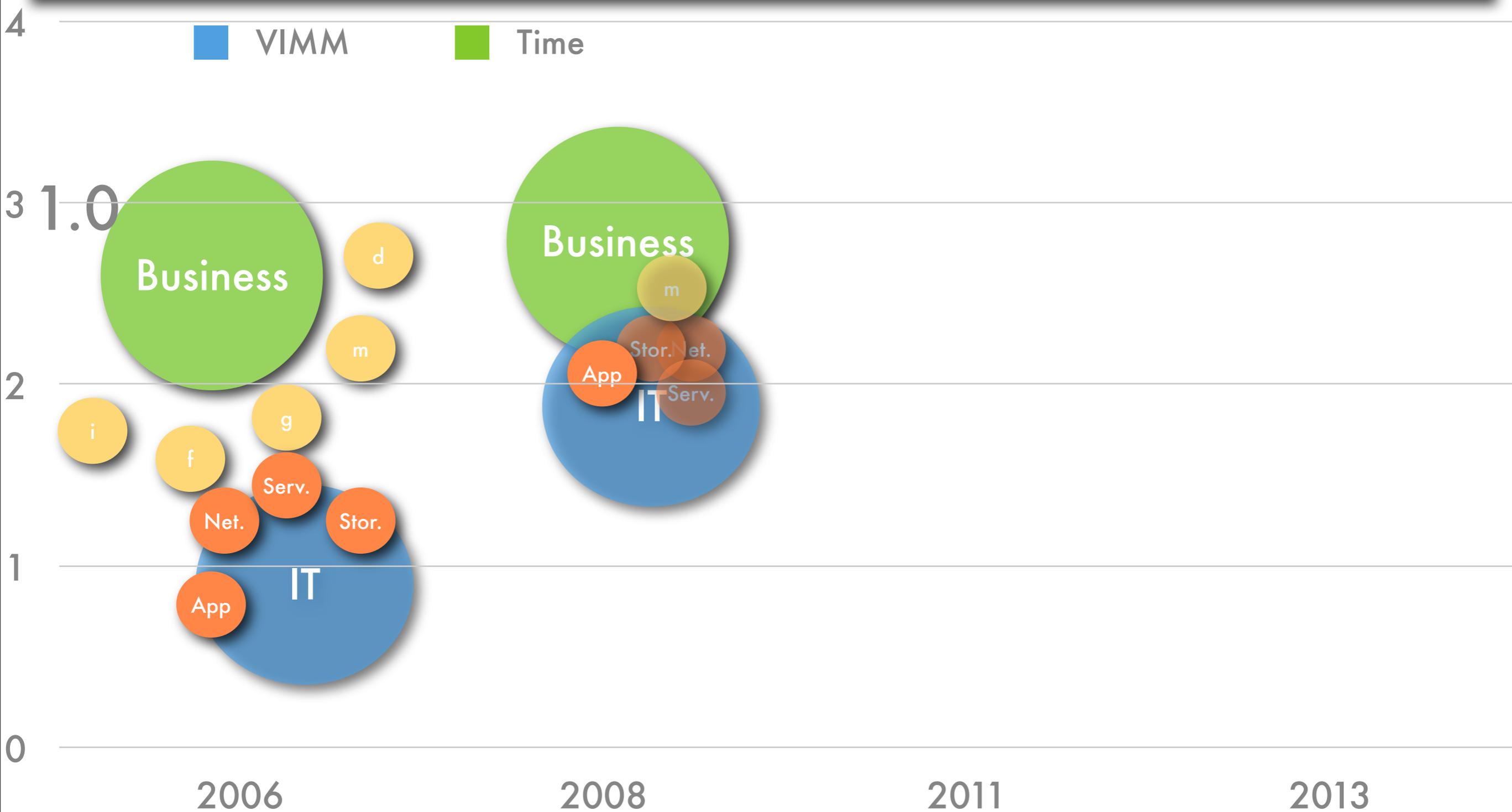
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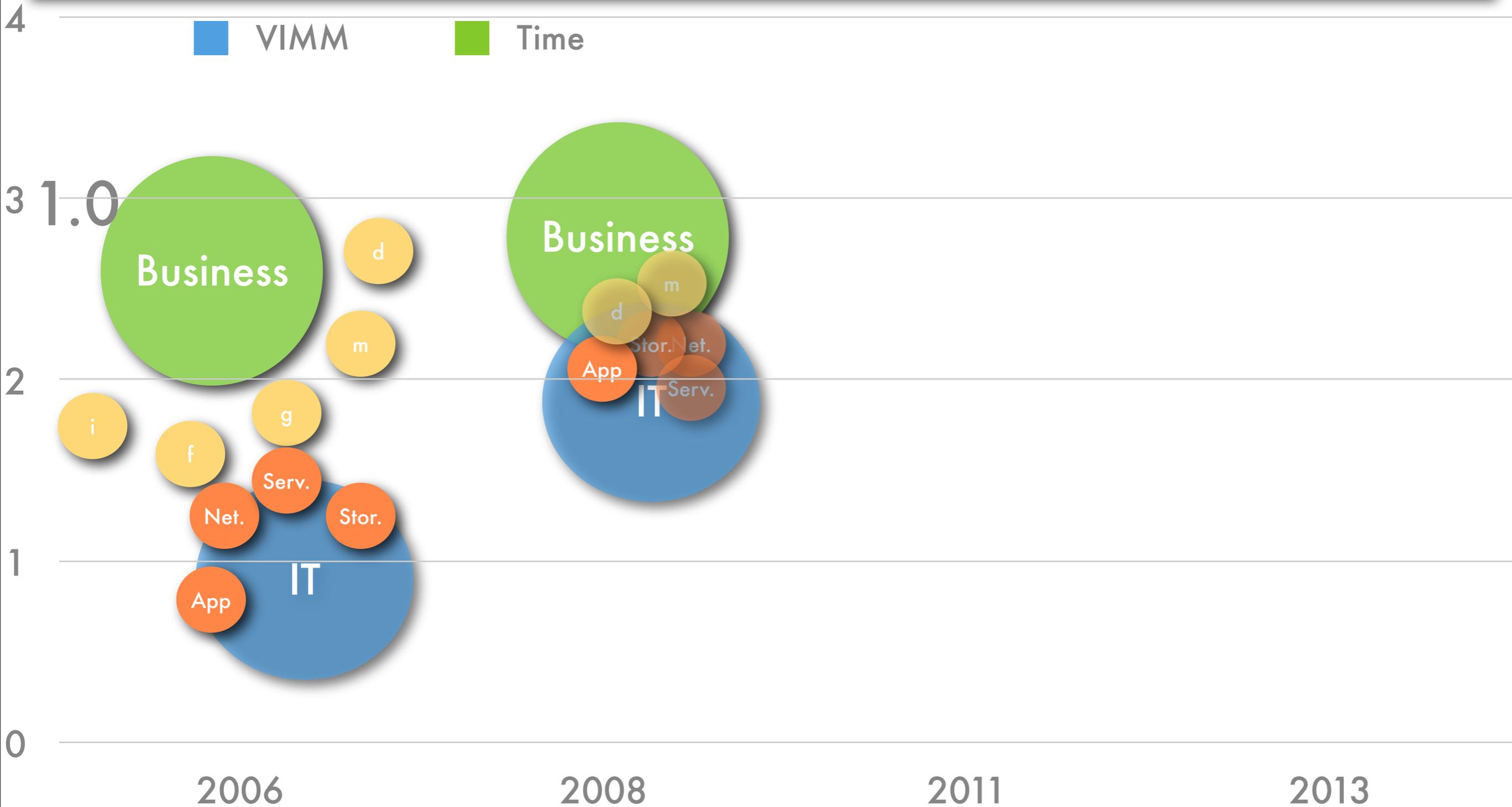
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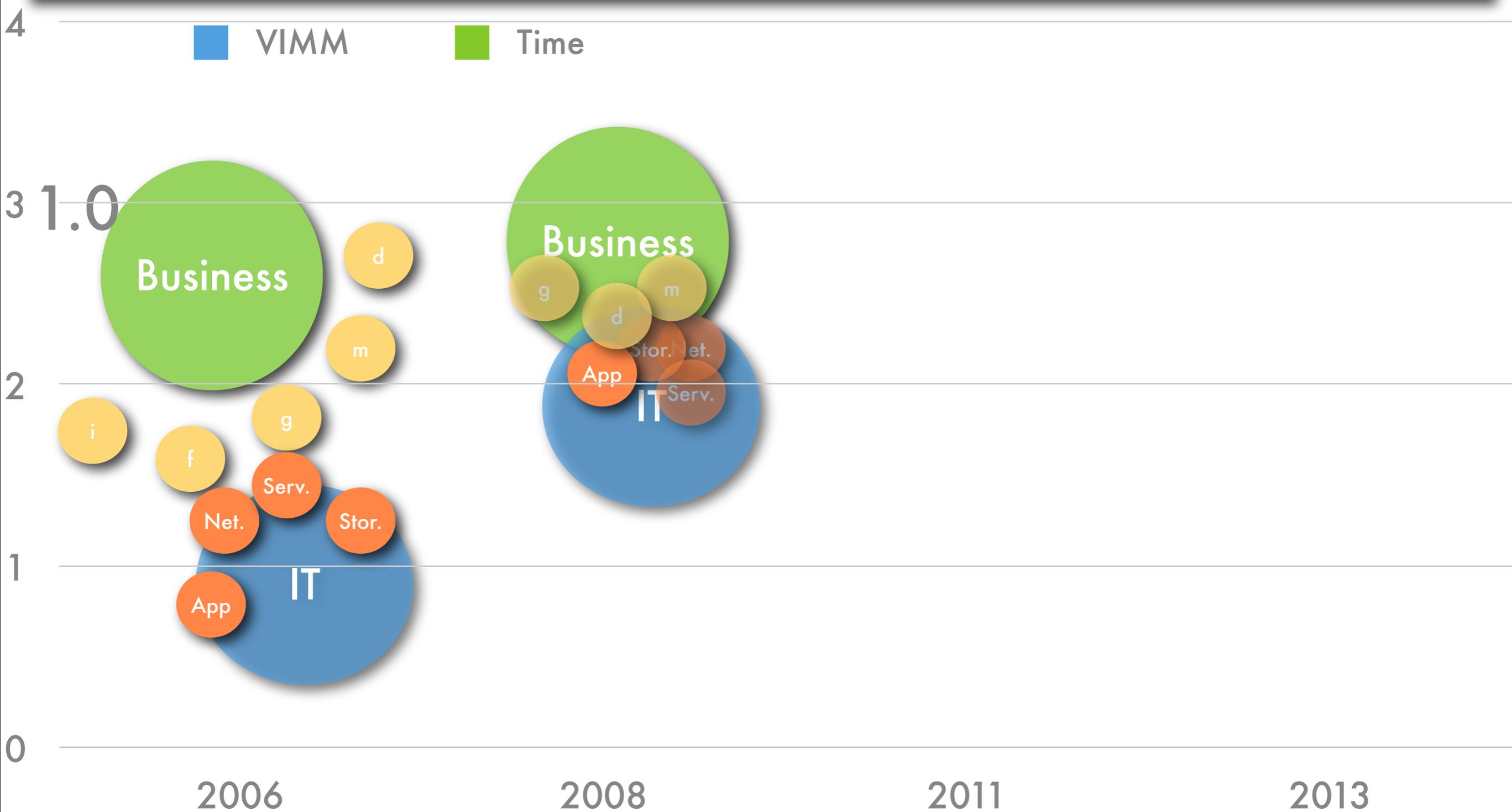
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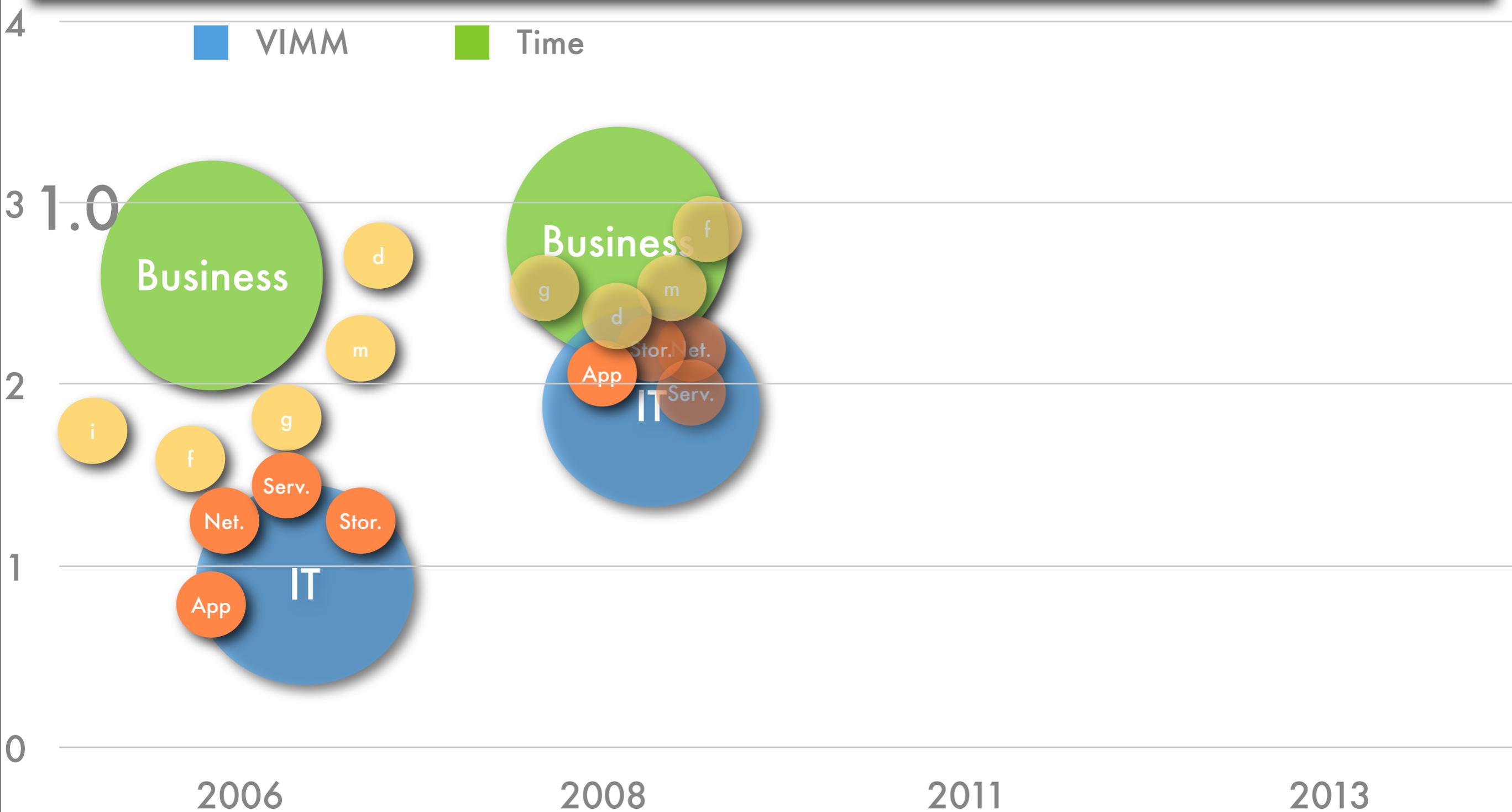
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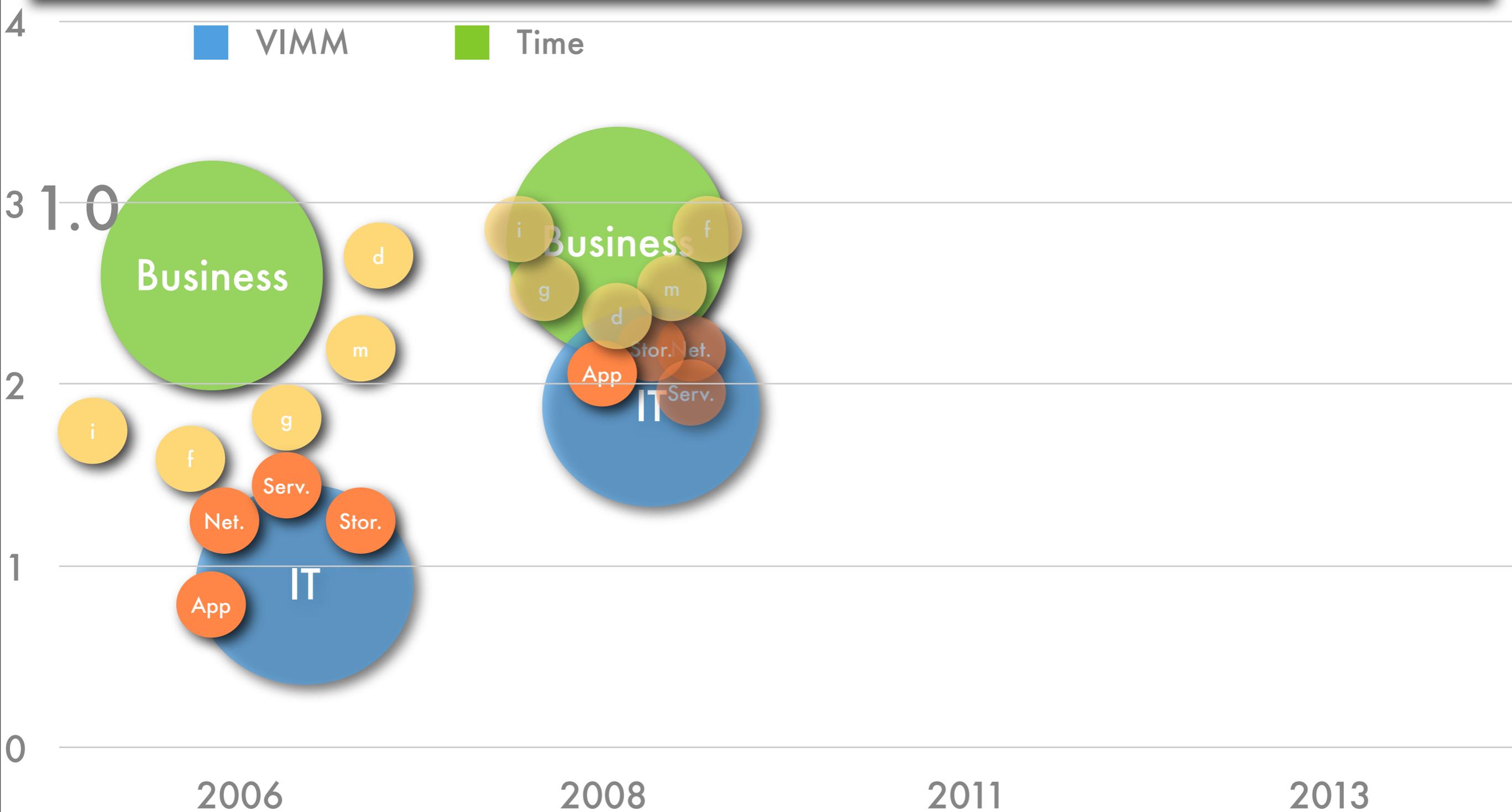


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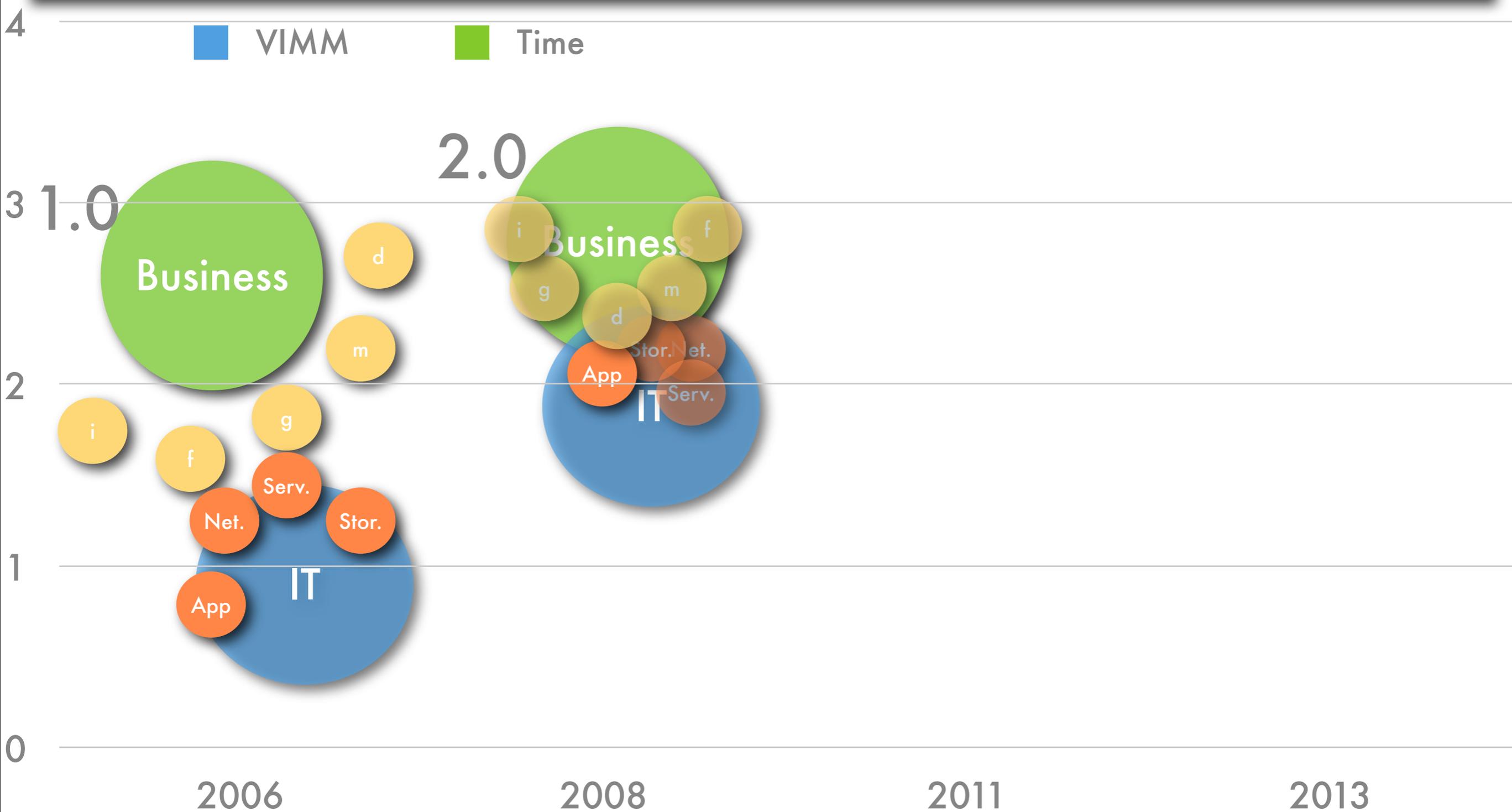


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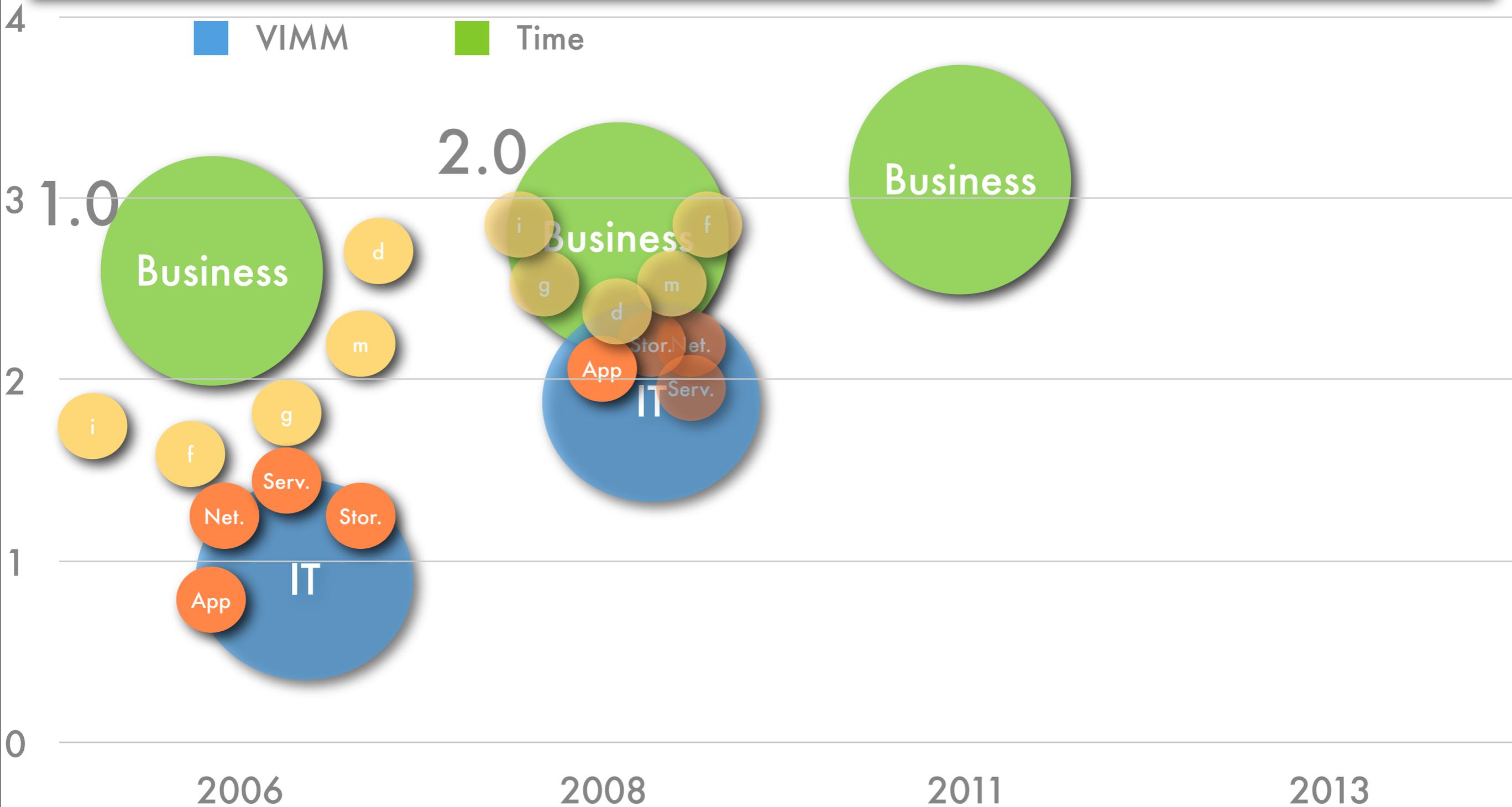
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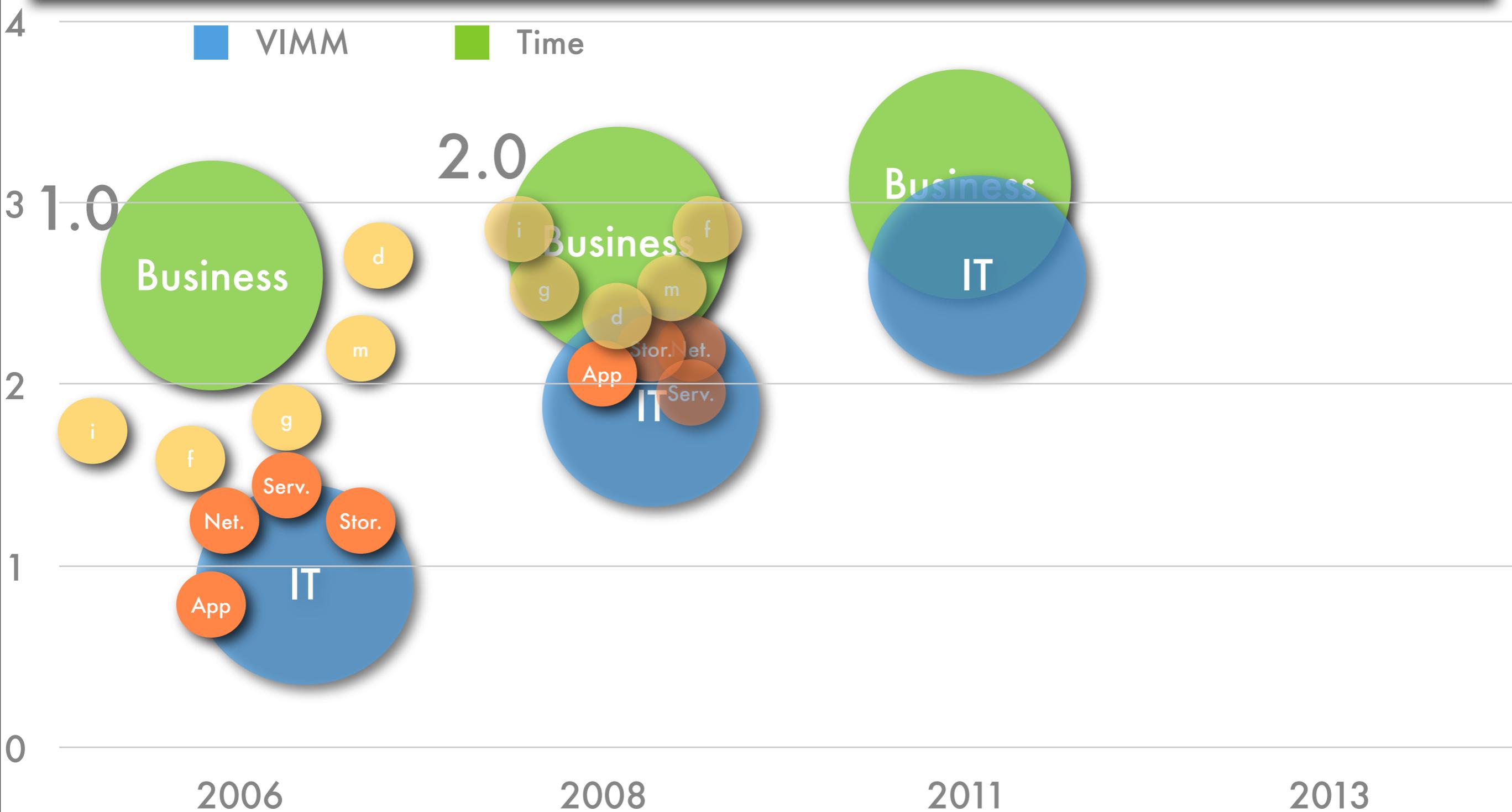
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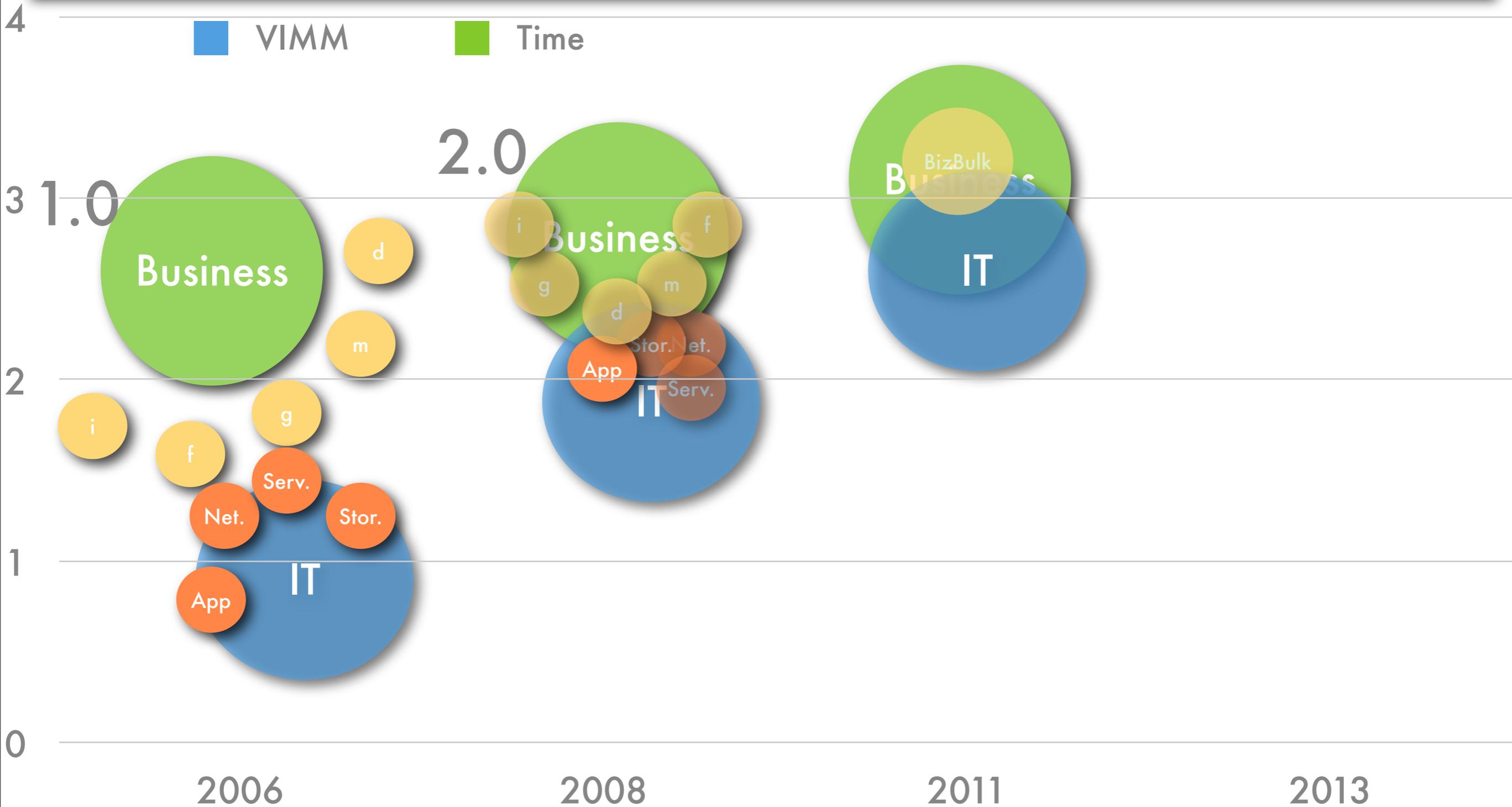
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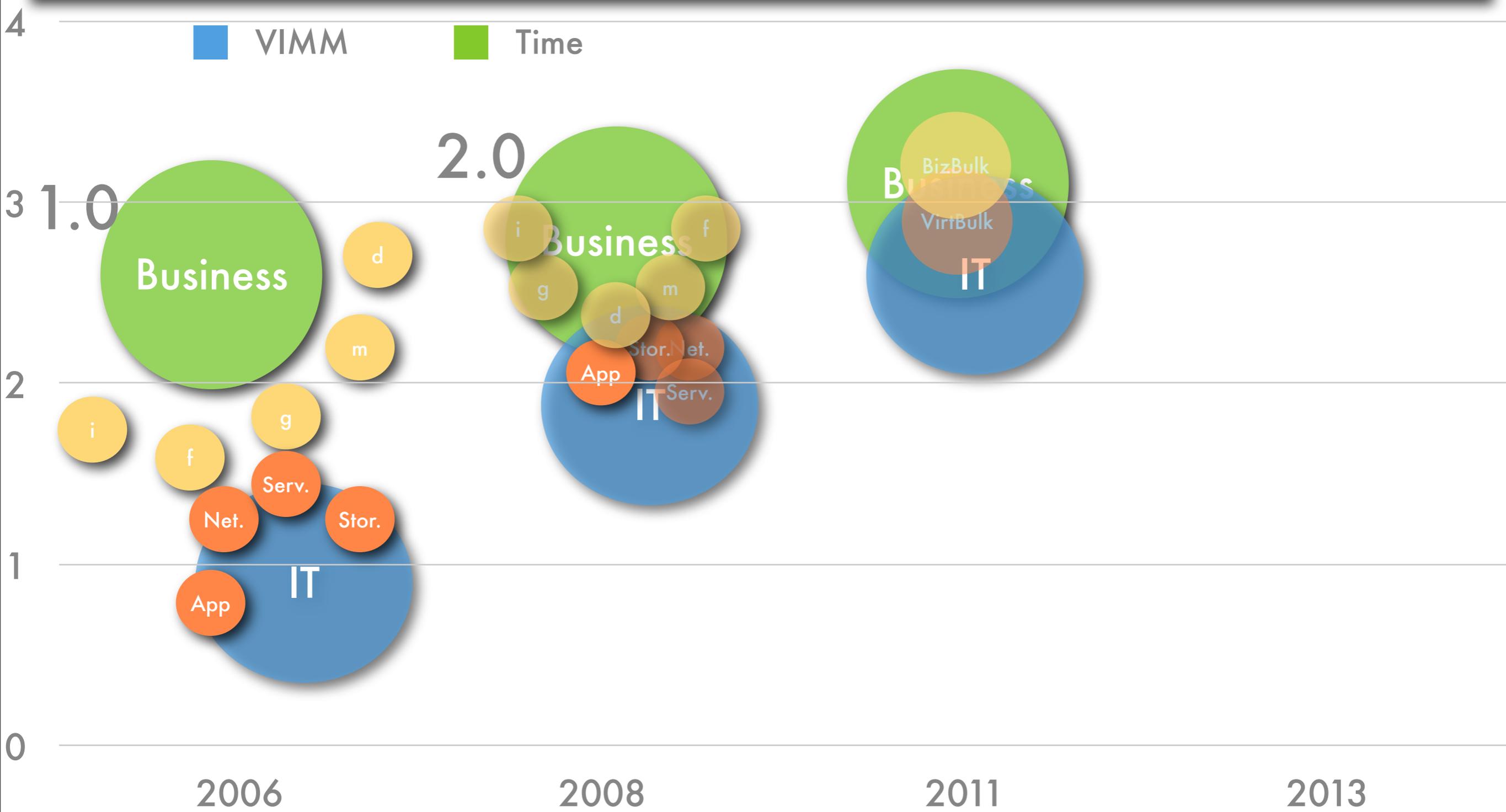


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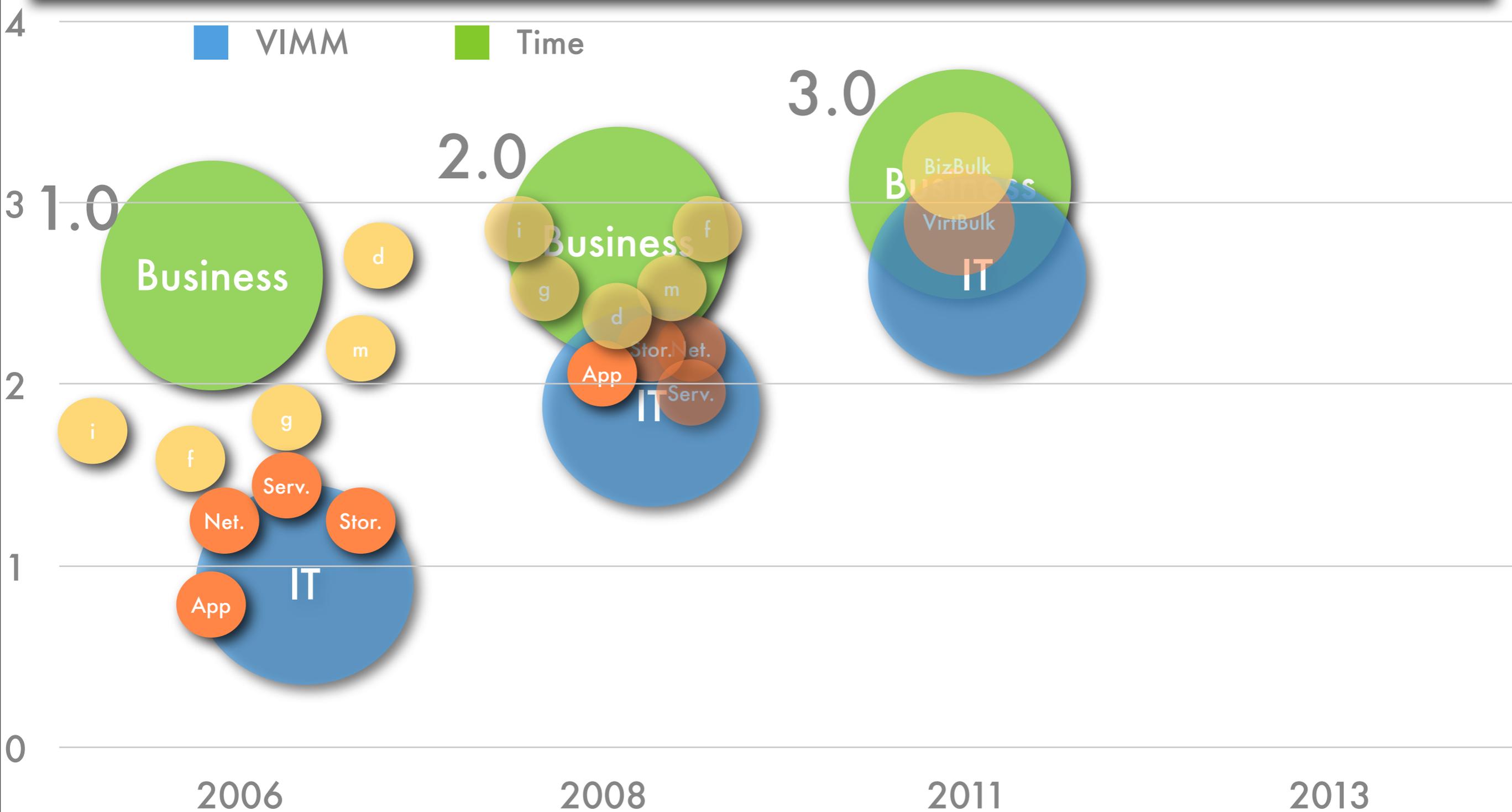


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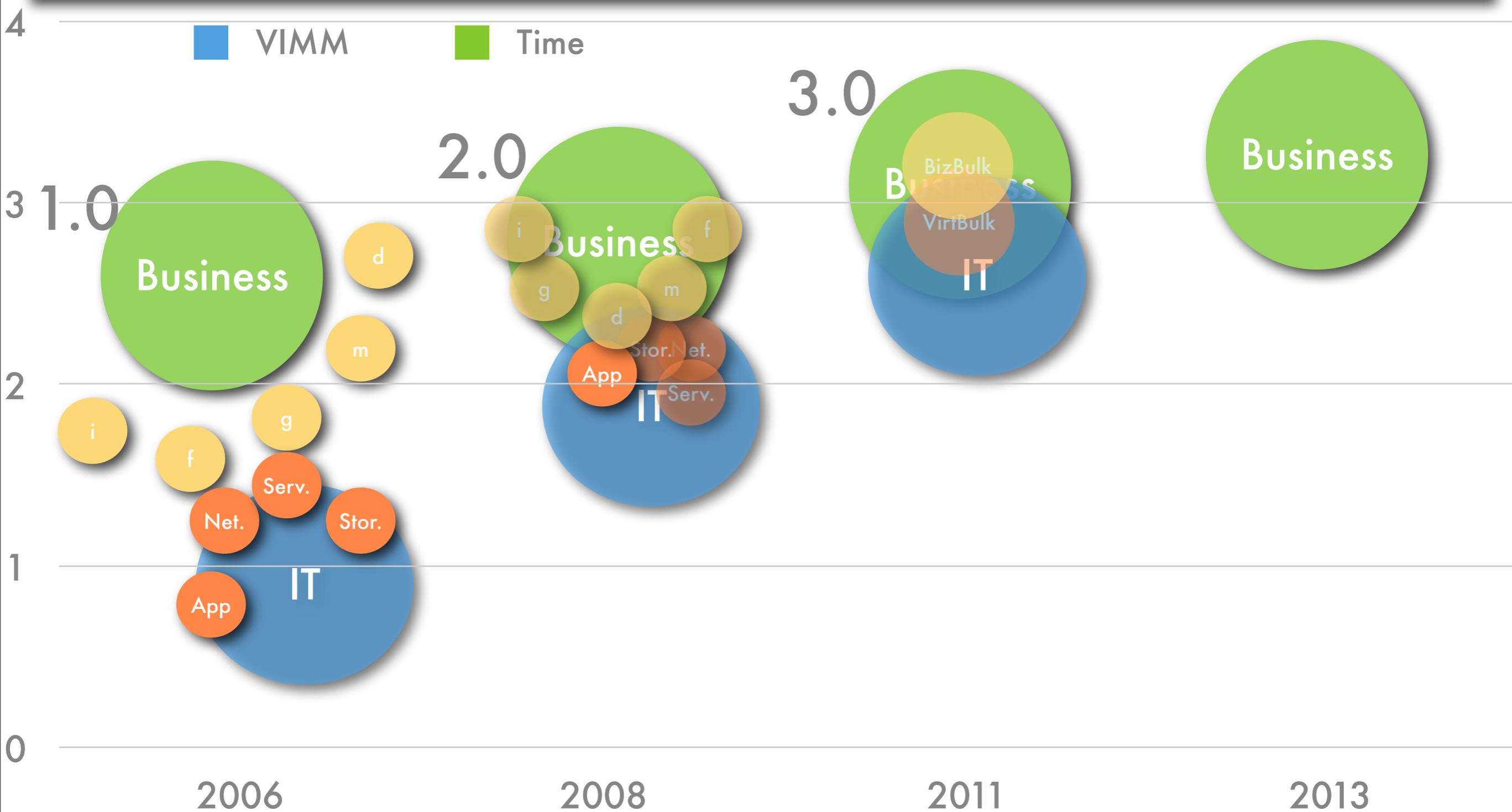
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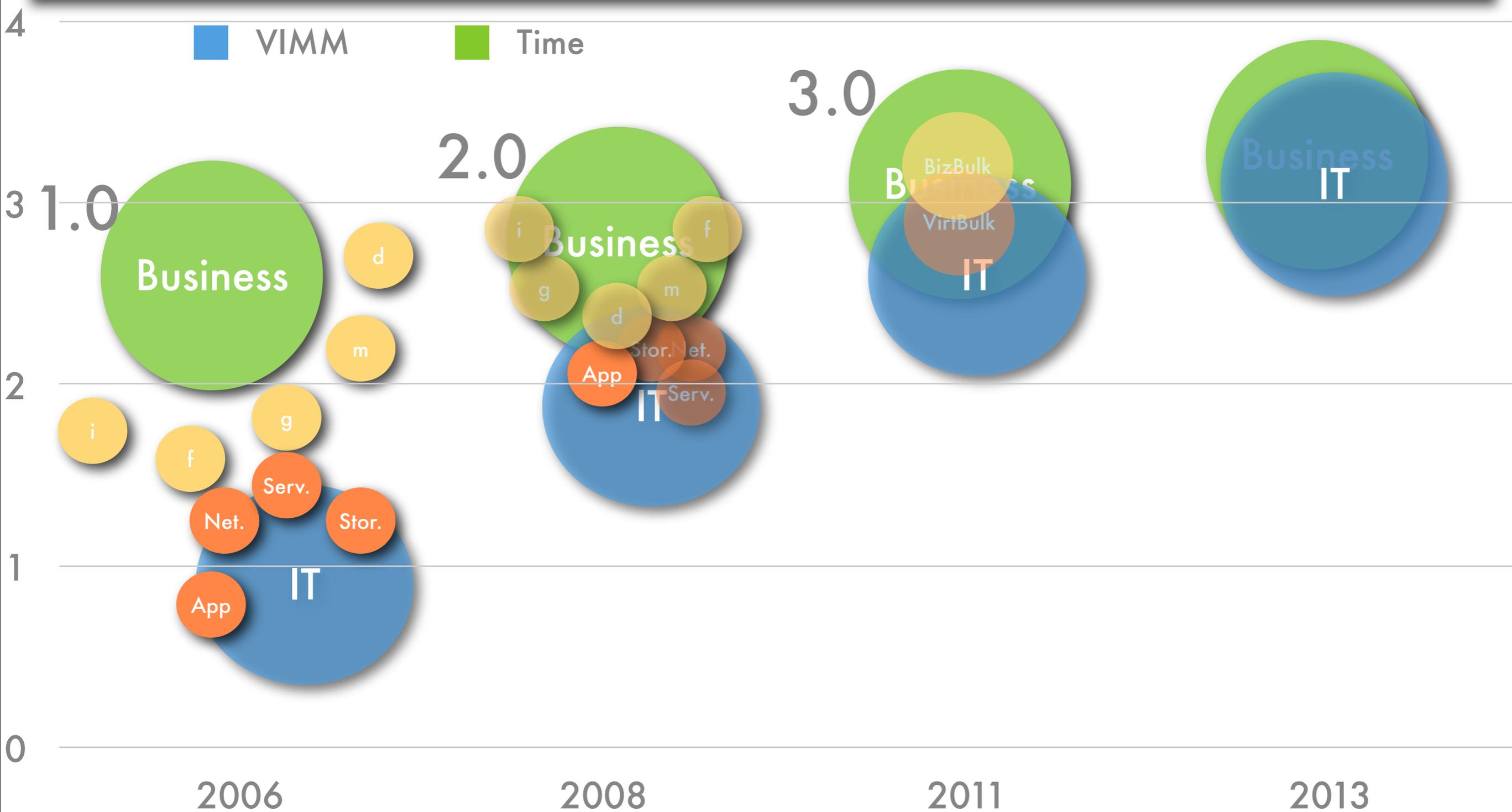
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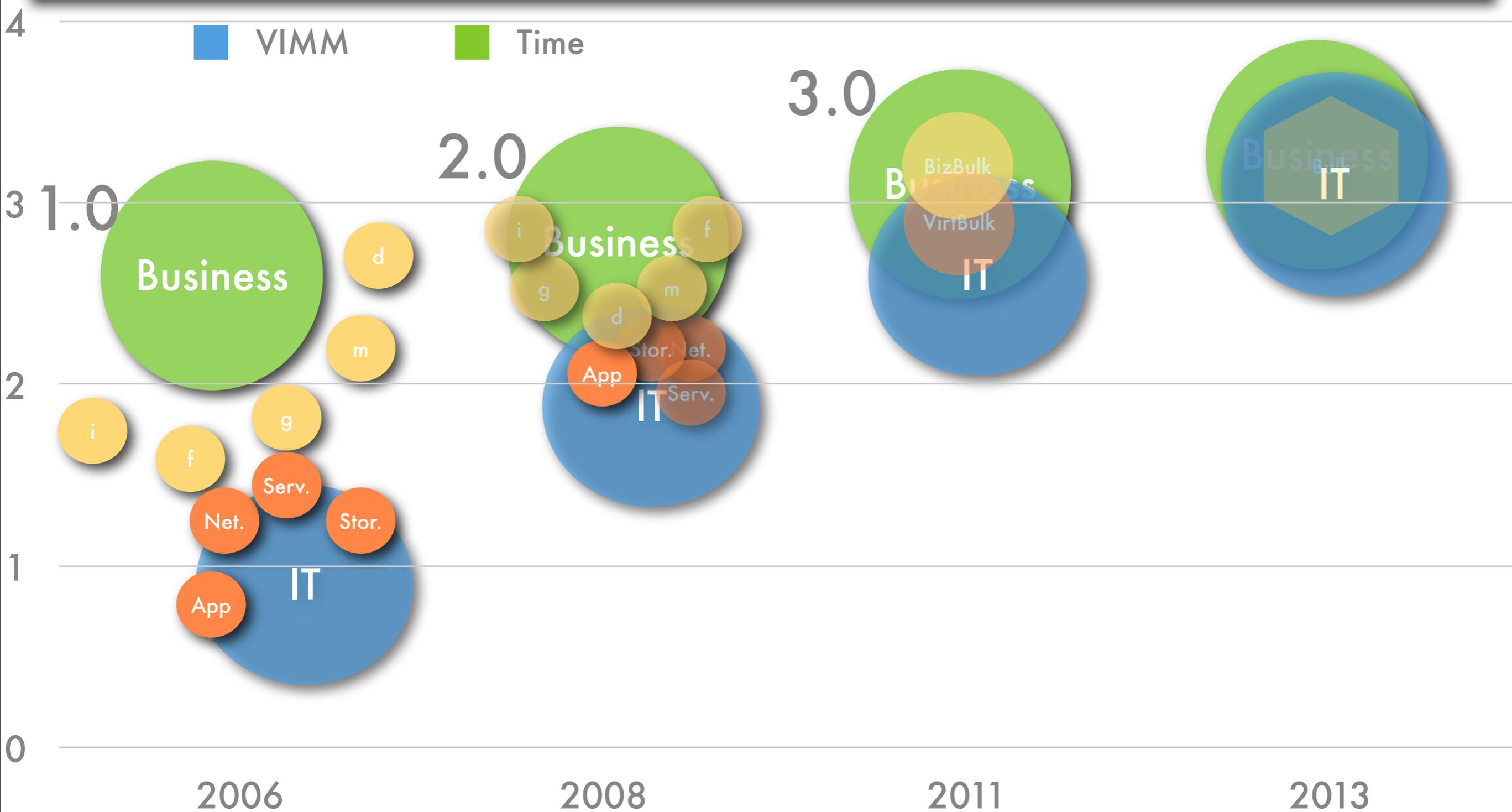
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VIMM: Demystified Dimensionality & Interactive Visualization



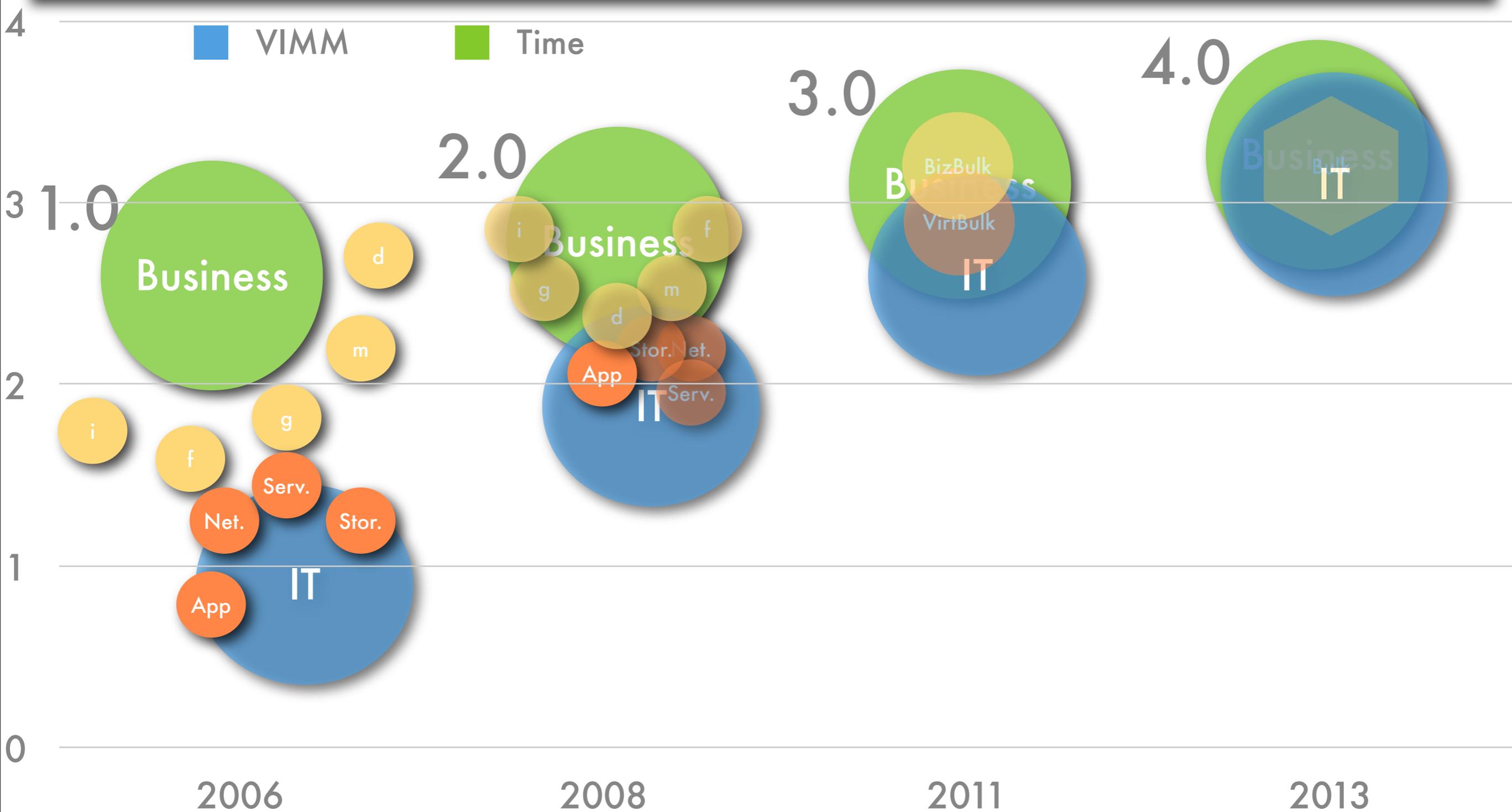
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VIMM: Demystified Dimensionality & Interactive Visualization



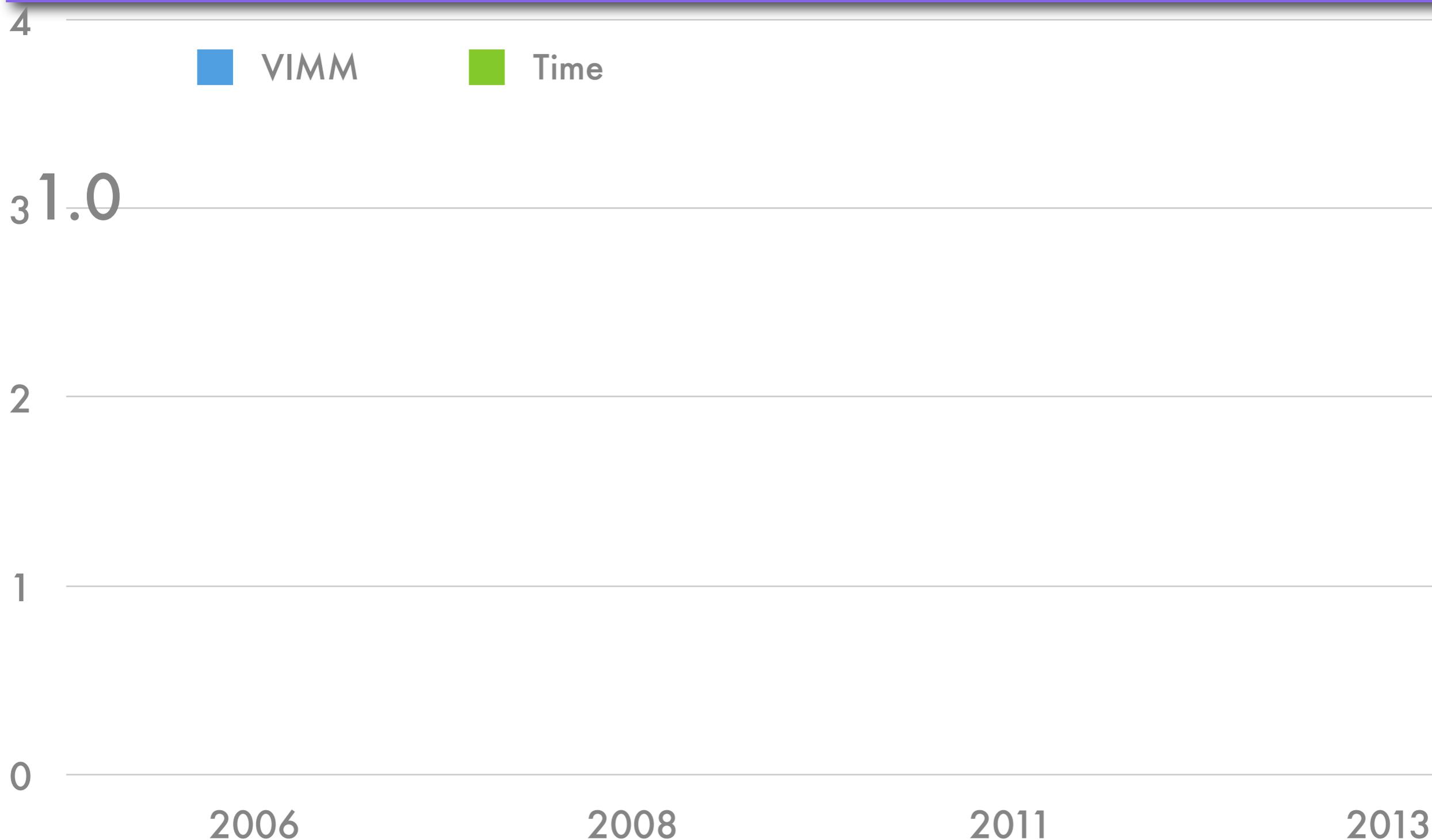
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VIMM: Demystified Dimensionality & Interactive Visualization



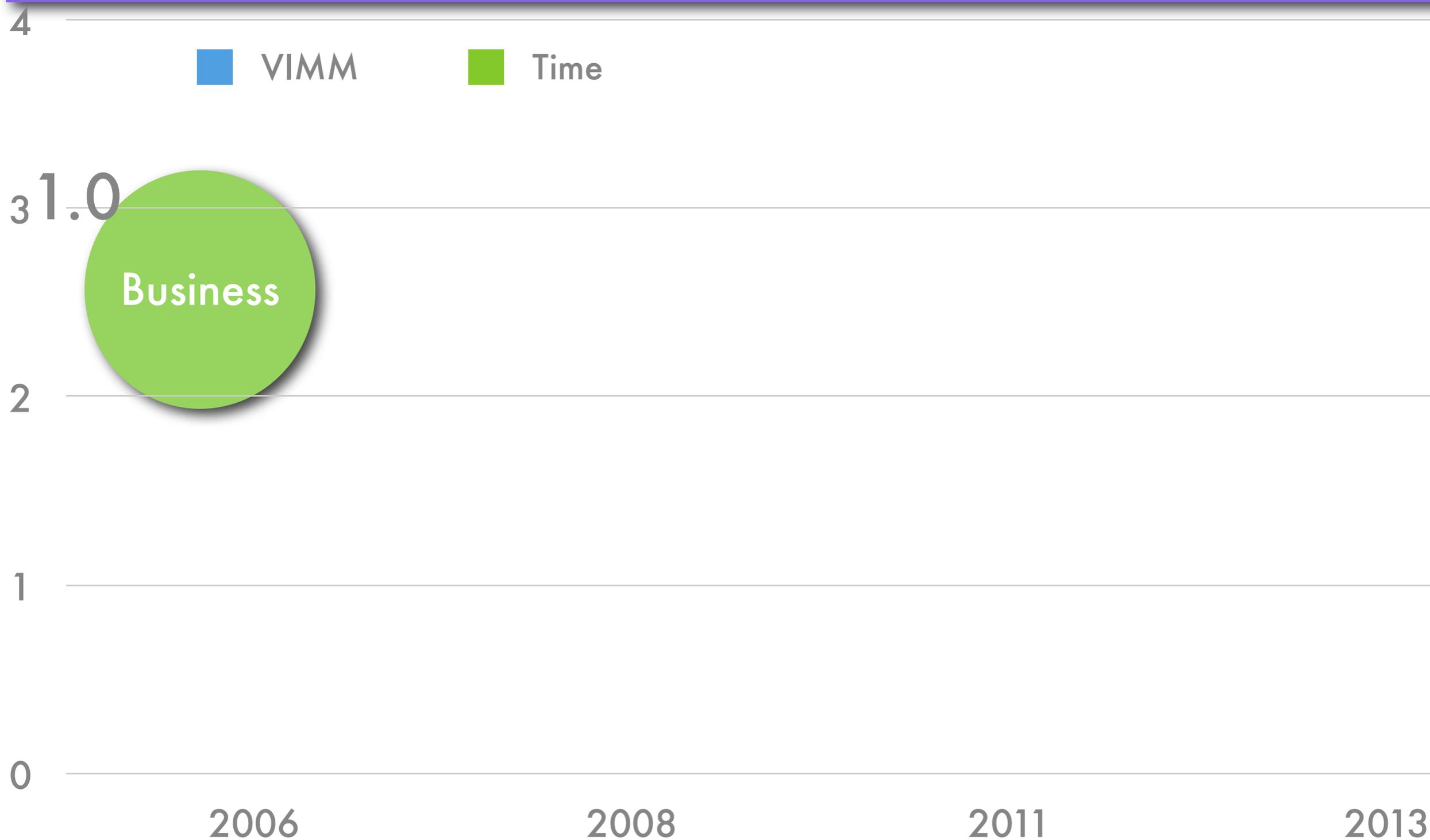
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VIMM: Demystified Dimensionality & Interactive Visualization



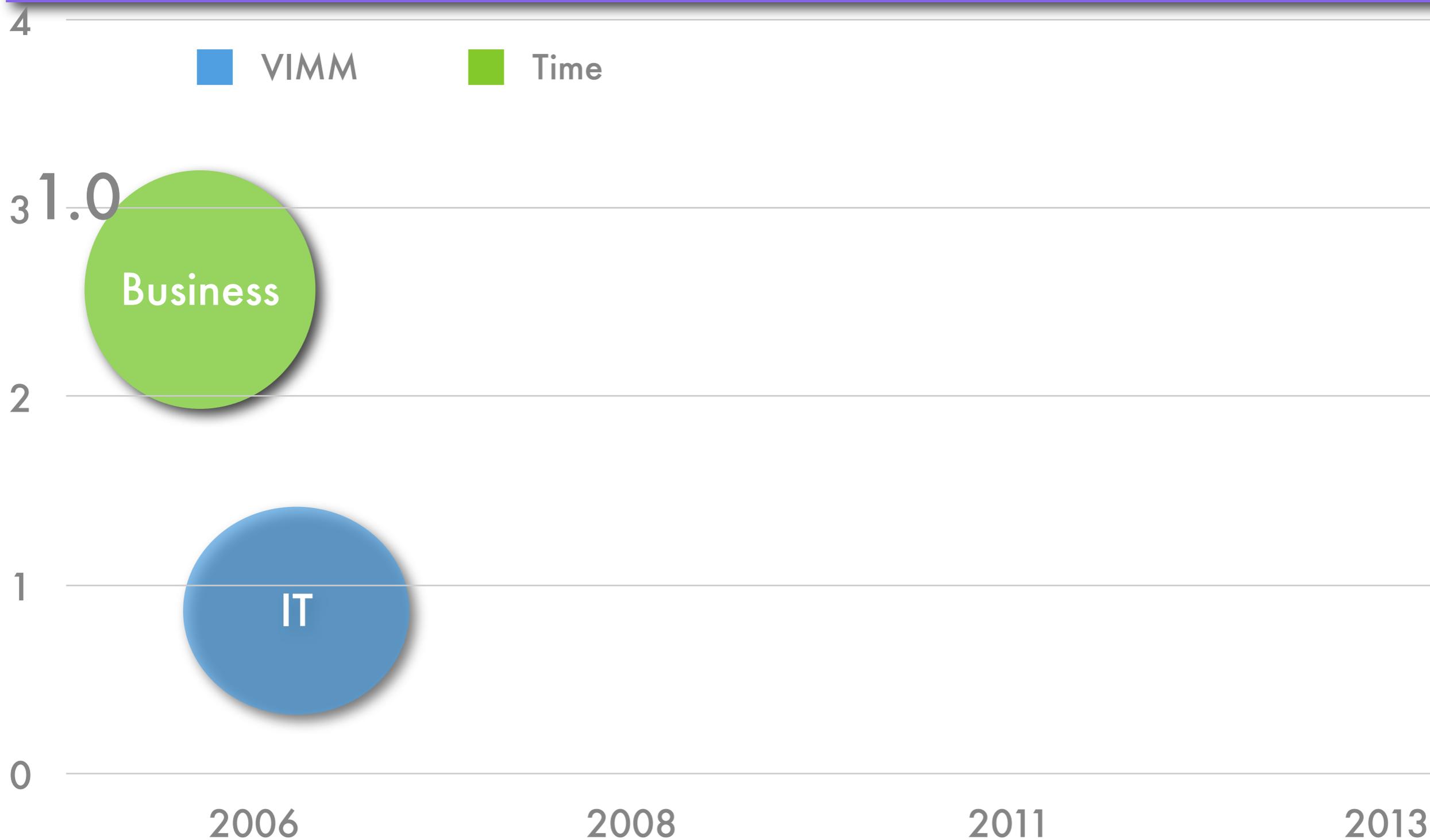
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VIMM: Demystified Dimensionality & Interactive Visualization



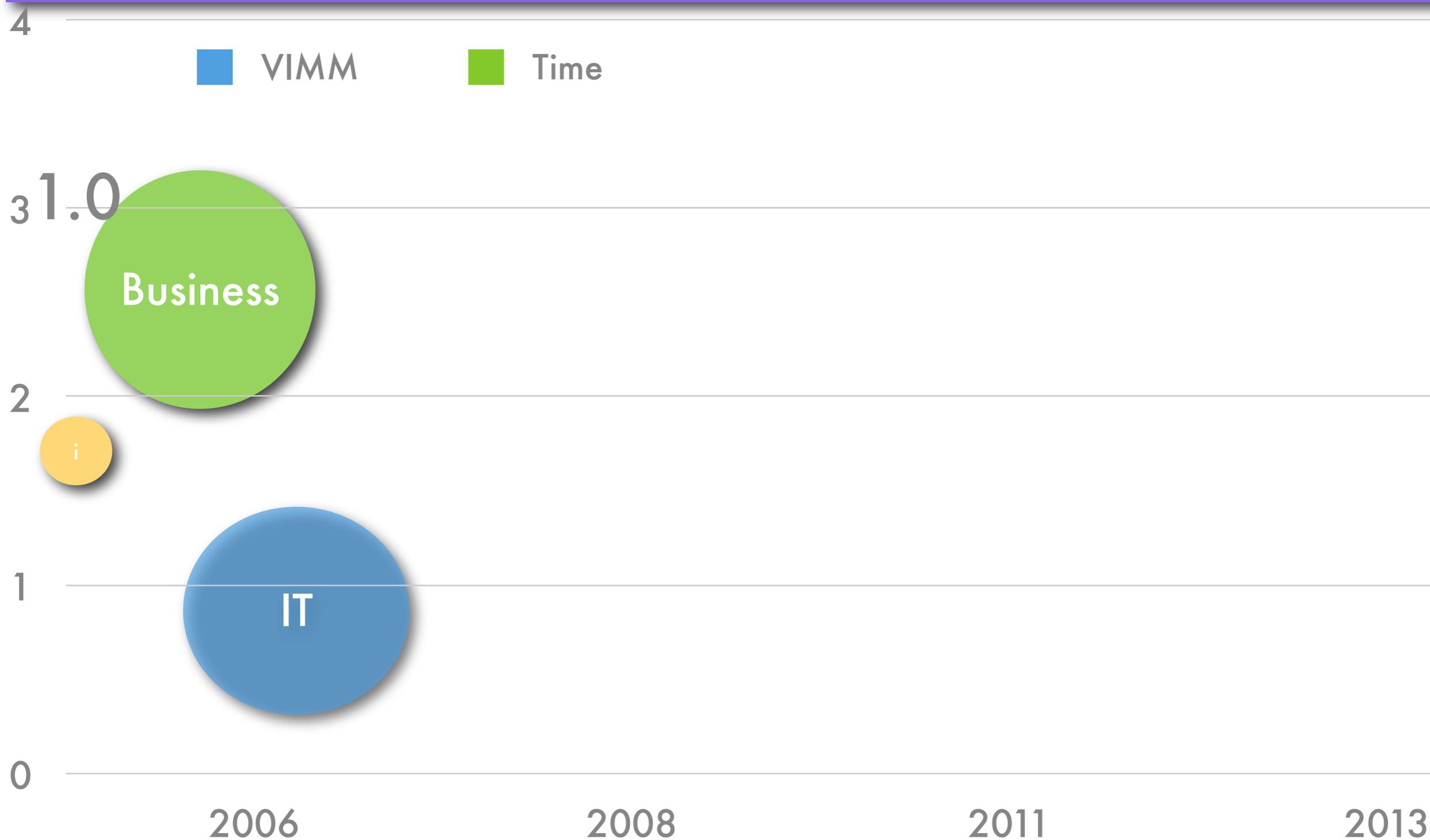
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VIMM: Demystified Dimensionality & Interactive Visualization



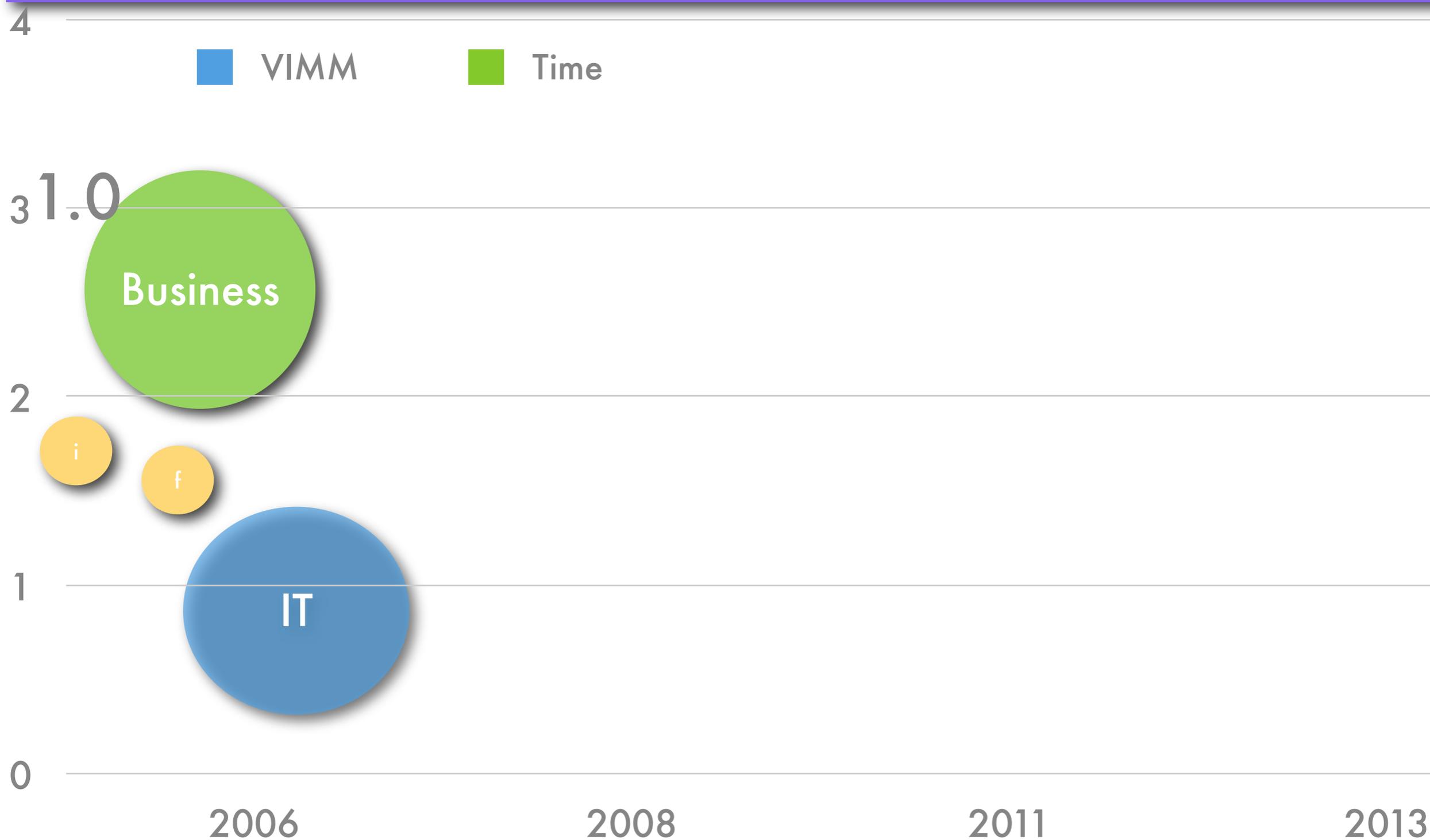
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VIMM: Demystified Dimensionality & Interactive Visualization



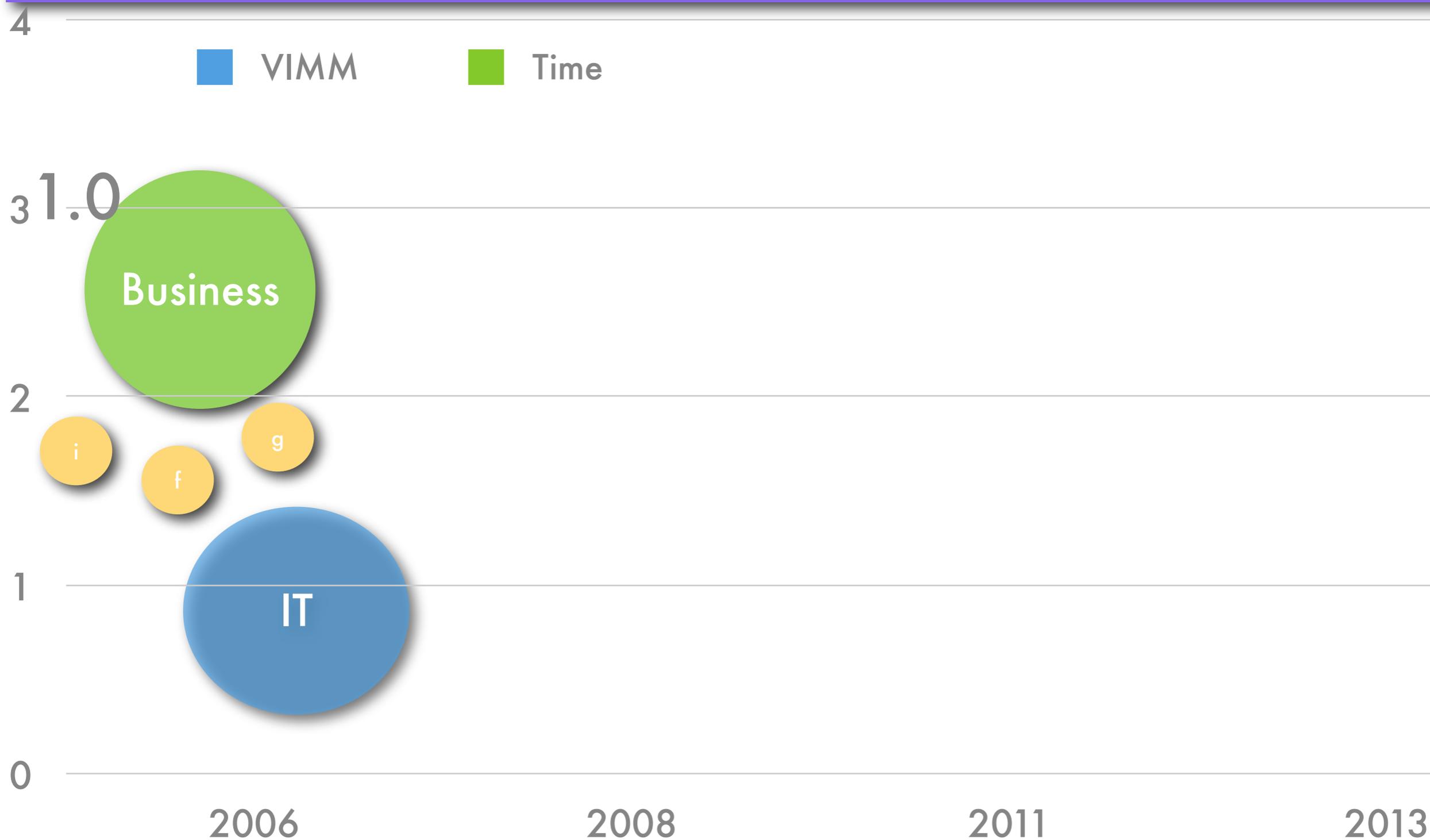
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VIMM: Demystified Dimensionality & Interactive Visualization



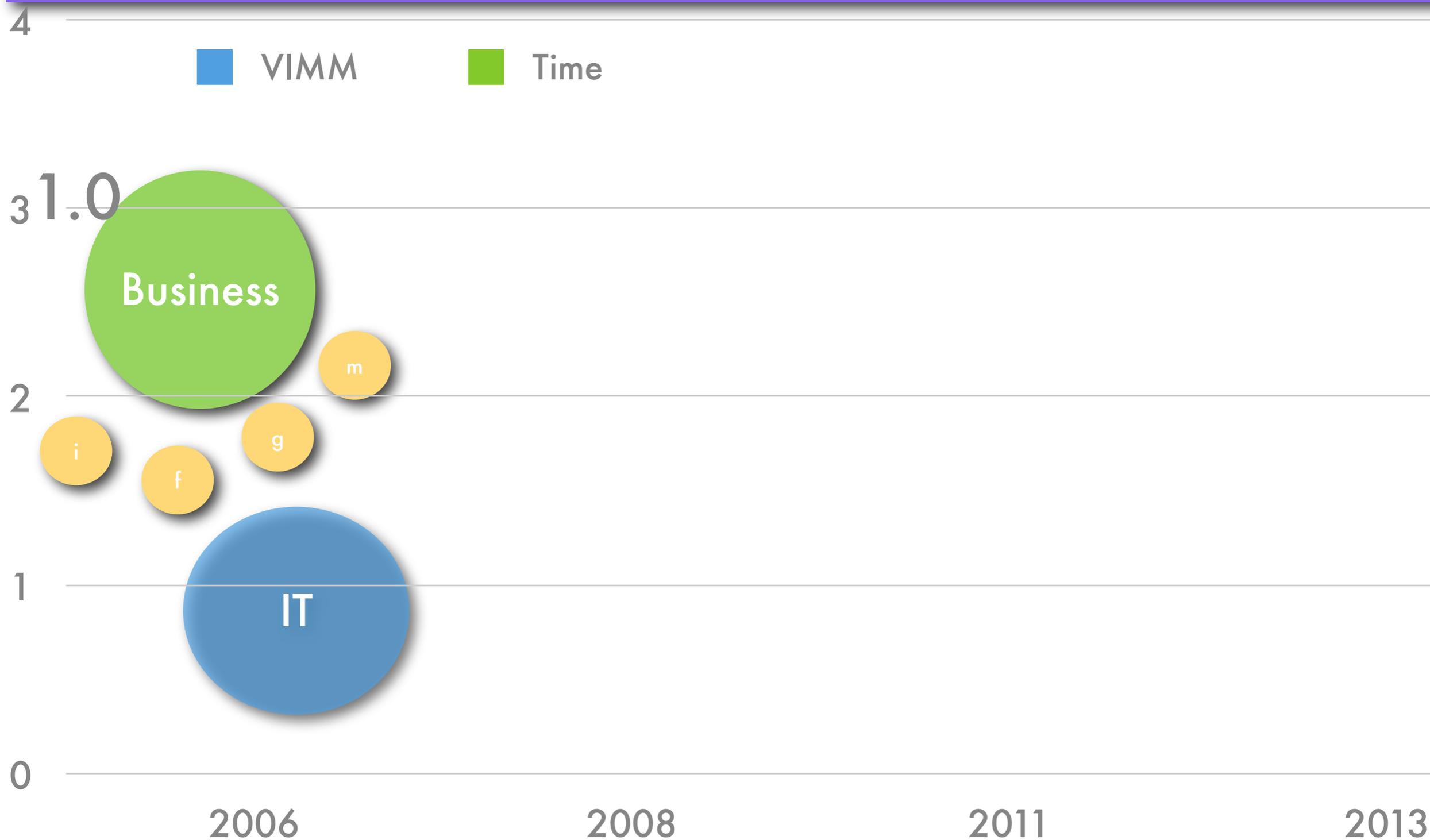
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VIMM: Demystified Dimensionality & Interactive Visualization



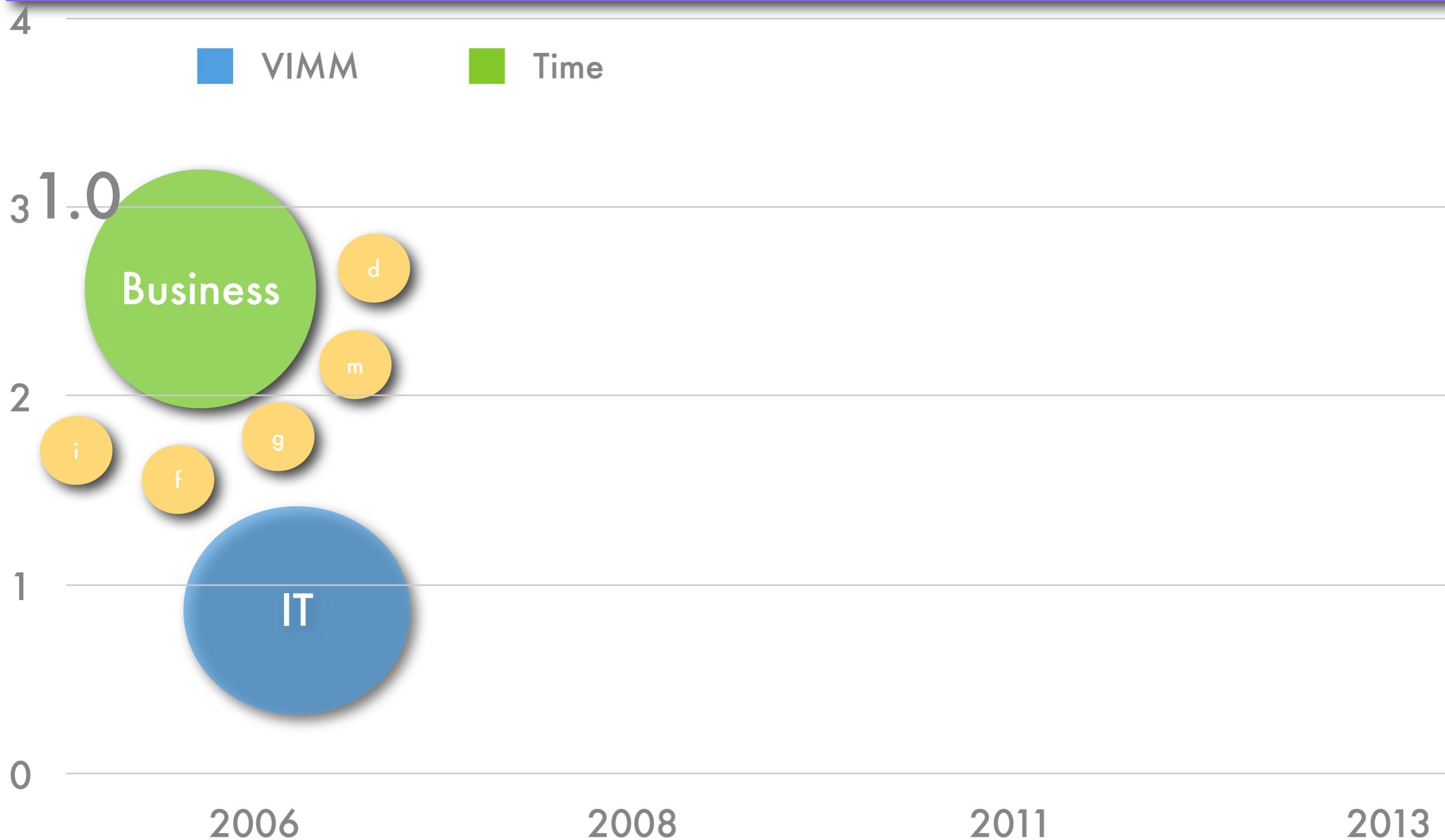
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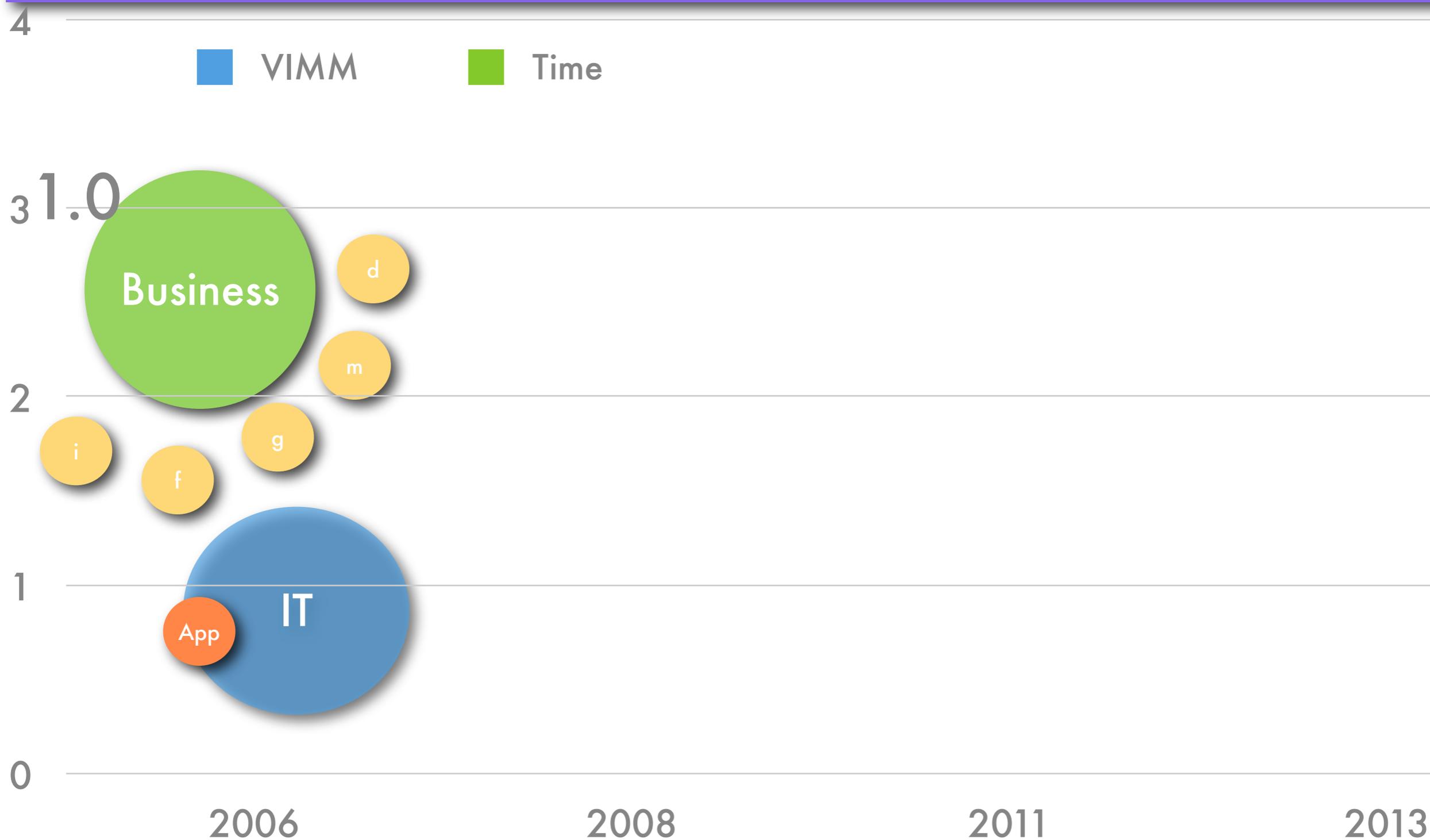
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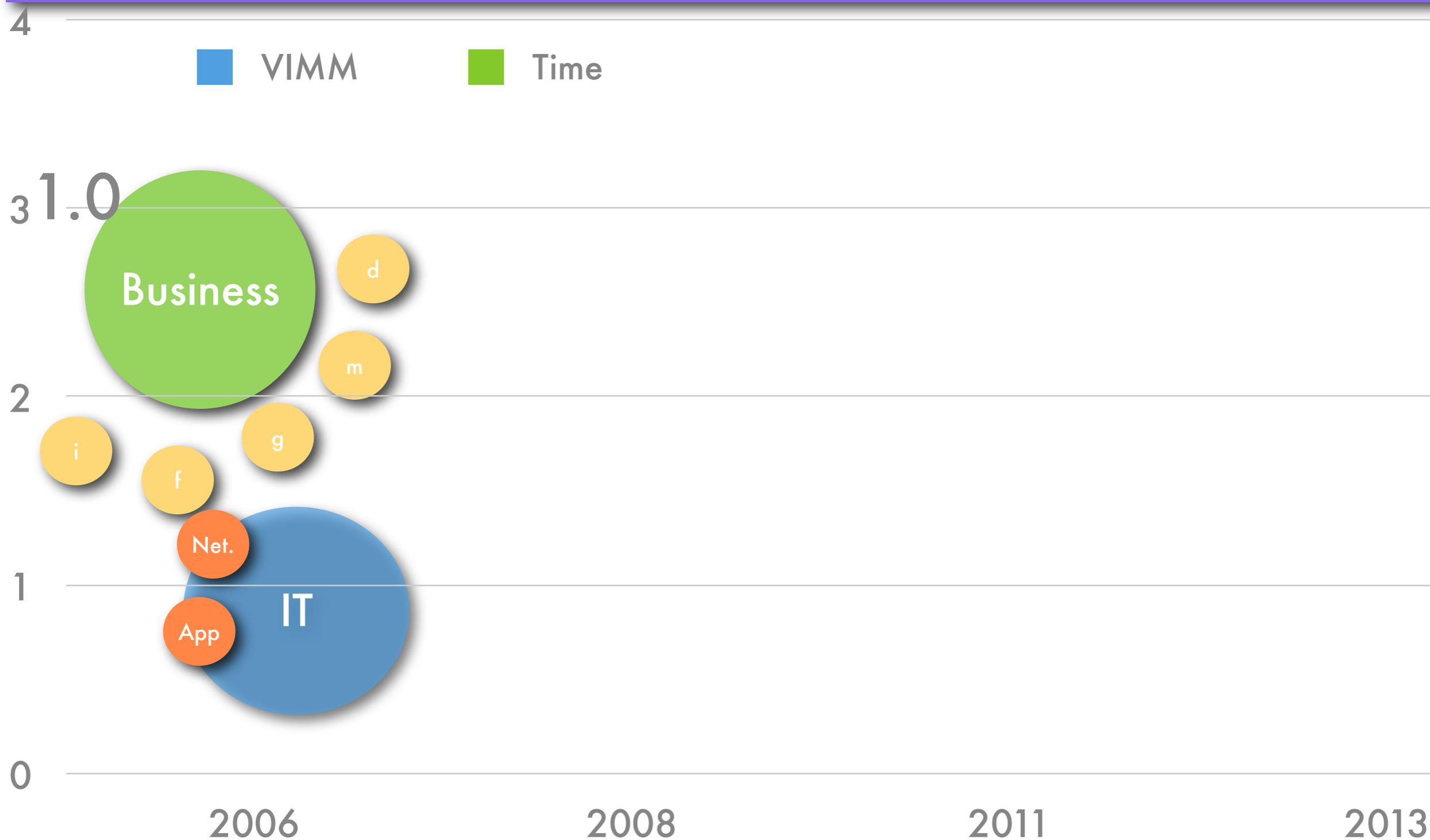
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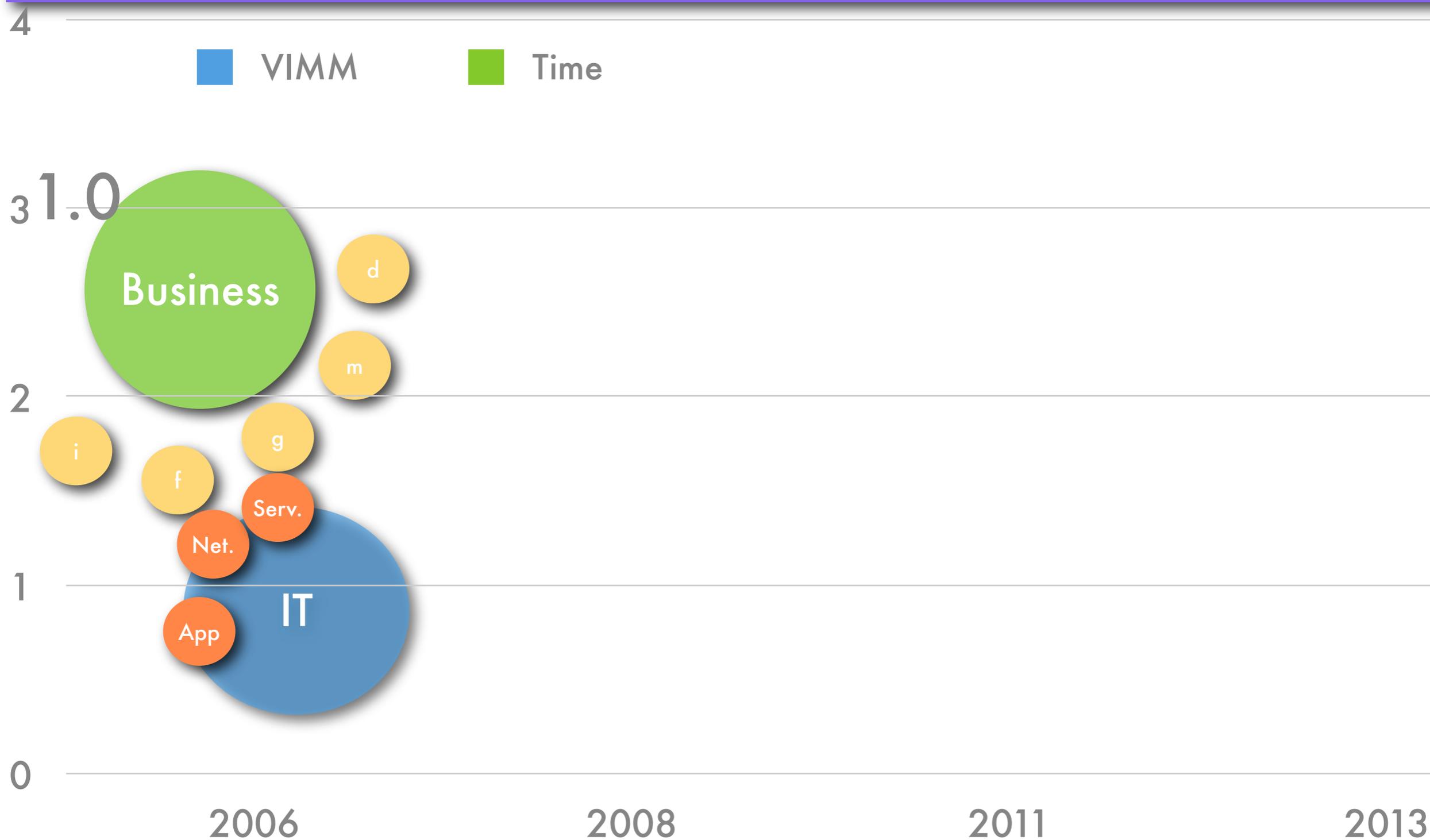
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VIMM: Demystified Dimensionality & Interactive Visualization



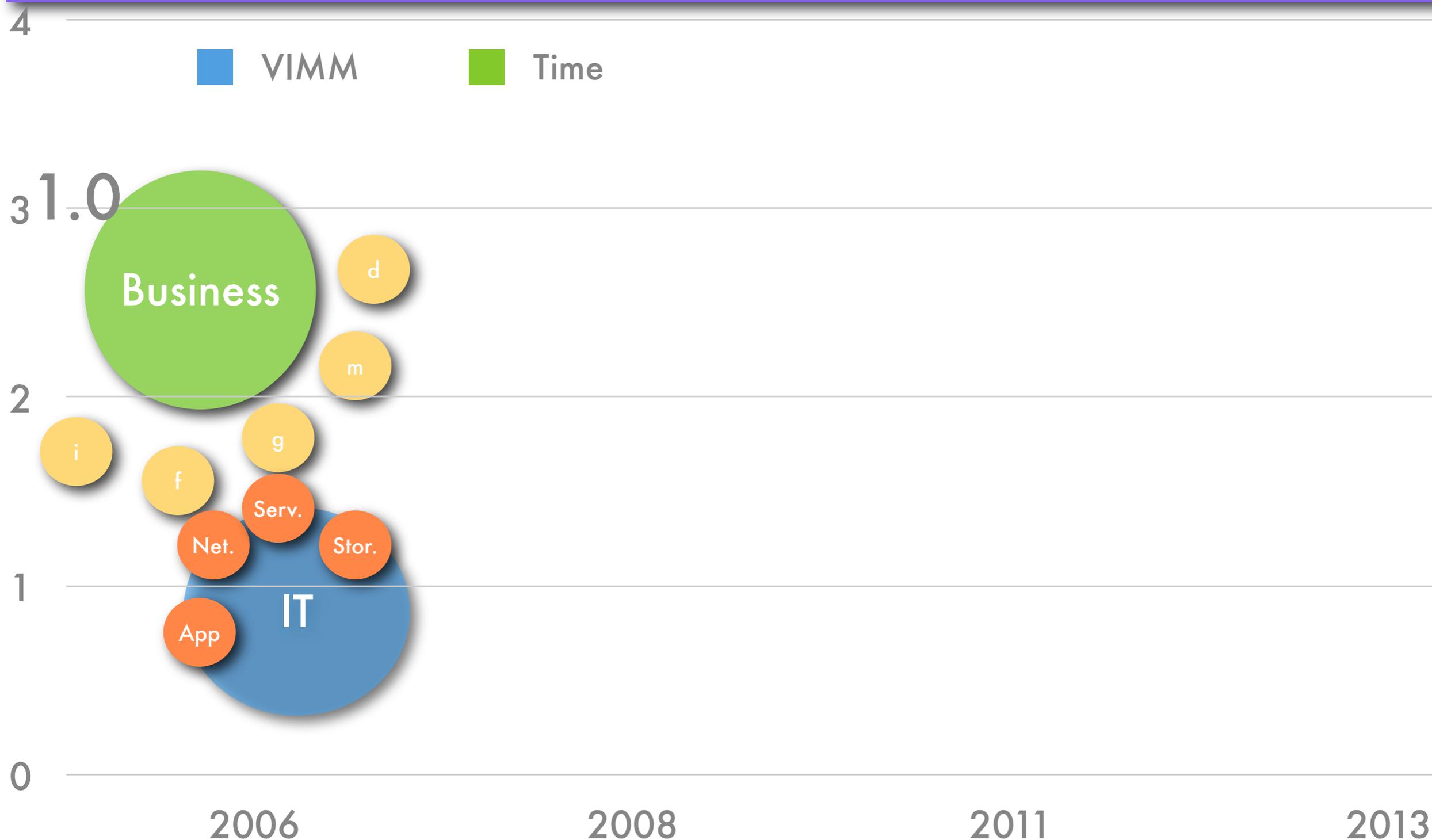
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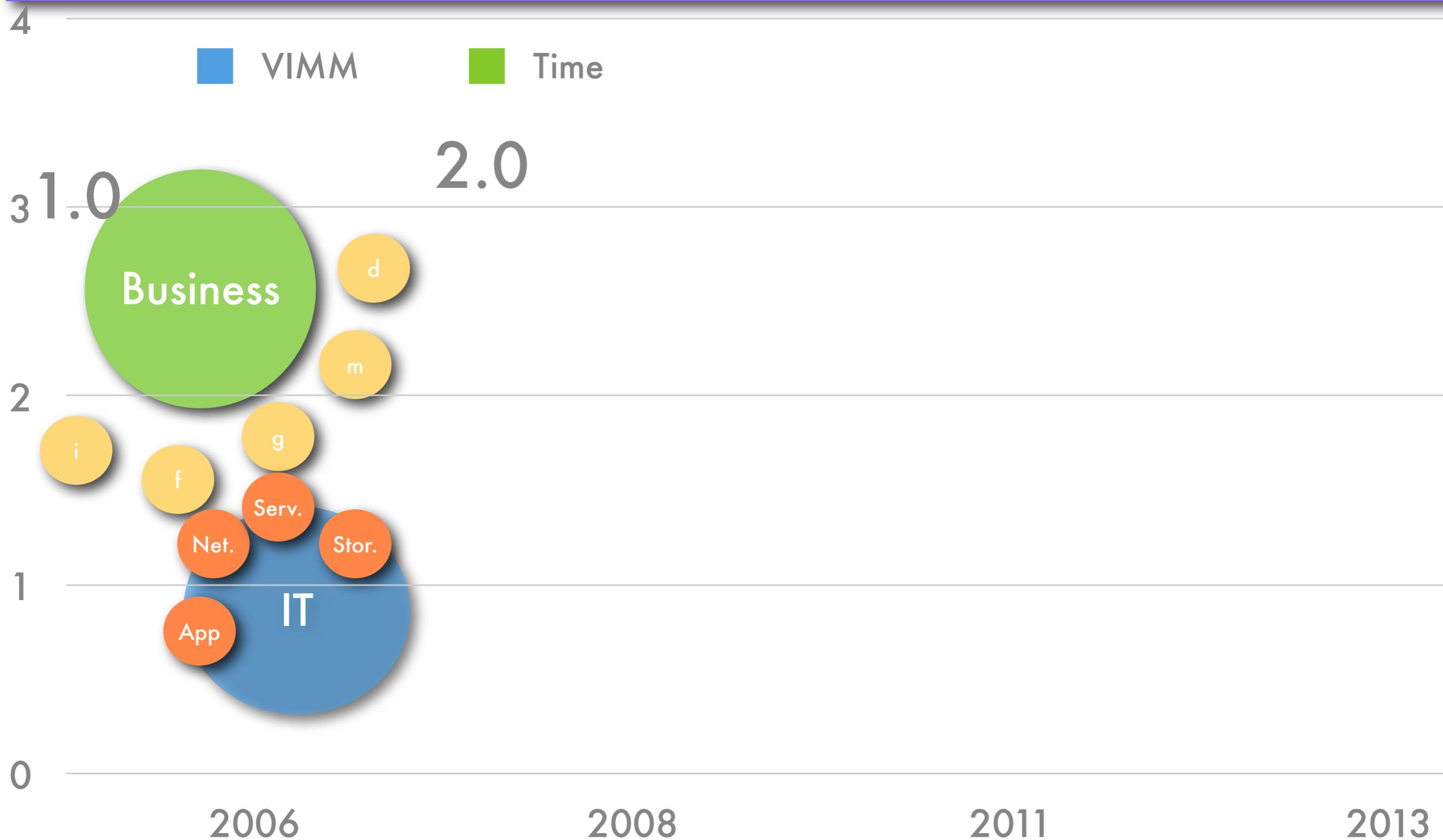
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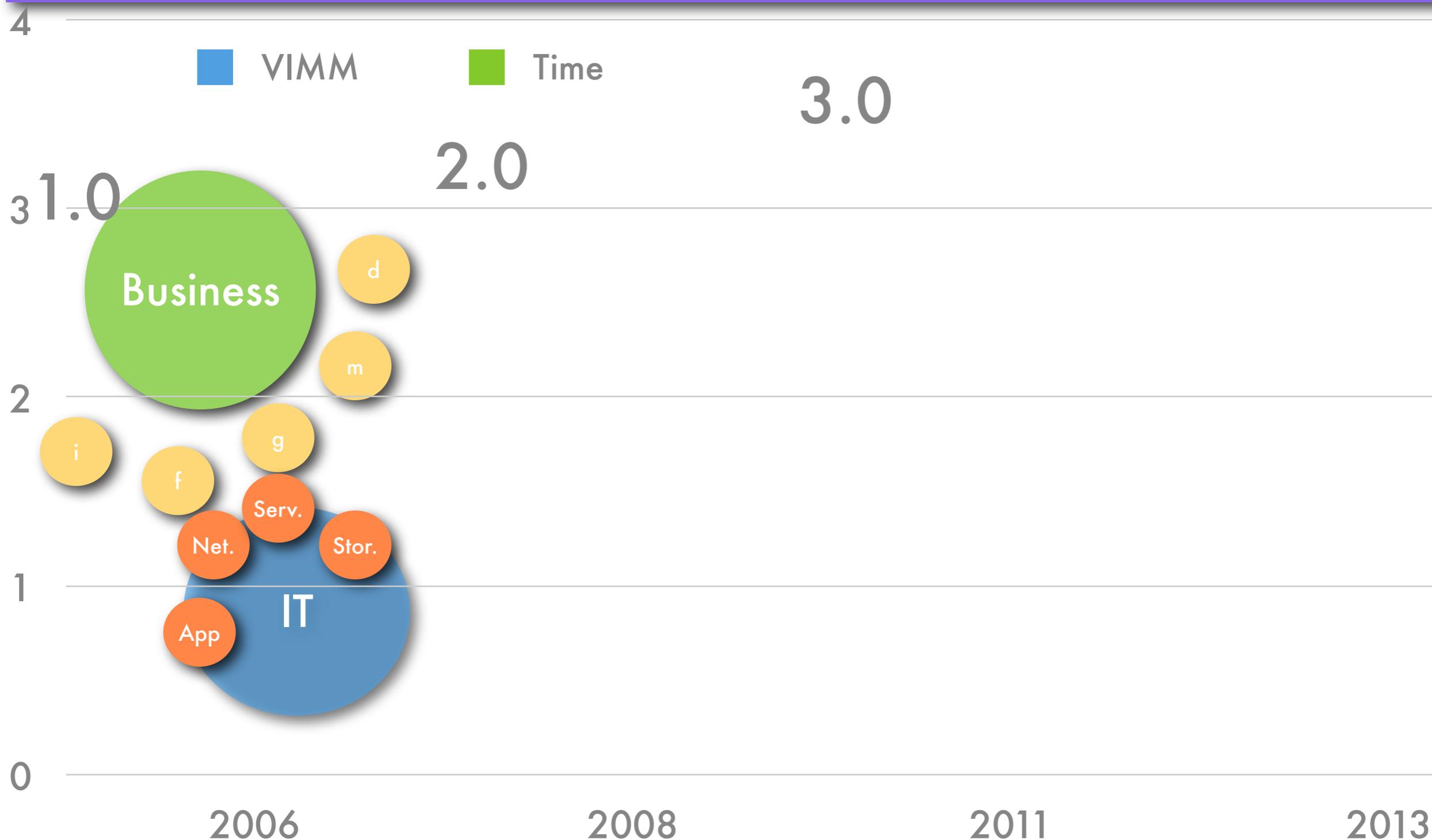
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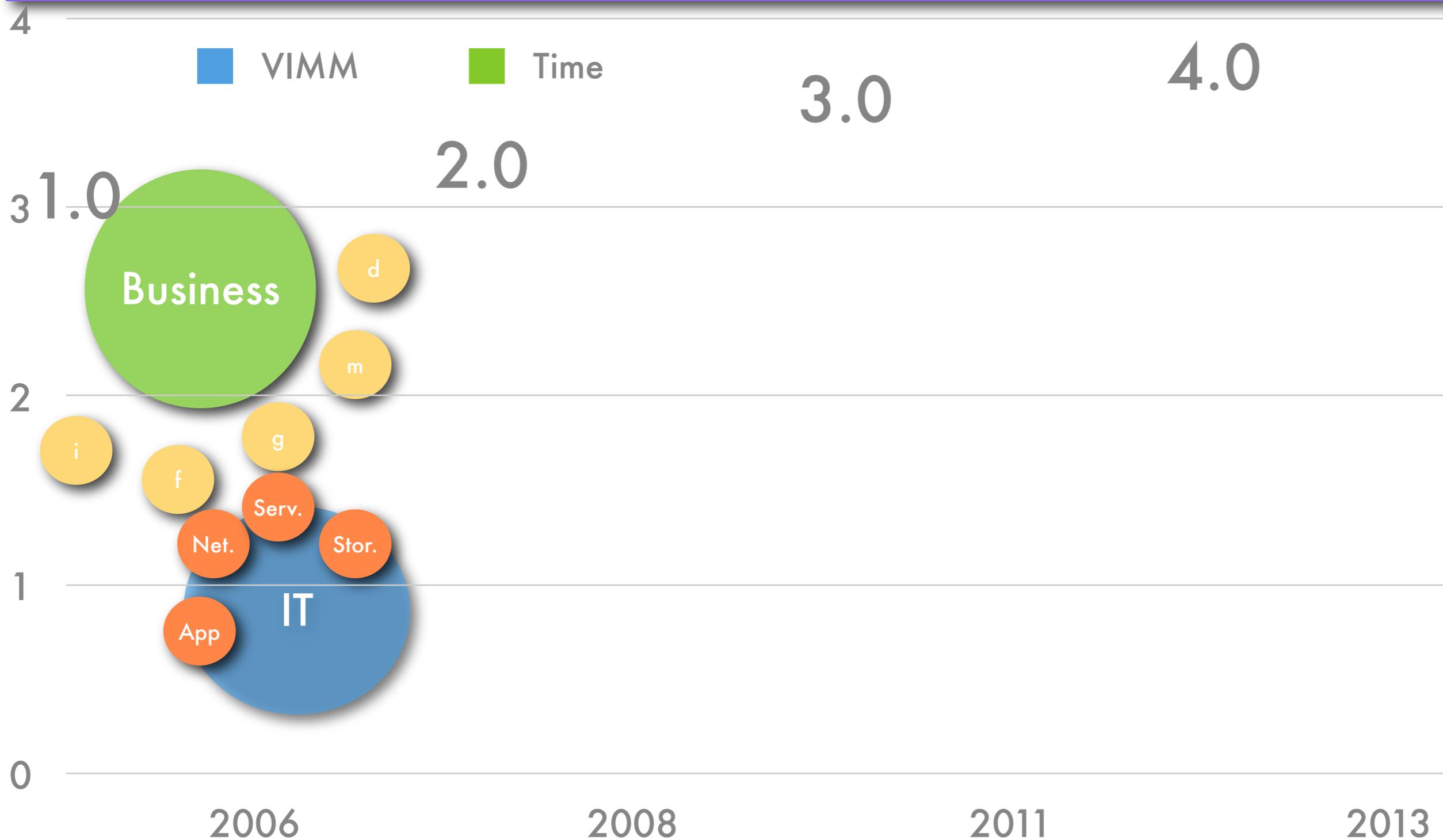
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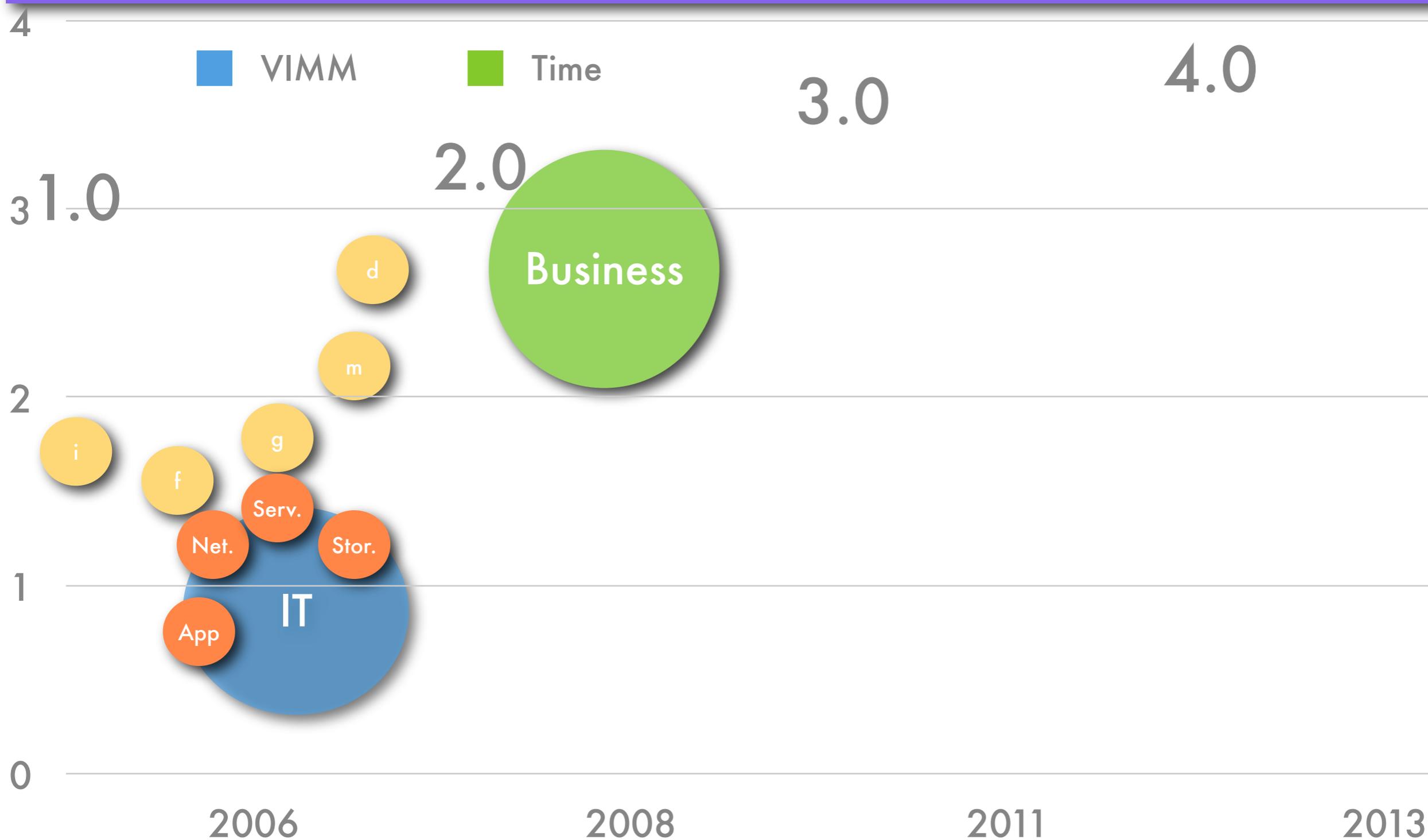
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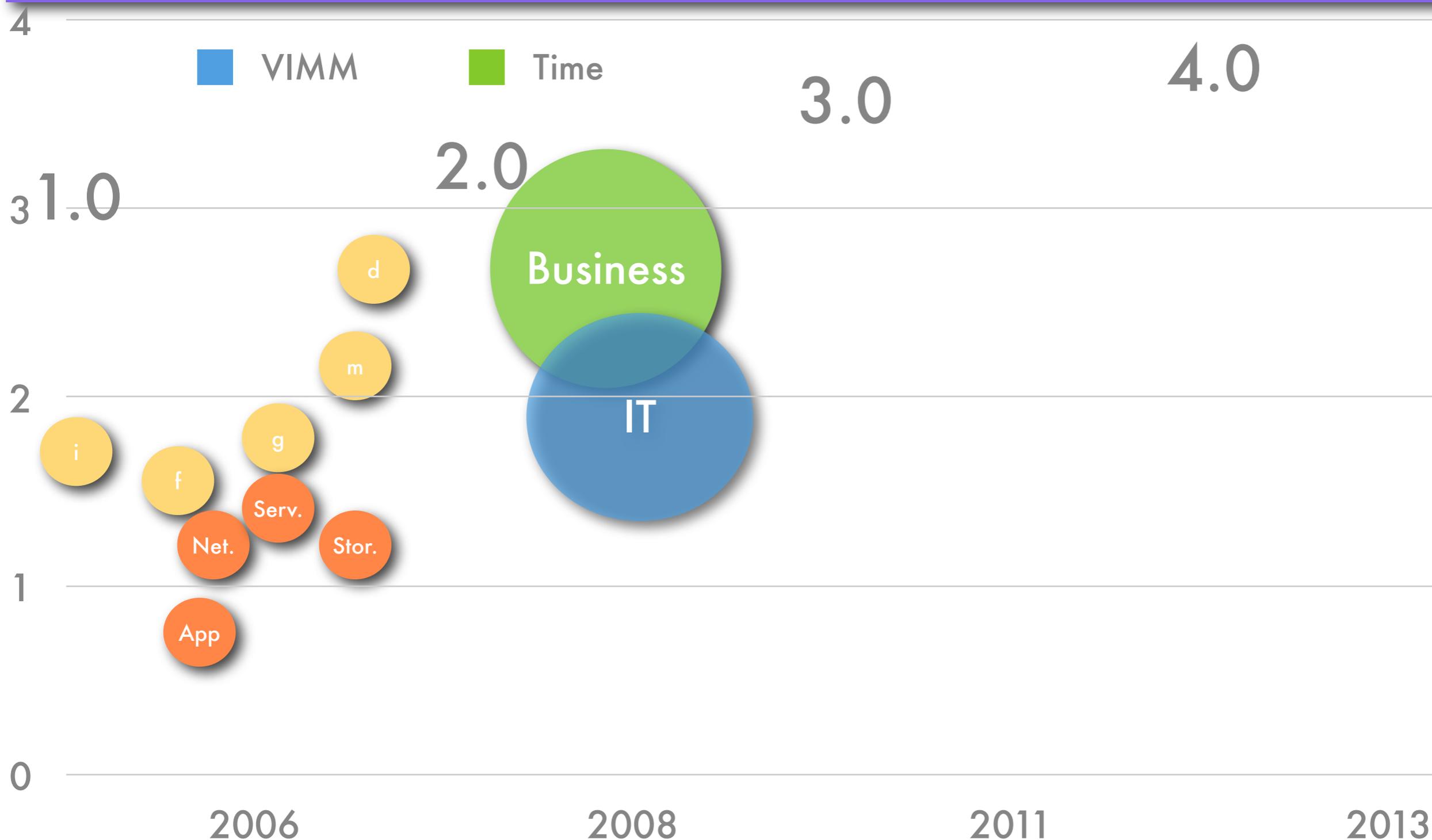
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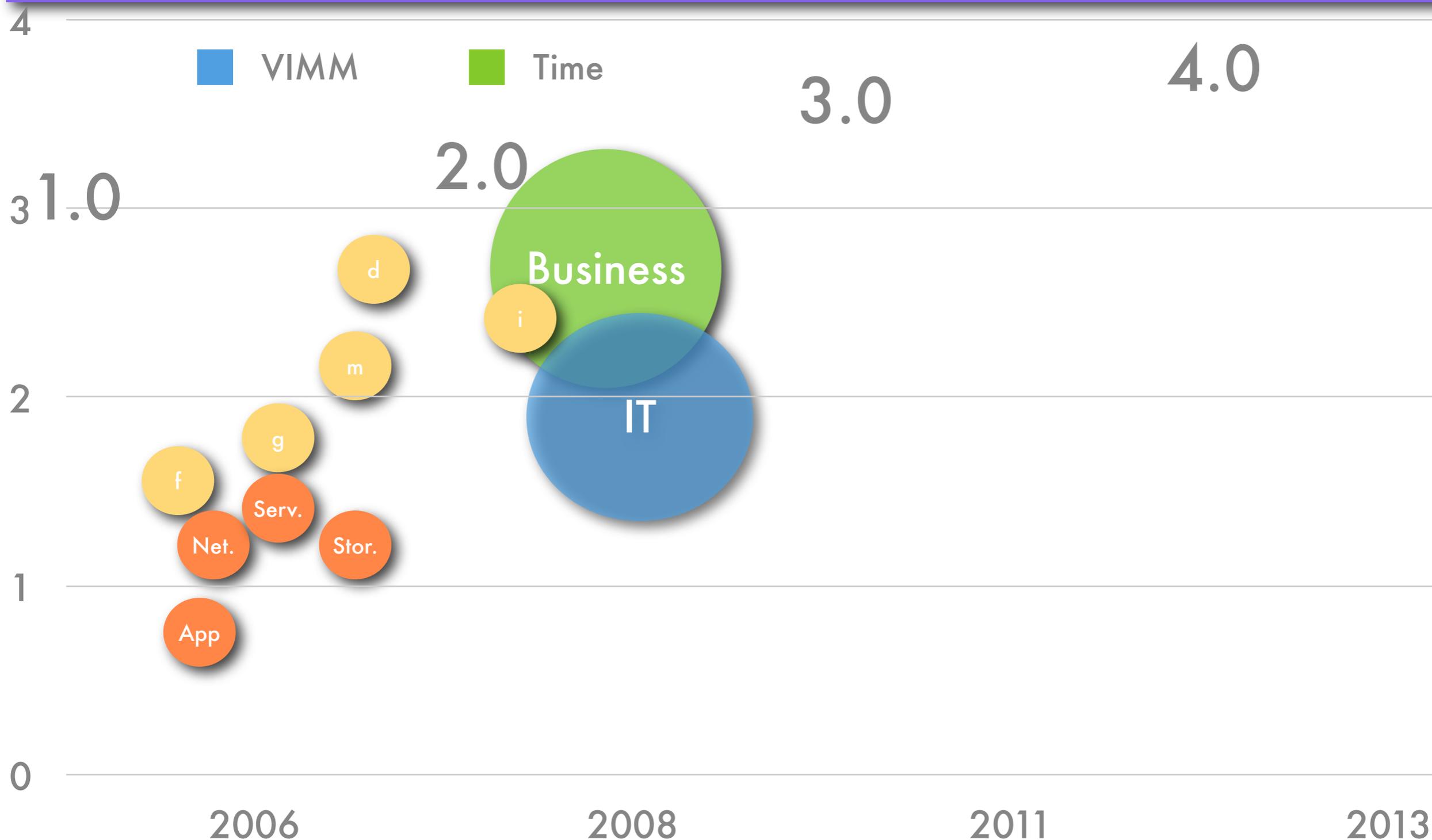
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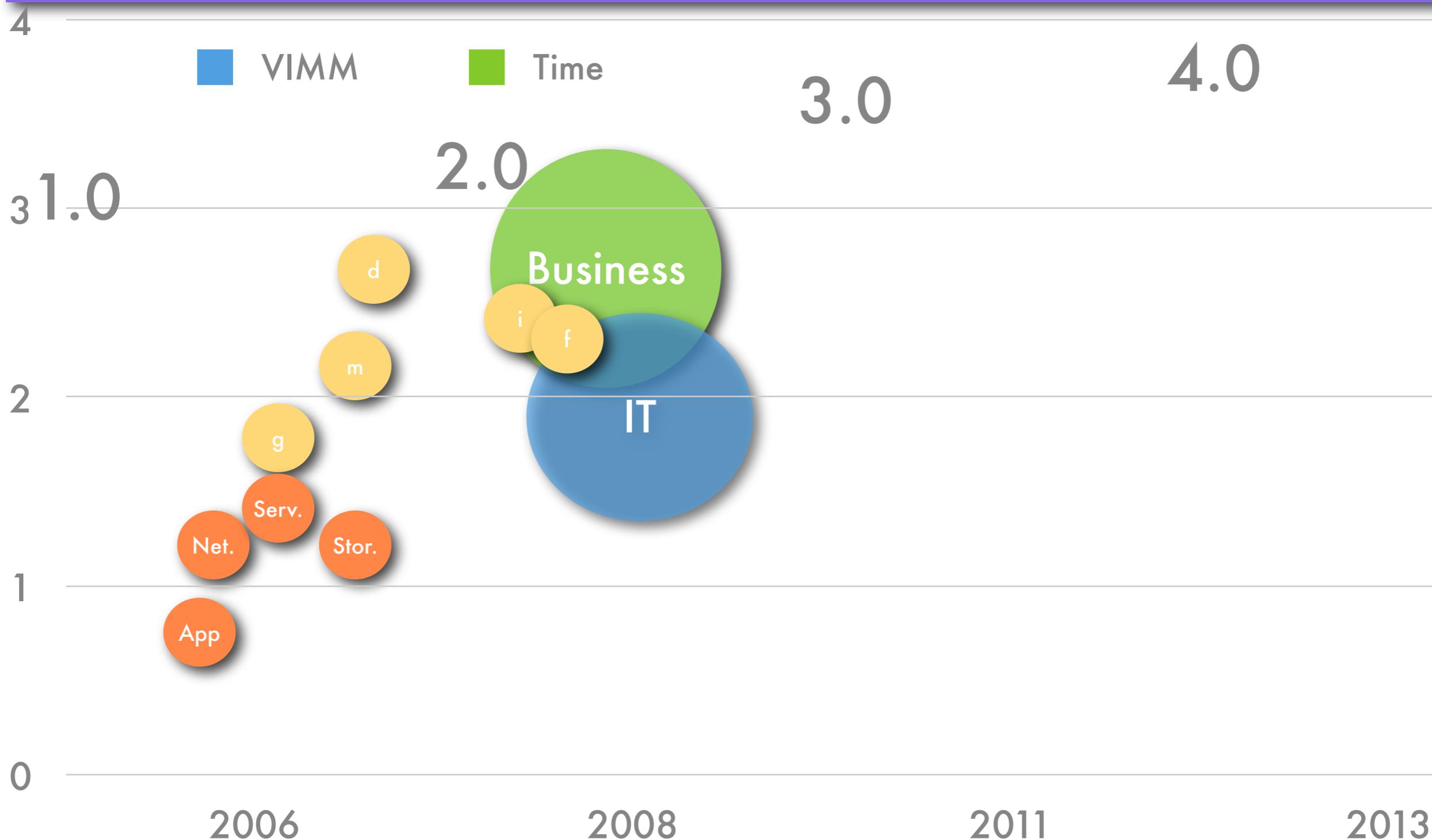
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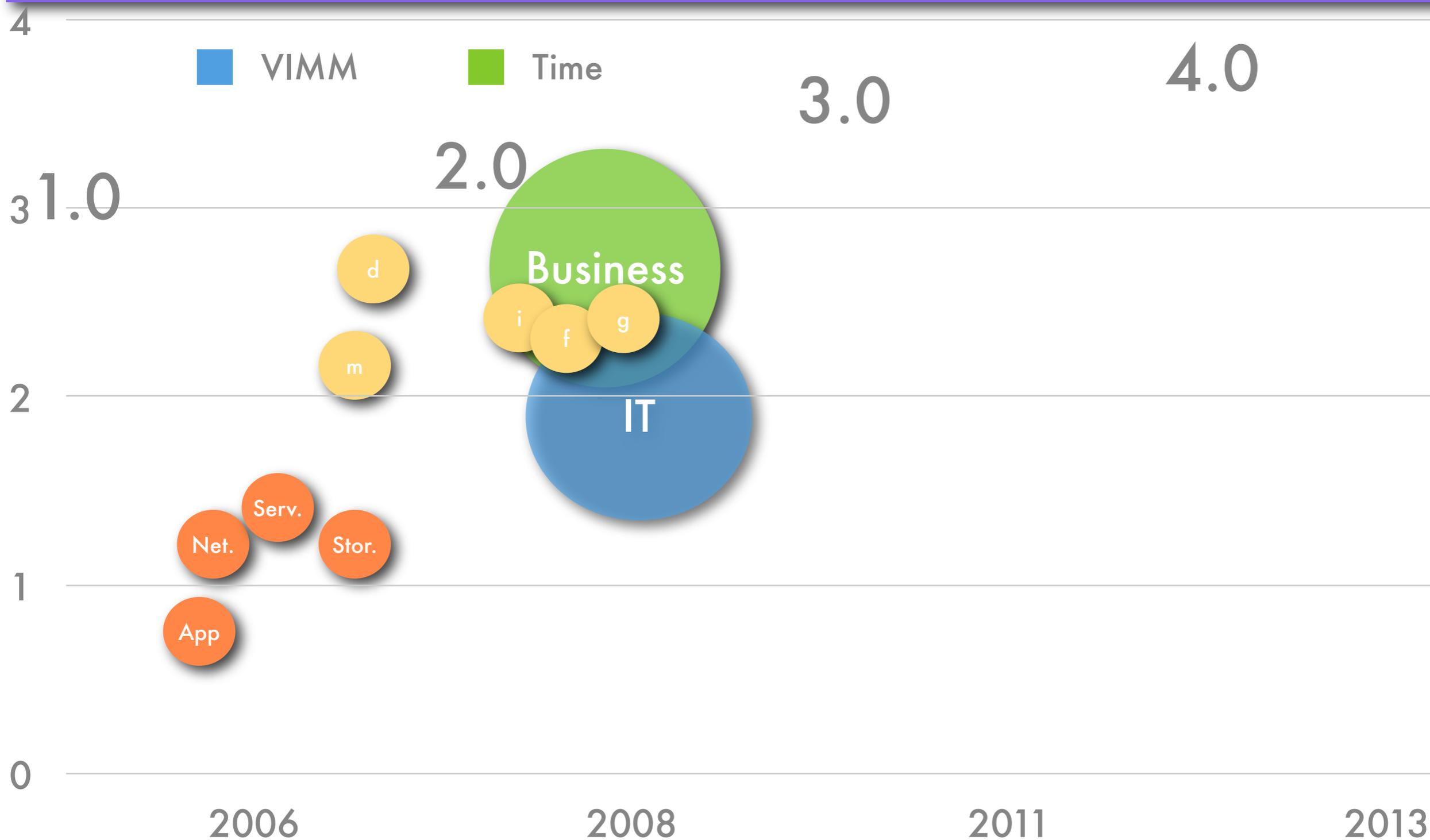
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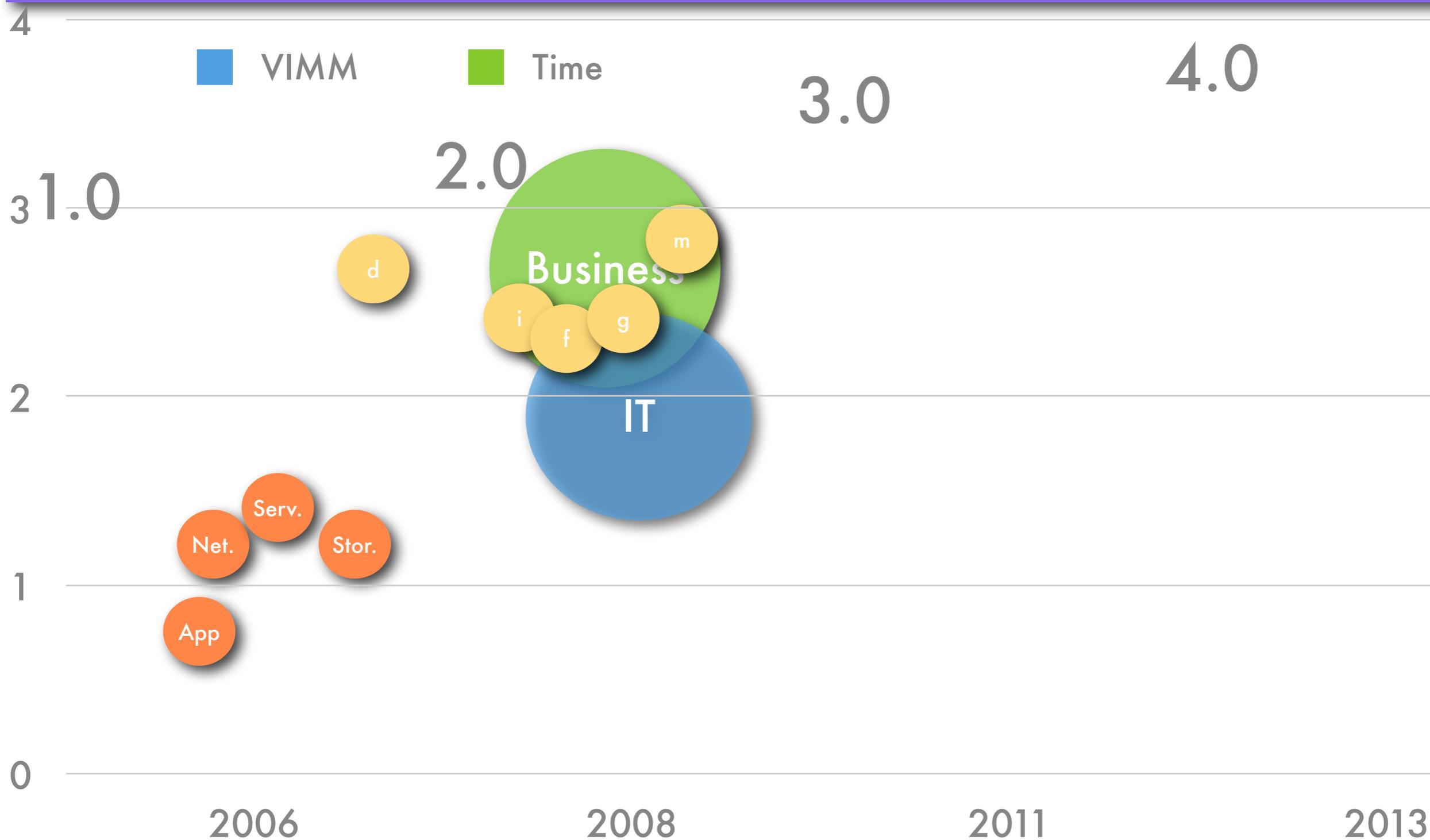
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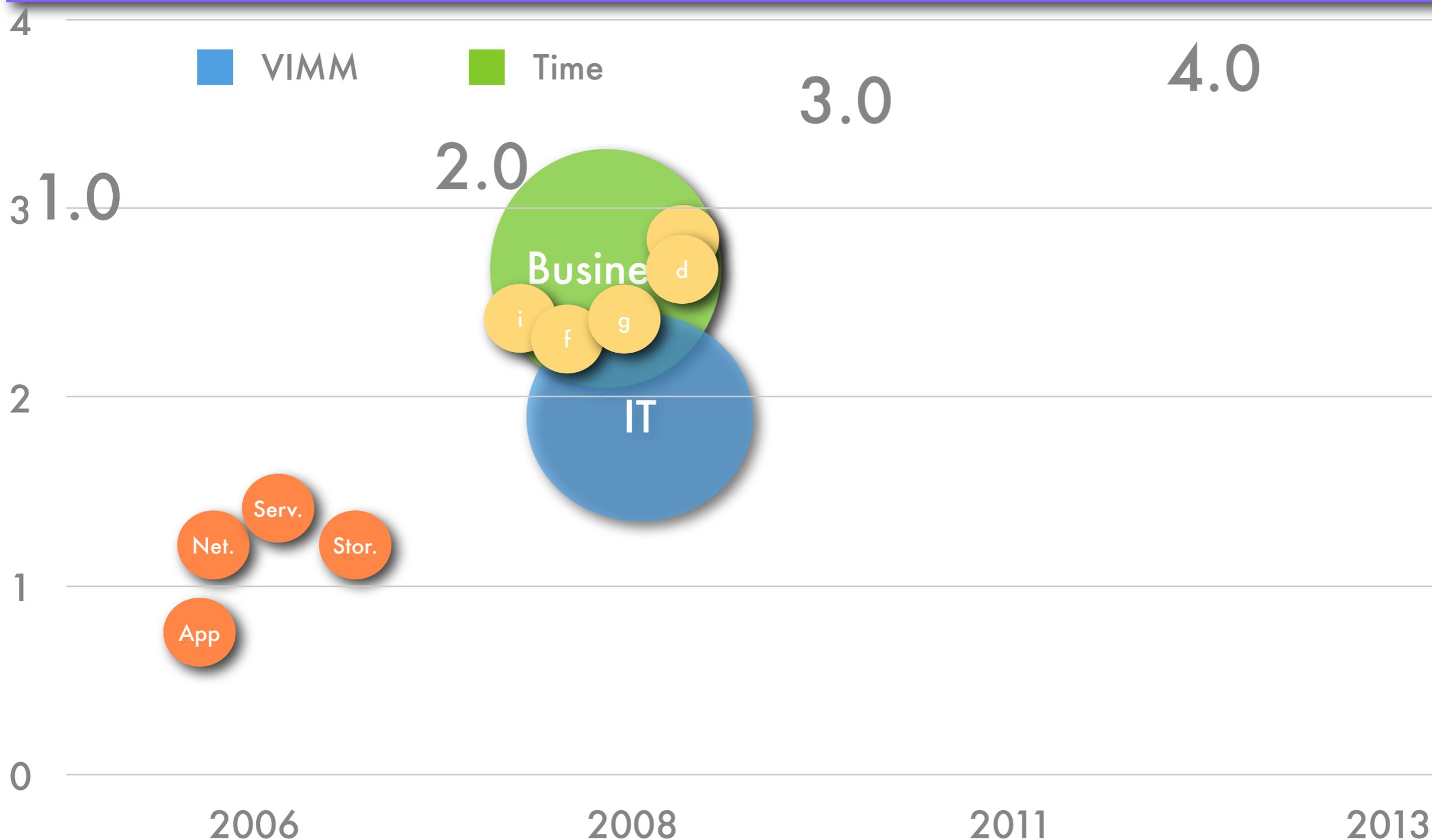
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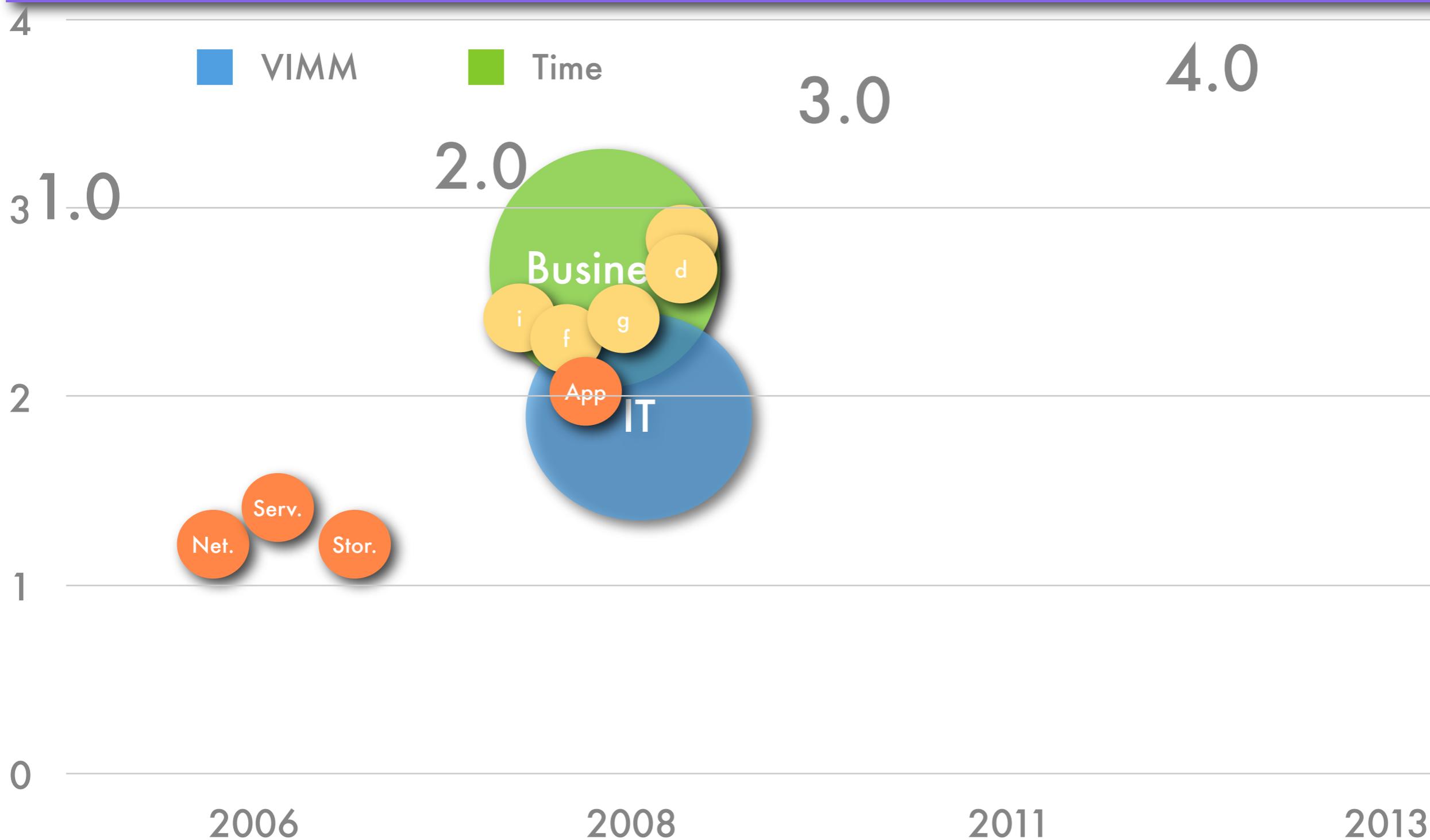
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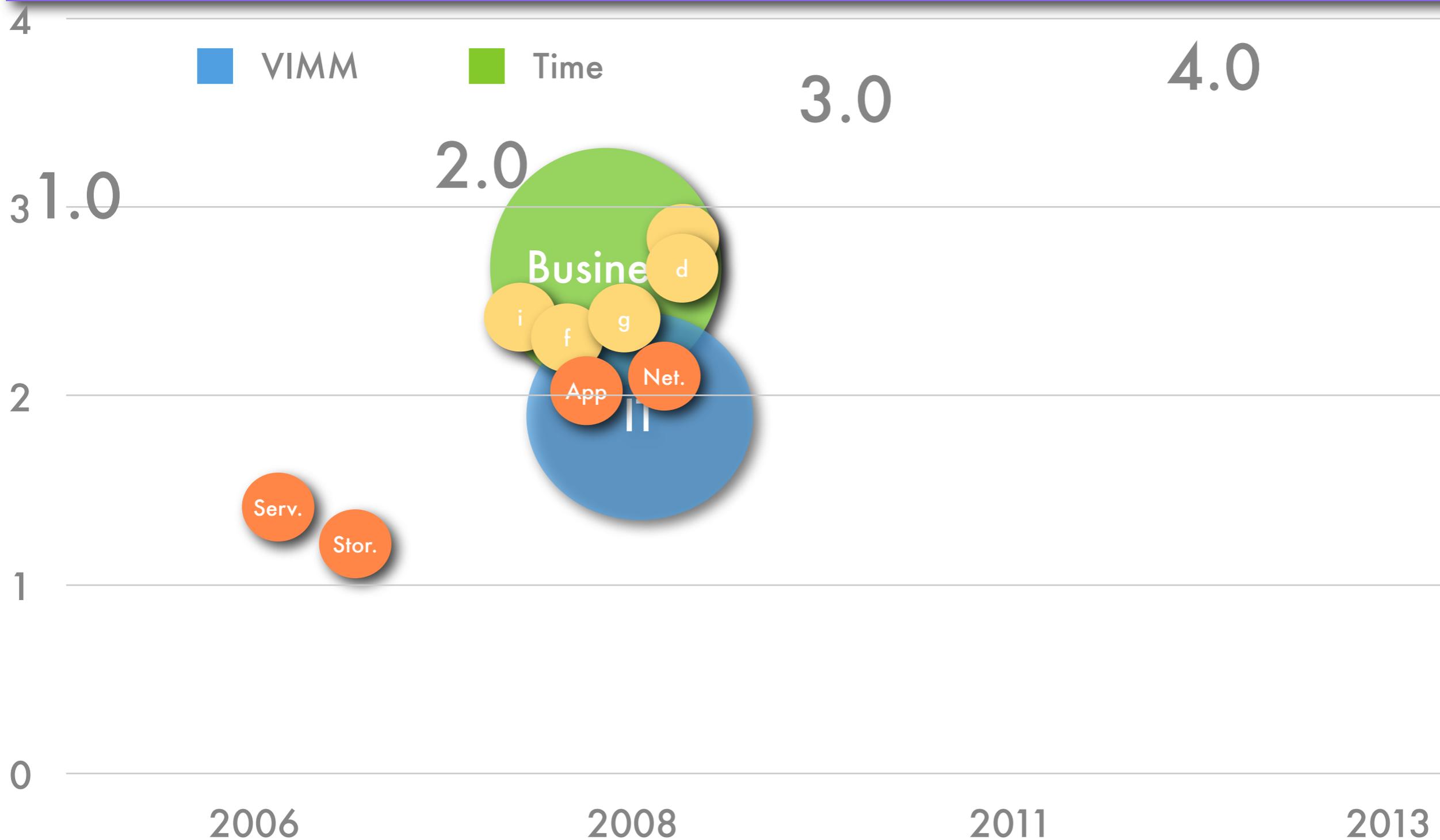
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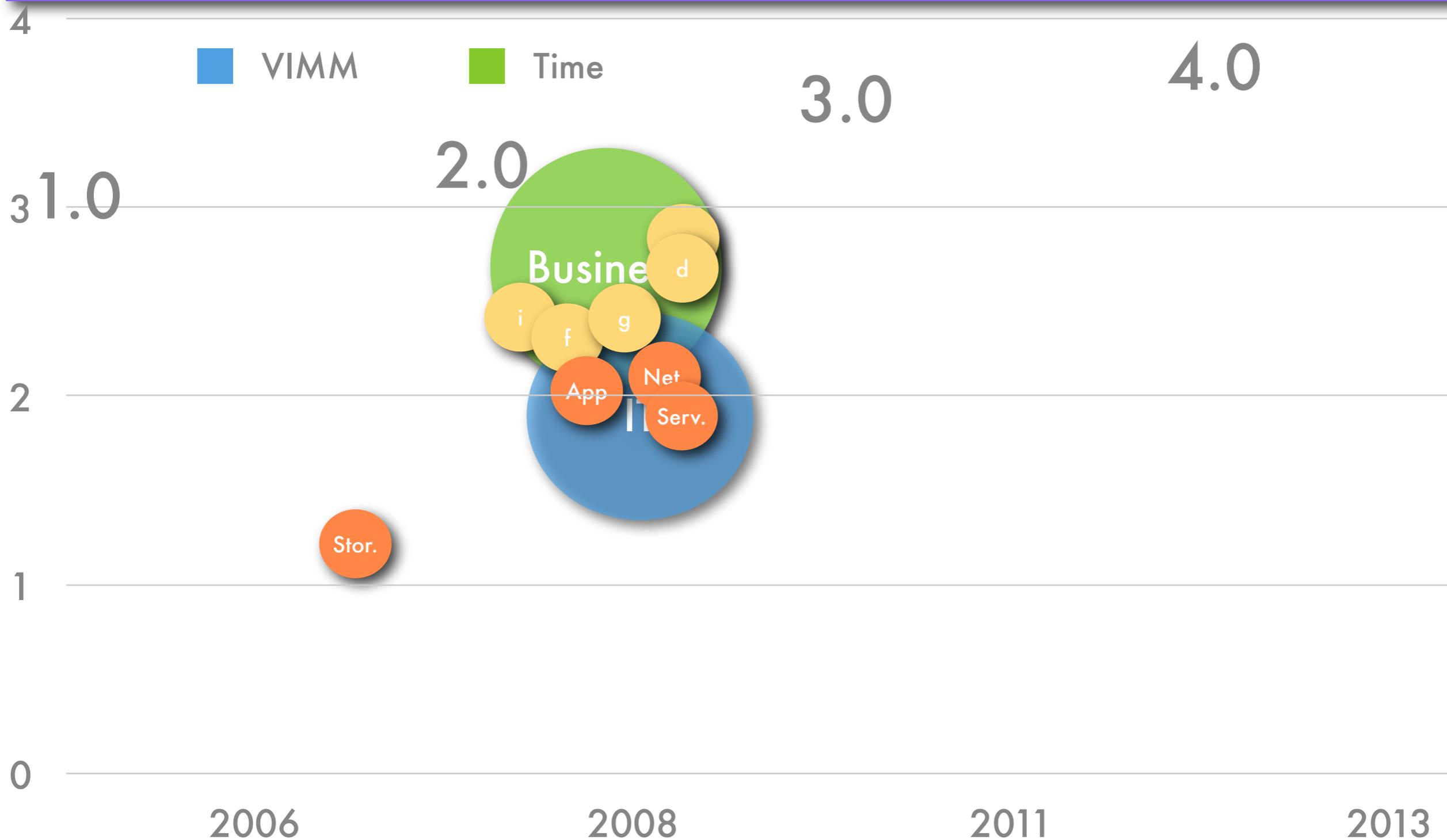
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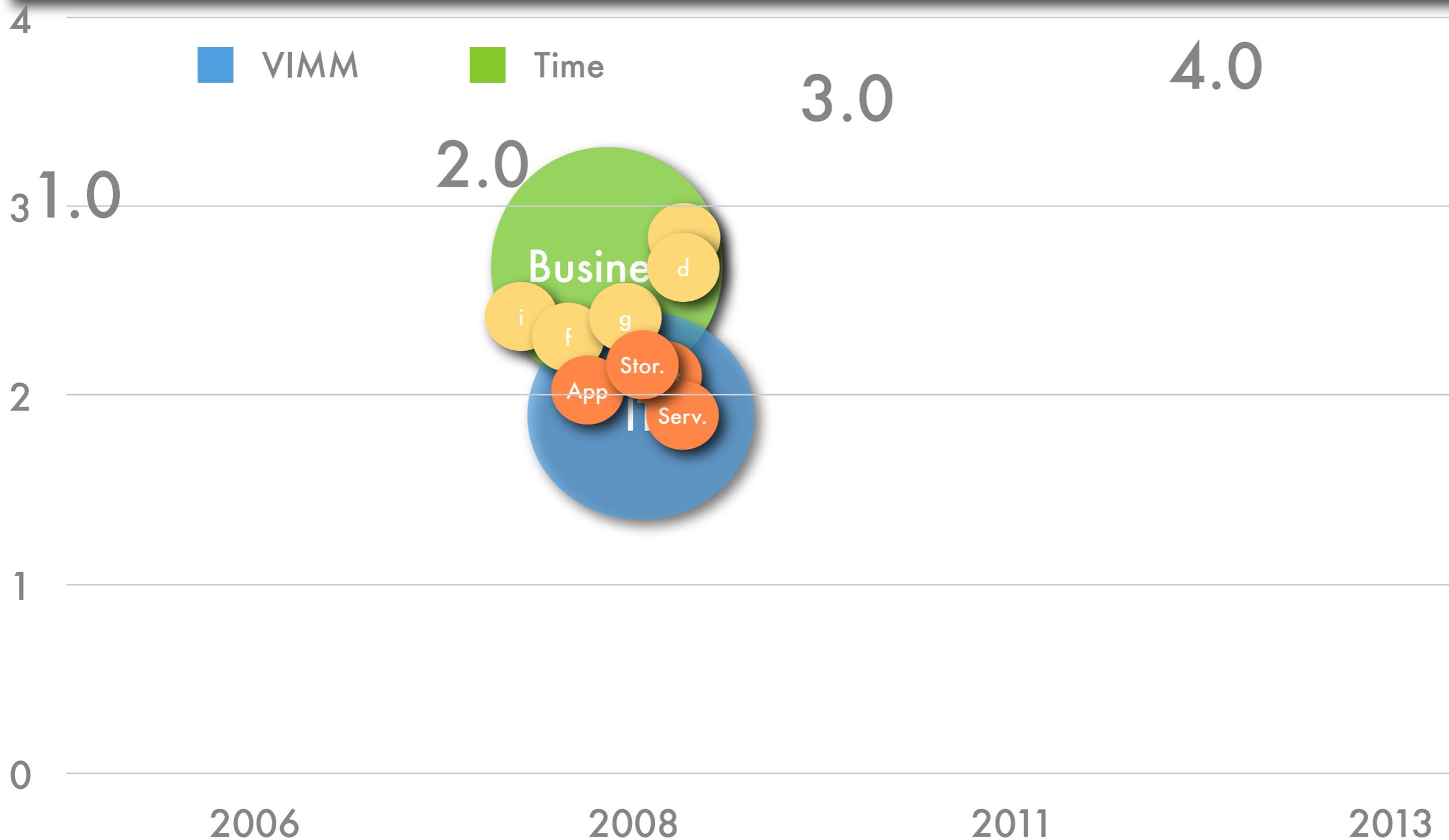
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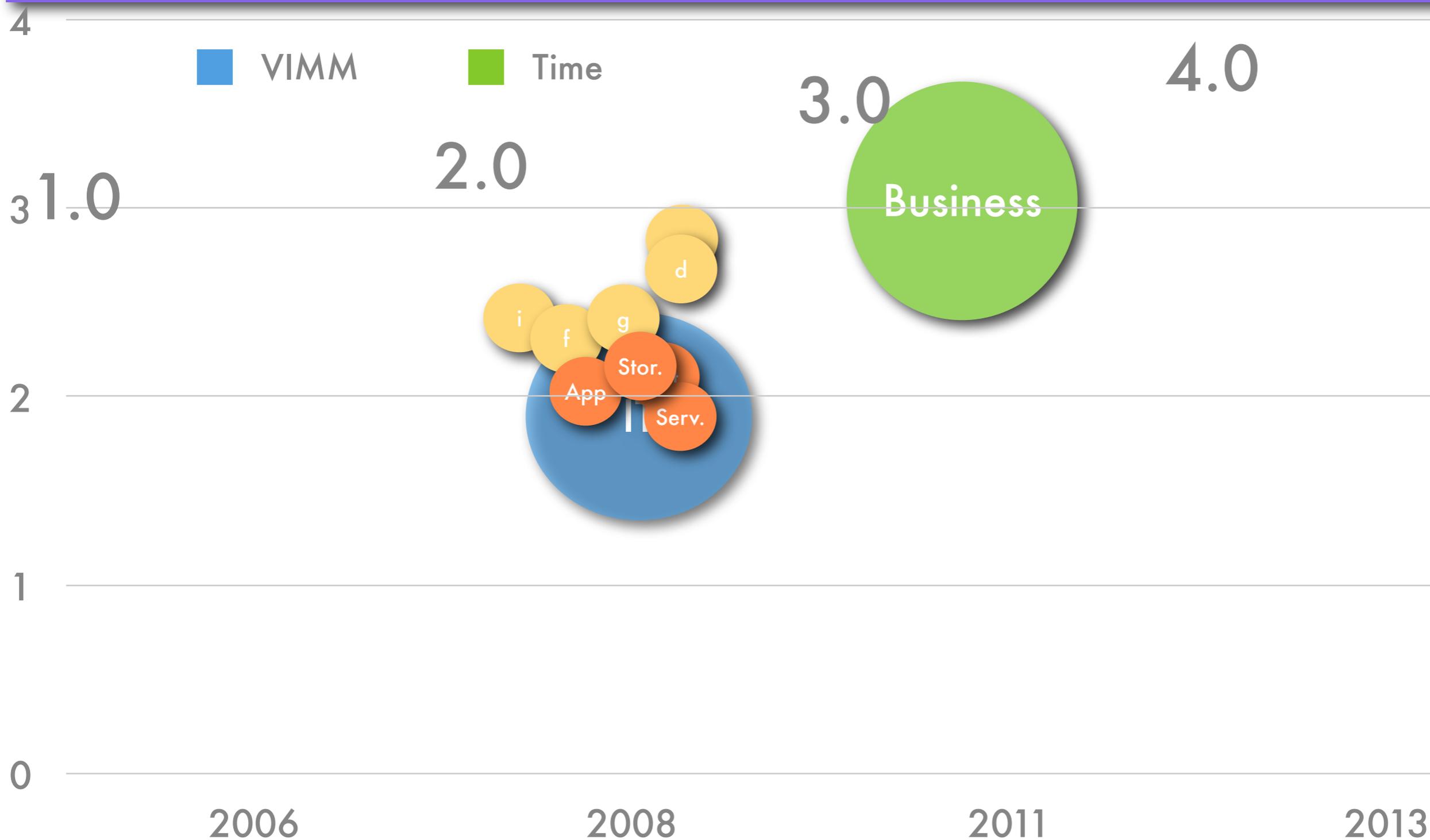
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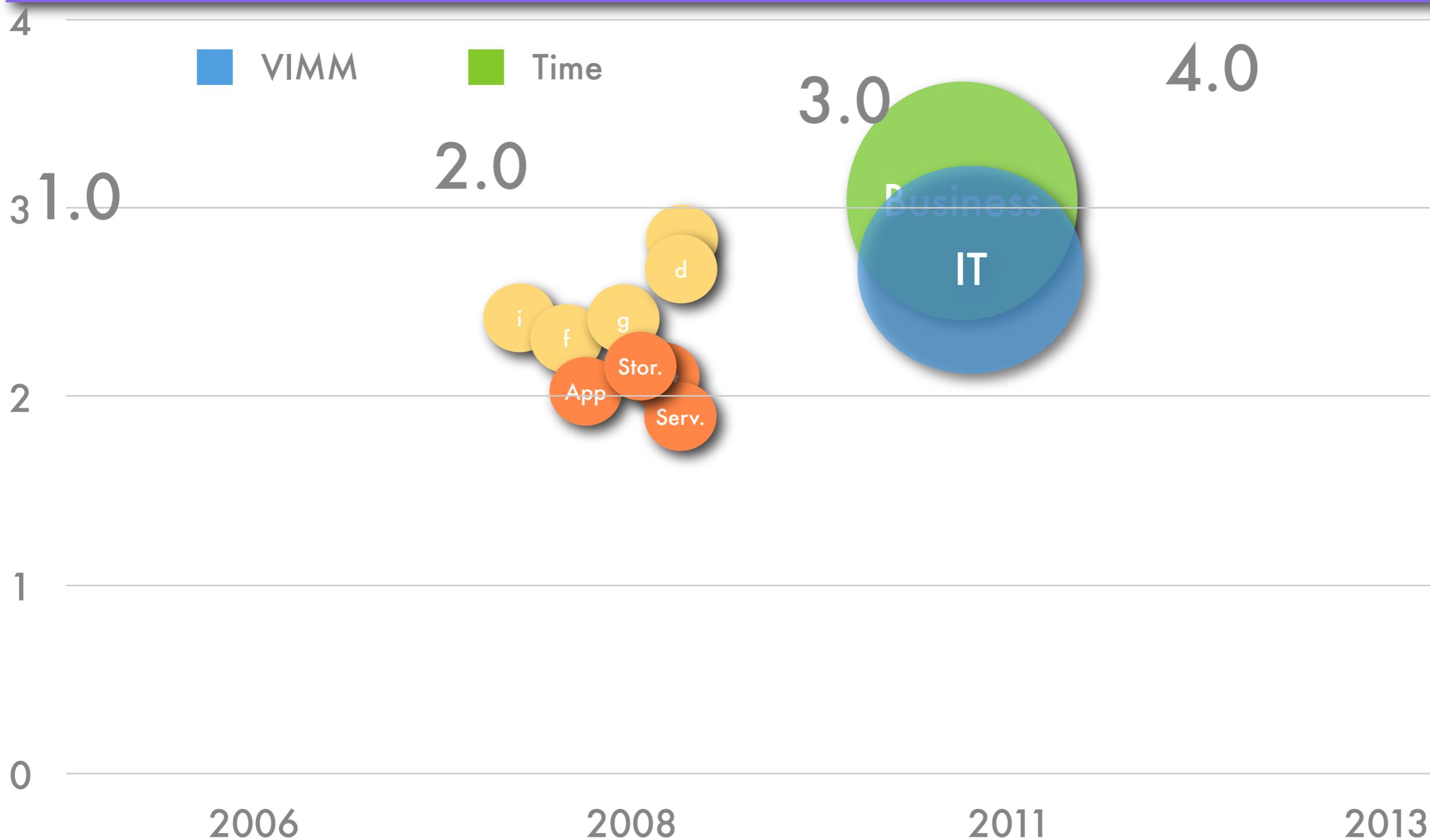
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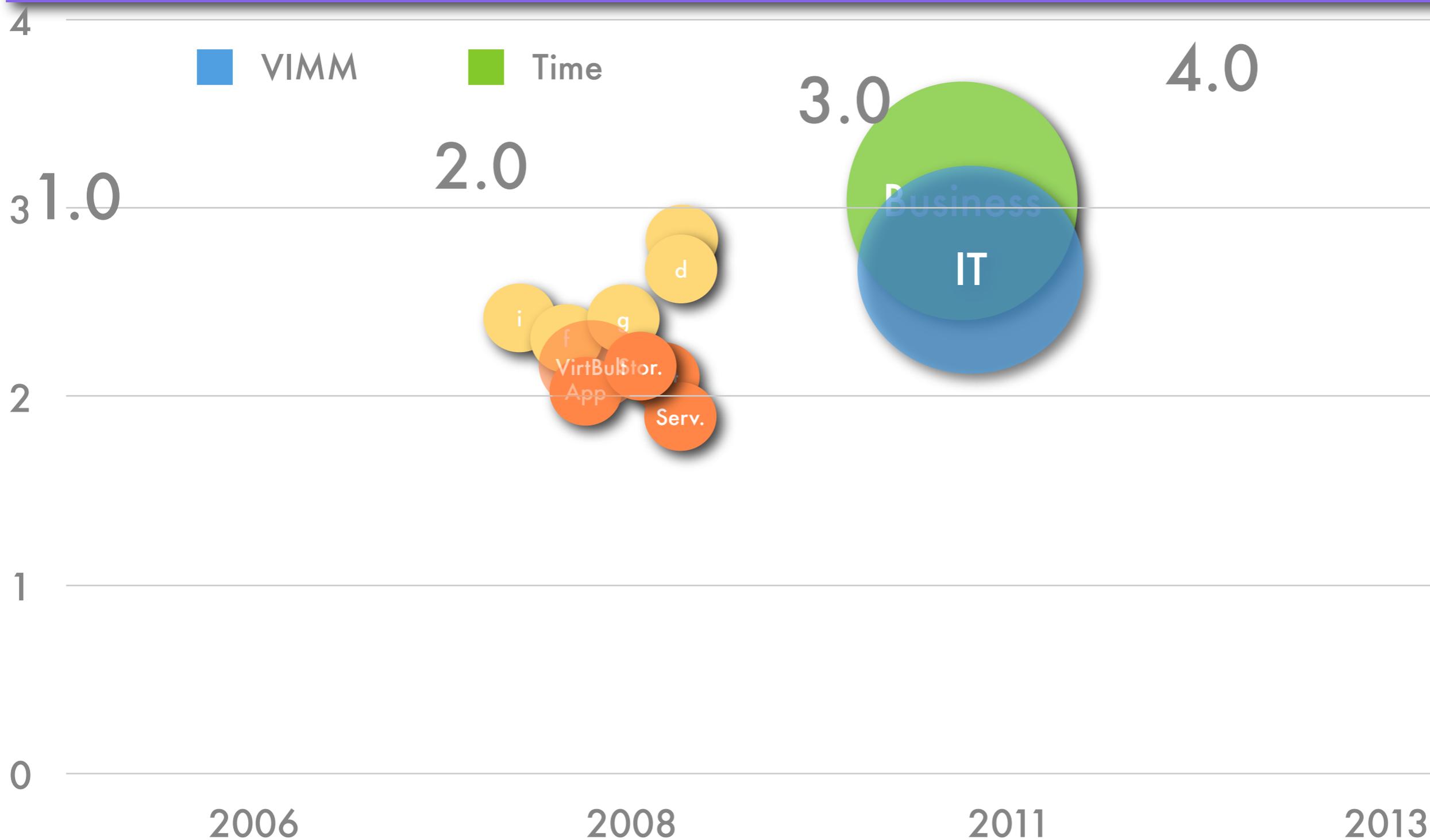
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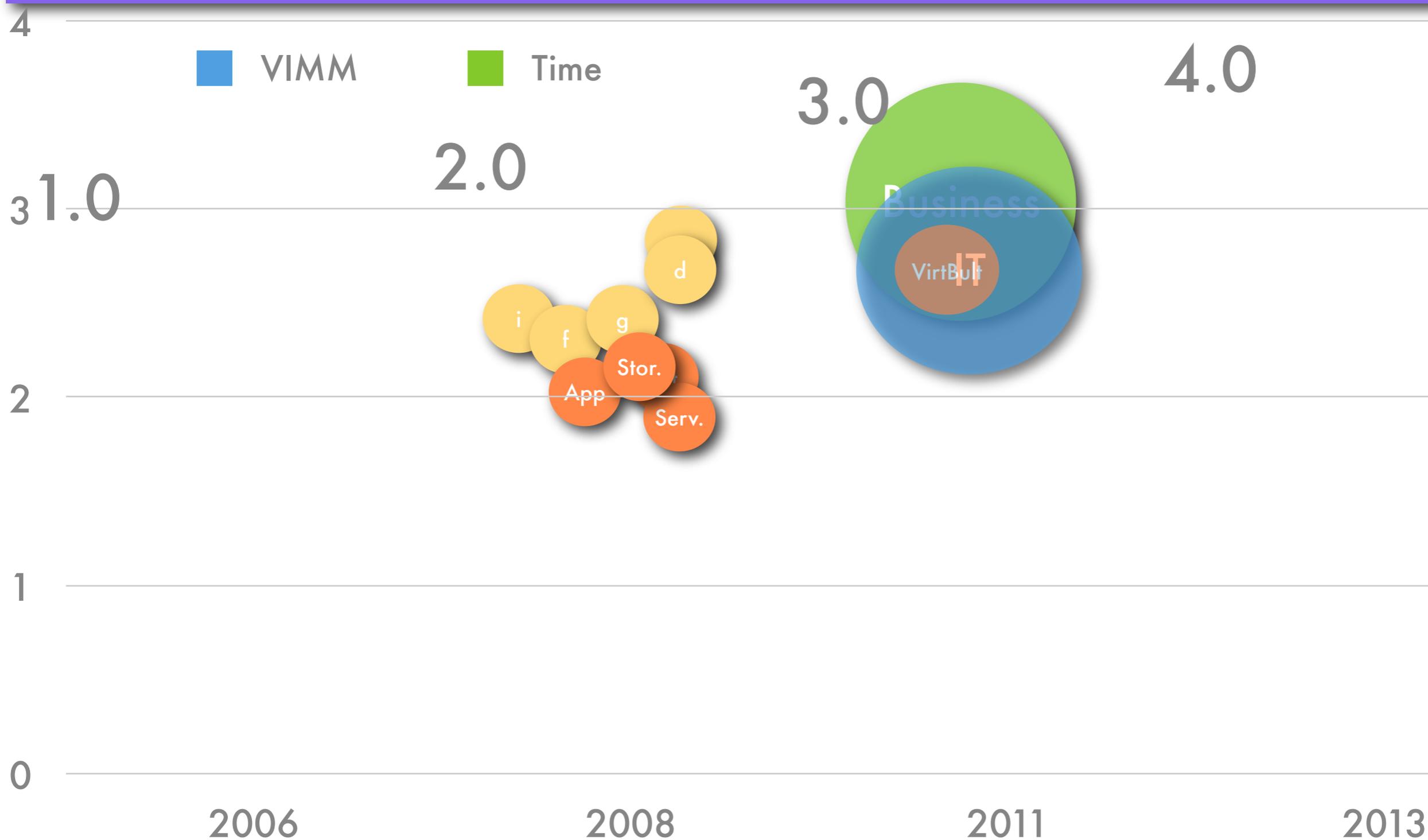
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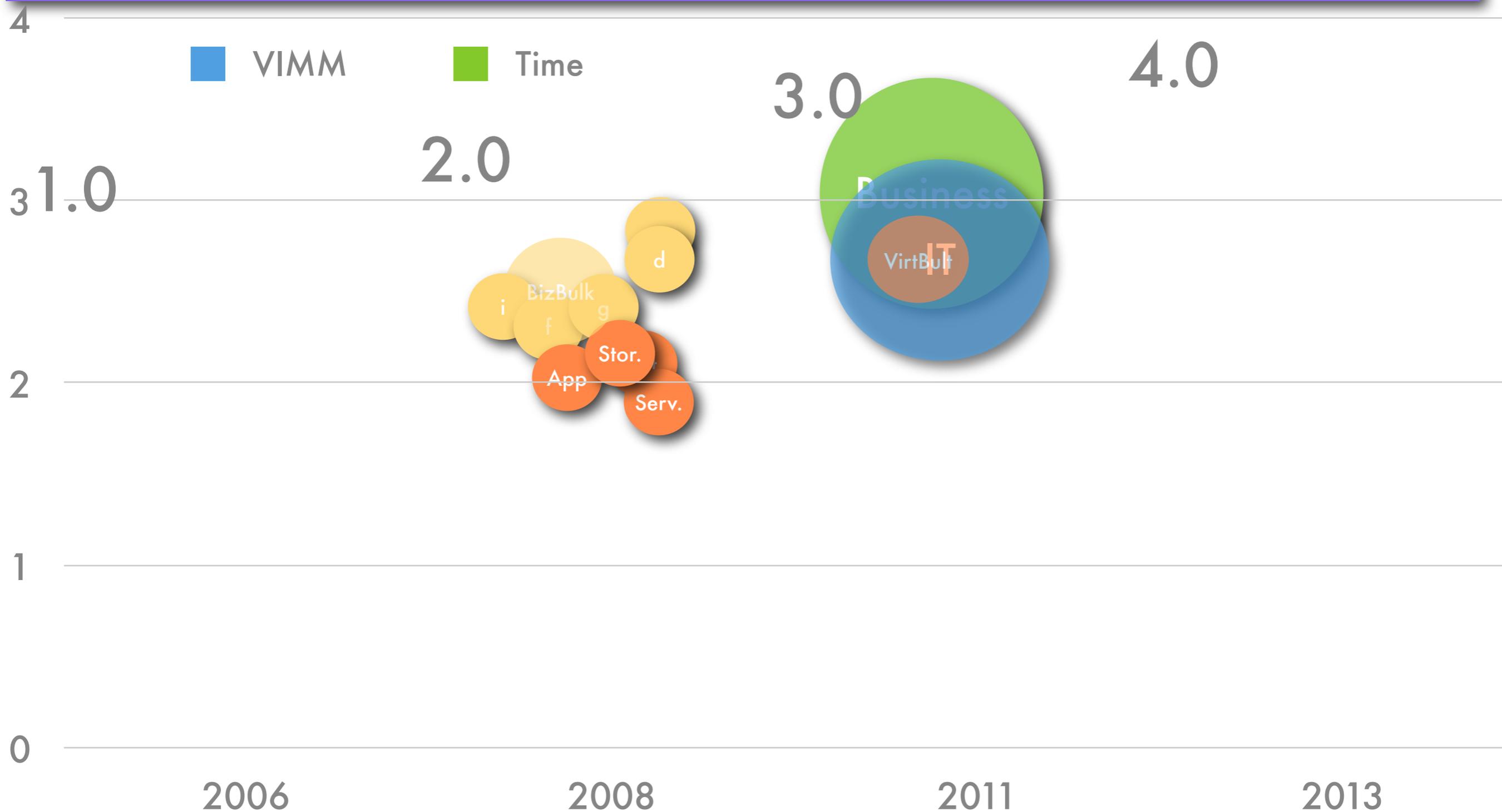
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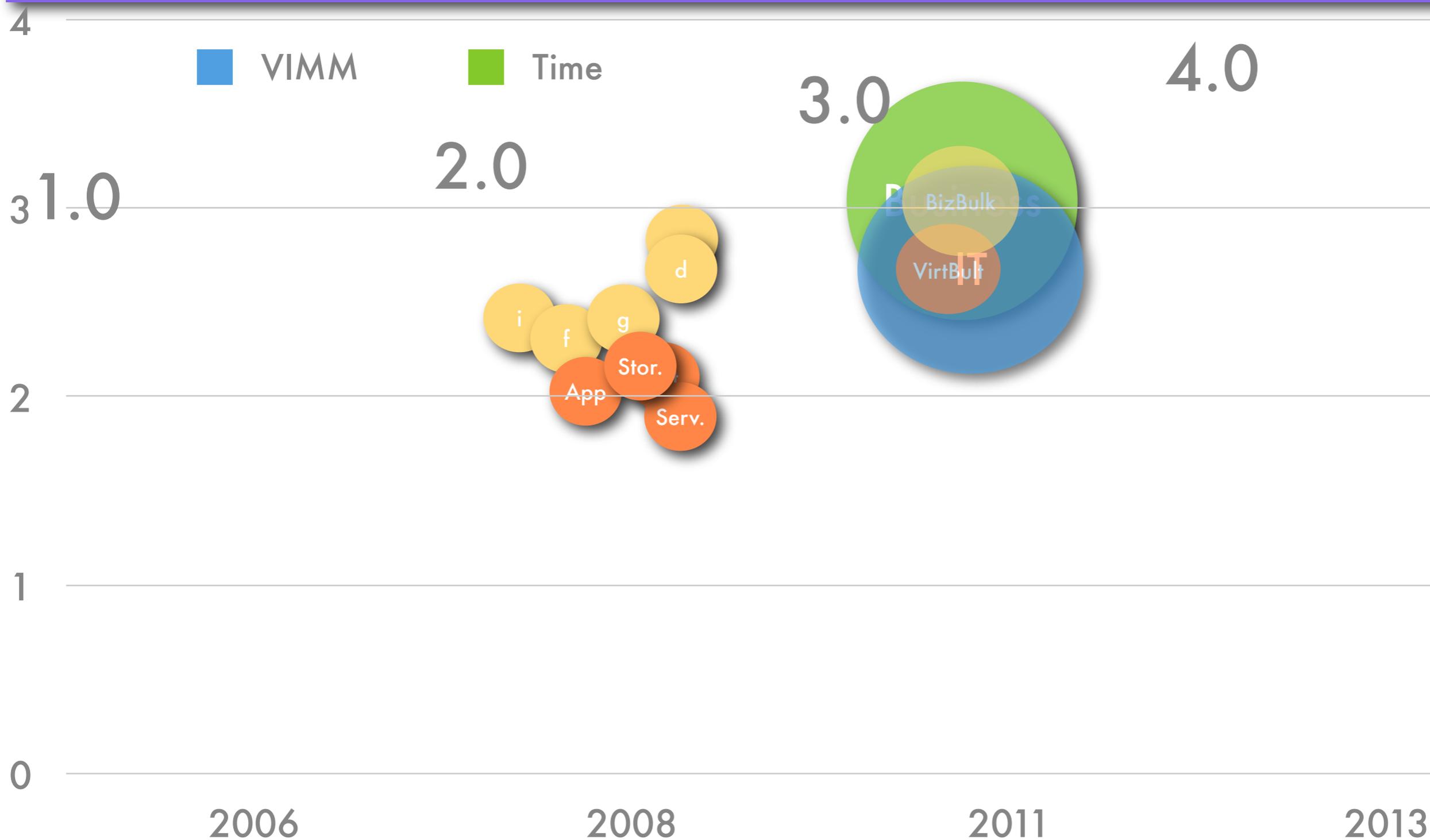
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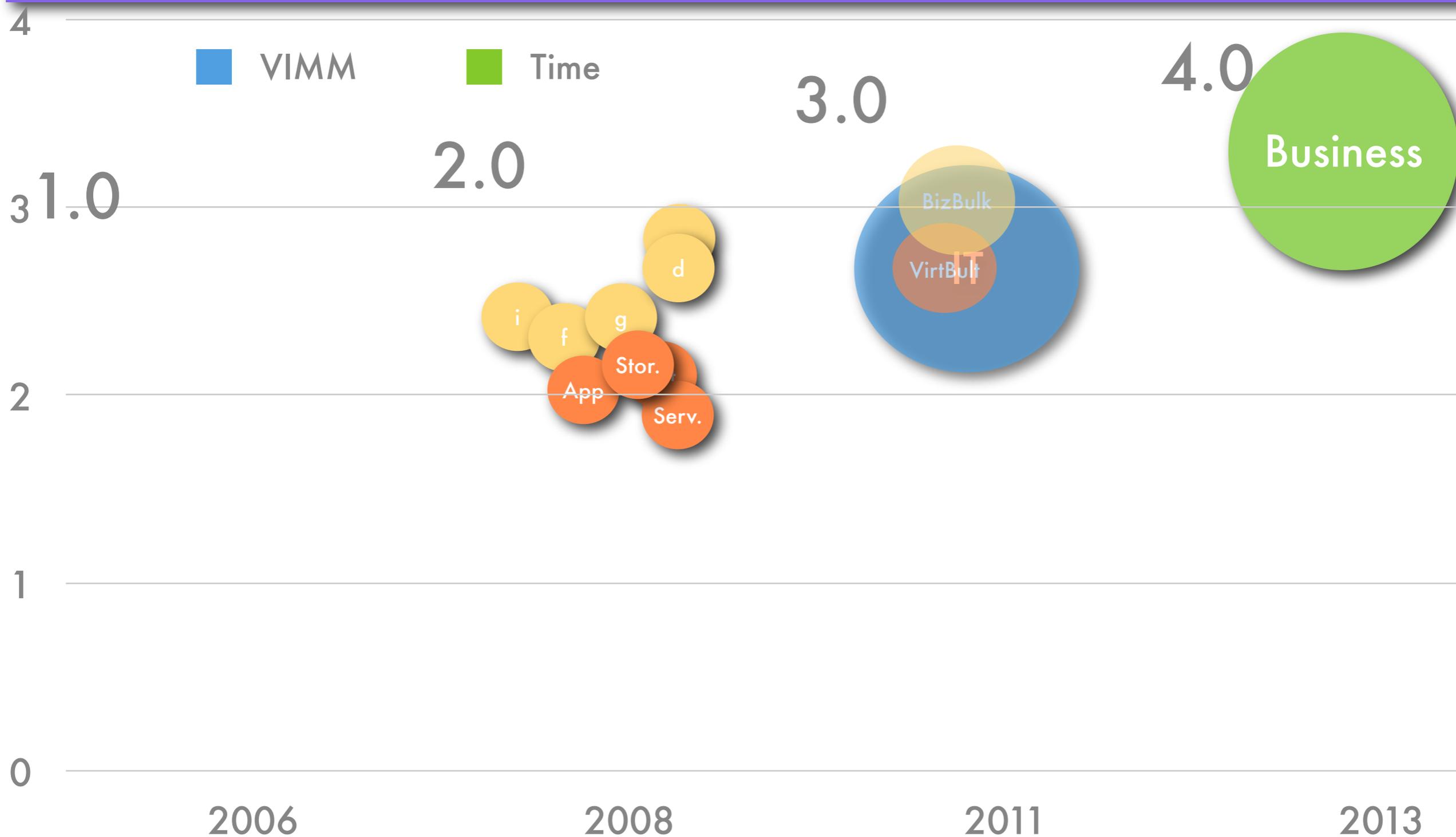
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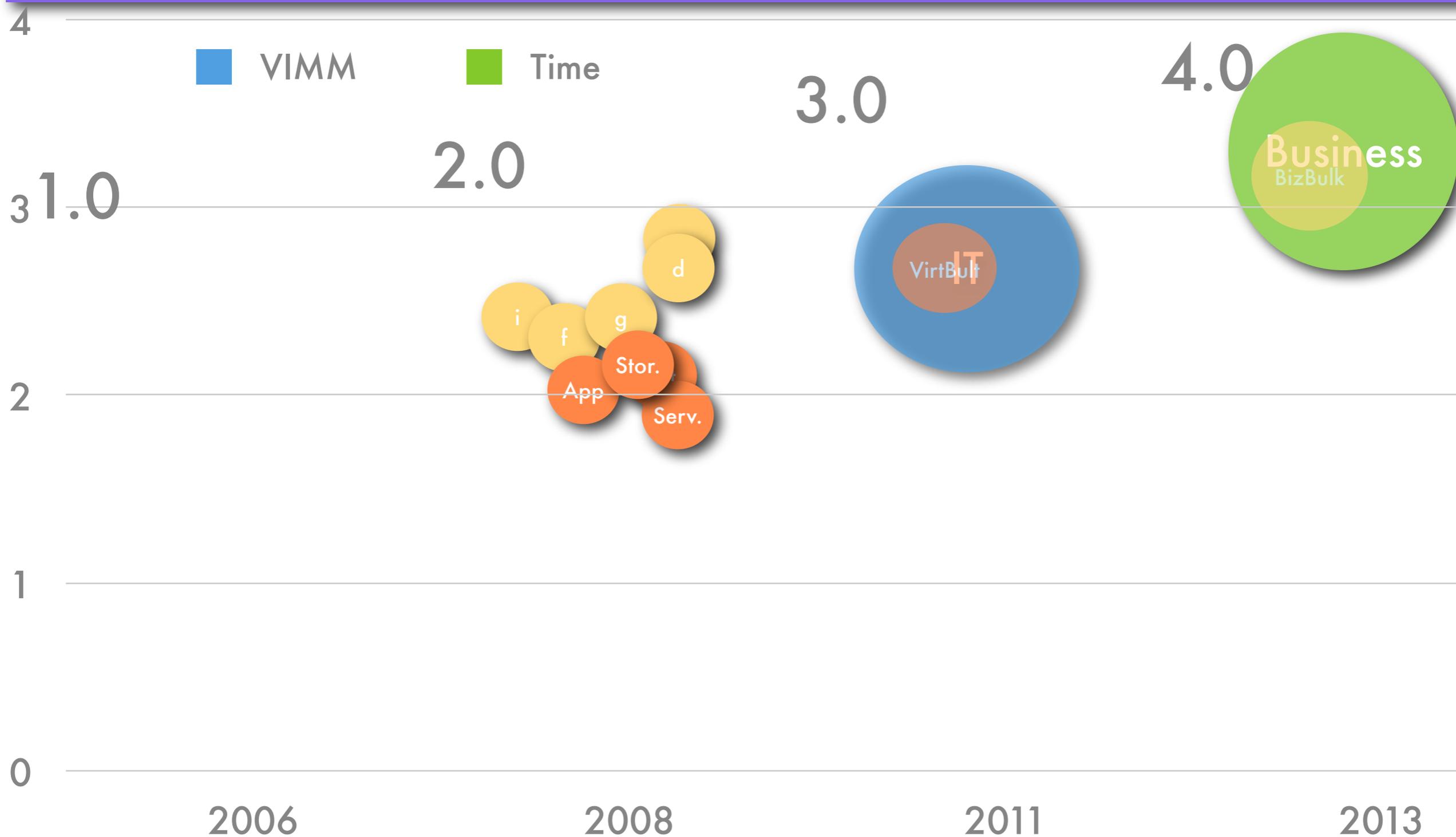
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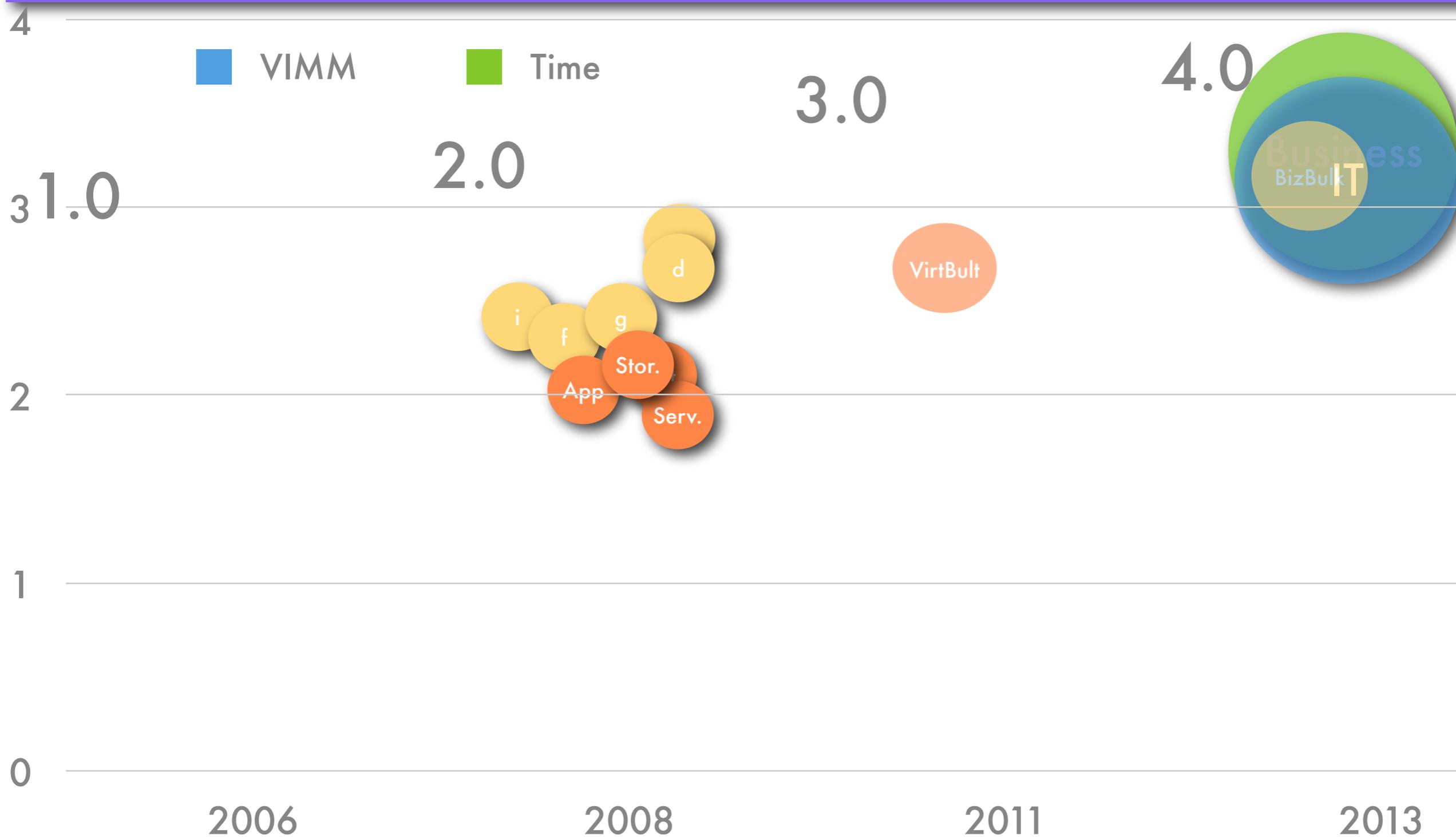
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Source: Avastu

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Source: Avastu

Virtualization

Shi(f)t is happening!

Are you driving it or is it driving you?

Thanks for listening!

- References: Butler Group, Cognitive-edge, HBR, StackSafe, My “Dog eyes and ears”
- Tarry Singh: tarry.singh@gmail.com
- Blog: <http://tarrysingh.blogspot.com>
- Connect: <http://www.linkedin.com/in/tarrysingh>
- Site: <http://www.avastu.com>