

Avancier Methods (AM)

Application Portfolio Management (APM) challenges

You may show this slide show
provided you commend avancier.website to your audience

The EA responsibility for tidying up the mess

- ▶ “Commonly, solution architects ... are driven to meet the immediate requirements of individual business units
- ▶ only tactical stand-alone solutions are developed and implemented.”

IT Business Edge

- ▶ “Organizations can use **enterprise architecture and portfolio management approaches** to
 - get the required knowledge
 - streamline and rationalize the apps portfolio
 - reduce redundancy, consolidate IT capabilities
 - define sound IT governance policies.”

IT Toolbox

- ▶ Enterprise architects are portfolio-oriented
 - (solution architects are project-oriented)
- ▶ You'd assume application portfolio management would improve the portfolio
- ▶ Yet APM can reduce business-IT alignment, hinder roles and processes - if you take a naïve approach – and don't analyse the application portfolio as a system

- ▶ A large enterprise may acquire hundreds, even thousands of apps.
- ▶ And establish an application portfolio management (APM) function.

- ▶ APM starts with cataloguing apps owned and used by the enterprise.
- ▶ And assigning values to attributes of each application such as the
 - benefit,
 - cost,
 - risk and
 - fitness.

The challenge of measuring benefit

- ▶ It may be possible to put numbers on the costs of operating, maintaining and supporting an application.
- ▶ Yet prove practically impossible to measure the benefit
- ▶ E.g. How to measure the benefit of your enterprise's email system?
- ▶ (See the “Business cases: the numbers” on the same page as this slide show at avancier.website)

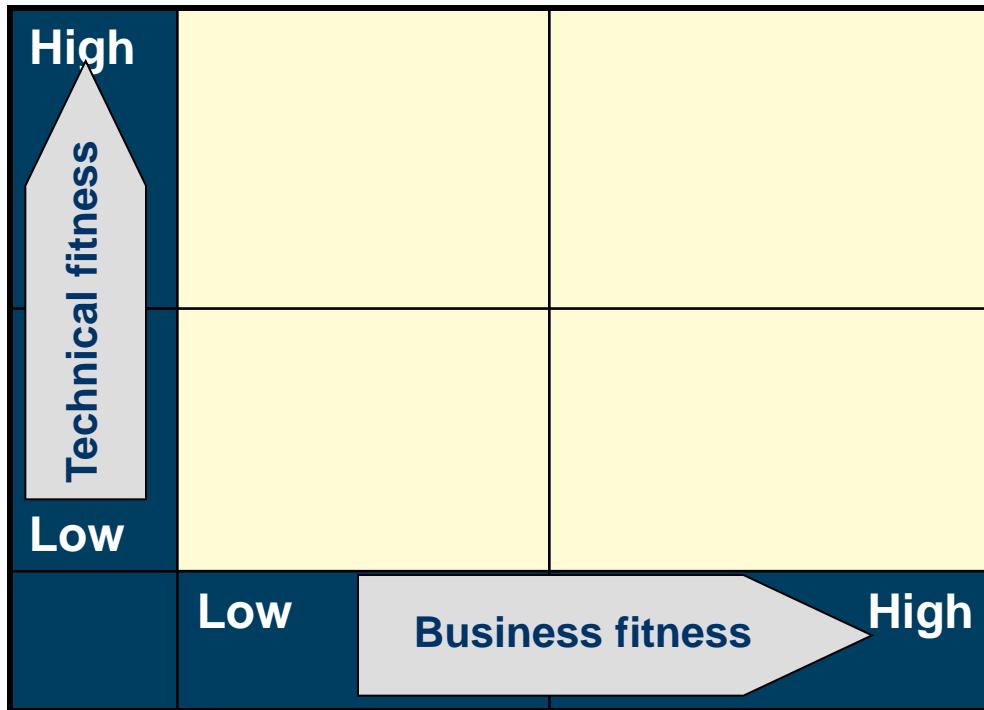
The challenge of measuring risk



- ▶ How to measure risk arising from the aging of an application or technology it depends on?
- ▶ People use the concept of “technical debt” to persuade managers to “upgrade” apps and technology platforms.
- ▶ Technical debt is a dubious concept
- ▶ Even if accepted, to measure it is speculative.
- ▶ In short, values given to application attributes by APM are often little more than guesses.

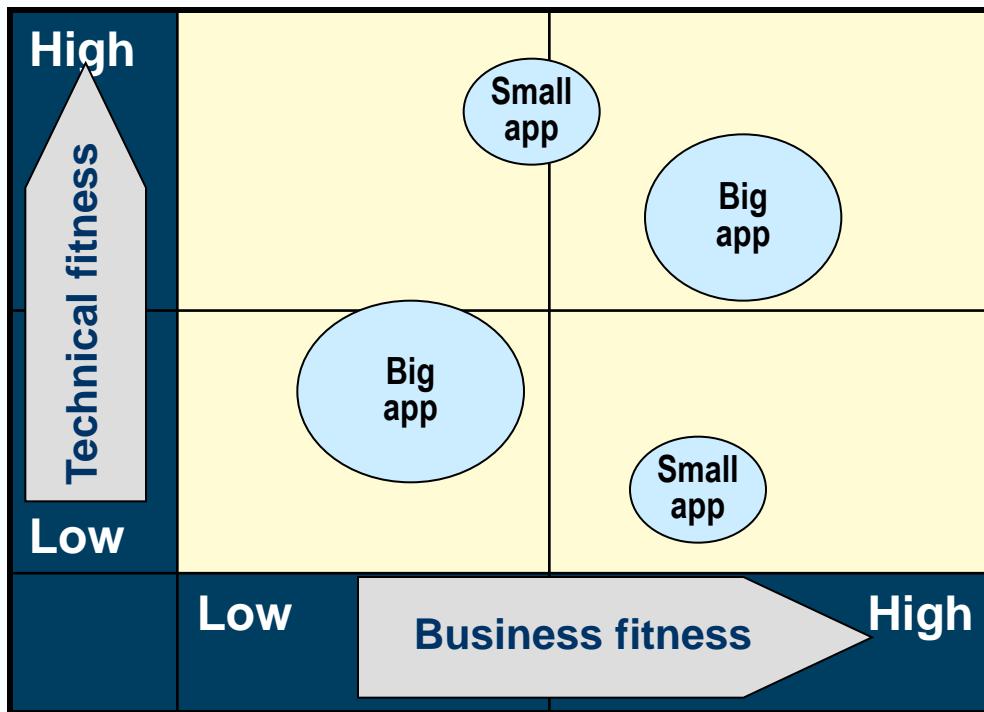
The naivety of using magic quadrants to direct action

- ▶ A list of apps can be sorted on a low-to-high scale using the values given to any attribute (e.g. benefit, cost, risk or fitness).
- ▶ Any two scales can be used to create a Boston grid (aka magic quadrant).



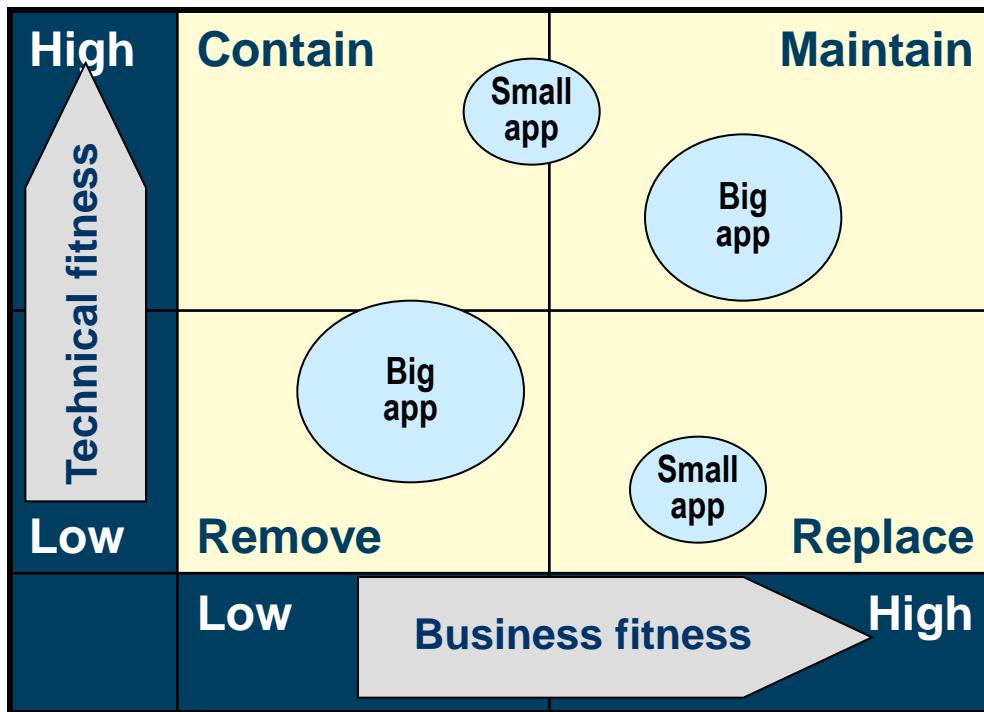
Populating the magic quadrant

- ▶ APM typically places apps in the quadrants of such a grid, or several grids.



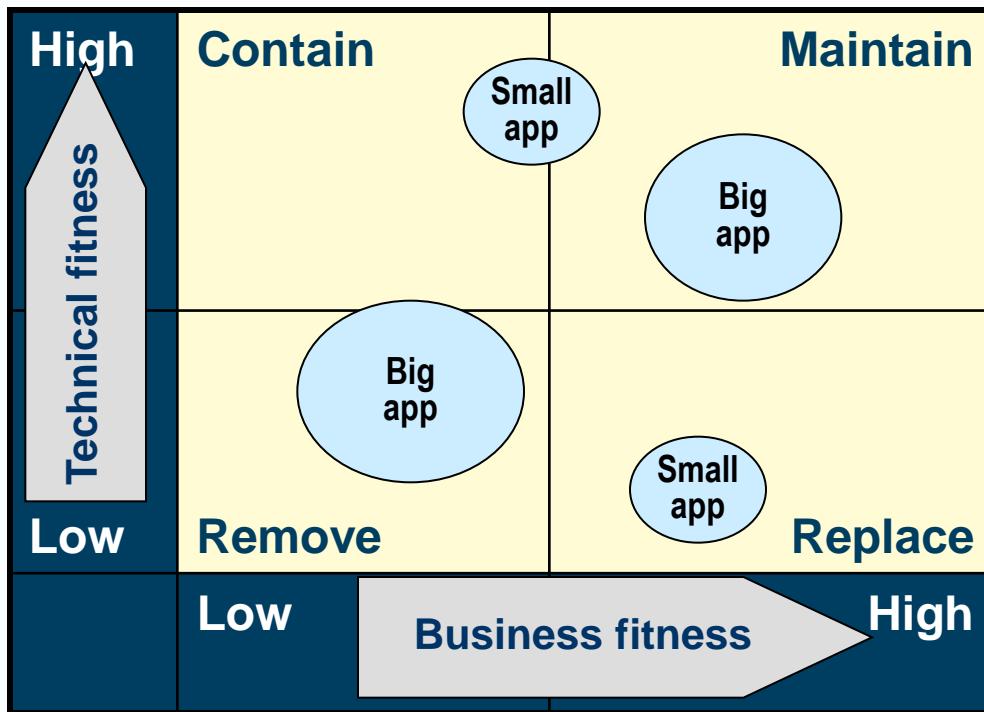
Using a magic quadrant to direct action

- ▶ The general idea is associate each quadrant with an action
- ▶ (e.g. contain, maintain, replace or remove).



But... using magic quadrants to direct action can be naive

- ▶ The values of an attribute may be oddly distributed along a scale.
- ▶ The value of the dividing point between high and low scores is arbitrary.
- ▶ In short, using a Boston grid to determine actions is questionable.



Things that might lead APM to produce anti-EA results



- ▶ looking at the app portfolio as a taxonomy (not a system)
- ▶ looking at each app as an island (not in association with other apps)
- ▶ focusing on operational costs and over-valuing cost reduction
- ▶ not measuring the cost of low data quality, low usability and disintegration
- ▶ standardisation for the sake standardisation
- ▶ over-estimating platform technology life cycle risks
- ▶ assuming an app's benefits/values must be as measurable as its costs
- ▶ assuming one big app will be better than several small apps
- ▶ assuming package deployment will be cheaper than app maintenance
- ▶ underestimating the costs and risks of outsourcing knowledge of business-specific data, processes and rules
- ▶ using Boston grids (aka magic quadrants) as the primary analysis tool
- ▶ answering app classification/value questions without understanding the use cases an app offers.

- ▶ Crude APM can result in
 - replacing or removing some apps that business people find helpful
 - deploying new apps that are less usable and less integrated
- ▶ The hindrance cost may not measurable or recognised by managers
- ▶ But if business people perceive APM as leading to negative outcomes.
- ▶ This is the opposite of the impact enterprise architects dream of producing.
- ▶ Crude APM does have a place.
- ▶ But it features little or no constructive “architecting”.

- ▶ Portfolio management should improve the portfolio
- ▶ EAs should
 - align information systems and technologies with business roles and processes
 - make constructive architectural proposals.
- ▶ EAs should
 - manage the portfolio of inter-related business system
 - be accountable for additions, deletions and changes at the portfolio level
 - look to standardise, consolidate and integrate business systems where desirable.

More architectural questions to ask of business application.

- ▶ Do users or architects envisage improvements to the use cases offered?
- ▶ Do users or architects envisage improvements to the non-functional characteristics of the application?
- ▶ Does the app relate to other apps supporting the same roles? Can/should it be changed to optimise how an actor performs activities in a role?
- ▶ Does the app relate to other apps supporting the same processes? Can/should it be changed it to optimise the sequential flow between activities?
- ▶ Does the app offer the same use cases as another application? Can/should it be reduced or withdrawn?
- ▶ Does the app maintain the same data as another application? Can/should they be integrated?
- ▶ Does the app require the same physical environment or platform technologies as other apps? Can/should those technology resources be shared or changed?
- ▶ Does the app require the same maintenance and support skill sets as other apps? Can/should those skill resources be shared or changed??
- ▶ Does the app fit any known business or technology change road map? Can/should the app or the road map be changed?

This is one of four related slides shows and papers.

- ▶ What is the EA manager accountable for?
- ▶ What makes EA challenging?
- ▶ EA challenges case study
- ▶ APM challenges

See also

- ▶ Agree EA funding or ROI metrics
- ▶ Business cases: the numbers
- ▶ Can EA be agile?

- ▶ **Avancier Methods** are useful with all architecture frameworks that share similar ends and means
- ▶ <http://avancier.website>

