

Jürgen Van Gorp, PhD

CHAGWA

V1.0



**Allowing Change, Agile and Waterfall
Projects in the Organisation**

CHAGWA V1.0

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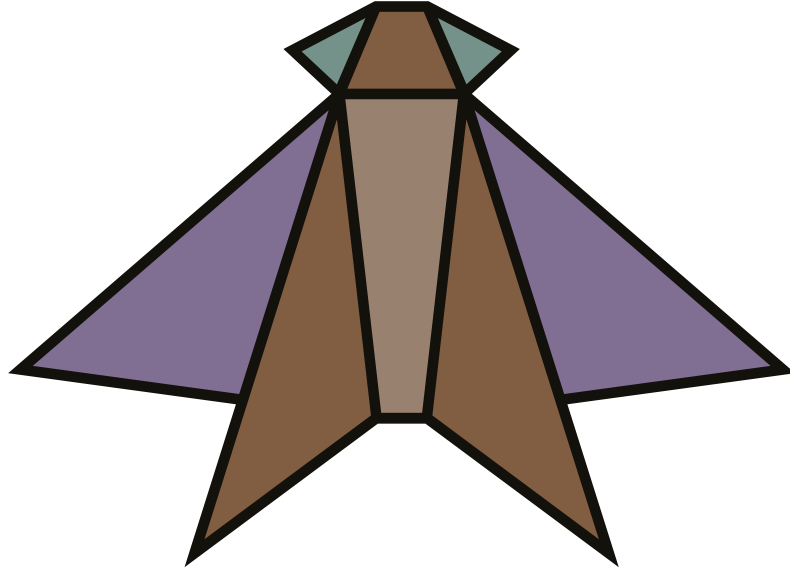
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CHAGWA



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Allowing Change, Agile and Waterfall
projects in the organisation

by Jürgen Van Gorp



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ISBN Hardcopy: 978-94-018-1039-5

ISBN eBook: 9789401810401

ISBN ePub: 9789401810418

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CONTENTS OF THIS BOOK

This book contains eight chapters.

The first chapter in this book introduces the Chagwa concept. First, a more general background of project management is provided with general definitions and role descriptions given. Then, Chagwa is introduced within the larger project management framework. This chapter also gives the basic Chagwa principles and guidelines.

The next four chapters describe the different Chagwa processes and sub-processes in more detail.

Chapter two handles common Chagwa processes.

Chapter three treats the processes used in the Change Control Chagwa track.

Chapter four discusses processes used in the Agile Chagwa track.

Chapter five discusses the Waterfall Chagwa track processes.

The sixth chapter provides a more detailed description of different documentation Artefacts that are used in the different Chagwa processes. Chagwa proposes, but not enforces, the use of particular Artefacts that support the different processes. This chapter also brings in a new concept, 'Distrans'. Distrans can be used to determine the level of complexity and size of the project artefacts.

The seventh chapter briefly discusses how projects can be integrated. Larger projects can be cut into smaller subprojects, each running its own Chagwa track. Other projects can be running in parallel and may have interdependencies with the current project. The chapter on integration provides an example of how overall planning is achieved.

FOREWORD

Chagwa is a Project Management Methodology. It targets the integration of best practices in project management in a concise framework.

This book first gives an analysis on project management in general, and on much used project management methodologies in particular. The analysis results in the integration of different methodologies in the Chagwa framework.

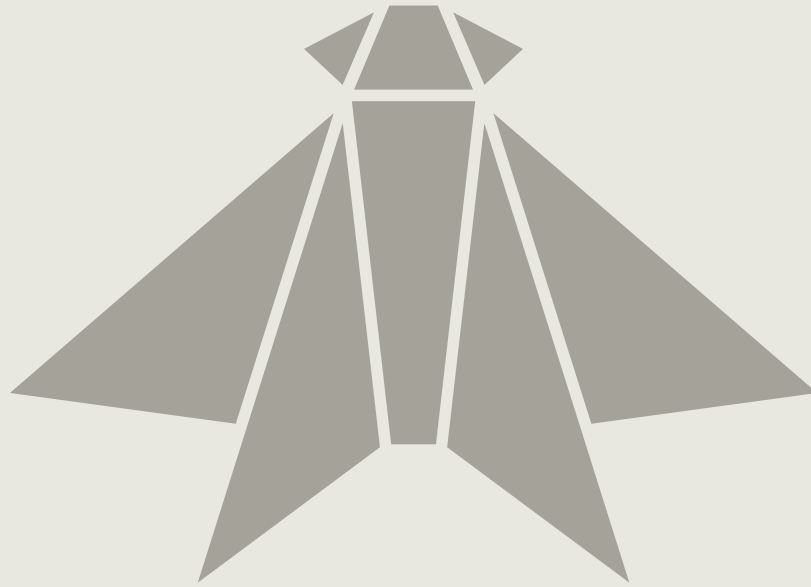
The analysis is based on three much used methodologies in project management: Agile, Waterfall and Change Control. All three project management methodologies have unique advantages that justify their use. The choice depends on what your project is supposed to deliver. It depends on the Product you're working on.

If you are a Project Manager or Program Manager, this book will provide you more insight in project management in general, and in the Chagwa approach of project management.

If you plan on setting up a new Project Management Organisation, or you are improving your existing one, this book will help you in kick-starting your organisation. Chagwa will provide you with a project methodology right out of the box, and includes a set of ready-to-use tools. It will provide clear guidance on when to use Waterfall, Agile or Change Control and how new developments can be put into production flawlessly. This can happen whether the new developments are part of a small or large project, or come from continuous change.

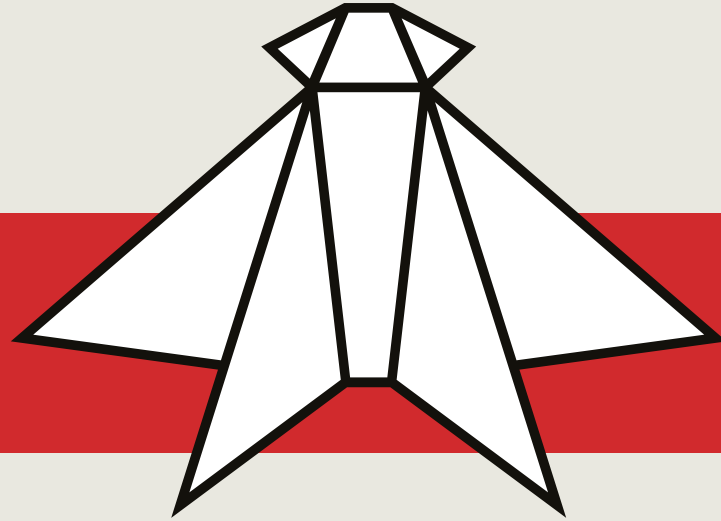
Chagwa brings ideas about program and project management. It is not a one-size-fits-all panacea. Every organisation is unique. Every Product is unique. For that reason your Project Management Organisation should adapt itself to the Business. Chagwa can provide you a methodology and set of Artefacts bundled in a single Toolbox, as a starting point.

The author wishes you success in implementing the Chagwa principles in your organisation.



CHAPTER 1

THE CHAGWA CONCEPT



1.1 Who should read this book?

1.2 Introduction

1.3 Roles

1.4 Chagwa Project Management

1.5 Templates and Artefacts used in this book

1.1 Who should read this book?

This book has been written for

- Program and Portfolio managers: they can benefit from the processes and procedures described in this book, the artefacts that come with Chagwa, the clear guidance on when to use Waterfall, Agile or Change Control;
- Project Managers, because of the mix of three different project methodologies integrated in Chagwa;
- Change Managers, because Chagwa relies on Change Management for executing and integrating projects;
- Business and Operational managers, because they want to know what their role is in the project management tracks described by Chagwa;
- Engineers, technicians and any other stakeholder impacted by projects, because they want to learn about their role in projects in general and how organisations need to organise themselves for each Chagwa track;
- Anyone interested in project management in general.

You may have special interest in this book

- if you want to make changes to your existing Program, Portfolio or Project Management Organisations and want to gain additional insight in project management;
- if you want to start with Program, Portfolio or Project Management in your organisation or enterprise;
- if you're struggling with introducing Agile or Waterfall project management methodologies in an existing project management culture;
- if you are impacted by or involved in projects and want to know more details on the practical organisation.

This book provides the description of different project management methodologies, but will not go into the details. You will profit more of Chagwa if you already have experience in the following.

- Change Management and Change Control;
- Agile driven project management.
- Waterfall driven project management;

1.2 Introduction

1.2.1 Defining the Product

DEFINITION

The **Product** is a separately managed item that can be worked upon and treated as a deliverable. A Product may be composed of different other Products or sub-components, each of which may be individually managed as a stand-alone Product. A Product can be a tangible or intangible. It can be a physical piece of hardware, but it can e.g. also be software source code, a textbook, training, a service or process description.

The **Product** is assumed to be a managed deliverable and therefore has a **life-cycle**. It is created at some point in time. The Product is managed and supported during its active life, and it is formally decommissioned at the end of its life-cycle. After decommissioning of the Product, supporting artefacts and documentation may need to be kept available for a Business defined retention period.

This book assumes that creating or updating the Product is typically done through projects, while everyday management is done through Change Control. The level of change control will be different for different organisations. Controlling changes can be loosely managed through oral approval, or strictly controlled through formally approved Change Requests. Projects working on the Product can either create the full end-to-end Product or only work on a small part of the Product.

DEFINITION

The **Core Product** in an organisation is the Product that is considered the “core business” of the organisation and that creates the revenue.

Consider the example of a furniture factory. The Core Product can be identified as the set of furniture sold to customers. The factory may also decide to specialise in exclusive design furniture, or the cheapest furniture available on the market. The Core Product may therefore be “furniture”, but it could also be “design furniture”, or “best price furniture”.

As explained, the Core Product is the central Product that is the reason for the Organisation to exist. Other Products in the Organisation are expected to only exist for directly or indirectly creating or supporting the Core Product. The furniture factory will have production machines that are managed as separate Products. Servers and end-user computers are managed Products, as can be the fleet of trucks for delivering the furniture. All of these Products are supporting Products for creating and managing the Core Product. Only the Core Product generates revenue for the Organisation.

1.2.2 Artefacts

DEFINITION

An **Artefact** is an object created to support a Product or project. Artefacts can e.g. be written documents describing a function, a process or procedure, written evidence of an action performed in scope of a project, technical documentation for a Product...

An Artefact can be physical, e.g. a warranty seal that is delivered with the Product, or electronic, e.g. digitally signed test evidence, or source code for a function. Artefacts can have their own life-cycle, e.g. strictly controlled quality compliance documents used in nuclear plants. In some cases an Artefact is considered a sub-component of the Product, and treated as a stand-alone Product with its own life-cycle, e.g. installation and repair manuals.

In Project Management, Artefacts describe the set of written project documentation and different types of evidence deliverables. An Artefact can e.g. be a Project Charter, but also a Test Script or Test Defect description.

1.2.3 A brief definition of Chagwa

DEFINITION

Chagwa is a Project Management Methodology (PMM). Its target is to describe ways of managing changes to the Product in a structured and consistent way. It provides tools and techniques for successful and controlled project management, while still allowing flexibility and adaptability to the organisation.

Chagwa defines different types of tracks for managing the changes to the Product, and provides guidelines as to which track is most favourable per type of change. Smaller changes to the Product will typically be done through simple Change Control, e.g. vendor maintenance or software patching. Larger upgrades may require a project approach through one of the three project management tracks defined in the Chagwa framework.

Chagwa also proposes artefacts for documenting the Product and how a Product can be enhanced by means of incremental changes. The Business defines which artefacts are essential for Product and project documentation in the organisation. Additional artefacts may be required by the Program Management Organisation and internal or external Compliance Organisations. Further in this book the concept of Distrans is defined, which can be used as a tool to determine the need for artefacts, and the size and complexity of an artefact.