

# POSSIBILITY OF APPLICATION OF TRIZ TECHNIQUE TO IT TECHNICAL FIELD



## BUSINESS MODEL PATENT AS A THEME

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# 1. Purpose of the research

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## 1. Background

- Idea putting out that assumes existing patent to be theme
- (1) Patent evasion (detour design)
- (2) Invention strengthening (improved design)

## 2. Problem

### (1) Technical field

Possible application to IT system (information system)?

There is little structural element (A functional = element is essence).

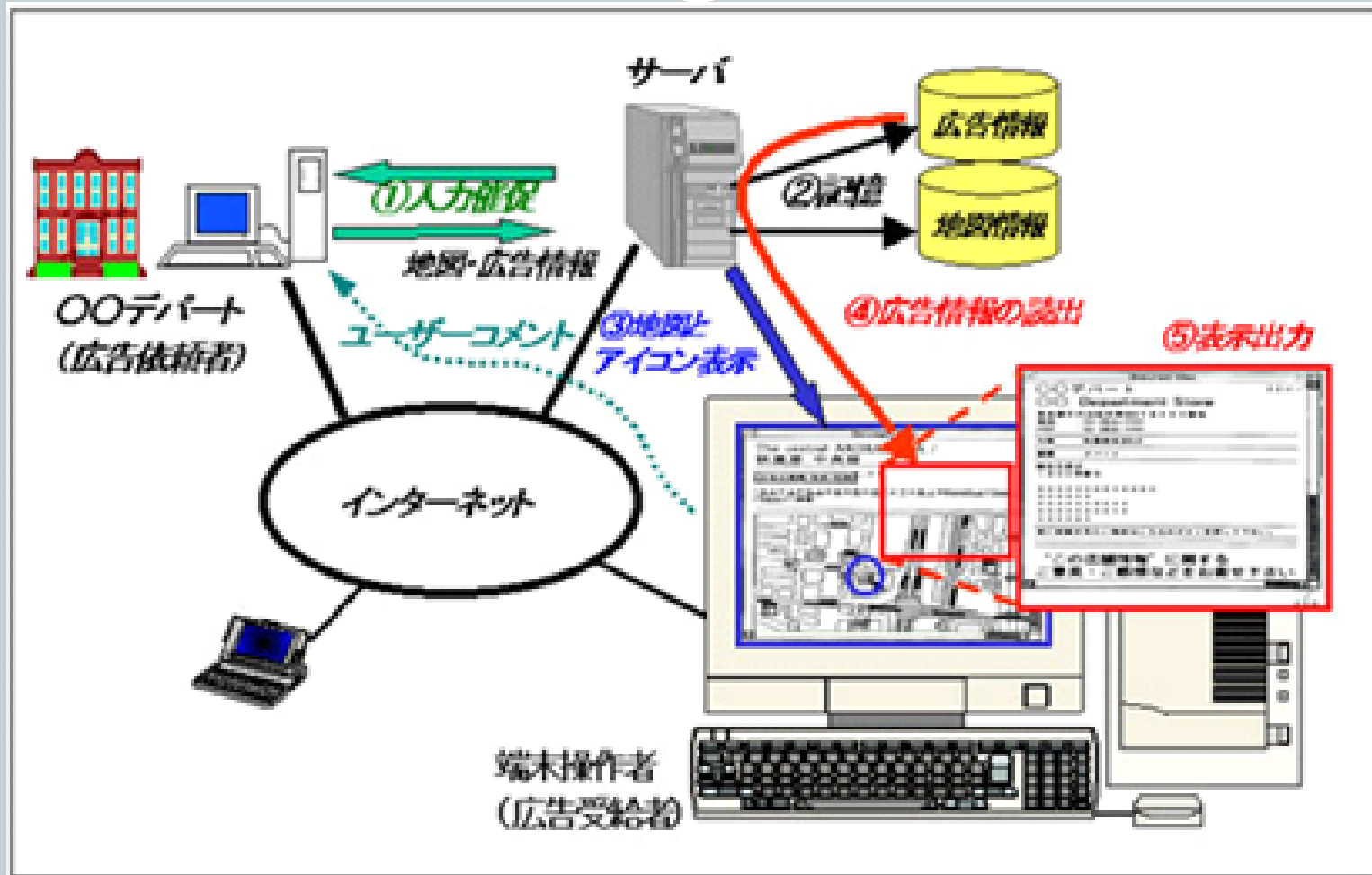
→The content is an advantage with too unnecessary clearness and technical knowledge.

### (2) Strong complaint

Does the idea come out really?

## 2-1. Outline of object patent

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## 2-2. Claim

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【claim 1】 By the computer system for the supply method of the advertising information that supplies the advertising information

Registration step

- To an advertising client
- The input of the advertising information is pressed.
- The map is displayed based on map information memorized beforehand, and positional specification of an advertising object is pressed on a map concerned.
- Coordinates of an advertising object for which the position is specified on the above-mentioned map are related to the input advertising information and it memorizes it in detail.

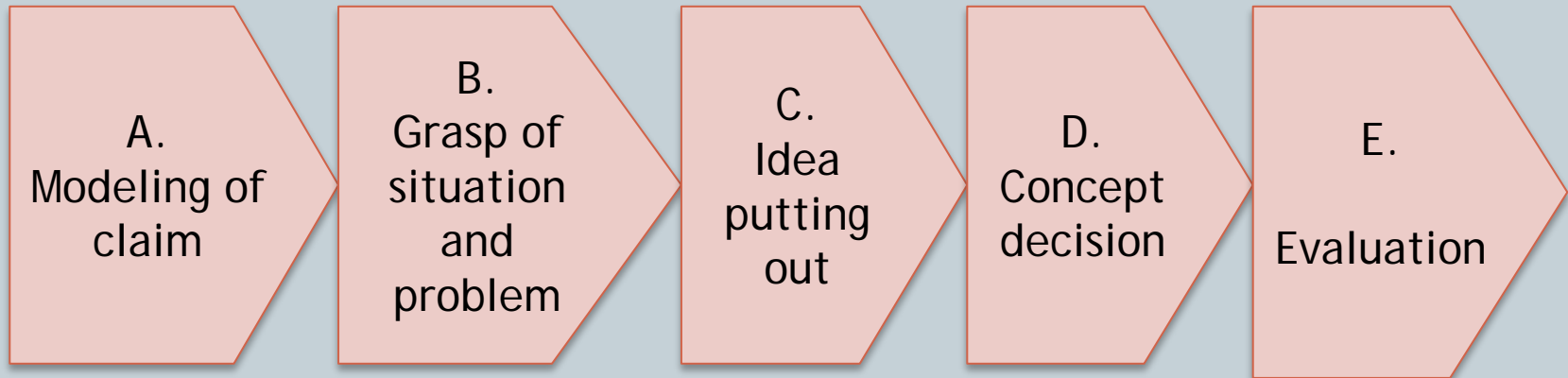
Output step

- To an advertising recipient
- The map based on the above-mentioned map information is displayed. It is a point on a map concerned, and advertising concerned, object "\*" made a chart image in the point that corresponds to coordinates of the memorized advertising object is displayed. And, the selection of the desired advertising object is urged.
- The advertising information related to the selected advertising object is read.
- The read advertising information is output to the above-mentioned advertising recipient.
- Supply method of advertising information characterized by preparing.

- Iconizing

# 3. Procedure and method

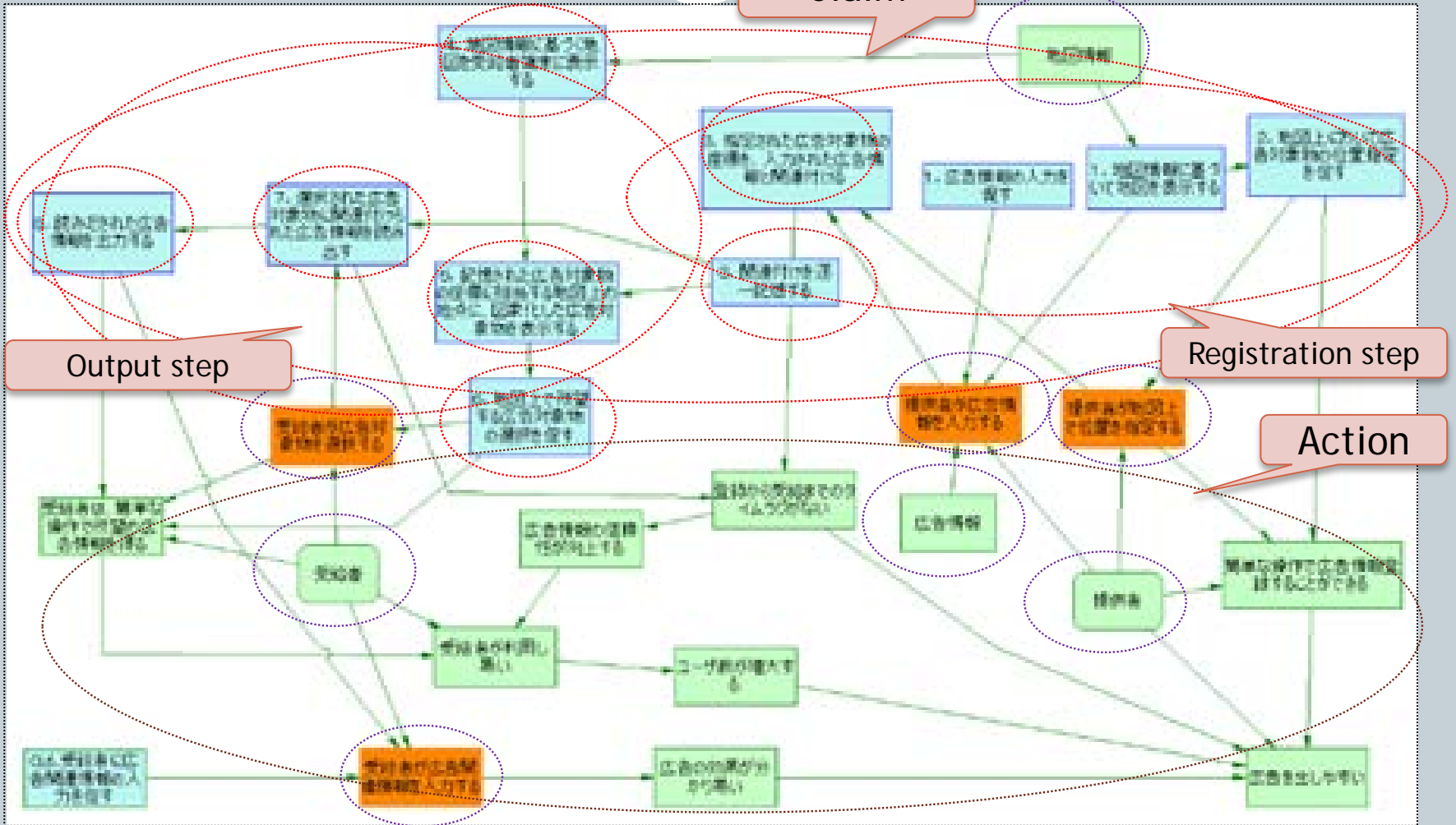
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# A. Modeling of invention

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Claim



# B. Situation awareness

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## 2.1. High-ranking system subordinate position system

### 2.1.3. Environment of high-ranking system and system

- Map information
- Real store
- Advertising content + location information
- Player?
- Structure of corporate profits
- Account model
- Development with other businesses

#### 2.2.1 Function of system

- The presentation from registration is early.
- It is possible to register by an easy operation.
- Is desired advertisement found by an easy operation?

## 2.2 Input process output

### 2.2.2. Input to system

- Map information
- Advertising information (content)
- Input operation
- Selection operation (specification of store position)
- Selection (positional specification of desired advertising object)

### 2.2.3. Output of system

- The probing intellectual curiosity is filled.
- The appearance of the store in my town (current state and change) can be understood.
- The inquiry increases .
- Advertising expenses are cheap.
- The user's evaluation is understood (CL6).
- Information enters the manager side.

Information: Change of information and land (real estate)  
information and stores of commodity and consumer  
(system user) who wants ex advertiser

## 2.3. Cause-problem-result

...

## 2.4. As of past- - the future

### 2.4.2. Time in front of process of system

- Map information is acquired (purchase and update).
- Store purchased, update timing, the capital preparation, and comparison
- Business
- Diving. Decision of net target
- Decision of screen composition
- Registration, confirmation, and change
- Method of collecting money
- Decision of advertising content
- Advice of advertisement

### 2.4.3. Time after process of system

Collecting money (payment confirmation)

Confirmation of result of advertisement

Diversion of data (the second use)

Coupon

Confirmation of store visit

It assists in the visit (guide).

It is possible to reserve it.

(addition) Proposal of shopping

The fact of the celebrity visit is taught.

# C. Idea generation (example 1)

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The map based on map information is displayed in the recipient terminal.

Map information

The map is displayed based on map information.



# C. Idea generation (example 1)

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The map based on **map information 2** is displayed in the recipient terminal.

Map information 2

Map information 1

The map is displayed based on **map information 1**.



# C. Idea generation (example 2)

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The read advertising information is output.

Advertising information

The advertising information related to the selected advertising object is read.



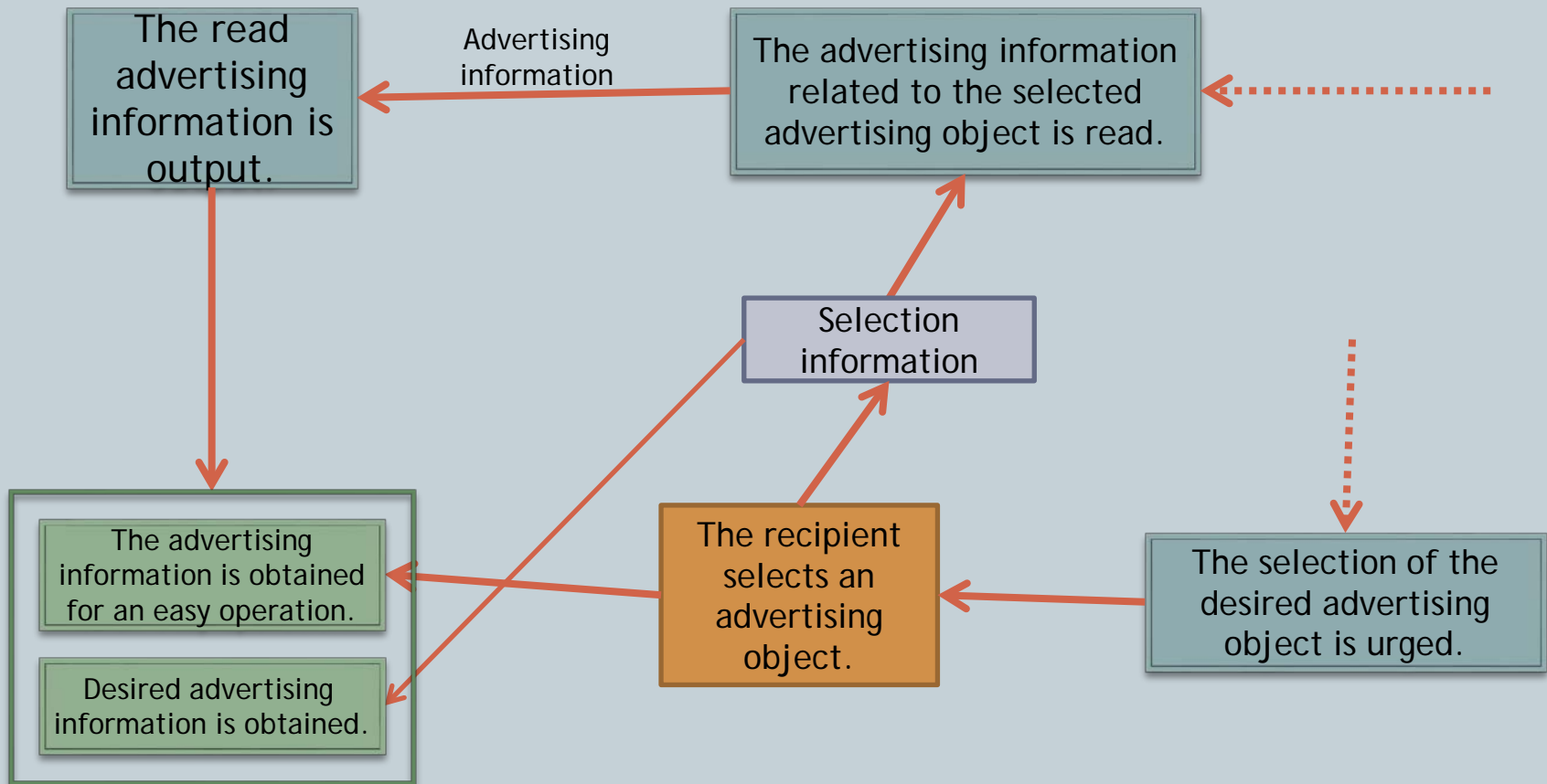
Desired advertising information is obtained for an easy operation.

The recipient selects an advertising object.

The selection of the desired advertising object is urged.

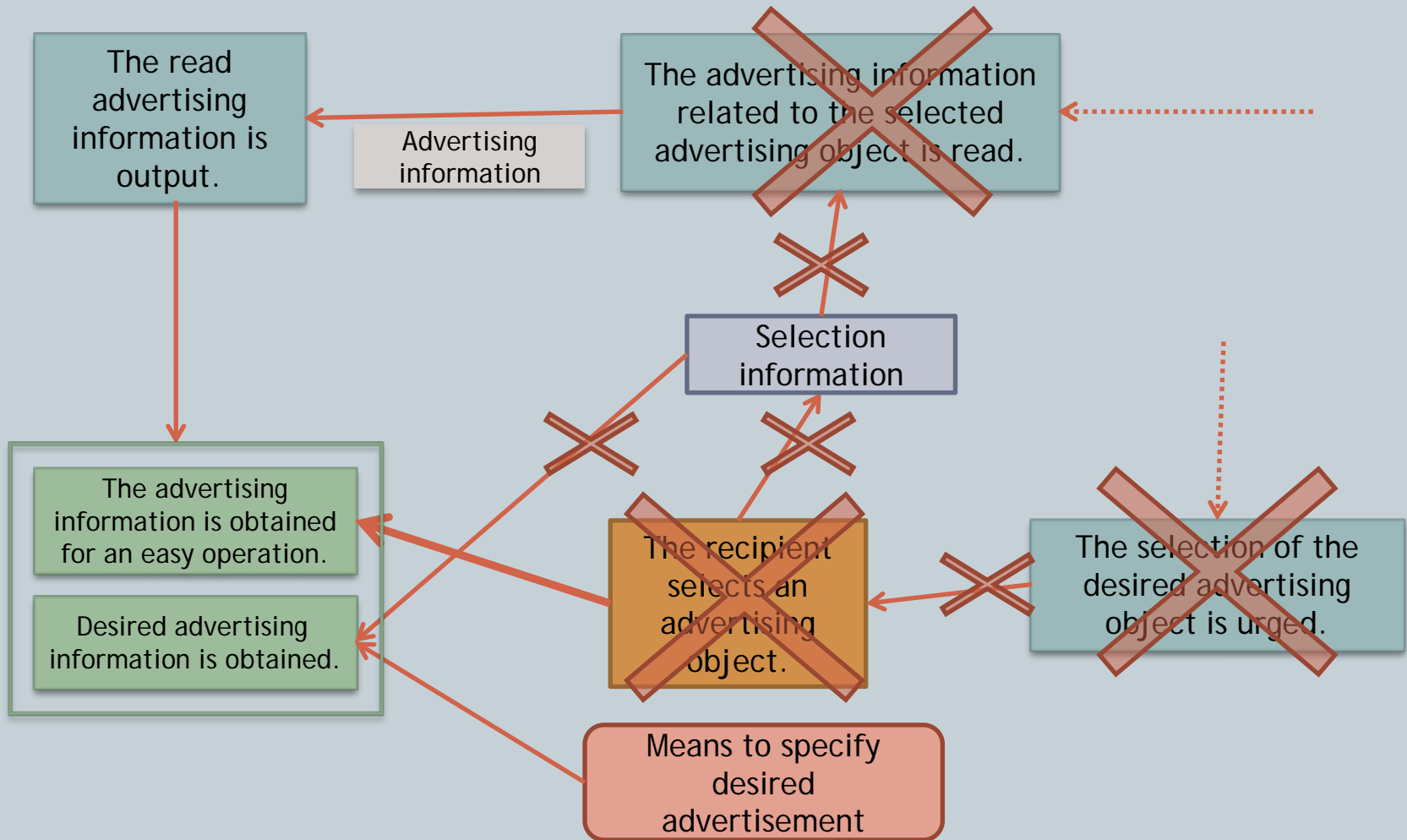
# C. Idea generation (example 2)

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# C. Idea generation (example 2)

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# C. Evasion idea (list)

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## 1 (地図を表示し、広告情報の入力を促す)

- #20. URLで編集対象を規定(地図を提示しない) (1,2)
- #24. 広告情報以外の情報を登録する(1,2)
- #30. 広告情報を入力させない代わりに口コミ情報を取得する
- #27. 広告情報に変えて検索キーワードを登録する(1,2)
- #26. 広告情報に変えてHPのリンクを登録する(1,2)

## 2 (位置情報の入力を促す)

<地図上で登録させない>

- #1. 「地図上において」、ではなく、住所の直接入力を促す

<位置情報を登録させない>

- #37. 位置座標でなく、路地(道路)を登録する
- #25. 座標に代えて、基準点とルート情報(写真など)を登録する

## 3 (座標と広告情報とを紐付け)

<記憶タイミング>

- #28. 「逐一」でなく記憶する(3)

<紐付けない>

- #23. 座標を広告情報と無関係に登録する
- #29. 広告情報を座標でない情報と関連付けて記憶する(3)

## 4 (端末に地図を表示する)

- #6. 端末に地図を表示しない
- #4-B 座標データのみ提供する

<地図情報に基づかない地図を表示する>

- #4A. 地図データが二種類ある(登録するための地図データとユーザーに提供する地図データ)

## 5 (地図上にアイコンを表示) <アイコンの表示位置>

- #7. 「地図に相当する位置」ではなく、対象店舗の近隣のスポット(ランドマーク等)を表示する(5)

<アイコンを用いない>

- #34. 点滅(輝度変化)や色変化で店舗の所在を表現する
- #32. 記号を表示する(5)
- #31. テキスト情報を表示する(5)
- #33. 音声・振動で報知(5)
- #38. 歩行ルートを表示(5, 7)

Processing and output system

Input and generation system

コンの選択を促す

「地図上で」ない画面領域で、選択を促す(6)

#36A促さない

#36. ユーザーが選択に迷ってる状態を検出する

## 7 (広告情報の読み出し)

読み出しタイミングをユーザーの選択前にする

広告情報を複数読み込んでおいて必要に応じて(表示領域に対応するものすべて)を提示する(3,7)

#3. ユーザーの選択した位置とは無関係な広告情報を表示する(意外性)

Movement system

## 8 (広告情報の出力)

<情報内容>

#40. 「読みだされた広告情報」ではない情報を出力する  
<出力先>

- #42. 第三者が加工した広告情報を提供
- #41. 要求者以外の端末を介して要求者に提供する

Processing and output system

# C. Reinforced idea (list)

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## ○登録ステップ（1～3）

情報入力方法

#2. 音声入力

登録内容

#9. 3次元地図情報を活用する

#49. 同一ビル内の他の店舗の情報

広告情報以外の情報を付随的に登録する

検索キーワードを登録する

口コミ情報を取得する

店舗のHPのリンクを登録する

#21. 位置の範囲を登録する

Input and  
generation system

## ○他のビジネス展開

#19. SNSと連携

#39. 仮想空間に適用

データの転用

#51. ユーザの閲覧履歴

#50. 不動産情報(店舗の移り変わり)

#49. ユーザの店舗についての評価

#48. ユーザの行動予測情報

Movement  
(feedback) system

## ○出力ステップ（4～8）

<提供内容（5～8）>

Processing and  
output system

### #11. 付加情報

#15. 広告情報に対するアクセス数を表示する

#22. 関連業務を表示

#18. ユーザに対する行動提案

#43. 有名人来訪の事実を加える

#44. 買い物内容の提案

#45. クーポンの提供

#46. 店舗で提供するサービスの予約を受け付ける

#47. 広告文面作成についてのアドバイス

### #12. 動的

内容が時間変動する

#10. アイコンの外観が時間変化する

#13. 時間に応じた広告内容を表示

他の情報を加味する

#14. ユーザ属性を加味してアイコンを変更

ユーザ操作

#35. 同一対象を複数回指定されたときに異なる情報を表示する

<提供方法（6～8）>

#17. アイコンが指定された時の動作(音声・振動)

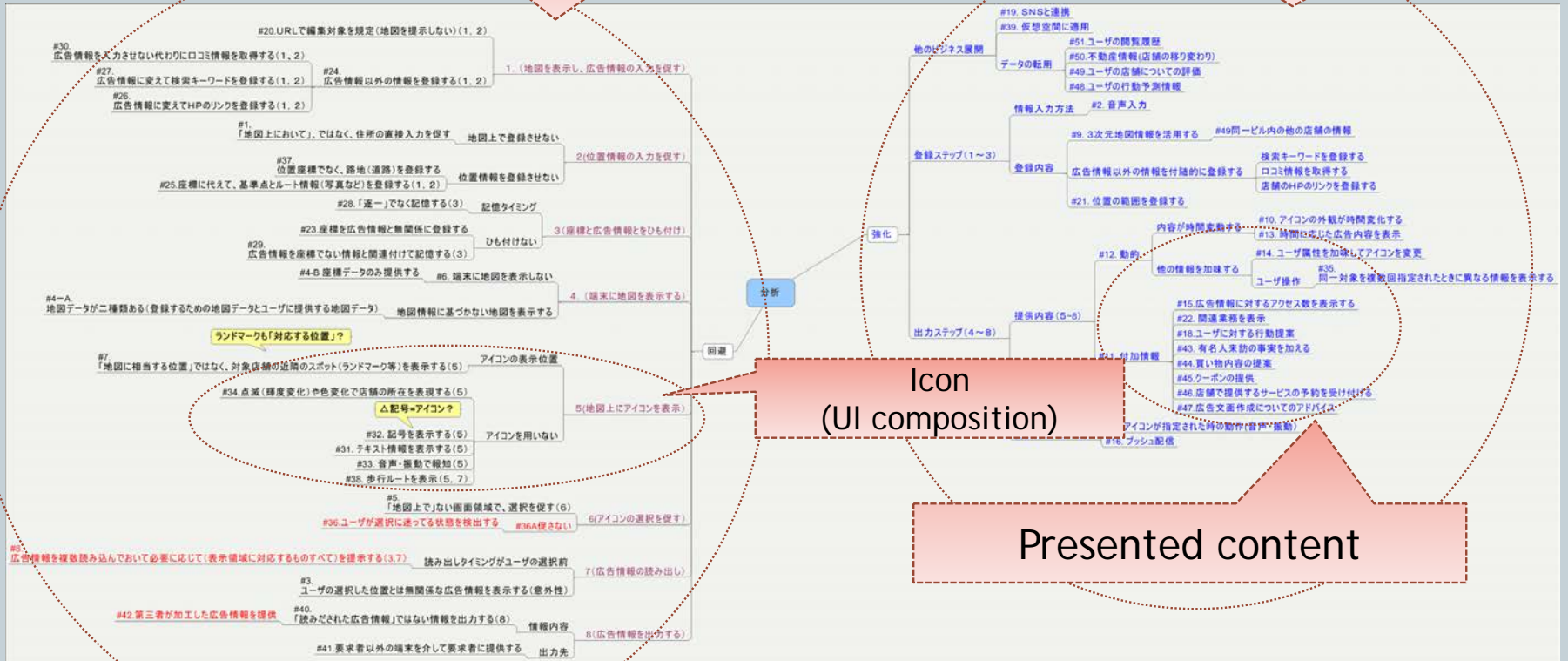
#16. プッシュ配信

# C. Idea (summary)

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Evasion idea

Reinforced idea



# D. Concept

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- Combination and evaluation of idea
  - Viewpoint 1. Certain evasion (Clearance; Intellectual Property matter)
    - Even application possibility and indirect violation correspondence, etc.
  - Viewpoint 2. Realizability (Business approval; business matter)
    - Earnings estimates and profit, etc.



## E. Evaluation and verification of idea (1)

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- Example 1 (information generation system)  
#4A. There are two kinds of map data (map data to register and map data offered to the user).  
→It is along today's technological trend.  
(GIS information and open data)

## E. Evaluation and verification of idea (2)

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- Example 2 (information movement system)  
#8. Two or more advertising information is read and it presents if necessary (all things corresponding to the display area).
- The same behavior as Google map

# 6. Summary

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## (1) Number of ideas

→ More than expectation

## (2) Level and quality of idea

· A similar idea executes or has already been applied for.

→ The level of each idea is high. There is a possibility that this has come out at the application this time.

## (3) Attitude and tendency to idea

· It accompanies the evasion idea and a reinforced idea comes out.

· As well as an actual application tendency (element that element/doesn't go out easily go out easily)

- Putting out of the idea of the TRIZ base that makes an existing patent a starting point is effective in the IT field.
  - The patent is used as priming of the idea putting out.
  - The grasp of the tendency distribution of the idea is easy (Especially, when the object patent is a more basic patent).
- The possibility that the weak point of the right and the other companies in the future execute (detour design) or strengthen (make to the right) is understood beforehand.
- The patent clearance work that will be needed in the future reduces or is unnecessary.

Thank you for your attention