ARE THE DAYS OF CLASSIC SIS NUMBERED?

SESSION 3007
8 May 2018

PRESENTER

Kong Yen Teck

Senior Associate Director

National University of Singapore

kongyt@nus.edu.sg

As the Head of Academic & Research Systems Tower at NUS, I oversee the planning, implementation and support of systems pertaining to student, faculty and research administration at the university.

The objective of this session is to surface an important and potentially contentious topic for deliberation and consideration among Higher Education institutions. Opinions and views expressed in this presentation does not represent the stand of HEUG or any specific institution.

DISCLAIMER

CHANGING BUSINESS MODEL @ NUS

Recent changes at NUS

NATIONAL UNIVERSITY OF SINGAPORE

Founded in 1905 as a modest medical school with 23 students, NUS is today widely known for our pioneering education and innovative research which have made an impact on the community in Singapore and beyond.

NUS AT A GLANCE

3
Campuses:
Kent Ridge, Bukit Timah and Outram

13
Undergraduate Schools

4
Graduate Schools

30
University-level Research Institutes and Centres

56
Bachelor's degrees

33
Double majors

24
Concurrent degrees

33
Joint degrees

71
Double degrees

150
Master's degrees, Doctoral degrees, Graduate diplomas

29K
Undergraduates

10K
Graduate students

2.5K
Faculty

3.9K
Research Staff

3.4K
Executive & Professional Staff

2.2K
General Staff

CHANGING EDUCATIONAL MODEL TO SUPPORT FUTURE OF WORK

The shift toward more-practical and skills-based training

The shift toward life-long learning

CHANGES AT NUS

- Extending focus from Pre-Employment Training (PET) to Continuing Education and Training (CET) for upskilling and reskilling

- Lifelong learning scheme open to all 288,600 alumni

- Introduction of stackable nano/micro credentials, 20 year commitment to students, etc.

CHANGES AT NUS (cont.)

- "first of its kind in Singapore", mixing traditional and non-traditional students, combination of deliveries

- Changes to teaching pedagogy, timetable scheduling, resource provisioning, *lifelong learner* engagement…

- …and there's a need to address the gaps in the current Student Information System

"CLASSIC" VS "NEXT GENERATION" STUDENT INFORMATION SYSTEM

Definition and Characteristics of the two SIS

WHAT IS "CLASSIC" SIS?

- Bought, integrated and usually run by institutions themselves in campus data centers or on the cloud

- Decades-old at their core

- Often (heavily) customized to meet business needs

- Layered on additional technologies (e.g. portal, mobile) to keep pace with demands

DEFINITION OF "CLASSIC"

Judged over a period of time to be of the **highest quality** and **outstanding** of its kind.

– Oxford Dictionary

HOW SATISFIED ARE YOU WITH YOUR "CLASSIC" SIS?
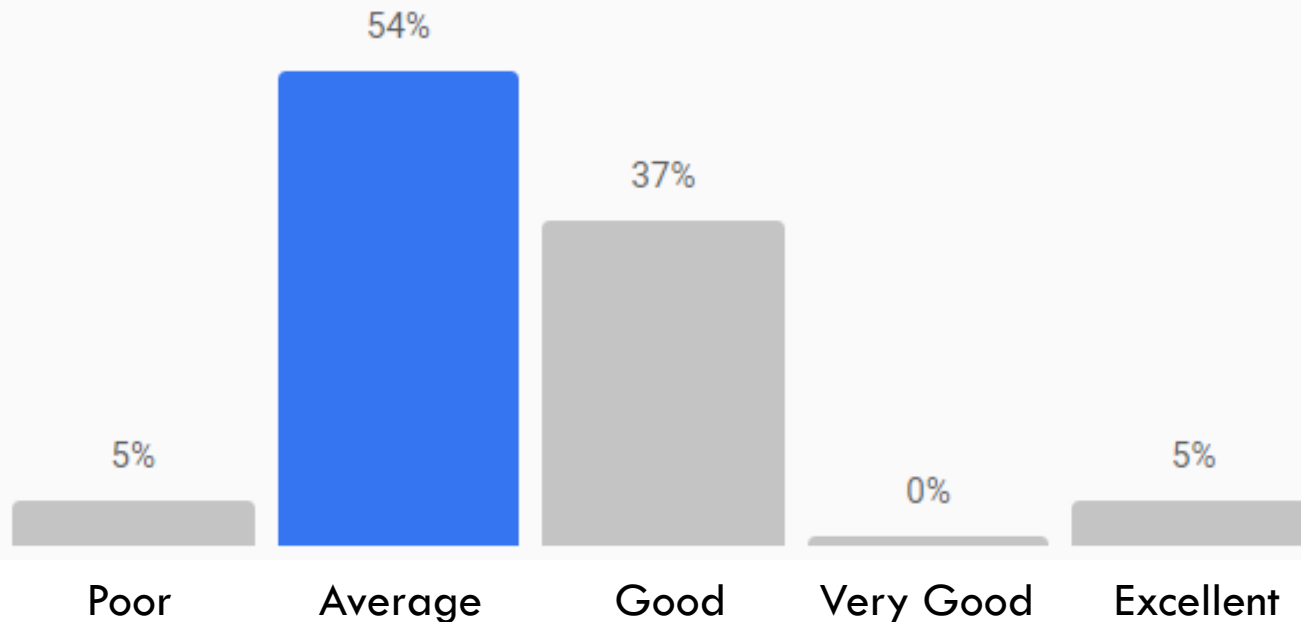
SLI.DO | Live poll

POLL RESULTS

How satisfied are you with your "Classic" SIS? (5 = Excellent, 4 = Very Good, 3 = Good, 2 = Average, 1 = Poor)

0 4 1

Score: 2.5

54%

37%

5%

0%

5%

Poor   Average   Good   Very Good   Excellent

CHALLENGES WITH "CLASSIC" SIS

- 2017 NUS IT Perception Survey – 85.8% of Staff and 87.6% of Students gave PeopleSoft Campus Solutions (CS) a Good to Excellent rating

- Functional but unable to fulfill emerging business requirements well, especially the changing educational model

CHALLENGES WITH "CLASSIC" SIS (CONT.)

- Institutions invested a lot in customization, and continue to invest in customization

- System maintenance can be difficult and costly

- The look and feel is ~~a bit~~ dated, not matching expectation of current generation of students

WHAT IS "NEXT GENERATION" SIS?

- These are "Cloud" SIS or SIS being delivered in Software-as-a-Service (SaaS) model
  - Native SaaS and "Ported to Cloud" SaaS

- Built from ground up – new architecture, technology, design, data model, modern user interface

VALUE PROPOSITION OF "NEXT GENERATION" SIS

- Flexible rule-based configurable solutions, less customization

- Functional support for new business model (e.g. non-traditional students)

- SMAC (Social, Mobile, Analytics, Cloud) + AI

- Integrated CRM capabilities

- Opportunities to free up IT staff to more strategic initiatives

"NEXT GENERATION" SIS

- Examples of "Next Generation" SIS:

  Unit4 Student Management, Workday Student, Oracle Student Management Cloud, …

- There are doubts:
  - Are the "Next Generation" SIS ready for adoption?
  - Will it ever work for Higher Education institutions?

WHEN DO YOU THINK YOUR INSTITUTION WILL ADOPT "NEXT GENERATION" OR SOFTWARE-AS-A-SERVICE BASED SIS?

SLI.DO | Live poll

POLL RESULTS

When do you think your institution will adopt "Next Generation" or Software-as-a-Service based SIS?

`0` `4` `2`

1 to 3 years

2%

3 to 5 years

21%

5 to 7 years

29%

Beyond 7 years

50%

Never

5%

DILEMMA OF HIGHER EDUCATION INSTITUTIONS

- Upgrade
  - Cost and effort with limited functional improvements
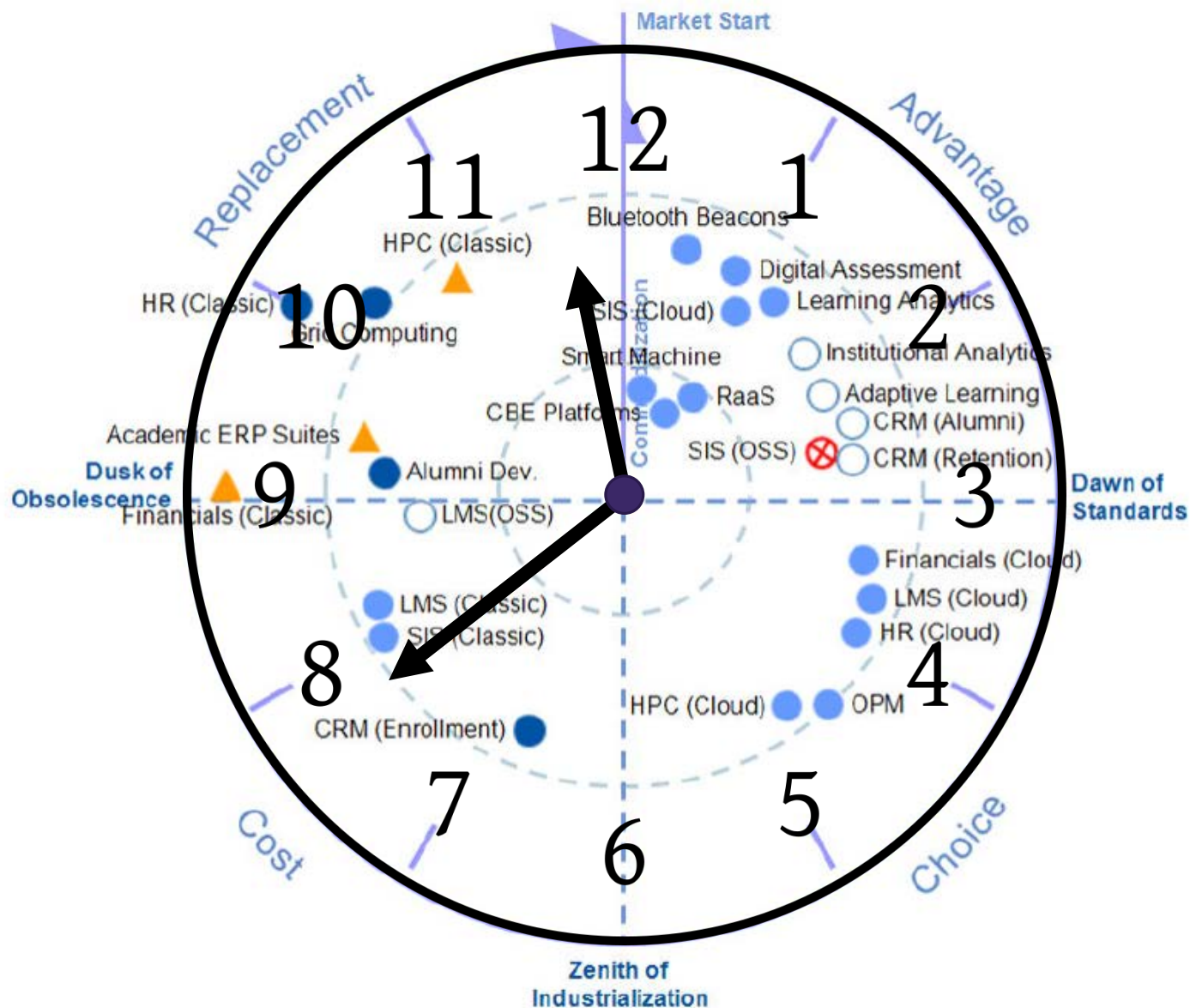 - Continued innovation and improvement in "classic" SIS is highly unlikely

- Migrate
  - Is there a solution to migrate to?
  - Significant cost to migrate too
  - Limited success stories so far
  - No localized yet

"I don't mind someone taking their time to buy cigars, but he's been standing there and staring for over 7 hours."

GARTNER'S IT MARKET CLOCK FOR HIGHER EDUCATION, 2016

Important references for higher education institutions

Market Start

Advantage

Replacement

12
11
1

Bluetooth Beacons

HPC (Classic)

HR (Classic)
Grid Computing
10

Digital Assessment
Learning Analytics
SIS (Cloud)
2

Smart Machine
Institutional Analytics
Adaptive Learning
CRM (Alumni)
CBE Platforms
RaaS
SIS (OSS)
CRM (Retention)

Academic ERP Suites
Dusk of
Obsolescence
9
Alumni Dev.
Financials (Classic)
LMS(OSS)
3
Dawn of
Standards

Financials (Cloud)
LMS (Cloud)
HR (Cloud)

LMS (Classic)
SIS (Classic)
8
4

CRM (Enrollment)
HPC (Cloud)
OPM

7
5
6

Cost

Choice

Zenith of
Industrialization

ASIA ALLIANCE 7-8 MAY 2018

INTERPRETING GARTNER'S IT MARKET CLOCK

Objective: Provides a lifecycle view of technology assets

When to retire

When to adopt

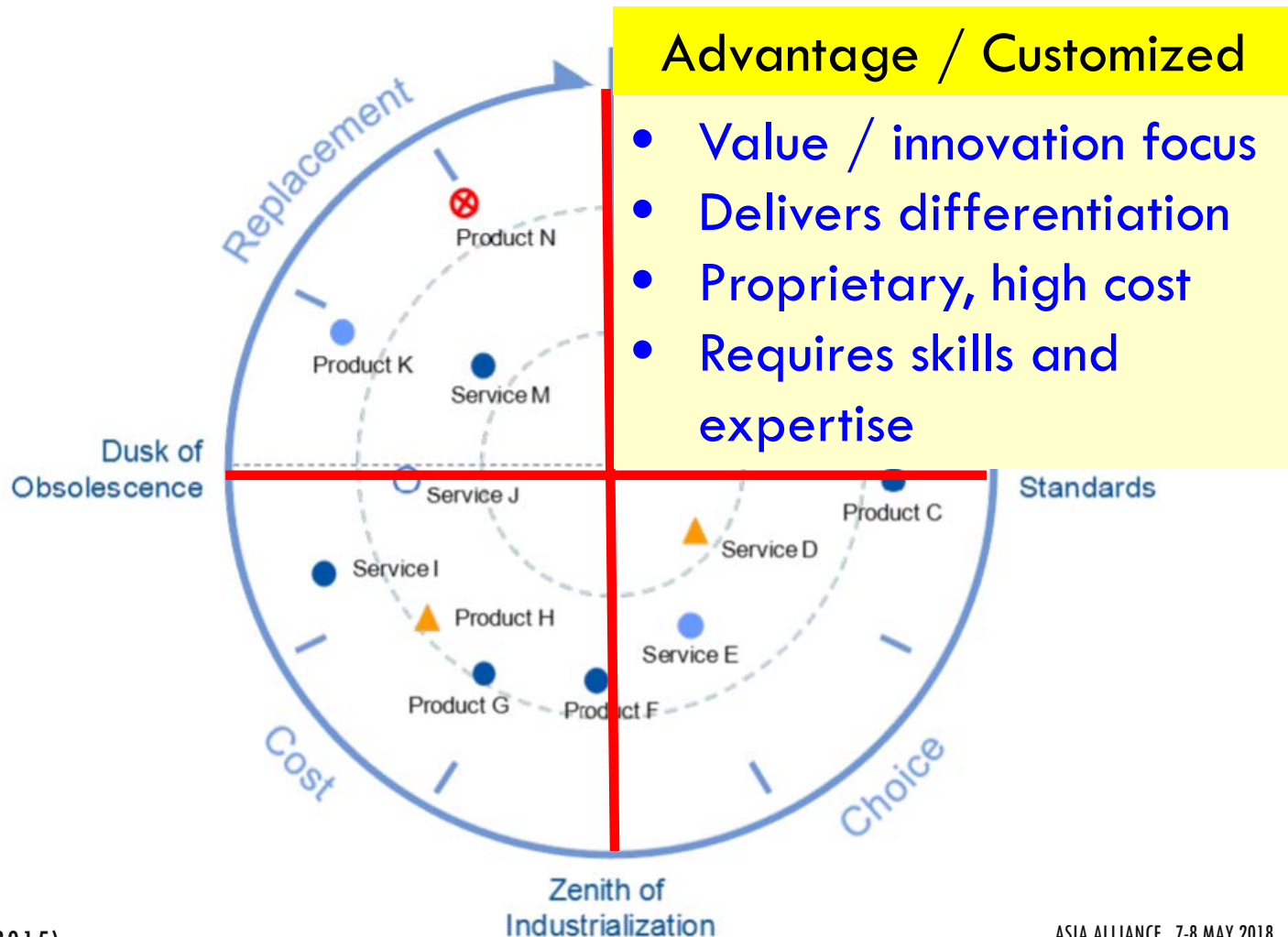When to consider alternatives
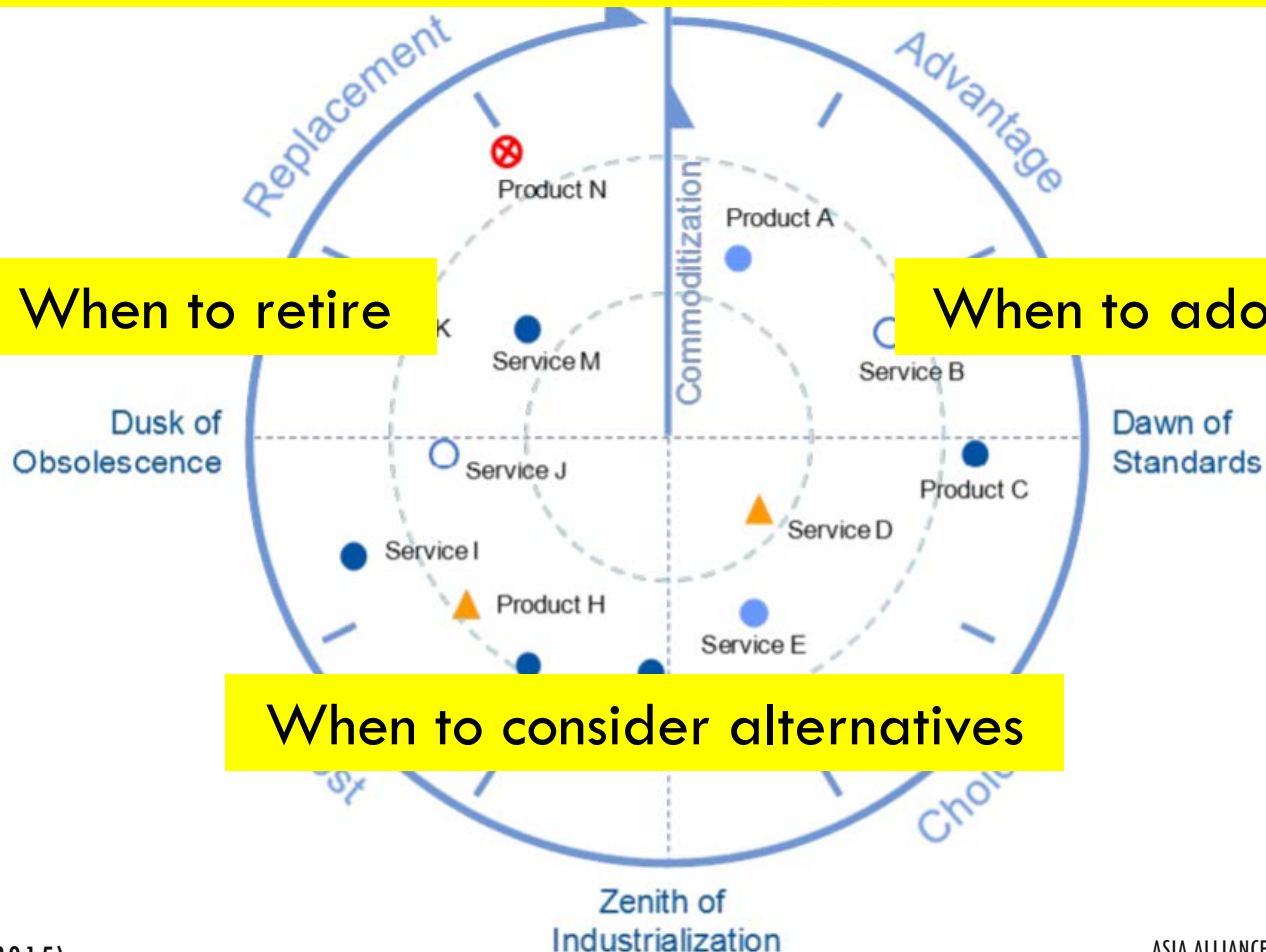
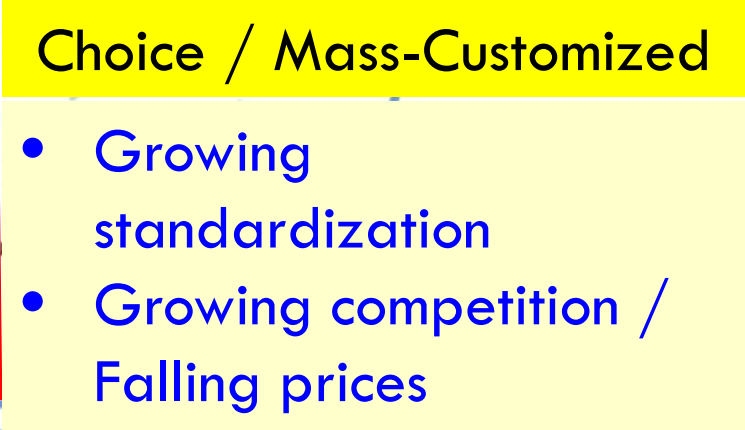# INTERPRETING GARTNER'S IT MARKET CLOCK

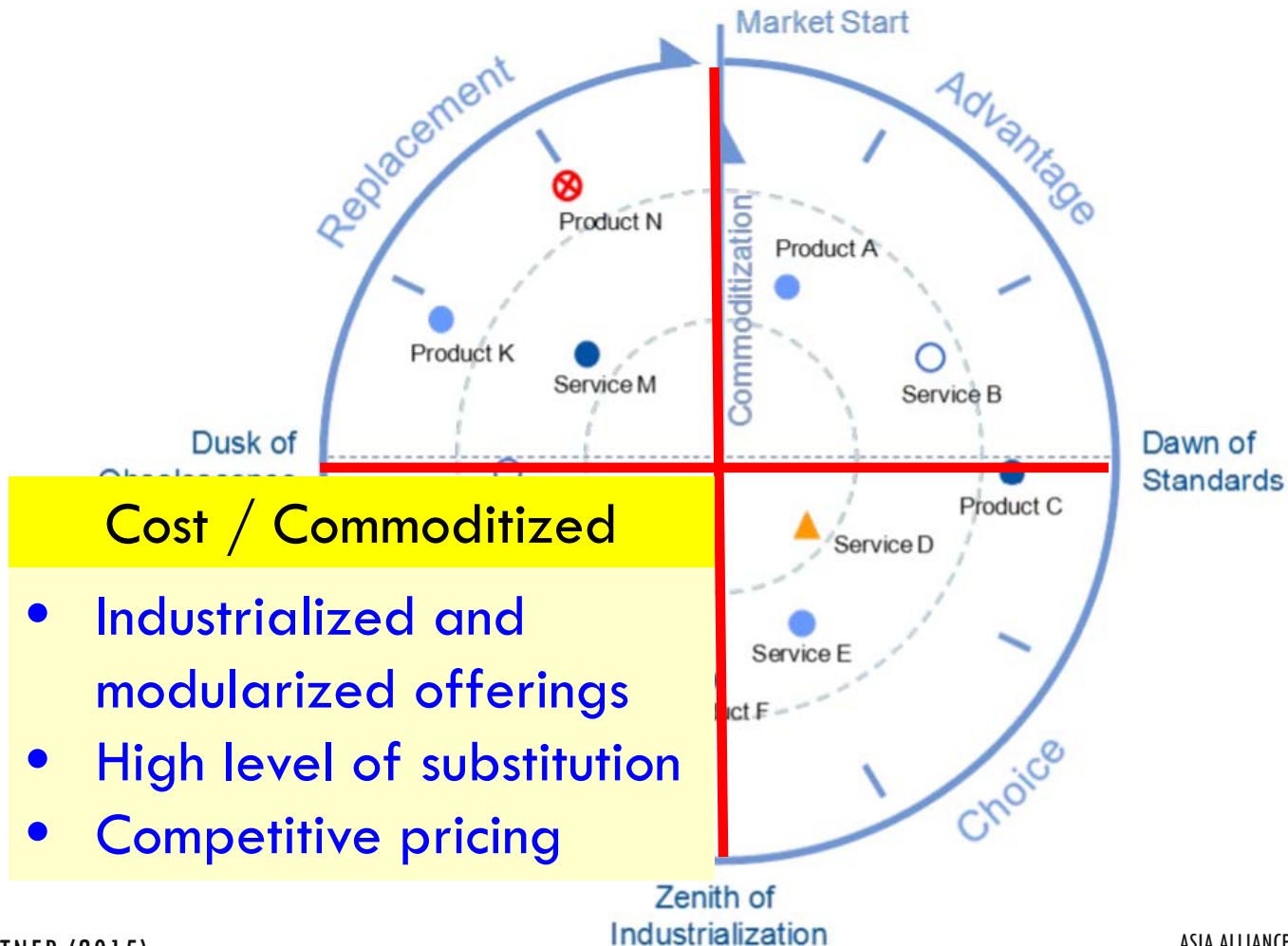**Time of the clock** represents the progress of the technology asset
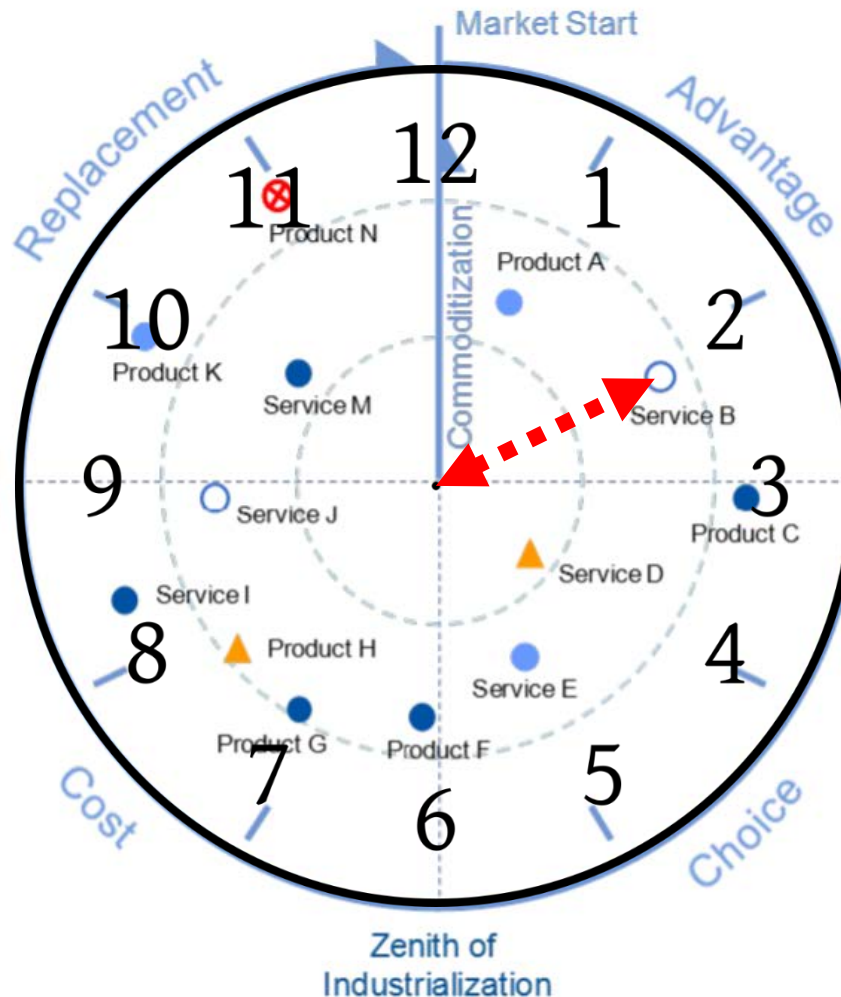
Distance from centre of the clock represents the relative level of commoditization
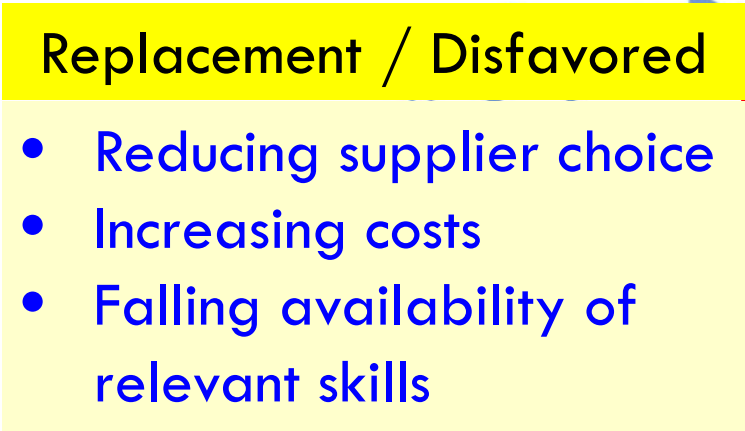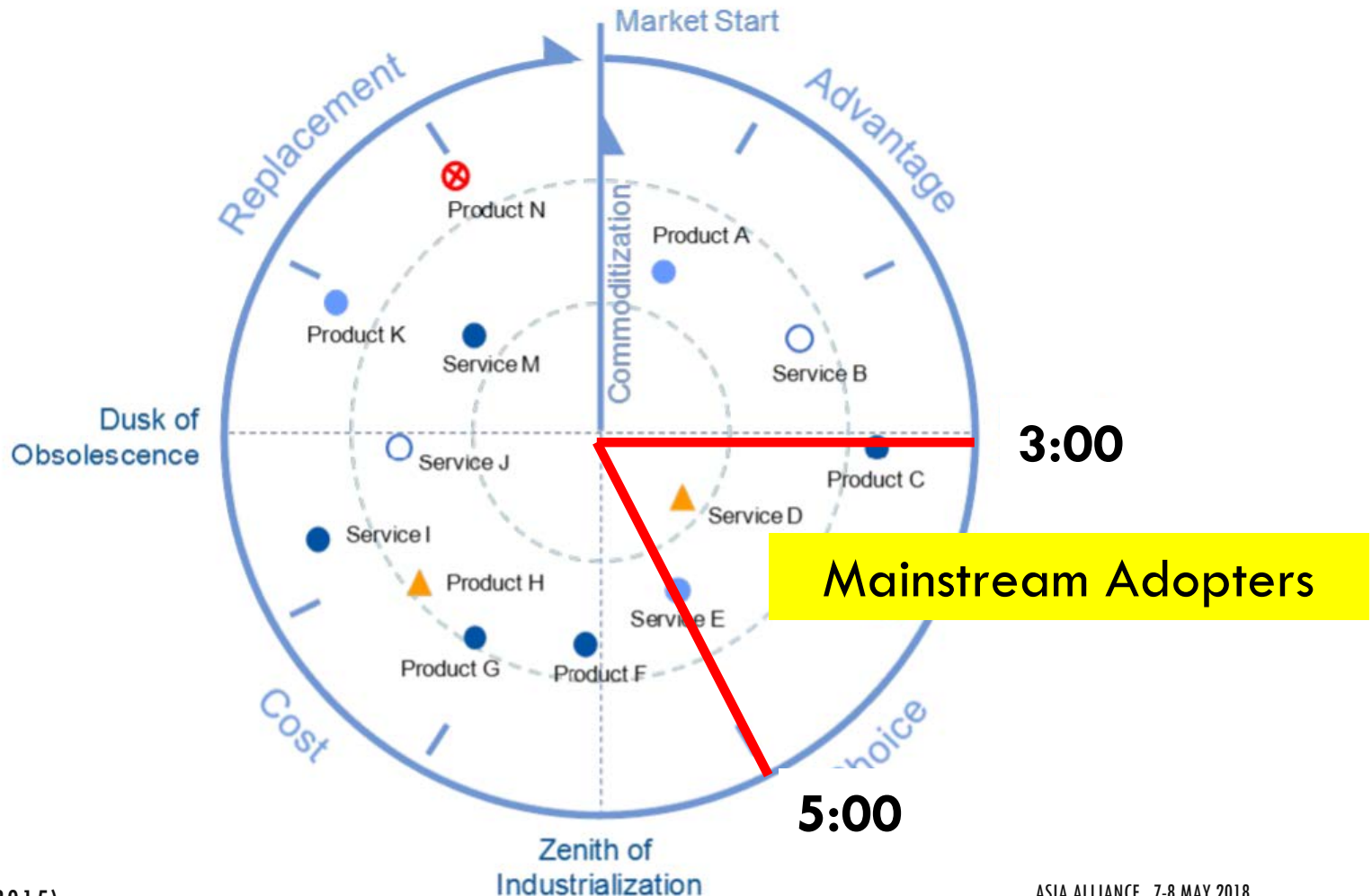
INTERPRETING GARTNER'S IT MARKET CLOCK

Advantage / Customized

- Value / innovation focus
- Delivers differentiation
- Proprietary, high cost
- Requires skills and expertise

INTERPRETING GARTNER'S IT MARKET CLOCK

Choice / Mass-Customized

- Growing standardization
- Growing competition / Falling prices

INTERPRETING GARTNER'S IT MARKET CLOCK

Cost / Commoditized

- Industrialized and modularized offerings
- High level of substitution
- Competitive pricing

INTERPRETING GARTNER'S IT MARKET CLOCK

Replacement / Disfavored

- Reducing supplier choice
- Increasing costs
- Falling availability of relevant skills

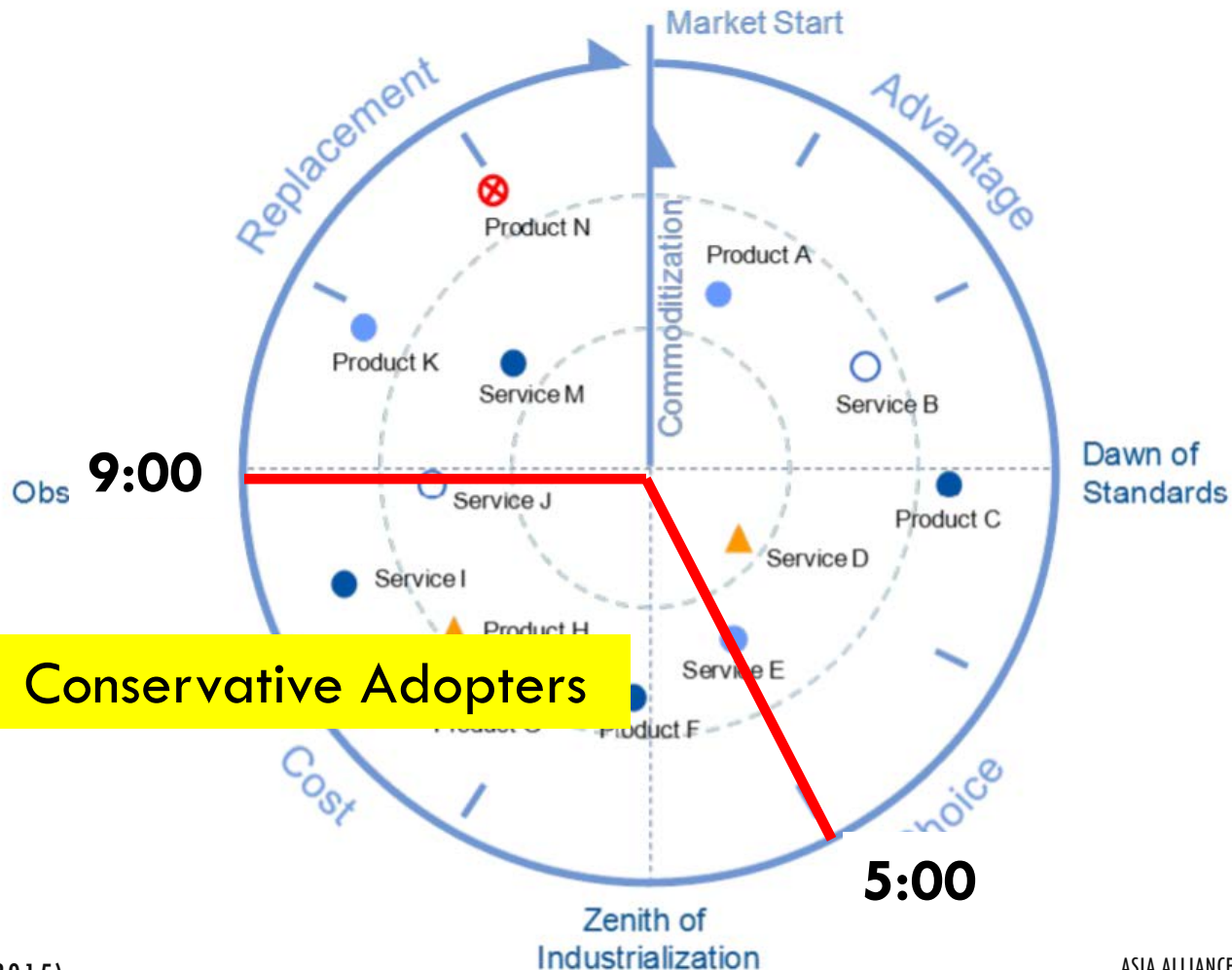# INTERPRETING GARTNER'S IT MARKET CLOCK

INTERPRETING GARTNER'S IT MARKET CLOCK

INTERPRETING GARTNER'S IT MARKET CLOCK

12:00
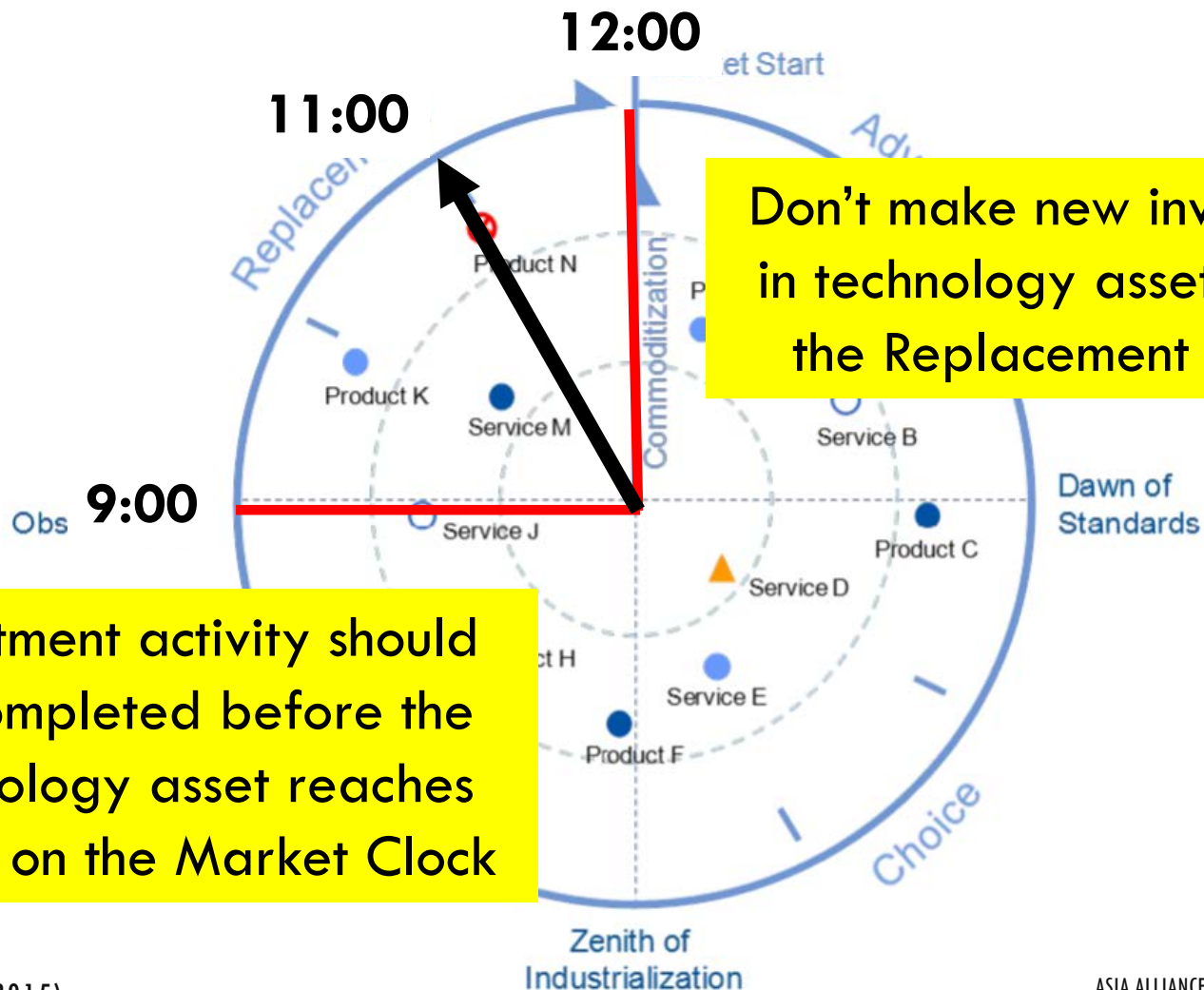
11:00

9:00

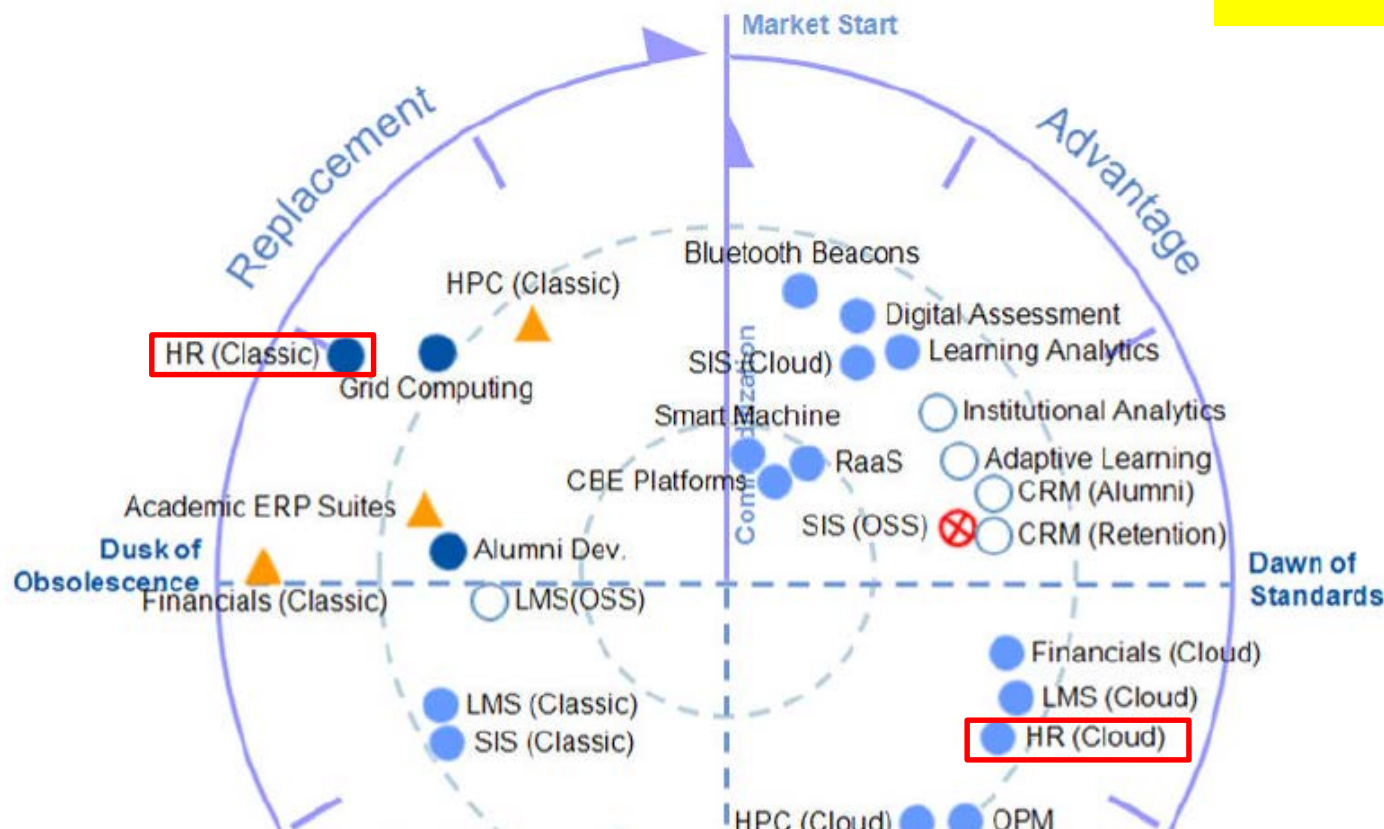Don't make new investment in technology asset during the Replacement phase

Divestment activity should be completed before the technology asset reaches 11:00 on the Market Clock

# INTERPRETING GARTNER'S IT MARKET CLOCK

The symbol used for each technology asset indicates the time it will take for the asset to transition into next phase.

Item	Gartner's Recommendations
HR (Classic) 10:00	Actively monitor HR (Cloud) market and migrate if current solution is markedly underperforming.
HR (Cloud) 4:00	A fast-moving and commoditized asset with increasing suppliers and growing adoption. If you are looking for a new HR solution, consider this as a **primary** option.

Time to Next Market Phase

○ <2 years   ● 2 to 5 years   ● 5 to 10 years   ▲ >10 years   ⊗ End of life
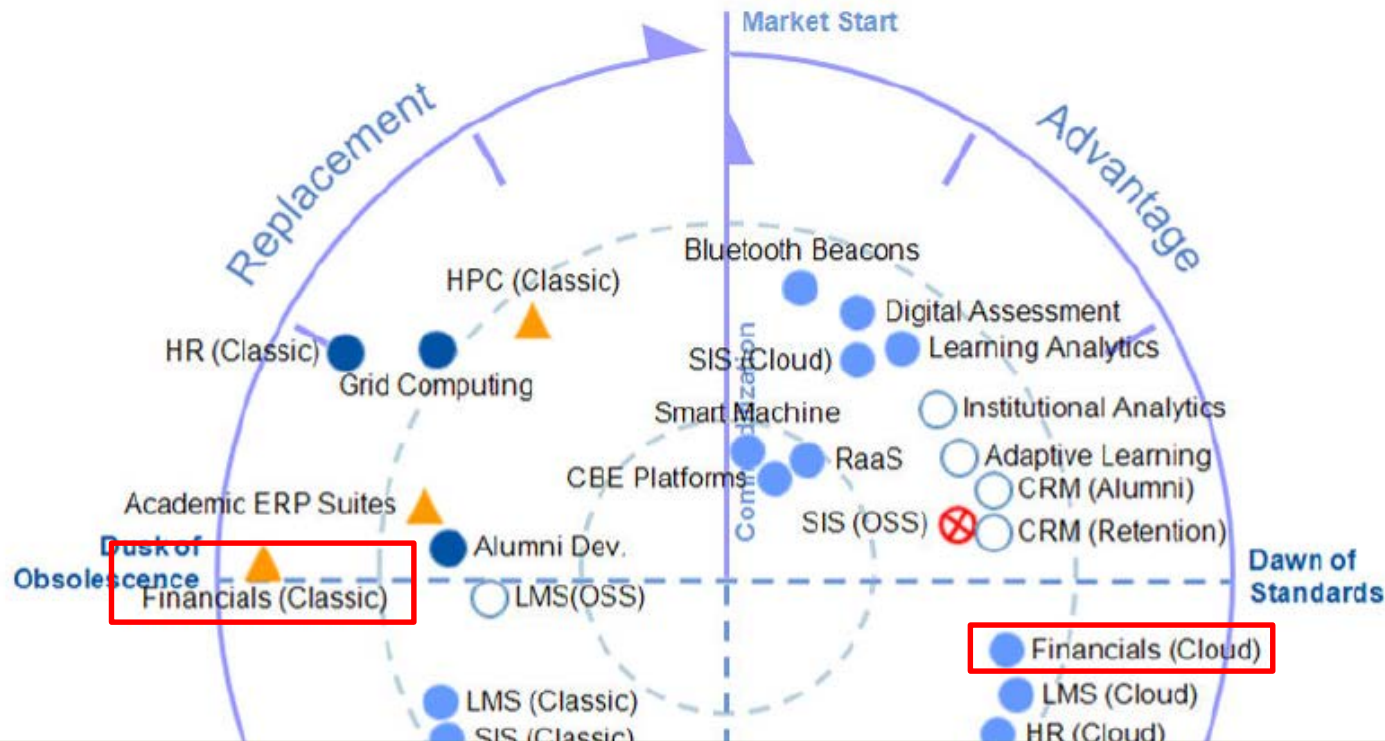
Item	Gartner's Recommendations
Financials (Classic) 9:05	Replacement planning should begin even if timing is years away. An immediate move is unnecessary unless current application is severely underperforming or opportunities present themselves.
Financials (Cloud) 3:30	An emerging asset with early adopter success. It may be replaced as contract expirations and ERP suite replacement projects present opportunities.

Time to Next Market Phase

○ <2 years   ● 2 to 5 years   ● 5 to 10 years   ▲ >10 years   ⊗ End of life

Student Information System
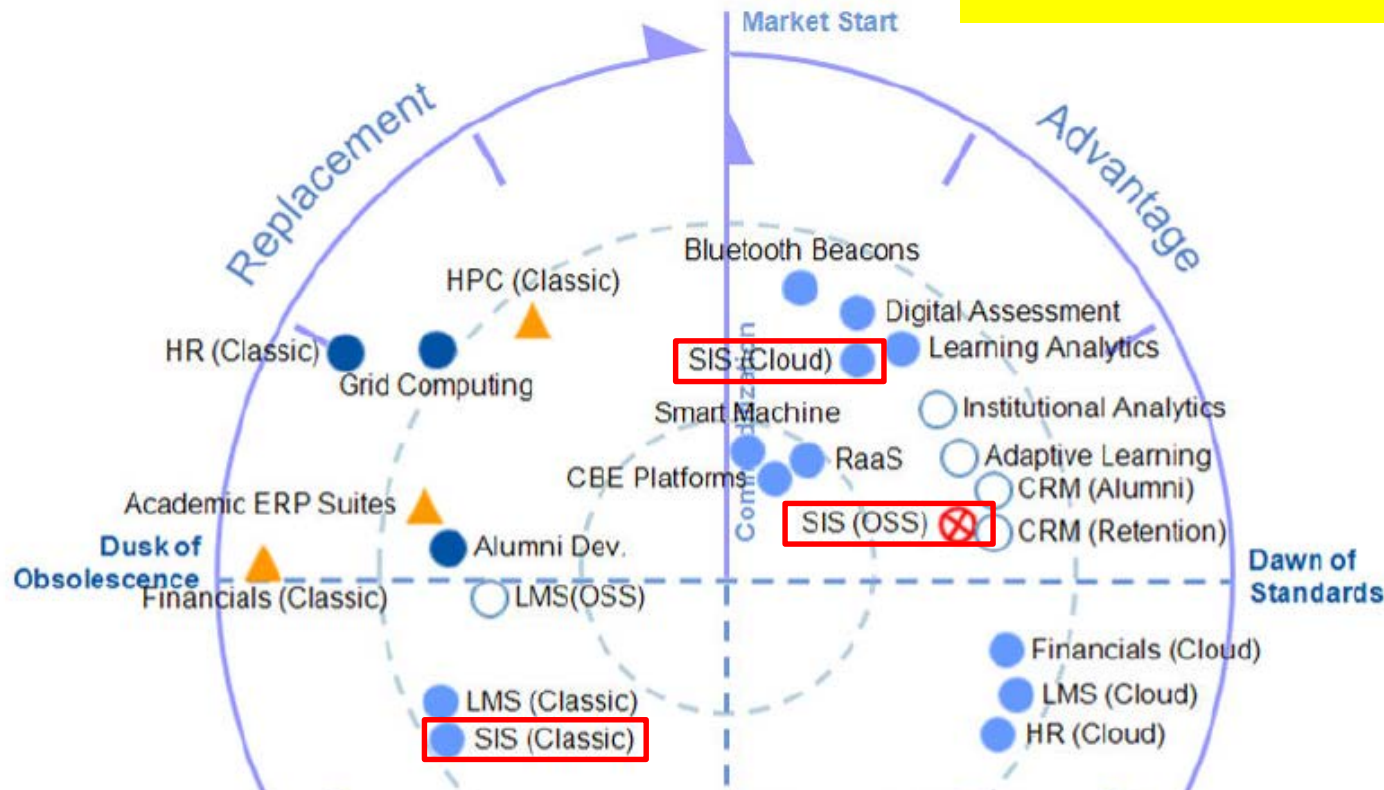
Item	Gartner's Recommendations
SIS (Classic) 8:00	As new cloud solutions emerge, limit investment in classic solutions, except in extenuating circumstances. Start the planning process for replacement in the next 24 months.
SIS (Cloud) 1:00	High value asset that could represent a competitive advantage for early adopters.

Time to Next Market Phase
○ <2 years ● 2 to 5 years ● 5 to 10 years ▲ >10 years ⊗ End of life

IN YOUR OPINION, ARE THE DAYS OF "CLASSIC" SIS NUMBERED?

SLI.DO | Live poll

POLL RESULTS

In your opinion, are the days of "classic" SIS numbered?   `0` `4` `4`

Yes (but in more than 5 years)

50%

Yes (probably in 3 to 5 years)

41%

No

5%

Not Sure

9%

RECOMMENDATIONS

1) Limit or minimize major investments into your "Classic" SIS where possible

2) Keep abreast progress of "Next-Generation" SIS
   - Know the solution proividers and their strategy
   - Obtain regular solution update by various solution providers

RECOMMENDATIONS

3) Create informal information sharing network among peers

4) Volunteer and participate in product focus group discussions if opportunity arises

5) Incorporate some components of SaaS solution into the student ecosystem

Q & A

SLI.DO | Interactive Q&A

REFERENCES (1/2)

- Monica Basso, Denise Ganly (Sep 2015), *How to Use Gartner's IT Market Clocks*, Gartner (ID: G00290912)

- Monica Basso, Denise Ganly (Sep 2015), *Gartner's IT Market Clock: Methodology Definition*, Gartner (ID: G00290913)

- Terri-Lynn B. Thayer, Glenda Morgan, Jan-Martin Lowendahl, Kelly J. Calhoun Williams (Sep 2016), *IT Market Clock for Higher Education 2016*, Gartner (ID: G00308860)

- Terri-Lynn B. Thayer (Apr 2017), *Market Guide for Higher Education Student Information Systems*, Gartner (ID: G00304088)

- Kelly J. Calhoun Williams (Jul 2017), *Hype Cycle for Education 2017*, Gartner (ID: 00313670)

- Robert A. Yanckello (Aug 2017), How to Prepare for Student Information Systems Moving to the Cloud, Gartner (ID: G00334804)

REFERENCES (2/2)

- Jan-Martin Lowendahl, Terri-Lynn B. Thayer, Glenda Morgan, Robert A. Yanckello, Marty Resnick, Magnus Revang (Jan 2018), *Top 10 Strategic Technologies Impacting Higher Education in 2018*, Gartner (ID: G00343299)

- Robert A. Yanckello (Jan 2018), *Should You Replace or Renovate the SIS?* Gartner (ID: G00346040)

- Glenda Morgan, Terri-Lynn B. Thayer (Mar 2018), *The Future of Work Will Demand Changes to Higher Education*, Gartner (ID: G00349433)

PRESENTER

Kong Yen Teck

Senior Associate Director

National University of Singapore

kongyt@nus.edu.sg

ALL ALLIANCE PRESENTATIONS WILL BE AVAILABLE FOR DOWNLOAD FROM THE CONFERENCE SITE

THANK YOU!

ASIA ALLIANCE   7-8 MAY 2018