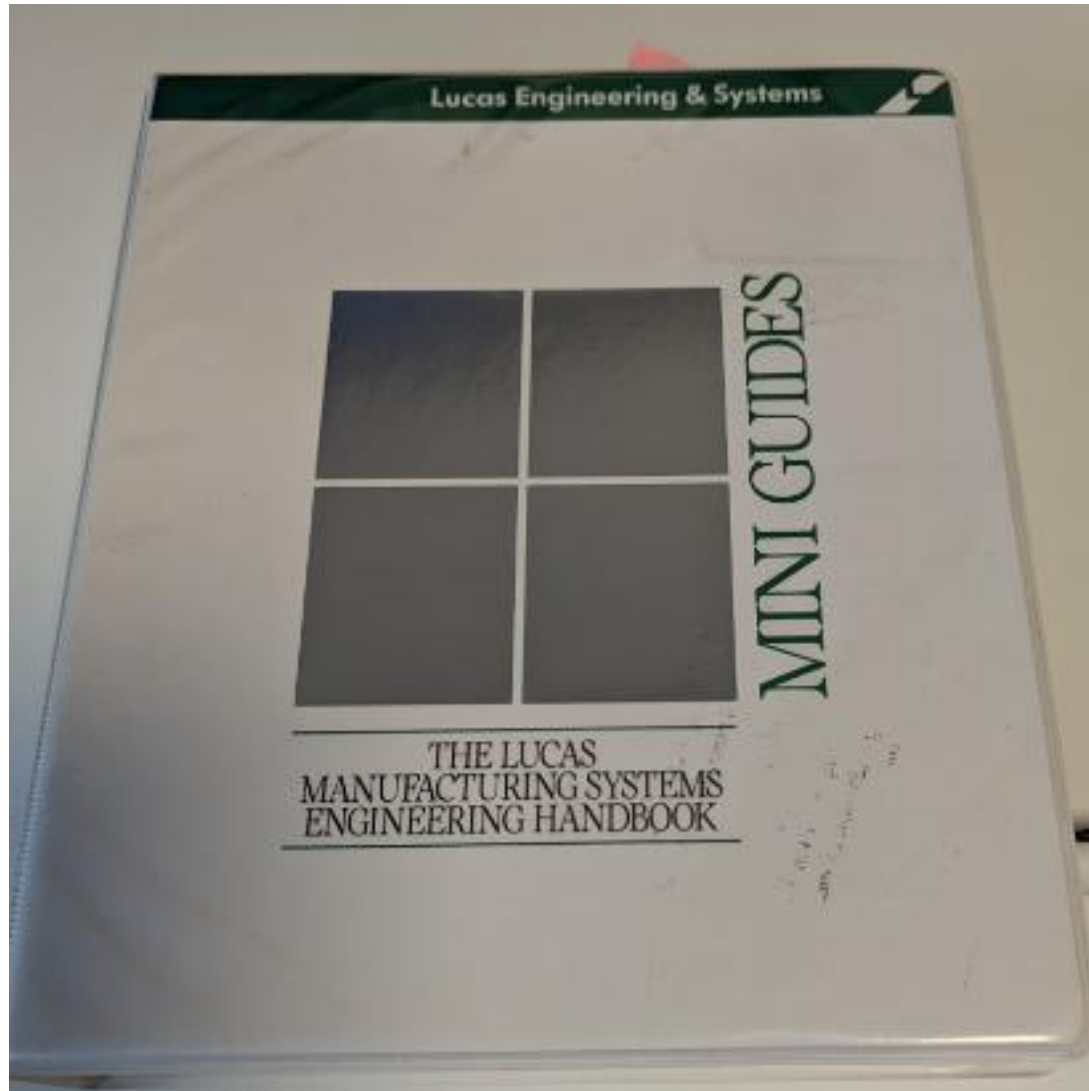


# **Runners, Repeaters, Strangers**



Lucas Engineering & Systems

## PROJECT MANAGEMENT ORGANISATION STRUCTURE

5-5

**Traditional FUNCTIONAL management results in:**

- ▶ No overall ownership of the project as an integrated set of work packages
- ▶ Fragmentation of activities into specialist groupings
- ▶ long lead times due to activities in series as work moves between departments.

**Modern PROJECT management results in:**

- ▶ Ownership of the project by a dedicated multidiscipline team
- ▶ Integration of supporting functions, e.g. Product Engineering and Manufacturing Systems Engineering
- ▶ Short lead times due to parallel and interactive work on all activities.

A combination of Project and Functional Management is required to suit the project mix in a particular Business or Product Unit with clear ownership of the projects and the associated work packages – particularly where the latter are subcontracted internally or externally.

**Project Scale Categorisation:**

CLASSIFICATION	DESCRIPTION	LEADERSHIP
RUNNERS	Narrowly focussed projects lying inside specialist functions	→ Functional Manager or subordinate
REPEATERS	Crosses a few functions only	→ Lead function which owns it, manages it
STRANGERS	Big new projects requiring mix of all functional skills e.g. Product introduction Business change	→ Project Manager matrix style

**Two Types of Project**

A – Change and Competitiveness Improvement Projects  
 B – New Product Introduction Projects (PIP)  
**Plus** – parallel QUICK HIT programmes

MINI GUIDE

# A systems approach to the implementation of JIT methodologies in Lucas Industries.

The first step is to carry out pareto analysis on the products made by the factory and by each cell to determine with reference to relevant time scales of operation, those which lie in the following categories.

1. *regular Runners,*
2. *irregular runners, and*
3. *strangers*

INT. J. PROD. RES., 1988, VOL. 26, NO. 3, 483-492

## **A systems approach to the implementation of JIT methodologies in Lucas Industries**

J. PARNABY†

Competitive modern manufacturing businesses must operate total materials flow control systems to ensure low stock levels and short lead times. When a variety of products is produced, to achieve just-in-time operation relevant to the overall business time-constants, composite control systems are needed within the factory, supported by matching supply processes and levelled output scheduling.

### **1. JIT methodology**

The development of just-in-time (JIT) materials flow procedures wherein materials are supplied exactly at the time they are required to the point at which they are processed and have value-added does not depend upon the purchase of high technology equipment. There may, of course, be areas where the production engineering of process changeovers require attention or where information technology in the form of personal or minicomputers can be applied to support the process. However, JIT is primarily a consequence of improved methodologies, not the application of high technology and starts from the viewpoint that everything

# References to RRS

- Project Portfolios
- Supply Chain/logistics
- Production
- Manufacturing
- Procurement processes
- Banking – loan processes
- Product Packaging
- Health services
- Access to data on population and individuals – from simple to data governed by GDPR and confidentiality contracts
- Customer services
- PS2000- «Forenklet Prosjektstyring» “Simplified Project Control»



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# What landscape are we in?

**Manufacturing Excellence**

**Lean**

**BPR    JIT**

**Agile**

**Push vs Pull**

**CIB**

**Change**

**Systems Engineering**

**Managing Project for Business  
Success**

# Other Project Classifications

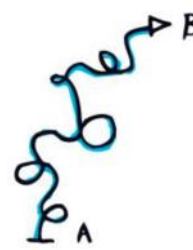
- Product development/product introduction
- System Development
- Organizational improvements/Change programs
- Technical construction/fabrication
- Planning and Investigation
- Events
- Research

# Other Project Classifications

- Capital Intensive Projects
  - Delivery projects, Investment projects, Technology, Development
- Change projects
  - Strategic change, Market adoption, Internal efficiency programs
- Other
  - Research and development, Analyzes, Events and campaigns, Expeditions, Emergency, Aid, Military intervention, other activities and initiatives in health or education
- Project Clusters
  - Project Chains, Programs, multi-core project networks

# Other Project Classifications

- Concrete projects
  - Specified, Clear goal, clear roles, the right competence
- Occasional/Ad-hoc projects
  - Unclear goals, unclear roles, lack of experience and competence
- Open Projects
  - May result in many alternatives, informal organization, unknown field of operations, no previous experience





# Classification systems for projects

- Literature review:
  1. Classification of projects by size, complexity and familiarity
  2. Classification of projects by life cycle or sector (industry)
  3. Classification of Project for contract type and payment terms
- Focus group review
- Marketing and the interface with customers
- Categorization by product of the project
- The assignment of project finance
- Classification is hierarchical

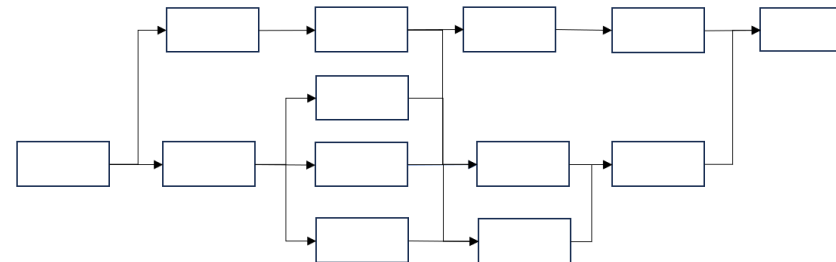
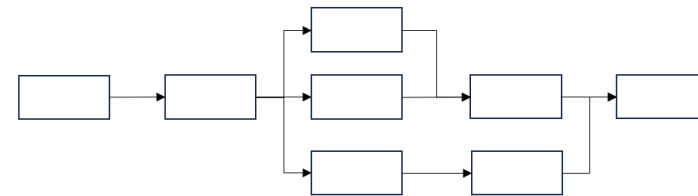


Crawford, L., Hobbs, J. B., & Turner, J. R. (2002). Investigation of potential classification systems for projects. Paper presented at PMI® Research Conference 2002: Frontiers of Project Management Research and Applications, Seattle, Washington. Newtown Square, PA: Project Management Institute.

[Investigation of potential classification systems for projects](#)

# Runners, Repeaters, Strangers.

Familiarity, complexity



# Project Portfolio

Once those project types have been identified, a repeatable method is developed to deliver each profitably.

It is useful to draw on the experience of the practitioners of Lean Manufacturing who use the RRS principle.

*Runners* are projects that organisations perform frequently – large number of projects but tending to be of lower individual complexity. Duration is likely to be low, with little planning needed. Risk is low.

*Stranger* projects are those that are performed infrequently, relatively rare but with high complexity

*Repeaters* are projects that organisations performs less frequently than runners, but more often than strangers.

For each of these project types we need to consider how easy it is to define a method of delivery.

# Balancing Project Portfolio

Classification is related to frequency, volume, variety and complexity

**Runner:** something we know how to do, easy to plan and estimate, low risk and easy to carry out

**Repeater:** a runner with a difference, something outside the norm.

**Stranger:** something we have little experience of, but know can be done, harder to plan and estimate, higher risk and harder to carry out.

**Alien:** a project nobody has done before, hard to plan and estimate, high risk and unclear how to carry out.

Project Smart, “are there too many Aliens in your portfolio?”, oct 2010)

# Project Classification

Understanding what makes projects ordinary instead of unique

**Runners:** the types of projects that you see almost frequently. The number of runners are likely to be high.

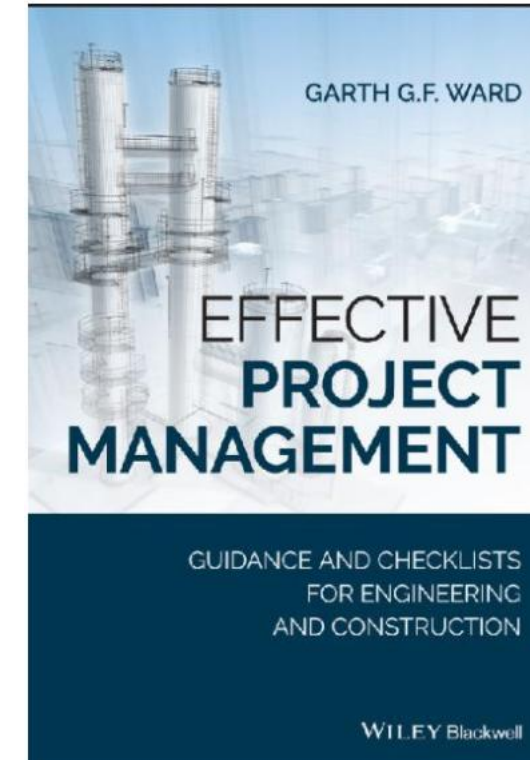
**Repeaters:** are the projects you see regularly, but not all the time.

**Strangers:** are the infrequent projects we rarely see. We should consider whether they are strange everywhere or just to our organization.

HotPMO, the most dangerous word in project management, Feb 2020

projects determined by their size, complexity, and the inherent risks (see Figure I.A.1). At the lowest hierarchical level are **the routines**, tasks that are so common and so well developed in a function that methods of working have ironed out all the difficulties. Next in the hierarchy are those frequently occurring packages of work – small projects that are very similar and can be developed without too much specialized management and theoretically do not present any significant risks. There are lots of them in an organization and they can be performed without any real difficulty. **These are called the runners.**

larger projects that the organization performs reasonably regularly; they are very similar or replicate previous projects. Naturally, **they are called repeaters**. The development of repeaters has become more specialized, less routine, and more individually project-focused. As a consequence they have a higher risk of failure. They need someone experienced in project management because the real risk with them is that people assume they are repeats. The reality is that they have differences that, if ignored, could cause project failure. Then come the projects that are infrequent and more unusual, **they become strangers** to an organizations normal method of working. They are large projects and are high risk projects as far as the organization is concerned. As a consequence, they need someone to manage them, who is skilled and experienced in project management. Finally, the mega project, the first of a kind, the once-in-a-career opportunity are the **aliens**, consisting of a programme of large projects.



# Performance improvement

Systems automation/ Processes/service automation

**Runners:** standard tasks and processes that are frequent and highly predictable

**Repeaters:** as the name suggest, repeaters are processes or tasks that are still predictable to a degree, but they are not as regular as runners.

**Strangers:** are highly customized tasks that occur infrequently, products that are produced very infrequently- most importantly they are unpredictable and non-standardized.

Ad Esse Consulting- linkedin Jan, 2024

# Supply Chain

Packaging of products in the Health sector:

**Runners:** products that are produced very frequently

**Repeaters:** products that are produced or packaged frequently but not every week or month

**Strangers:** products that are produced very infrequently

Be4ward (packaging Complexity Management, plan for runners, repeaters and strangers)



# PS 2000 – Mindre ressurskrevende prosjektstyring

3 categories

Small or uncomplicated Project

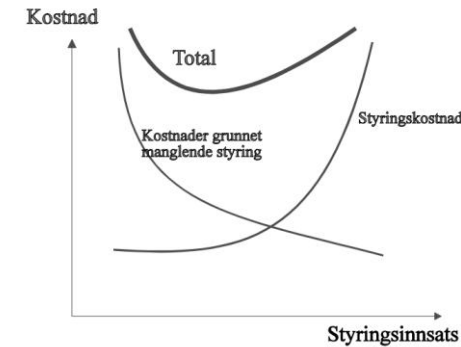
Medium Sized, Medium Complicated Project

Big or Complicated Project

Size and how complicated the project is are parameters

Volume is not a parameter

<b>Eksperimentell</b>
<b>Unikt for dette prosjektet</b>
<b>Valgbar blant grunnleggende alternativer.</b>
<b>Felles basis for alle prosjekt</b>



Jan Alexander Langlo <jan.a.langlo@ntnu.no>

Til: Øyvind Røberg



ti. 30.04.2024 10:14

Hei Øyvind,

Takk for henvendelsen! Jeg husker godt denne studien, og den har nok vært viktig for utviklingen av mer «skreddersøm» i prosjektstyringen. Den litteraturen som fantes før dette var myntet på «one size fits all», og da med tanken om at alle hadde noe å lære av de store prosjektene. Jeg mener at arven av denne studien fra PS 2000 var at vi fikk fokus på hverdagsprosjektene og andre varianter av prosjekter som krevde en tilpasning av metoder og rammeverk.

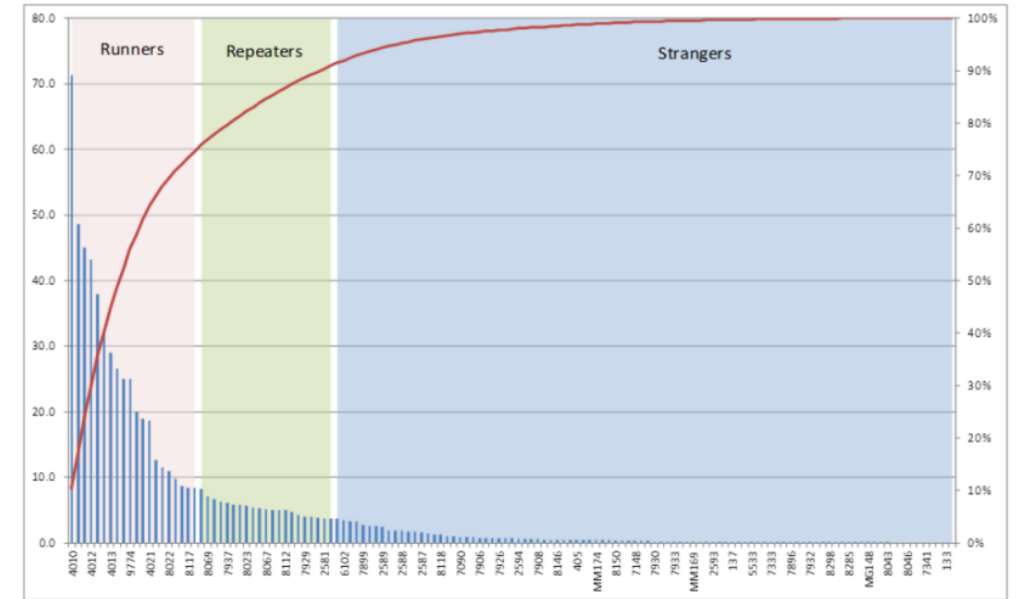
Alexander :-)

**Jan Alexander Langlo**, PhD  
Førsteamanuensis  
Institutt for maskinteknikk og produksjon  
Norges teknisk-naturvitenskapelige universitet (NTNU)  
7491 Trondheim

# Manufacturing

Product categorization – ‘runners’, ‘repeaters’, ‘strangers’ (RRS) and planning mode

Thought to have originated in Lucas Industries during the late 1980s, the product categorization into ‘runners’, ‘repeaters’ and ‘strangers’ forms part of an excellent strategy for production scheduling and supply-chain management. When applying the ‘Venetians rule’ (Pareto analysis) to the RRS v current throughput rates, the ‘runners’, ‘products’ or ‘product-family’ – having sufficient volume to justify dedicated facilities or manufacturing cells – make up to ~60% sold, as the example above demonstrates.



David Harkin, Unlocking the scheduler's dilemma- The Engineers Journal July 2014

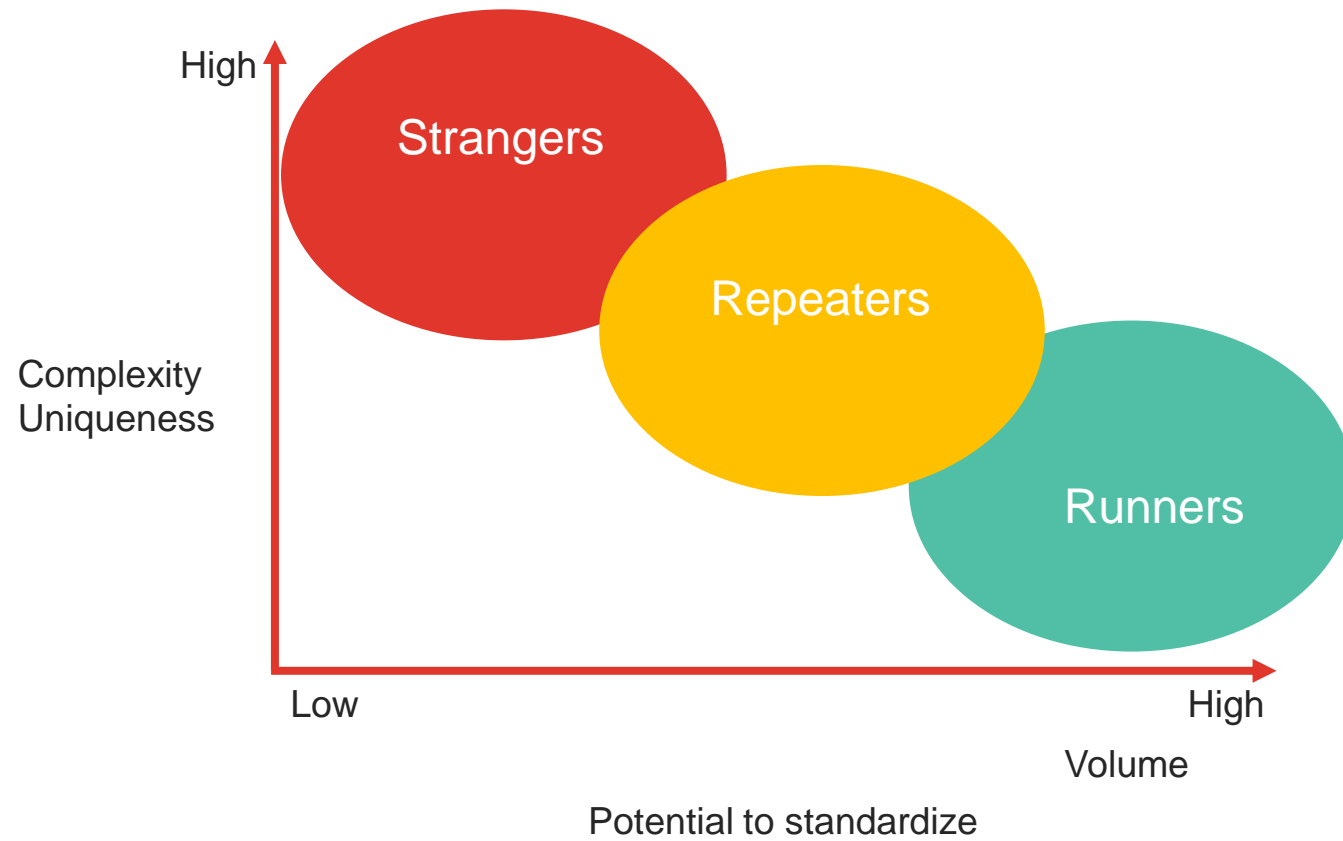


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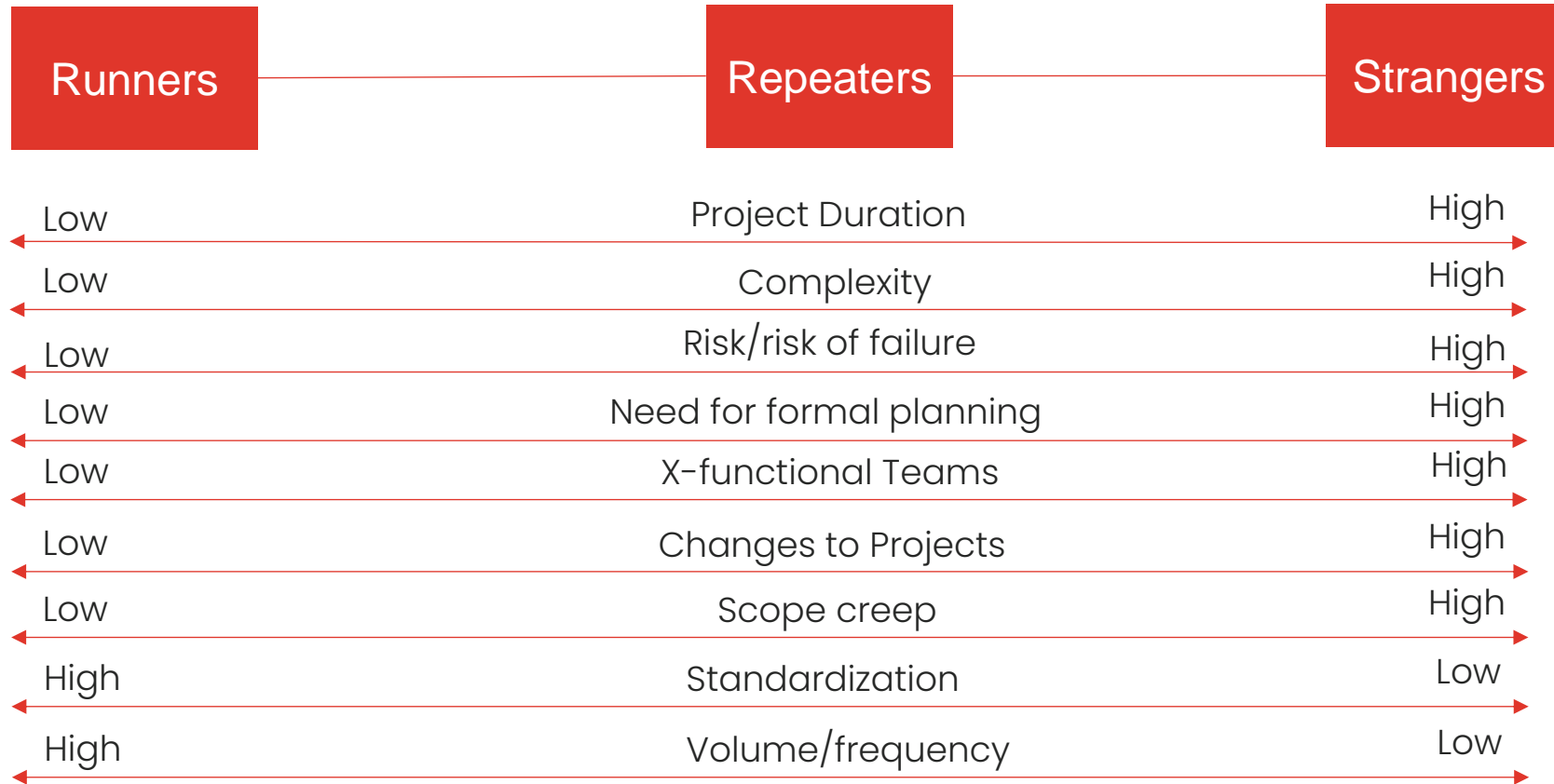
# RRS, Risk and Changes

**Runners;** Less Risky, less changes to project goal and scope. The assumption is based on the fact that Runners are more frequent, lower duration, higher speed project that does not allow for changes and high knowledge of what to produce.

**Repeaters, Strangers (Aliens):** Risk and the potential for changes grow as project duration grows and complexity and unknowns grow



# Variables



# Runners, Repeaters, Strangers, (Aliens)

- Classifying your Project Portfolio can be used to
  - Provide data for analysis
  - Basis for improvements – doing the right projects right
  - Selecting appropriate project management methodology
  - Selecting appropriate project organisation
  - Improved processes
  - Clarification of roles
  - Trending over time
  - Learning, Transfer of knowledge, structure of knowledge
  - Recognition of project types, context and management approaches



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# Classification

“using too many classification variables (taxes) means the analysis may become very messy and thereby lose valuable insight.”

Christopher, Towill, Aitken, Childerhouse, (2009), Value Stream classification, Journal of Manufacturing Technology

“it needs to be practical and not theoretically oriented.”

... ensuring that the classification system is meaningful for users.”

Crawford, L., Hobbs, J. B., & Turner, J. R. (2002). Investigation of potential classification systems for projects

**Classification  
by frequency,  
size and  
complexity**





**Thank You.**

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