

# CONFIDENTIAL INFORMIX INTERNAL USE ONLY

## **The INFORMIX Product Development Process or "Daddy, Where do Software Products Come From?"**

**Version #1 Effective: 7/8/88**

### **Purpose**

The Purpose of this paper is to outline the Product Development Process at INFORMIX from the formulation of an idea for a new product, to the approval of the Product Plan to develop that product. This paper highlights the important stages of the Process, as well as the company documents that are part of the Process.

The most recent version of this document is always INFORMIX Company Policy. Questions, comments, and suggestions for changes should be directed to Bob Macdonald in Menlo Park (email: bob).

### **A Note About Terminology**

The reader should be aware that the term "new product" in this paper means either a completely new product for the INFORMIX Corporation, or a new features release of an existing INFORMIX product.

### **Overview of the Product Development Process**

Here, in brief, is a list of the important stages in Product Development:

1. A Product Idea is born
2. The Idea is developed into a Product Concept
3. The Product Concept is presented to the Product Strategy Committee (PSC)
4. The Product Concept is approved by the PSC and a Product Proposal is commissioned by the PSC .
5. The Product Proposal is developed by an appointed Product Marketing Manager and an appointed Product Planner.
6. The Product Proposal is presented to the PSC.

7. The Product Proposal is approved by the PSC and a Product Plan is commissioned by the PSC.
8. The Product Plan (which consists of the External Specification, Implementation Plan, and Marketing Plan) is developed by the same Product Marketing Manager and Product Planner.
9. The Product Plan is presented to the Product Planning Committee (PPC)
10. The Product Plan is approved by the PPC.
11. The Product Plan is put into action.
12. The product is completed and released.

## **The Product Strategy Committee and the Product Planning Committee**

Before getting into details, it's important to understand the two company committees that play key roles in the Product Development Process.

### **Product Strategy Committee (PSC)**

The purpose of the Product Strategy Committee (PSC) is to set and maintain the long term product direction of INFORMIX. The PSC decides which new products will actually go into development. It also decides the priority of all products in development.

The Product Strategy Committee is chaired by Roger Sippl and Mark Callegari.

The PSC holds meetings at least twice a month to consider the items on its agenda. Membership of the PSC is determined by the Co-Chairmen, and as of June 14th, 1988 these Informix Employees were members of the PSC:

Nick Baxter	Roy Harrington
Neil Blumenfield	Tommy Hawkins
Ron Bower	Steve Hill
Mike Brown	Bob Macdonald
Mark Callegari	Steve Marra
Dick Curtis	Bill Morton
Tom DeBacco	Joe Poskin
Ron Ferguson	Roger Sippl
Steve Goldsworthy	Jim Thanos
Mark Hanson	

### **Product Planning Committee (PPC)**

The purpose of the Product Planning Committee is to approve proposed Product Plans, and to be a troubleshooting clearing house for problems arising from the implementation of Product Plans.

The Product Planning Committee is chaired by Steve Goldsworthy. As of June 14th, 1988 these Informix employees were members of the PPC:

Nick Baxter	Roy Harrington
Neil Blumenfield	Tommy Hawkins
Ron Bower	Steve Hill
John Bruzas	Doug Hoffman
Mark Callegari	John Lax
Dick Curtis	Bob Macdonald
Ron Ferguson	Steve Marra
Bernard Golden	Bill Morton
Steve Goldsworthy	Roger Sippl

## **The Process**

### **The Idea**

The idea for a new Informix product can come about in a variety of ways from a variety of sources. The idea may come from research being done in the marketing department, a technical breakthrough in engineering, input from a customer, or a suggestion from an employee who is using our products.

### **Idea into Concept**

The product planning process begins, however, only when the product idea is turned into a Product Concept that is presented to, and accepted by the Product Strategy Committee.

Any Member of the PSC can sponsor a Product Concept Presentation for the agenda of a PSC meeting. The Product Concept Presentation is basically an oral, thumbnail sketch of the product and its possible market potential. The real purpose of this step is determine whether the PSC should commit Marketing and Product Planning resources to a more in depth look at the possibilities of the proposed Product.

If the PSC rejects a Product Concept at this stage, it can be presented again whenever the sponsor feels there is justification to consider it again.

### **Product Concept to Product Proposal**

If the PSC accepts the Product Concept for further study, a team is assigned the responsibility of researching and writing a Product Proposal about the possible new product. The team consists of a Product Planner, a Marketing Manager, and a Corporate VP who acts as "Chief Honcho", or primary booster of the project. In some cases a Lead Developer may be assigned from R&D at this early stage.

The Product Proposal is meant to give the PSC enough information about the proposed Product, its market potential, and the potential cost to develop it, so that the Committee members can make an informed decision of whether or not to proceed with the actual development of the Product. This Product Proposal pulls together the principle feature list for the new product or release, addresses the principle marketing questions and goals, and raises any technical or positioning questions that must be answered before work proceeds. (An outline of the suggested contents for a Product Proposal can be found in Appendix A.)

### **Review of Product Proposal**

When a Product Proposal is finished, it is distributed to members of the PSC prior to the PSC meeting when the Proposal will be discussed.

When the PSC meets to discuss the Product Proposal it has three choices. First, it can reject the proposed Product. Second, it can send the Proposal back for more work on points where the committee wants further clarification. Third, it can accept the Proposal and commit Company resources to the actual development of the Proposed Product.

If the PSC accepts the Product Proposal, the Committee sets a target date for the completion of a full Product Plan. At this time the PSC may make specific suggestions of individuals or groups inside and/or outside the Company who should be consulted during the development of the Product Plan.

### **Product Proposal to Product Plan**

With the approval of the Product Proposal, its authors, the Marketing Manager and Product Planner, now have the task of outlining in detail what the proposed Product is, how its development will be implemented at Informix, and how it will be marketed. These are the three main parts of the Product Plan, and they are developed simultaneously. The three parts are:

#### **1. The External Specification**

This document fully describes the proposed product from a user point of view. All proposed features and functionality is covered. Once approved, the External Specification becomes the basis for the development of the Product by R&D, the writing of the documentation, the designing of Quality Assurance test plans and test suites, the development of marketing materials, etc.

NOTE: The External Specification will undoubtedly evolve during the development of the product and the writing of the documentation. A representative of Technical Publications is responsible for the production and maintenance of the External Specification during its evolution. In its final form it is almost the first draft of the Reference Manual.

## **2. The Implementation Plan**

This document is a detailed plan and schedule for the development of the product by the assigned Product Team. It contains all the details regarding the important milestones of making the Product a reality.

The Implementation plan includes a **Design Document** that discusses engineering issues related to creation of the Product. For each major feature described in the External Specification, the Design Document provides the following information:

- A. Performance Criteria and Testing Strategy
- B. Operating System, Networking, Porting Considerations
- C. Compatibility with Previous Releases, Conversion Requirements
- D. Memory Requirements or Targets
- E. Source Code Maintenance Issues
- F. Supportability, Installation Issues

## **3. The Marketing Plan**

This document outlines in detail how Informix will market the new Product when it's released. It includes marketing objectives and strategies, product promotion schedules, financial forecasts, etc.

(See Appendices B,C, and D for detailed outlines of what should be included in the External Specification, the Implementation Plan, and the Marketing Plan.)

The Product Planner takes the lead in developing the External Specification and the Implementation Plan, while the Marketing Manager focuses on developing the Marketing Plan.

Concurrent with the development of the Product Plan, the Product Team is assigned that will make the Proposed Product a reality. The Product Team consists of a representative(s) from Engineering, Product Planning, Product Marketing, Technical Publications, and Customer Services, and Operations

The Senior Writer assigned from Technical Publications and the Lead Developer assigned from Engineering may assist the Product Planner in development of the External Specification and the Implementation Plan.

## **Review of the Product Plan**

When the Product Plan is complete, it's distributed to the members of the Product Planning Committee (PPC) prior to the PPC meeting when the Plan will be considered for approval. The PPC has two choices when reviewing a Product

Plan. The Committee can either approve the plan for action, or send it back for reworking.

### **Putting the Product Plan into Action**

Once the Product Plan is approved, the development of the new product is governed by procedures set by the Product Development Department in the case of the Implementation Plan, and the Marketing Department in the case of the Marketing Plan.

The Product Planner is responsible for leading the Product Team to successful completion of the product development process, while the Marketing Manager has the responsibility of making the product a success in the marketplace.

The Product Development Department will be producing documents that outline the procedures that govern product development from the point a Product Plan is approved to when the Product is available for shipment. The Marketing Department will be doing the same for the procedures governing the implementation of Marketing Plans. These documents will, of course, be coordinated with Customer Services and Operations, when members of those departments are involved in the process.

Some of the important milestones for Products heading toward completion are outlined in Appendix E, which contains Definitions of Software Development/Test/Release Phases.

### **The Continuing Evolution of the Process and this Document**

The Product Development Process at Informix will continue to evolve, and this document will continue to change as a result. Regardless of how frequently, or infrequently changes occur, the current version of this document is considered INFORMIX Company Policy. If you are unclear if you have the most recent version of this document, please contact Bob Macdonald in Menlo Park (email: bob) with the version number.

# Appendix A

## Product Proposal Outline

(Supplied by the Marketing Department 7/88 - S. Hill)

### 1. Executive Summary

- A. What is the need
- B. How we will fill it
- C. Timing/Resources
- D. Critical factors for success
- E. Recommended next step

### 2. Current Market Situation

- A. Market size
- B. Product competition/market share
- C. User requirements (what people want)
- D. User profile and product benefits
- E. Key product/market trends
- F. Product overview

### 3. Marketing Objectives/Strategies

- A. Mission statement/marketing positioning
- B. Revenue and market share goals

### 4. Outstanding Issues

- A. Technical
- B. Product Line
- C. Marketing

### 5. Resource Requirements

- A. Personnel
- B. Capital Equipment

### 6. Summary of Work Completed

### 7. Product Schedule

### 8. Product Feature List

## **Appendix B**

### **Product Plan: External Specification Outline**

**(To be supplied by Product Development)**

## **Appendix C**

### **Product Plan: Implementation Plan Outline**

**(To be supplied by Product Development)**

# Appendix D

## Product Plan: Marketing Plan Outline

(Supplied by the Marketing Department 7/88 - S. Hill)

### 1. Executive Summary

This presents an abbreviated overview of the proposed plan for quick management skimming.

### 2. Current Marketing Situation

This presents relevant background data on the market, product, competition, and distribution.

### 3. Opportunity and Issue Analysis

This summarizes the main opportunities/threats, strengths/weaknesses, and issues facing the product that the plan must deal with.

### 4. Marketing Objectives

State the measurable goals the plan wants to reach in the areas of sales volume, market share, and profit.

### 5. Marketing Strategies

This presents the basic marketing approach that will be used to meet the plan's objectives. It consists of broad decisions on target markets, marketing positioning and mix, and marketing expenditure levels.

### 6. Action Programs

This section answers: What will be done? Who will do it? When will it be done? and How much will it cost?

#### A. Communications Plan

##### 1. Objectives

##### 2. Strategies --- How are you going to accomplish your objectives?

###### a. Creative Strategy

-target audience, your main message, your positioning, type of execution

###### b. Media Strategy

-how are you going to spend your advertising dollars?

###### c. Sales Promotion Strategy

- promotional activities, audience aimed at, and what it should accomplish
- d. Public Relations Strategy
  - what do you want to accomplish
- 3. Specific Plans --- Detail how each strategy will be implemented
  - a. Creative Plan
  - b. Media Plan
  - c. Sales Promotion Plan
  - d. Public Relations Plan

B. Marketing Research Plan

1. Strategy --- Specify how research will provide information to assist in preparing and executing the marketing plan.
2. Plans --- Specific plans necessary to execute the above strategies.

C. Sales Management Plan

-This is the responsibility of the Sales Manager. Where the sales are coming from - by market, by territory, by size, by price, etc. Includes planning, communications, and training of the sales force.

7. Profit-and-Loss Statement

This summarizes the expected financial payoff from the plan.

8. Controls

This tells how the plan will be monitored.

# Appendix E

## Definitions of Software Development/Test/Release Phases

(Supplied by Quality Assurance 7/88 - D. Hoffman)

This paper presents an explanation of terminology about releases and a general background on each term. The terms are defined in terms of the commonly used computer and software industry definitions.

**Alpha Test:** This is formal testing done in-house in order to qualify a product prior to release to production or distribution to the field. This is normally performed per a written test plan, and is done by an organization independent of R&D, such as QA. This is complete before the start of Beta test or Manufacturing Release.

**Beta Test:** This is formal testing performed by a customer on a ready-to-release product. The Beta testing is usually for the purpose of having a customer check out functionality, performance, and our ability to deliver and support the product. It's purpose is not for heavy bug testing. Frequently a Beta test is performed by the running of a production system at a customer's site. This is very different from Pre-release, in that the customer is not using the product exclusively in a production mode, but is really testing out the product for us.

**Pre-release:** This is a Pre Alpha, Alpha, or Beta version of a product which is given to a customer for either production or development type of work prior to Manufacturing Release. (Most of our "Betas" in the past have been Pre-release shipments.) The customer needs to know the condition of the software, and should be aware of the fact that it is not yet released.

**Manufacturing Release:** In Manufacturing Release, the product has been fully qualified and characterized and has been proven capable of being produced.

The terms Pre Alpha, Alpha, and Beta are internal names representing the condition of the product and how far into the release cycle it has progressed. The term Pre-release is an external name which indicates only the fact that the software has not completed the release cycle.